

Foreign Administration

International Ferry Vehicles

Part One

Diagram Book No. 340

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PREFACE

A complete list of Vehicle Diagram Books is shown below, together with new or revised reference numbers and the colours of the respective book covers.

REVISED VEHICLE DIAGRAM BOOK NUMBERS

Vehicle Type	Diagram Book No.	Colour of Cover	Vehicle Type	Diagram Book No.	Colour of Cover
<u>Locomotives :- Diagram Book Series 100</u>			<u>Freight Vehicles :- Diagram Book Series 300</u>		
Diesel Electric Main Line Locomotives	100 (Prev.No.MT/25)	Red	Privately Owned Freight Vehicles	300	White
Electric Main Line Locomotives	110 (Prev.No.MT/26)	Green	Privately Owned International Ferry Vehicle	310	White
Diesel Shunting Locomotives	120 (Prev.No.MT/27)	Yellow	BR Revenue Freight Vehicles	320	Buff
<u>Coaching & Multiple Unit Stock :-Diagram Book Series 200</u>			BR International Ferry Vehicles	330	Buff
Loco Hauled Coaches	200	Orange	Foreign Administration Vehicles	340	Buff
Electric Multiple Units	210	Blue	BR Service Department Vehicles	350	Buff
Diesel Multiple Units	220	Pink			
Diesel Electric Multiple Units (Inc.HST)	230	Pink			
Non-Passenger Carrying Coaching Stock(NPCCS)	240	Orange	<u>ON Track Plant:- Diagram Book Series 400</u>		Red
			Rail Cranes & Tracklaying Vehicles 400 (Previously No MT/212)		

Issued By:-

Director of Mechanical & Electrical Engineering,
British Railways Board,
Railway Technical Centre,
DERBY

JANUARY 1989

CZECHOSLOVAK STATE RAILWAYS (CSD)

Country 54

VANS

Exchange condition 21.

Diagram Description

Vehicle Numbers

ILE353 40t 2 axle van

21 54 2380 000 - 21 54 2380 099.

VEHICLE DIAGRAM BOOK No 300
Private Owner Freight Vehicles (TT-TU)
(Part 3)

Revision 32

<u>DESIGN CODE</u>	<u>ACTION</u>	<u>REASON FOR CHANGE</u>
TT018K	Insert	First Issue
TU005B	Insert	First Issue
Index	Insert	Additional diagram

After incorporating the above, endorse the revision record at the front of the diagram book accordingly. When the revision letter has been actioned, it shall be stored at the front of the publication.

Date : 25.7.90.

Ref. : TBF 172-125-2(BC)

Tel. : 3507

Issued by:

DM & EE
RTC.
DERBY.

BRITISH RAILWAYS (BR)

Country 70

FLAT WAGONS

Exchange Condition 23.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IPE578	40t 2 axle container flat	23 70 4424 001 - 23 70 4424 005.

SPANISH STATE RAILWAYS (RENFE)

Country 71

VANS

Exchange Condition 24.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
ITE010	40t 2 axle van	24 71 2148 000 - 24 71 2148 395, 24 71 2148 693 - 24 91 2148 990, 24 71 2148 992.
ITE011	40t 2 axle van	24 71 2147 000 - 24 71 2147 487.
ITE215	40t 2 axle van	24 71 2148 397 - 24 71 2148 485.
ITE407	40t 2 axle van	24 71 2148 993 - 24 71 2148 999, 24 71 2149 000 - 24 71 2149 055.
ITE555	40t 2 axle van	24 71 2148 496 - 24 71 2148 594.
ITE556	40t 2 axle van	24 71 2148 486 - 24 71 2148 495, 24 71 2148 595 - 24 71 2148 692.
ITE575	40t 2 axle van	24 71 2396 000 - 24 71 2396 199.
ITE584	40t 2 axle van	24 71 2396 200 - 24 71 2396 299.
ITE673	40t 2 axle van	24 71 2380 000.

YUGOSLAV RAILWAYS (JZ)

Country 72

VANS

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>	<u>Exchange Condition</u> 21.
ILE415	40t 2 axle van	21 72 2390 000 - 21 72 2390 064.	
IME199	36t 2 axle van	21 72 2191 000 - 21 72 2191 099.	

SWEDISH STATE RAILWAYS (SJ)

Country 74

VANS

Exchange Condition 21.

Diagram Description

Vehicle Numbers

ILE237 36t 2 axle van

21 74 2140 000 - 21 74 2140 099.

GERMAN FEDERAL RAILWAY (DB)

Country 80

TANK WAGONS

<u>Diagram</u>	<u>Description</u>	<u>Exchange Conditions</u>	<u>Vehicle Numbers</u>
ICE001	32t 2 axle tank wagon	21,23,24,33,34.	23 80 7197 401
ICE002	32t 2 axle tank wagon		23 80 7391 722
ICE008	33t 2 axle tank wagon		23 80 7490 000 & 23 80 7490 001.
ICE038	40t 2 axle tank wagon		23 80 7391 721.
ICE064	32t 2 axle tank wagon		23 80 7288 000.
ICE072	40t 2 axle tank wagon		23 80 7197 402.
ICE091	40t 2 axle tank wagon		24 80 7390 400 - 24 80 7390 404.
ICE109	40t 2 axle tank wagon		23 80 7391 700.
ICE110	40t 2 axle tank wagon		23 80 7391 701.
ICE111	40t 2 axle tank wagon		23 80 7391 702.
ICE112	40t 2 axle tank wagon		23 80 7398 600.
ICE141	33t 2 axle tank wagon		23 80 7191 701 & 23 80 7191 702, 23 80 7391 718 - 23 80 7391 720.
ICE154	31t 2 axle tank wagon		23 80 7190 004, 23 80 7190 006, 23 80 7190 008, 23 80 7190 009, 23 80 7190 014, 23 80 7197 000, 23 80 7199 002, 23 80 7199 009, 23 80 7199 012, 23 80 7199 017, 23 80 7286 003, 23 80 7286 005, 23 80 7287 000, 23 80 7287 001, 23 80 7289 000, 23 80 7289 004.
ICE158	32t 2 axle tank wagon		23 80 7277 015 - 23 80 7277 039.
ICE160	30t 2 axle tank wagon		23 80 7197 400.
ICE200	31t 2 axle tank wagon		23 80 7394 400.

GERMAN FEDERAL RAILWAY (DB)

Country 80

TANK WAGONS

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>	<u>Exchange Conditions</u>
ICE202	32t 2 axle tank wagon	23 80 7277 001, 23 80 7277 003, 23 80 7277 004, 23 80 7277 006, 23 80 7277 007, 23 80 7277 009 - 23 80 7277 012.	21,23,24,33,34.
ICE217	26t 2 axle tank wagon	23 80 7395 002 - 23 80 7395 005.	
ICE224	37t 2 axle tank wagon	23 80 7395 000, 23 80 7395 001.	
ICE227	40t 2 axle tank wagon	23 80 7398 602.	
ICE243	33t 2 axle tank wagon	23 80 7491 400, 23 80 7491 401.	
ICE269	40t 2 axle tank wagon	23 80 7398 017.	
ICE273	40t 2 axle tank wagon	23 80 7391 000 - 23 80 7391 004, 23 80 7398 000 - 23 80 7398 005.	
ICE274	40t 2 axle tank wagon	23 80 7391 400 - 23 80 7391 402.	
ICE278	40t 2 axle tank wagon	23 80 7191 703, 23 80 7191 704.	
ICE281	40t 2 axle tank wagon	23 80 7398 006, 23 80 7398 007.	
ICE282	36t 2 axle tank wagon	23 80 7191 700.	
ICE283	40t 2 axle tank wagon	23 80 7390 417.	
ICE289	40t 2 axle tank wagon	23 80 7390 405.	
ICE302	40t 2 axle tank wagon	23 80 7391 016.	
ICE307	40t 2 axle tank wagon	23 80 7394 000, 23 80 7394 001.	
ICE308	40t 2 axle tank wagon	23 80 7734 005.	
ICE314	40t 2 axle tank wagon	23 80 9185 000 - 23 80 9185 006.	
ICE319	40t 2 axle tank wagon	23 80 7398 603.	
ICE321	40t 2 axle tank wagon	23 80 7391 012, 23 80 7391 013.	

GERMAN FEDERAL RAILWAY (DB)

Country 80

<u>TANK WAGONS</u>		Exchange Conditions 21,23,24,33,34.
<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
ICE323	40t 2 axle tank wagon	23 80 7390 406, 23 80 7390 407.
ICE333	40t 2 axle tank wagon	23 80 9185 000 - 23 80 9185 009.
ICE335	40t 2 axle tank wagon	23 80 7397 001 - 23 80 7397 005.
ICE336	40t 2 axle tank wagon	23 80 7391 401 - 23 80 7391 405, 23 80 7391 703 - 23 80 7391 707.
ICE350	36t 2 axle tank wagon	23 80 7394 020. 23 80 7492 000, 23 80 7492 001.
ICE351	40t 2 axle tank wagon	23 80 7398 000.
ICE352	40t 2 axle tank wagon	23 80 7191 400.
ICE355	40t 2 axle tank wagon	23 80 7391 017 - 23 80 7391 023, 23 80 7391 049 - 23 80 7391 051, 23 80 7491 000 - 23 80 7491 012.
ICE356	40t 2 axle tank wagon	23 80 7391 024, 23 80 7391 025.
ICE357	40t 2 axle tank wagon	23 80 7397 000.
ICE365	40t 2 axle tank wagon	23 80 7197 029.
ICE367	32t 2 axle tank wagon	23 80 7287 006.
ICE371	40t 2 axle tank wagon	23 80 7398 400.
ICE372	40t 2 axle tank wagon	23 80 7391 026 - 23 80 7391 034.
ICE376	36t 2 axle tank wagon	23 80 7187 000.
ICE378	40t 2 axle tank wagon	23 80 7391 046.
ICE444	40t 2 axle tank wagon	23 80 7397 401.
ICE447	40t 2 axle tank wagon	23 80 7391 047, 23 80 7391 048.
ICE451	40t 2 axle tank wagon	23 80 7398 027 - 23 80 7398 036.

GERMAN FEDERAL RAILWAY (DB)

Country 80

TANK WAGONS

Exchange Conditions 21,23,24,33,34.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
ICE463	40t 2 axle tank wagon	23 80 7398 037 - 23 80 7398 046.
ICE469	40t 2 axle tank wagon	23 80 7391 052 - 23 80 7391 056.
ICE472	80t bogie tank wagon	33 80 7995 001, 33 80 7995 002.
ICE489	40t 2 axle tank wagon	23 80 7391 057.
ICE500	40t 2 axle tank wagon	23 80 7398 053 - 23 80 7398 062.
ICE508	80t bogie tank wagon	33 80 7895 010 - 33 80 7895 012.
ICE509	40t 2 axle tank wagon	23 80 7394 010 - 23 80 7394 019.
ICE511	80t bogie tank wagon	33 80 7995 003 - 33 80 7995 012.
ICE517	80t bogie tank wagon	33 80 7895 400, 33 80 7895 401.
ICE519	80t bogie tank wagon	33 80 7998 000 - 33 80 7998 004.
ICE524	80t bogie tank wagon	33 80 7995 500 - 33 80 7995 515.
ICE527	80t bogie tank wagon	33 80 7891 002, 33 80 7891 003.
ICE534	80t bogie tank wagon	33 80 7794 000 - 33 80 7794 004.
ICE544	40t 2 axle tank wagon	21 80 7197 019 - 21 80 7197 028.
ICE547	40t 2 axle tank wagon	23 80 7398 066.
ICE548	80t bogie tank wagon	33 80 7998 000 - 33 80 7998 004.
ICE558	40t 2 axle tank wagon	24 80 7497 000 - 24 80 7497 009.
ICE563	40t 2 axle tank wagon	23 80 7391 058, 23 80 7391 059.
ICE564	40t 2 axle tank wagon	24 80 7495 000 - 24 80 7495 009.
ICE565	80t bogie tank wagon	33 80 7996 000.
ICE571	40t 2 axle tank wagon	24 80 7393 000 - 24 80 7393 009.
ICE572	40t 2 axle tank wagon	23 80 7398 077.

GERMAN FEDERAL RAILWAY (DB)

Country 80

TANK WAGONS

Exchange Conditions 21,23,24,33,34.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
ICE577	40t 2 axle tank wagon	23 80 7491 013 - 23 80 7491 017.
ICE579	90t bogie tank wagon	34 80 7896 000 - 34 80 7896 019.
ICE580	40t 2 axle tank wagon	23 80 7495 010 - 23 80 7495 019.
ICE588	40t 2 axle tank wagon	23 80 7391 070.
ICE594	40t 2 axle tank wagon	23 80 7395 400 - 23 80 7395 405.
ICE600	33t 2 axle tank wagon	23 80 7490 000, 23 80 7490 001.
ICE638	32t 2 axle tank wagon	23 80 7397 400.
ICE666	40t 2 axle tank wagon	23 80 7498 000 - 23 80 7498 002.
ICE674	90t bogie tank wagon	33 80 7794 005 - 33 80 7794 014, 33 80 7794 017 - 33 80 7794 026.
ICE676	80t bogie tank wagon	34 80 7899 000 - 34 80 7899 009.
ICE679	90t bogie tank wagon	33 80 7794 027 - 33 80 7794 030, 33 80 7794 035, 33 80 7794 036.
ICE681	80t bogie tank wagon	33 80 7794 015, 33 80 7794 016.
ICE687	45t 2 axle tank wagon	23 80 7495 020 - 23 80 7495 022.

GERMAN FEDERAL RAILWAY (DB)

Country 80

<u>VANS</u>		Exchange Conditions
<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IME006	39t 2 axle van	21 80 2140 000 - 21 80 2140 070, 21 80 2140 072 - 21 80 2140 082, 21 80 2140 084 - 21 80 2140 149.
IME277	40t 2 axle van	21 80 5795 000 - 21 80 5795 098.
IME583	33t 2 axle van	21 80 2191 001, 21 80 2191 019, 21 80 2191 031, 21 80 2191 049, 21 80 2191 055, 21 80 2191 085, 21 80 2191 088, 21 80 2191 095.
IPE471	80t bogie van	33 80 2796 000 - 33 80 2796 139.
IPE476	80t bogie van	33 80 2797 500 - 33 80 2797 579.
IPE481	80t bogie van	33 80 2797 000 - 33 80 2797 009, 33 80 2797 011 - 33 80 2797 160, 83 80 2797 161 - 83 80 2797 170, 83 80 2797 172 - 83 80 2797 209.
IPE512	80t bogie 2 door van	83 80 2797 650 - 83 80 2797 699.
IPE514	45t 2axle high capacity sliding wall van	43 80 2384 000 - 43 80 2384 120, 43 80 2385 000.
IPE521	80t bogie all door van	83 80 4743 000.
IPE551	80t bogie van	83 80 2797 700 - 83 80 2797 734, 83 80 2798 000 - 83 80 2798 014.
IPE576	80t bogie sliding wall van	83 80 4746 000.
IPE593	90t bogie van	83 80 2795 000 - 83 80 2795 049.
IPE663	45t 2 axle van	23 80 2398 500, 23 80 2398 501.
IPE668	2 x 45t 2 axle vans, permanently coupled	23 80 2794 000 - 23 80 2794 099.
IPE690	90t bogie van	83 80 4741 001 - 83 80 4741 060.

GERMAN FEDERAL RAILWAY (DB)

Country 80

OPEN WAGONS

Exchange Condition 21.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IFE259	40t 2 axle open wagon	21 80 4142 025 - 21 80 4142 154.
IFE568	40t 2 axle lowsided open wgn	21 80 4142 000 - 21 80 4142 024.

GERMAN FEDERAL RAILWAY (DB)

Country 80

FLAT WAGONS

Exchange Condition 23,26,33,43.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IPE222	30t 2 axle container flat	23 80 4141 000 - 23 80 4141 002.
IPE443	40t 2 axle covered wagon	23 80 5798 000 - 23 80 5798 002.
IPE501	40t 2 axle container flat	43 80 4141 500 - 43 80 4141 502.
IPE502	80t bogie flat	26 80 0498 000 - 26 80 0498 049.
IPE557	90t bogie flat	33 80 4747 000 - 33 80 4747 049.
IPE566	39t 2 axle container flat	43 80 9195 000, 43 80 9195 001.
IPE670	90t bogie flat	33 80 4737 000 - 33 80 4737 049.

GERMAN FEDERAL RAILWAY (DB)

Country 80

COIL CARRIERS

Exchange Condition 33.

Diagram Description

Vehicle Numbers

IPE587 90t telescopic hood coil carrier 33 80 4746 000 - 33 80 4746 049.

AUSTRIAN FEDERAL RAILWAYS (ÖBB)

Country 81

TANK WAGONS

<u>Diagram</u>	<u>Description</u>	<u>Exchange condition</u> 23.	<u>Vehicle Numbers</u>
ICE368	36t 2 axle tank wagon	23 81 7204 050,	23 81 7204 057.
ICE669	40t 2 axle tank wagon	23 81 7391 000,	23 81 7391 001.

ITALIAN STATE RAILWAYS (FS)

Country 83

TANK WAGONS

Exchange conditions 21,23.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
ICE079	32t 2 axle tank wagon	21 83 7288 000.
ICE142	36t 2 axle tank wagon	23 83 7197 016 & 23 83 7197 017.
ICE170	35t 2 axle tank wagon	23 83 7197 008 - 23 83 7197 015.
ICE177	36t 2 axle tank wagon	23 83 7190 003 - 23 83 7190 007, 23 83 7288 001.
ICE221	36t 2 axle tank wagon	23 83 7190 000 - 23 83 7190 002, 23 83 7197 018 - 23 83 7197 021.
ICE225	40t 2 axle tank wagon	21 83 7197 022, 21 83 7197 023.
ICE230	40t 2 axle tank wagon	23 83 7197 037, 23 83 7197 038.
ICE261	36t 2 axle tank wagon	23 83 7197 030 - 23 83 7197 036.
ICE263	40t 2 axle tank wagon	23 83 7197 000 - 23 83 7197 007.
ICE470	40t 2 axle tank wagon	23 83 7190 008 - 23 83 7190 031.
ICE595	46t 2 axle tank wagon	23 83 7397 900.

ITALIAN STATE RAILWAYS (FS)

Country 83

<u>VANS</u>		Exchange conditions
<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IIE329	40t 2 axle van	21 83 2382 000 - 21 83 2382 299.
IIE331	36t 2 axle refrigerator van	11 83 8092 900 - 11 83 8092 999.
IIE332	36t 2 axle refrigerator van	11 83 8090 000 - 11 83 8090 049.
IIE348	40t 2 axle refrigerator van	04 83 8088 000 - 04 83 8088 024, 04 83 8092 200 - 04 83 8092 482.
IIE375	40t 2 axle refrigerator van	03 83 8089 000 - 03 83 8089 499, 03 83 8089 680 - 03 83 8089 979.
IIE418	40t 2 axle refrigerator van	06 83 8083 700 - 06 83 8083 750.
IIE452	40t 2 axle refrigerator van	04 83 8091 000, 04 83 8091 001.
IIE590	40t 2 axle refrigerator van	04 83 8088 000 - 04 83 8088 049.
IIE591	40t 2 axle refrigerator van	03 83 8087 000 - 03 83 8087 029.
ILE553	80t bogie van	31 83 2797 000 - 31 83 2797 199.
ILE653	40t 2 axle van	21 83 2382 300 - 21 83 2382 699, 21 83 2388 000 - 21 83 2388 049.

SWISS FEDERAL RAILWAYS (SBB/CFF)

Country 85

TANK WAGONS

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>	Exchange conditions 23,33.
ICE366	36t 2 axle tank wagon	23 85 7492 200, 23 85 7492 201, 23 85 7492 700.	
ICE488	40t 2 axle tank wagon	23 85 7397 750, 23 85 7397 751.	
ICE493	40t 2 axle tank wagon	23 85 7398 500 - 23 85 7398 521.	
ICE499	40t 2 axle tank wagon	23 85 7390 500 - 23 85 7390 567.	
ICE532	80t bogie tank wagon	33 85 7995 500 - 33 85 7995 505.	

FRENCH NATIONAL RAILWAYS (SNCF)

Country 87

TANK WAGONS

Exchange Conditions 23,33,34.

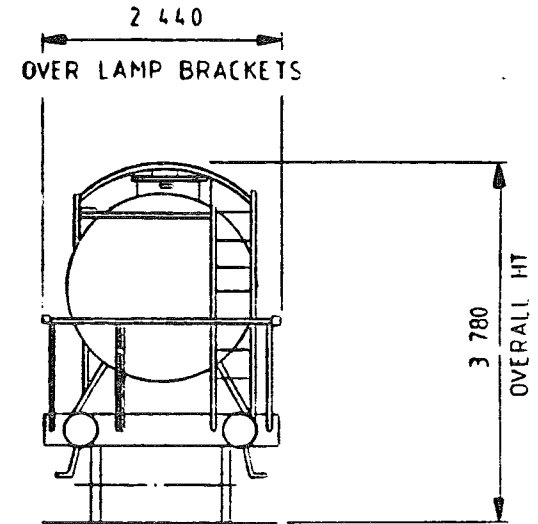
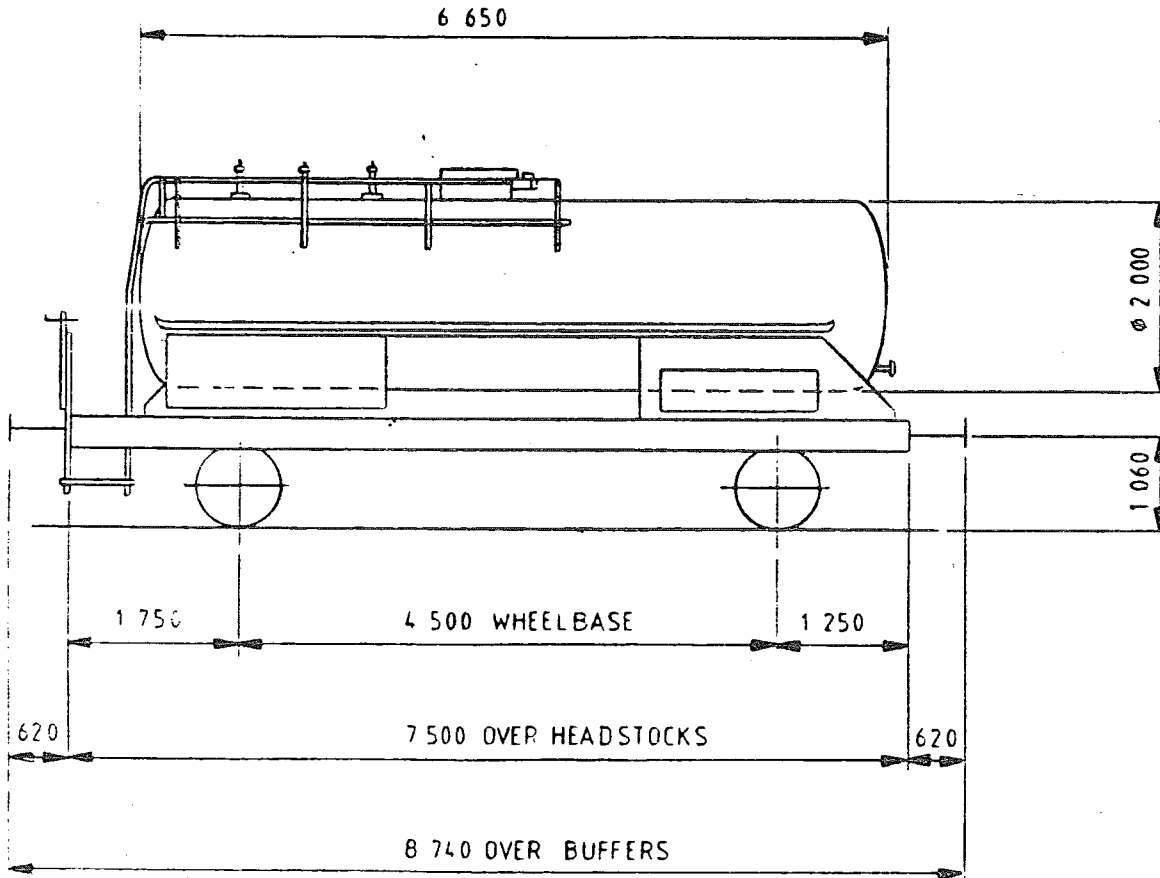
<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
ICE081	40t 2 axle tank wagon	23 87 7397 500.
ICE116	30t 2 axle tank wagon	23 87 7390 500.
ICE207	36t 2 axle tank wagon	23 87 7191 500.
ICE272	40t 2 axle tank wagon	23 87 7191 020.
ICE279	40t 2 axle tank wagon	23 87 7191 022.
ICE280	40t 2 axle tank wagon	23 87 7191 023.
ICE309	40t 2 axle tank wagon	23 87 7397 000 - 23 87 7397 002.
ICE315	36t 2 axle tank wagon	23 87 7190 501 - 23 87 7190 508.
ICE316	40t 2 axle tank wagon	23 87 7190 500, 23 87 7190 509.
ICE318	40t 2 axle tank wagon	23 87 7191 023.
ICE327	40t 2 axle tank wagon	23 87 7390 005 - 23 87 7390 007.
ICE338	40t 2 axle tank wagon	23 87 7395 000.
ICE361	40t 2 axle tank wagon	23 87 7390 514.
ICE362	40t 2 axle tank wagon	23 87 7390 507.
ICE363	40t 2 axle tank wagon	23 87 7390 504.
ICE373	40t 2 axle tank wagon	23 87 7391 001 - 23 87 7391 004.
ICB394	80t bogie tank wagon	33 87 7895 000 - 33 87 7895 006.
ICE428	80t bogie tank wagon	33 87 7890 555 - 33 87 7890 564.
ICE429	80t bogie tank wagon	33 87 7890 565 - 33 87 7890 584.
ICE432	80t bogie tank wagon	33 87 7890 613 - 33 87 7890 616.
ICE440	80t bogie tank wagon	33 87 7890 599 - 33 87 7890 610.
ICE441	80t bogie tank wagon	33 87 7890 611, 33 87 7890 612.

FRENCH NATIONAL RAILWAYS (SNCF)

Country 87

<u>TANK WAGONS</u>		Exchange Conditions 23,33,34.
<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
ICE446	80t bogie tank wagon	33 87 7890 520 - 33 87 7890 554, 33 87 7890 589 - 33 87 7890 598.
ICE454	80t bogie tank wagon	34 87 7890 585 - 34 87 7890 588.
ICE456	80t bogie tank wagon	34 87 7890 515, 34 87 7890 516, 34 87 7890 518, 34 87 7890 519.
ICE457	80t bogie tank wagon	33 87 7890 500 - 33 87 7890 514.
ICE460	40t 2 axle tank wagon	23 87 7390 515, 23 87 7390 516.
ICE477	40t 2 axle tank wagon	23 87 7191 028 - 23 87 7191 034.
ICE478	40t 2 axle tank wagon	23 87 7191 025 - 23 87 7191 027.
ICE492	40t 2 axle tank wagon	23 87 7491 000.
ICE496	80t bogie tank wagon	33 87 7992 000 - 33 87 7992 015.
ICE498	80t bogie tank wagon	33 87 7995 000 - 33 87 7995 002.
ICE507	80t bogie tank wagon	33 87 7896 000.
ICE510	80t bogie tank wagon	33 87 7996 000 - 33 87 7996 007.
ICE513	80t bogie tank wagon	33 87 7996 008 - 33 87 7996 014.
ICE516	80t bogie tank wagon	33 87 7996 030 - 33 87 7996 039.
ICE522	80t bogie tank wagon	33 87 7996 015 - 33 87 7996 029.
ICE525	80t bogie tank wagon	33 87 7896 001 - 33 87 7896 007.
ICE530	80t bogie tank wagon	34 87 7899 000.
ICE533	80t bogie tank wagon	33 87 7896 008 - 33 87 7896 011.
ICE536	80t bogie tank wagon	34 87 7899 010 - 34 87 7899 014.
ICE539	80t bogie tank wagon	33 87 7899 003 - 33 87 7899 009.
ICE541	80t bogie tank wagon	33 87 7896 012 - 33 87 7896 016.

					TOPS INFORMATION							
A	E	C	D		AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
18-71	22-71	26-71				60 mile/h UP TO 50 mile/h ABOVE	36 tonne GLW	6t FORCE UP TO 15t FORCE ABOVE	20t GLW	4	6	
S	18-71	22-71	22-71		CARKND							
					I C B B							

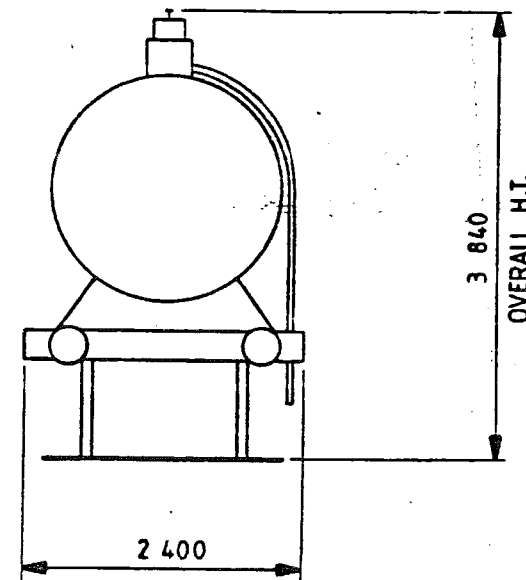
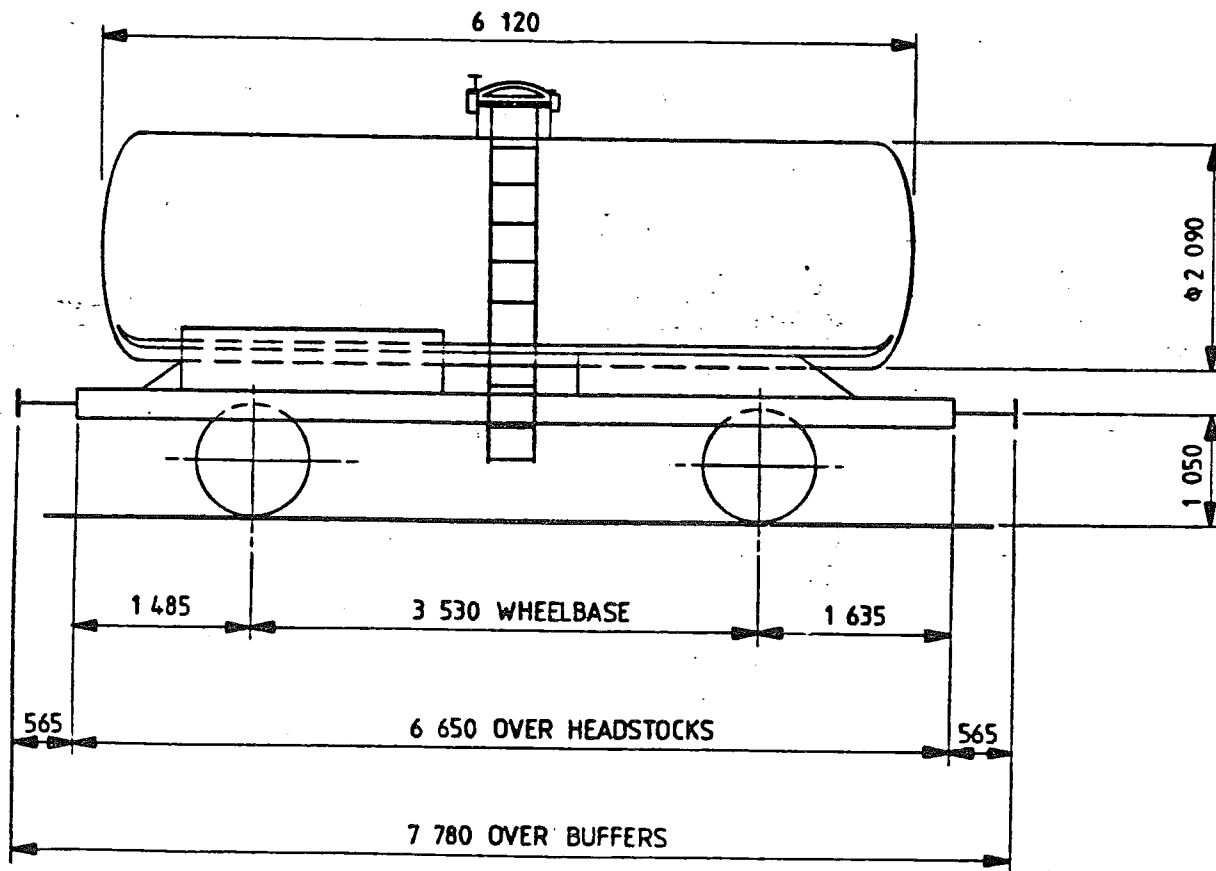


TARE -	13 300 Kg
CAPACITY, WEIGHT-	26.71
CAPACITY, VOLUME-	19m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARPST. DRG. No. -	H 7596-2

BRAKE -	AIR & VAC THRO PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

TYPE -	Z cefs
WAGON No. -	23 80 7398 600
BUILDER -	HULS RECKLING HAUSEN
OWNER -	D.B.

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
20t					CARKND	50 mile/h UP TO mile/h ABOVE 30 tonne GLW				3	2	
					I C Q A							



TARE -	9 350 Kg
CAPACITY, WEIGHT-	20t
CAPACITY, VOLUME-	20m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	C.7259

BRAKE -	AIR THROUGH PIPE
SUSPENSION -	
COUPLINGS -	U.I.C.
BUFFERS -	
WHEELS -	∅1050
JOURNALS -	

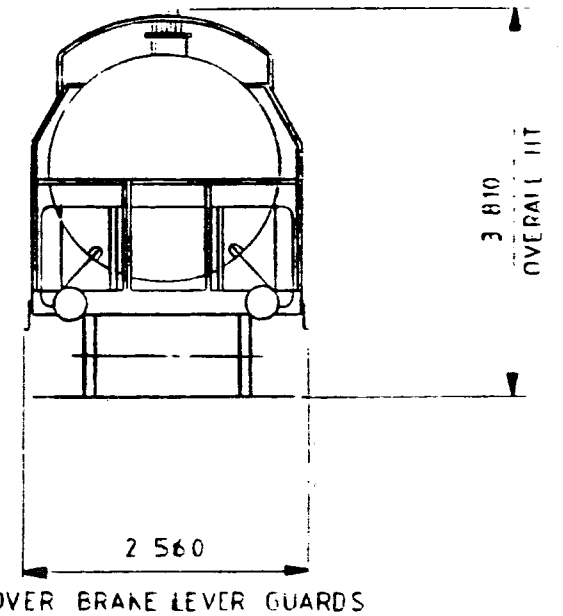
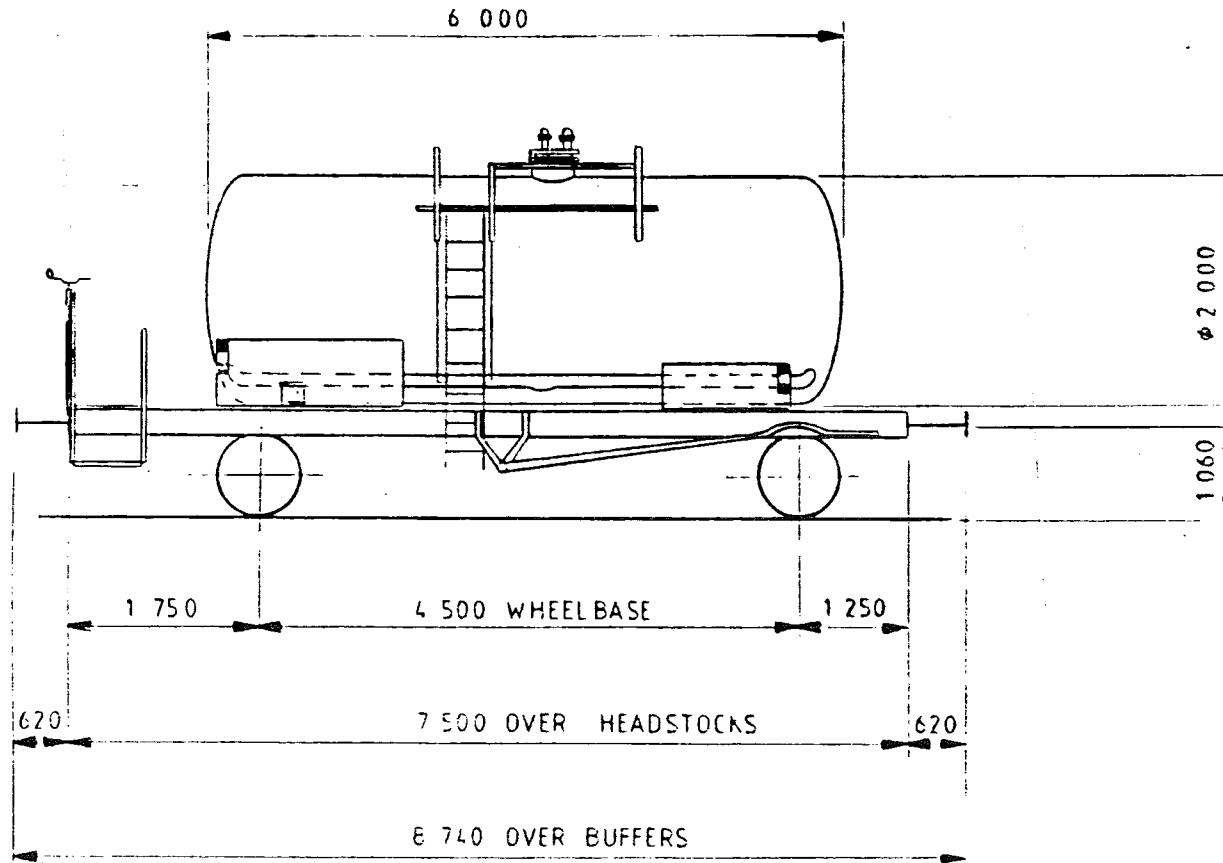
TYPE -	Zfs
WAGON No. -	23 87 7390 500
BUILDER -	
OWNER -	ERMEWA

ISSUE 1

33t GLW 2 AXLE TANK

ICE 141

				TOPS INFORMATION						
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
21-61	231	231		CARKND	50 mile/h UP TO	71 FORCE UP TO	231 GLW	4	4	
				I C B B	mile/h ABOVE	171 FORCE ABOVE				
					33 tonne GLW					



TARE -	10 500 kg
CAPACITY, WEIGHT -	231
CAPACITY, VOLUME -	18 m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ARRGT DRG No -	BT 519-2

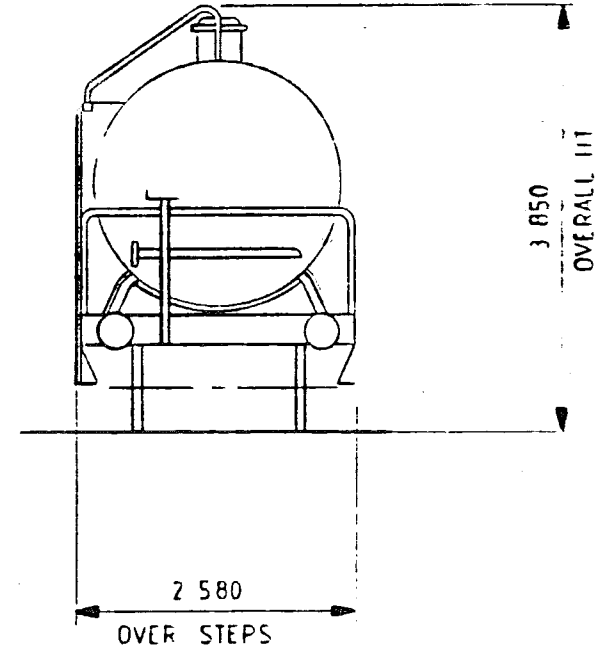
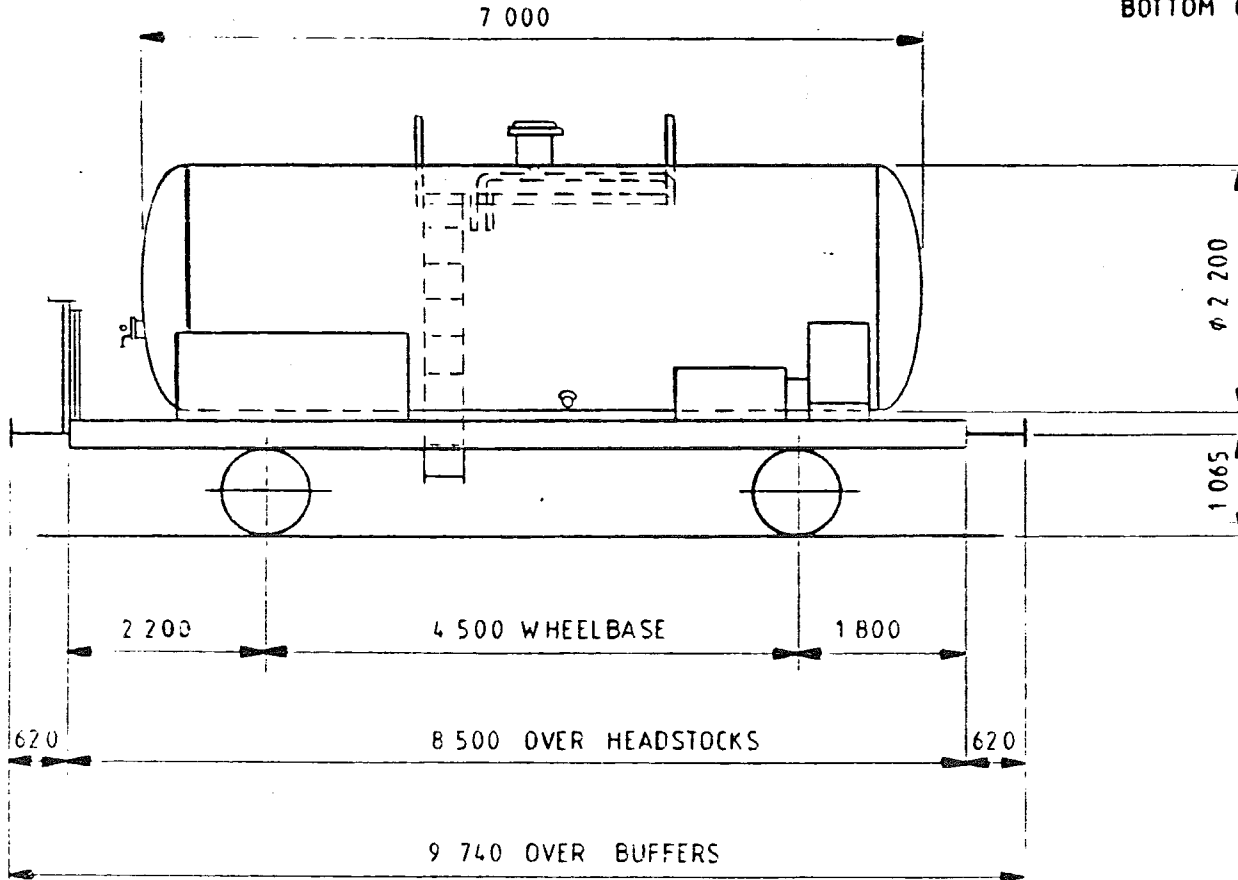
BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C
BUFFERS -	HYDRAULIC 7370 HD
WHEELS -	Ø1000
JOURNALS -	Ø130

TYPE -	Zc1 Zcfs
WAGON No. -	23 80 7191 701 & 702 23 80 7391 718 - 720
BUILDER -	E.A.S.F. LUDWIGSHAFEN
OWNER -	DE

ISSUE 1

				TOPS INFORMATION						
A	E	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
21-51	25-51	25-51		CARKND	50 mile/h UP TO mile/h ABOVE	36 tonne GLW	71 FORCE UP TO 161 FORCE ABOVE	201 GLW	6	4
				I C B B						

NOTE-BARRELS FITTED WITH
BOTTOM OUTLETS & HEATING COILS



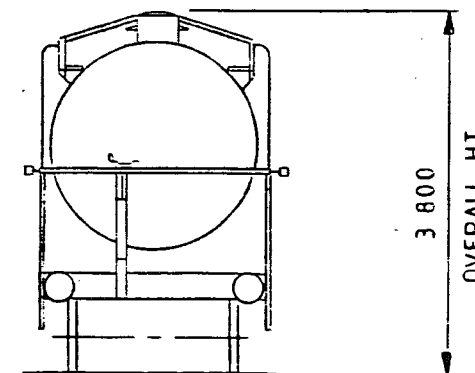
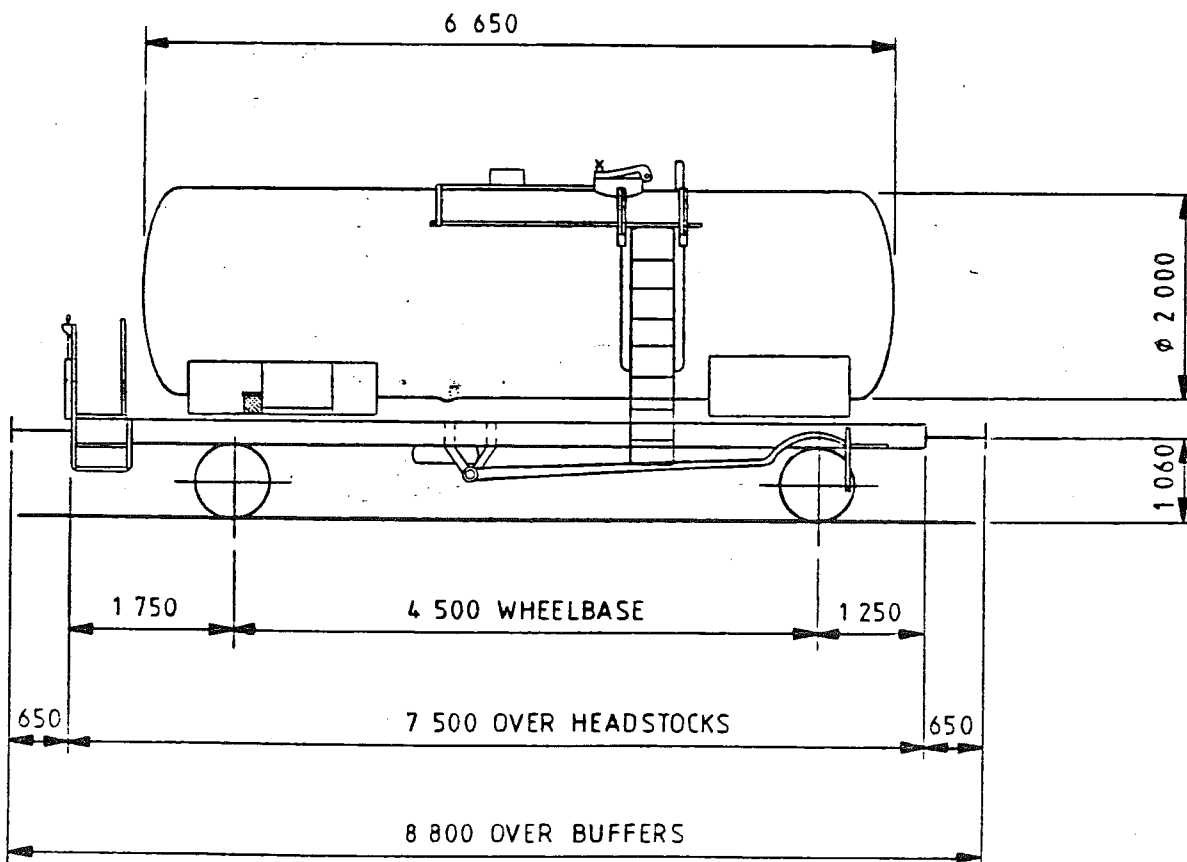
TARE -	10 500 Kg
CAPACITY, WEIGHT -	25.51
CAPACITY, VOLUME -	25 m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. AREGT. DRG. No -	6886

BRAKE -	AIR & VAC THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC φ370
WHEELS -	φ1 000
JOURNALS -	φ130

TYPE -	Z e f
WAGON No. -	23 83 7197 016, 017
BUILDER -	A.L.F.
OWNER -	MONTEDISON MILAN

ISSUE 1

				TOPS INFORMATION				EXCESS LENGTH	RA (GLW)	DESIGN SHEET
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA				
19 t				CARKND	50 mile/h UP TO mic/h ABOVE	5 t FORCE UP TO 12 t FORCE ABOVE	4	3		
				I C B B	31 tonne GLW	15 t GLW				



- Zfkk 23 80 7286 003.005
- Zcfkk 23 80 7287 000.001
- Zf 23 80 7190 004.006.008.
009.014
- Zef 23 80 7197 000
- Zefk 23 80 7199 002.009.012.017
- Zefkk 23 80 7289 000.004

TARE -	12 500 Kg
CAPACITY, WEIGHT-	19 t
CAPACITY, VOLUME-	20 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRG. DRG. No.-	25.01.253

BRAKE -	AIR & VAC THRO'PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370
WHEELS -	ϕ 1 m
JOURNALS -	ϕ 130

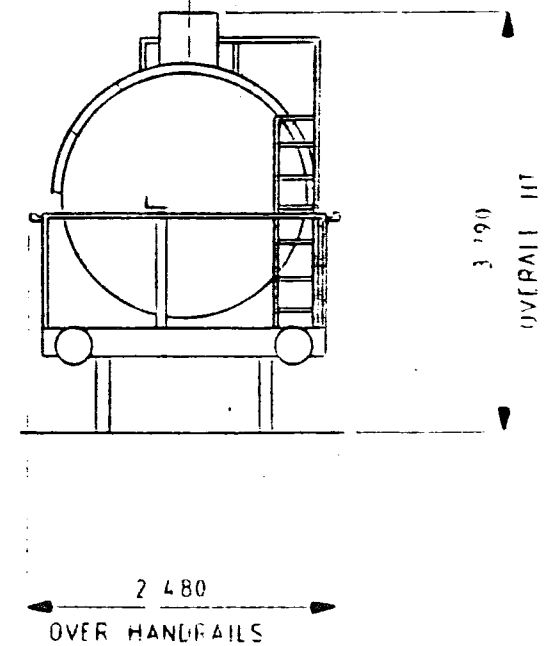
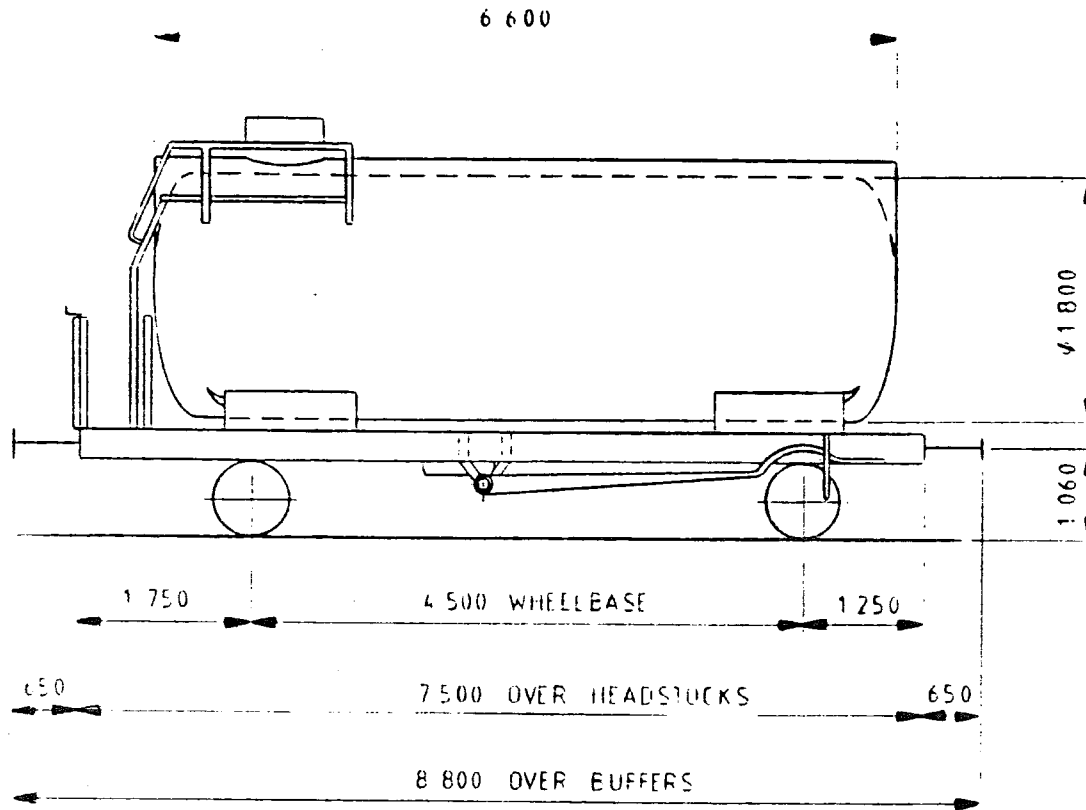
TYPE -	} SEE ABOVE
WAGON No. -	
BUILDER -	V. T. G.
OWNER -	V. T. G.

ISSUE 1

32t GLW 2 AXLE TANK

ICE 158

TOPS INFORMATION											
A	E	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
18t	158t	168t		CARKND	50 mile/h UP TO		8t FORCE UP TO		4	3	
				I C X A	mile/h ABOVE 32 tonne GLW		18t FORCE ABOVE 23t GLW				



TARE -	14 000 Kg
CAPACITY, WEIGHT -	18t
CAPACITY, VOLUME -	15 m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ASSEY. DRS No.	2603 01.006

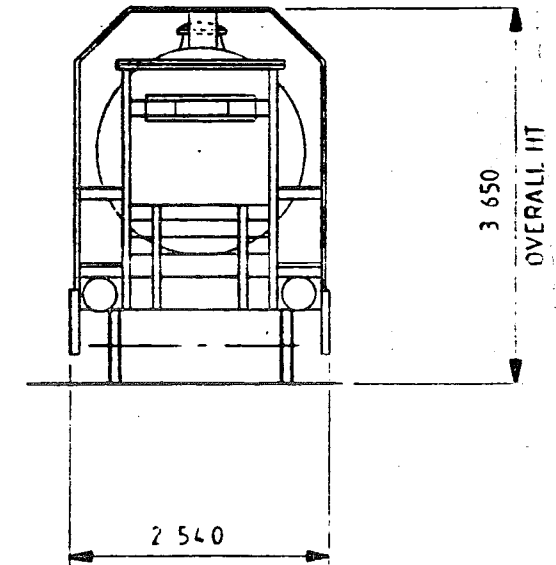
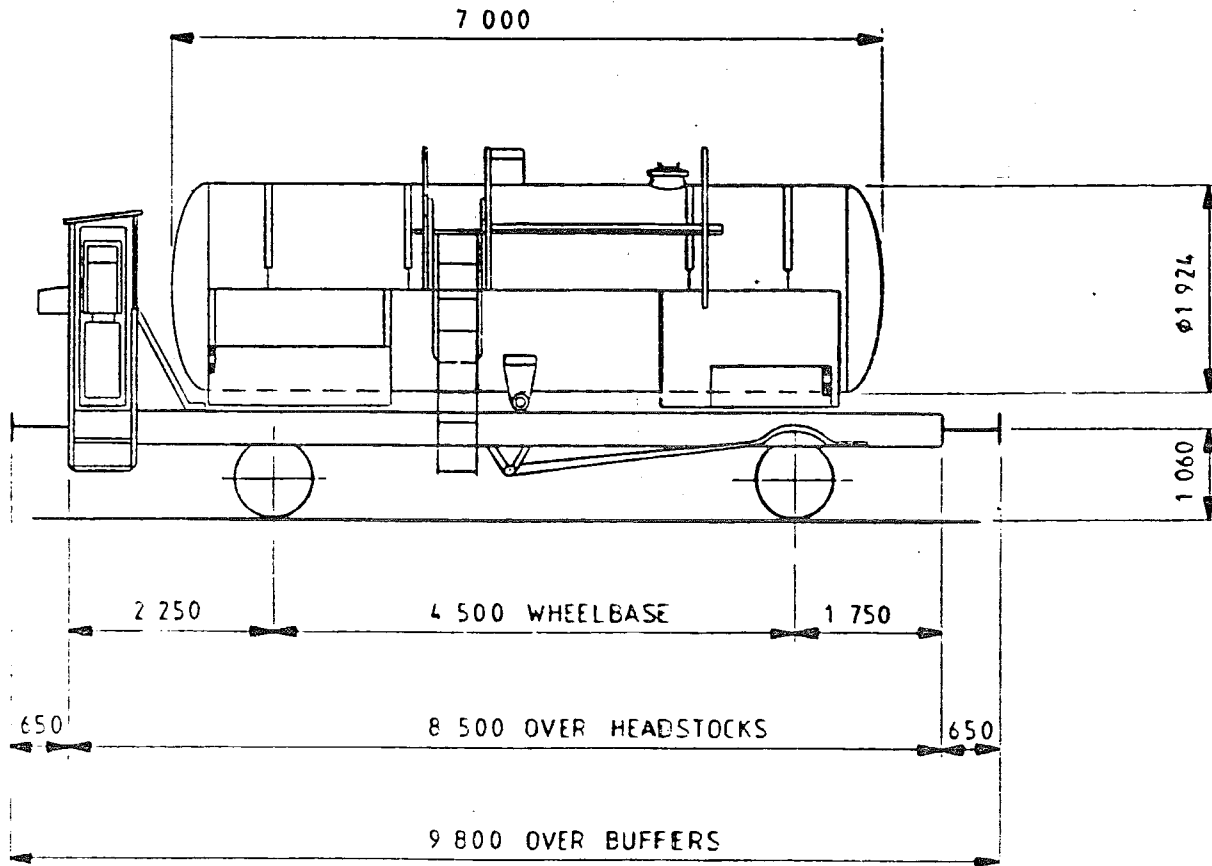
BRAKE -	DUAL
SUSPENSION -	SINGLE LINK
COUPLINGS -	J.I.C.
BUFFERS -	HYDRAULIC 4370
WHEELS -	21000
JOURNALS -	2130

TYPE -	Zfgk
WAGON No. -	23 60 7277 015 - 039 (NOT INCLD)
BUILDER -	V.T.G.
OWNER -	V.T.G.

ISSUE -

	A	B	C	D	TOPS INFORMATION							
	171				AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
					CARKND	50 mile/h UP TO mile/h ABOVE		30 tonne GLW		6	2	
					I C B A							

NOTE - BOTTOM OUTLET BLANKED OFF



TARE -	12 750 Kg
CAPACITY, WEIGHT -	171
CAPACITY, VOLUME -	19 m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	BT 1053

BRAKE -	AIR & VAC. THROUGH PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

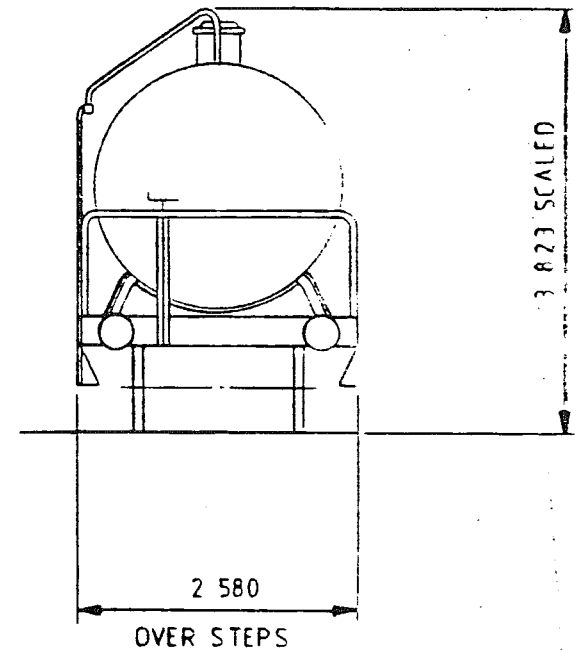
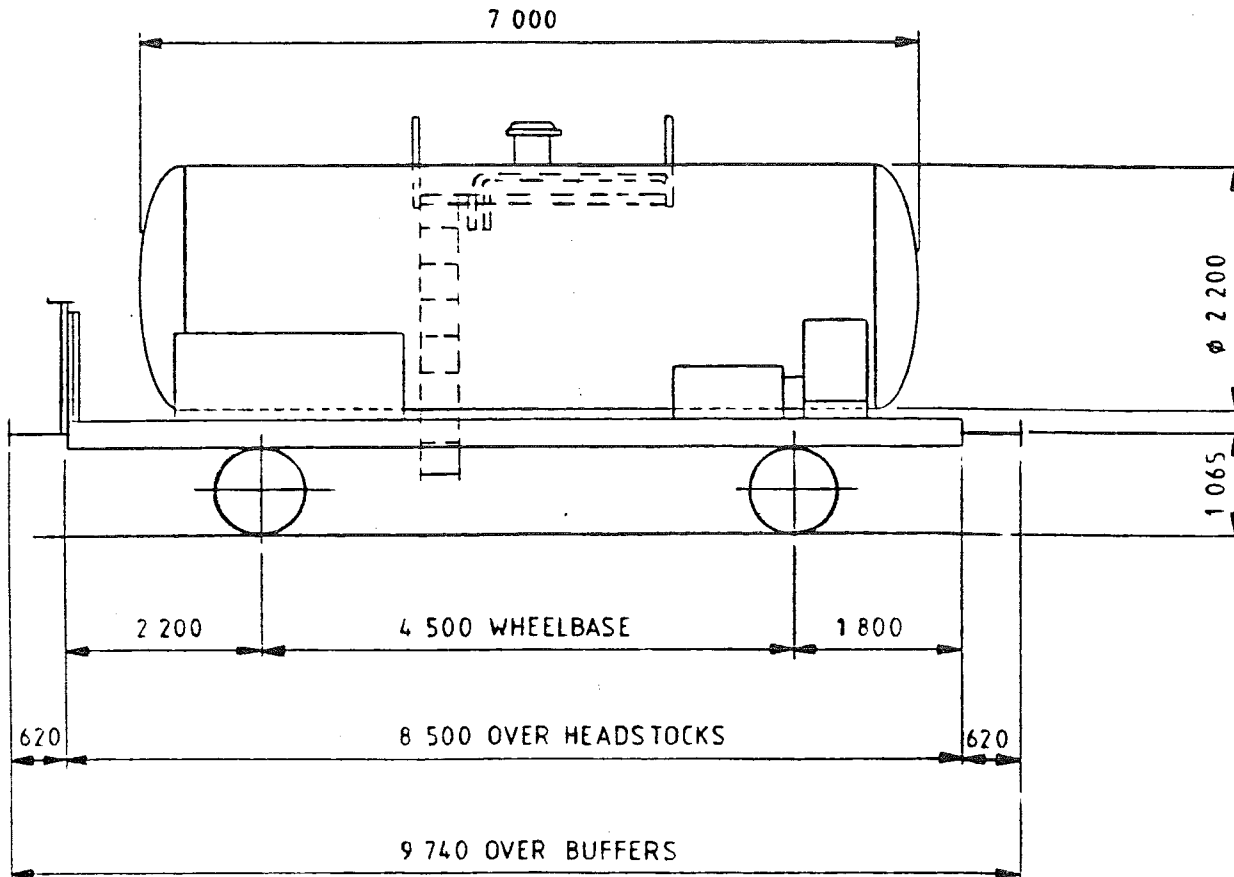
TYPE -	Z ef
WAGON No. -	23 80 7197 400
BUILDER -	BADISCHE ANILIN & SODA
OWNER -	FABRIK

ISSUE 1

35 t GLW 2 AXLE TANK

ICE 170

				TOPS INFORMATION						
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
20 81	24 t	24 t		CARKND		50 mile/h UP TO	7 t FORCE UP TO			
				I C B B	mile/h ABOVE	24 tonne GLW	15 t FORCE ABOVE	6	4	



TARE -	11 200 Kg
CAPACITY, WEIGHT	24 t
CAPACITY, VOLUME-	24 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRS No.-	56252 233

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	UIC
BUFFERS -	
WHEELS -	φ 1 m
JOURNALS -	φ 130

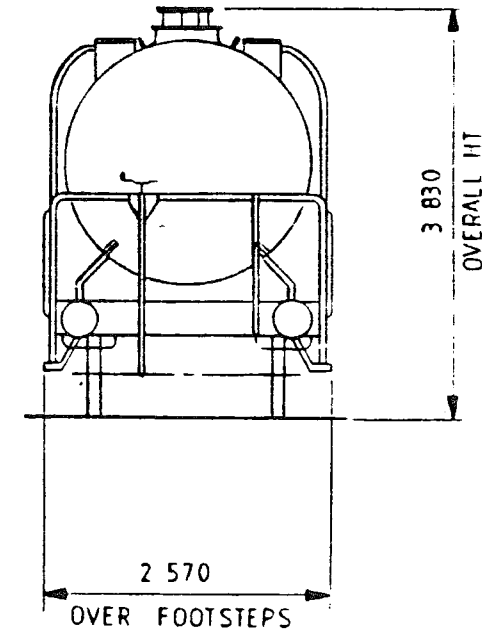
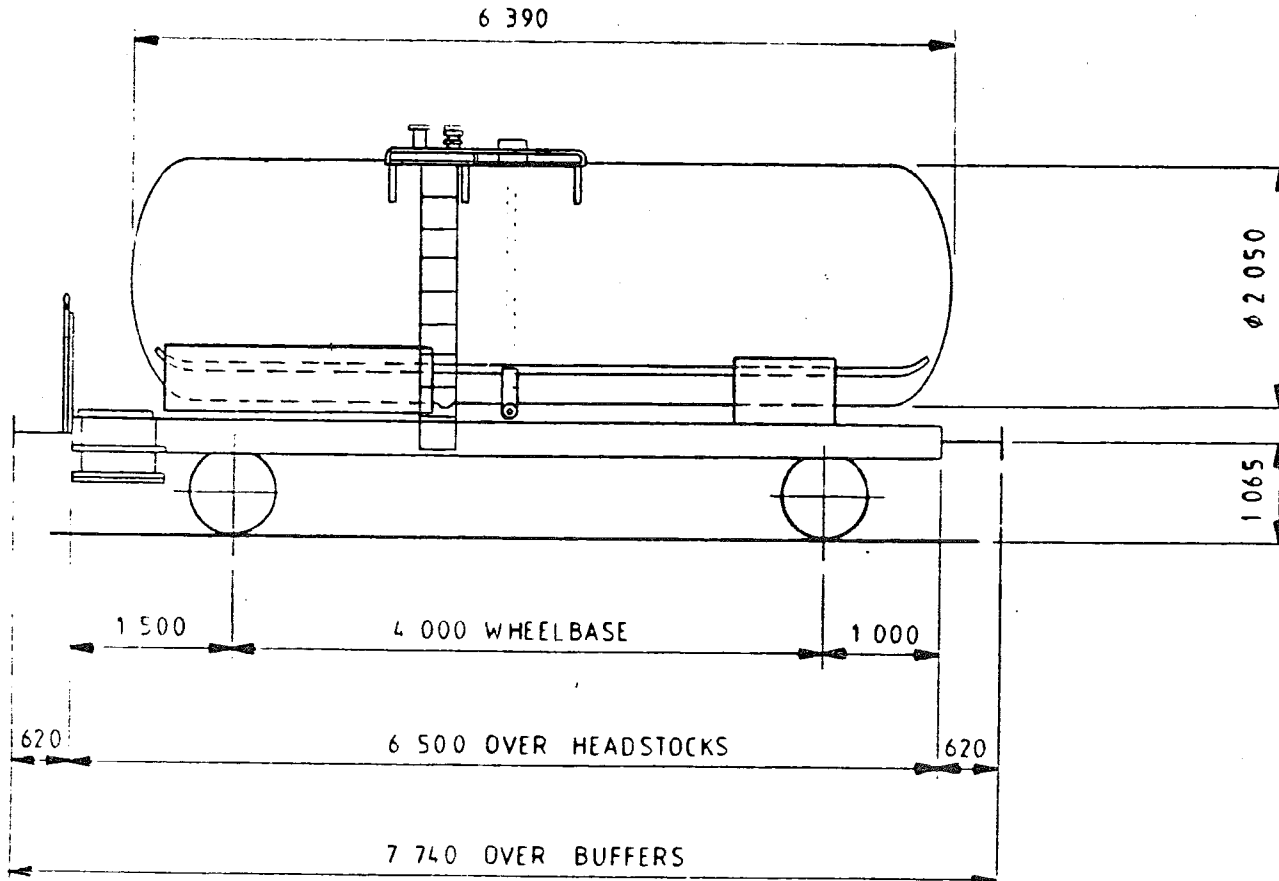
TYPE -	Zef
WAGON No. -	23 83 7197 008 - 015
BUILDER -	SIAI - LERICI
OWNER -	MONTEDISON, MILAN

37t GLW 2 AXLE TANK

ICE 174

				TOPS INFORMATION					
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
19.61	23.61	25.11		CARKND	50 mile/h UP TO mile/h ABOVE	11t FORCE UP TO 20t FORCE ABOVE	3	5	
				I C B B	37 tonne GLW	21t GLW			

NOTE: BRAKED WEIGHTS



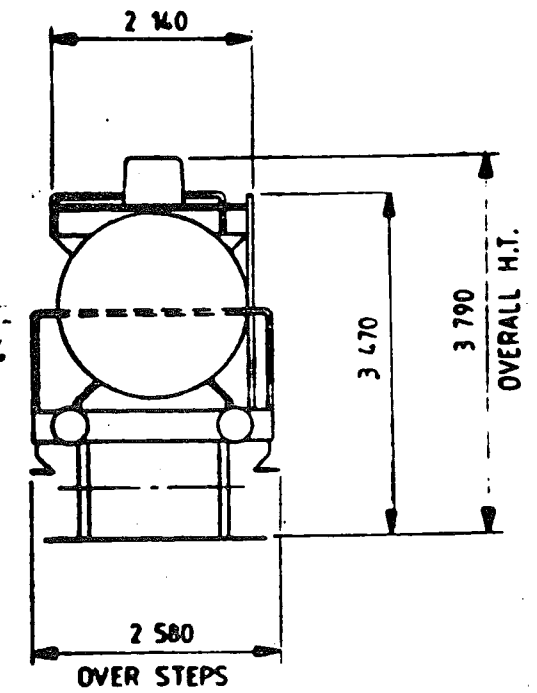
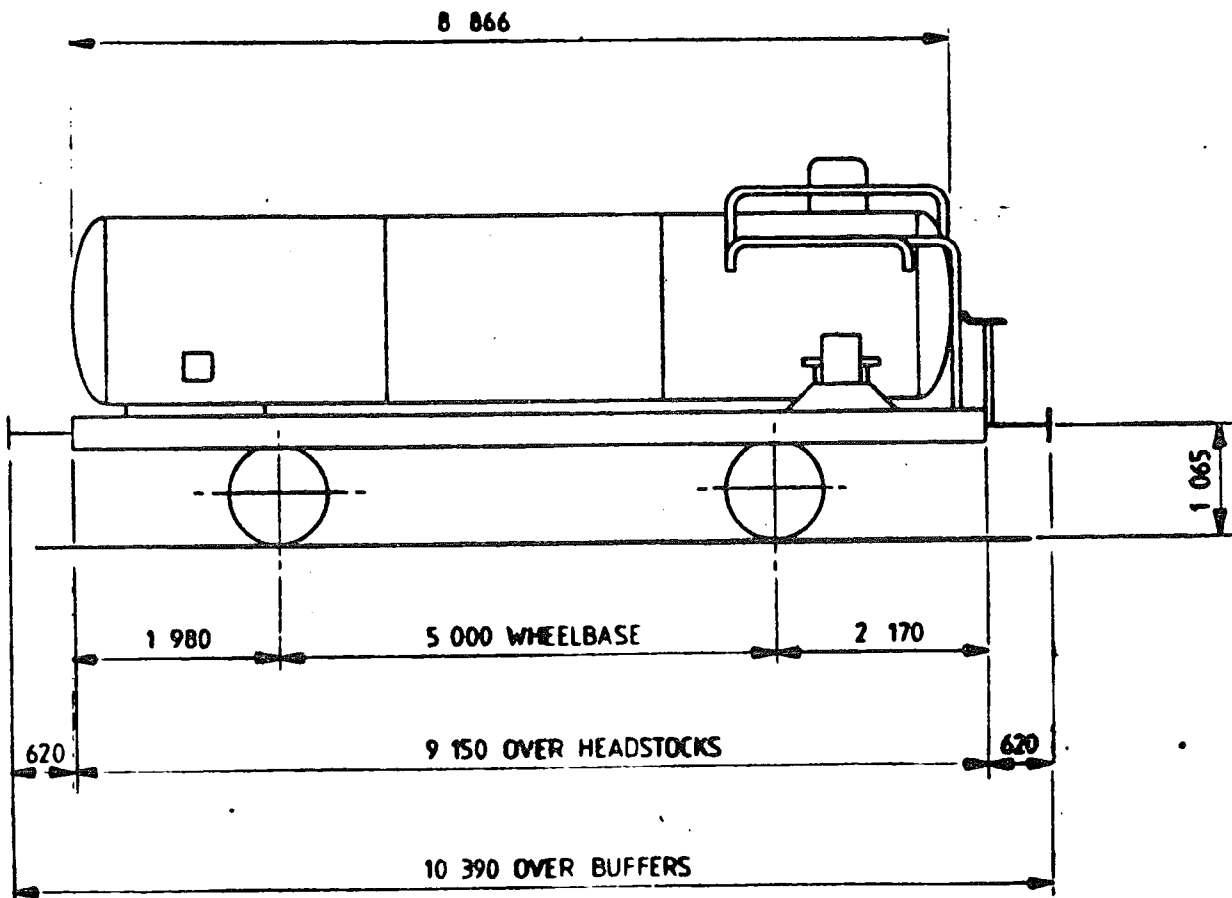
TARE -	12 370 Kg
CAPACITY, WEIGHT -	25.1 t
CAPACITY, VOLUME -	20 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. APPGT. DRG. No. -	4420-72

BRAKE -	AIR & VAC THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC Ø370 HD
WHEELS -	Ø1 000
JOURNALS -	Ø130

TYPE -	Z 1 g
WAGON No. -	23 88 7194 000
BUILDER -	FRERES. COBERT
OWNER -	SOLWAY. BRUSSELS

ISSUE 1

TOPS INFORMATION												
A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
18t	22t			CARKND		50 mile/h UP TO 36 tonnes GLW		6t. FORCE UP TO 12t. FORCE ABOVE 15t. GLW		7	5	
				I	C	X	B					



TARE -	13 950Kg
CAPACITY, WEIGHT-	22 t
CAPACITY, VOLUME-	26m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	832

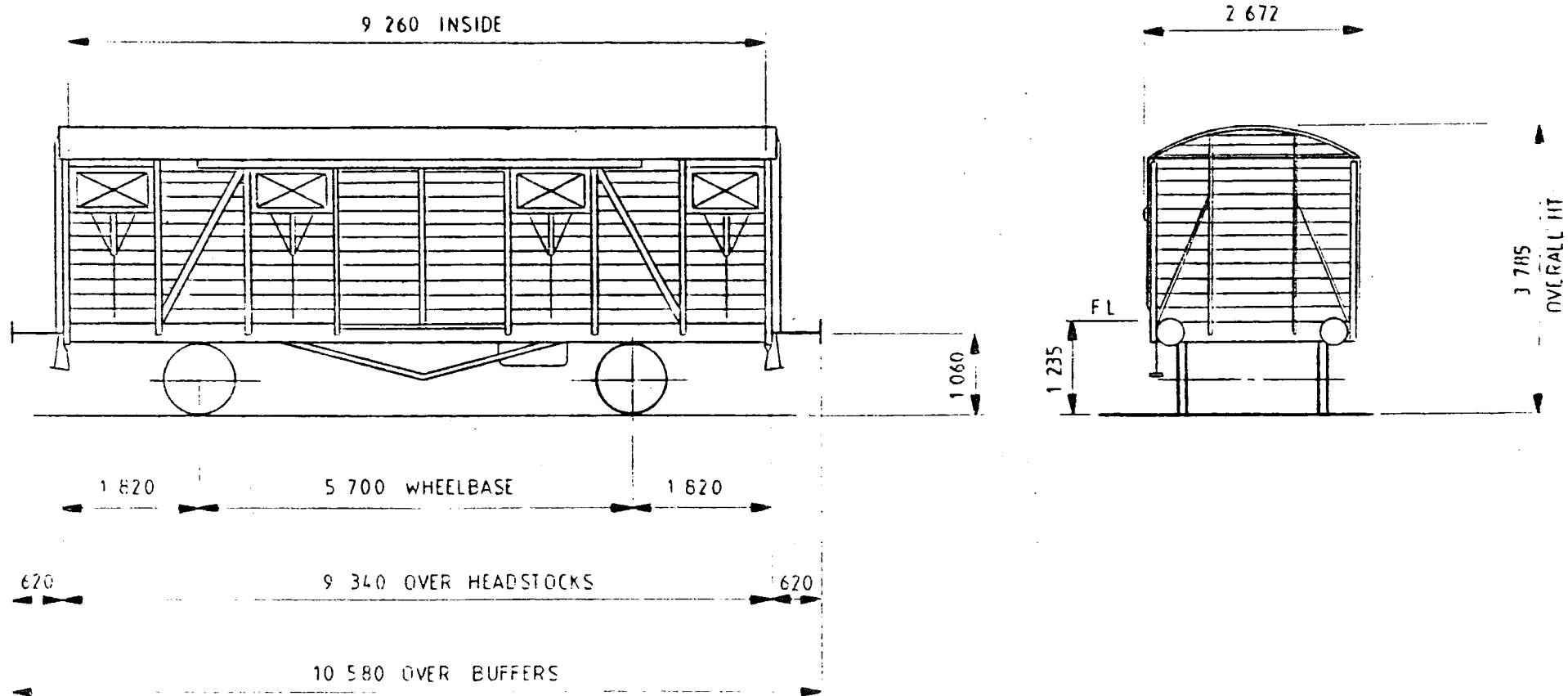
BRAKE -	DUAL
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 400
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130mm

TYPE -	Zf; Zfghk
WAGON No. -	23 83 7190 003-007 23 83 7288 001
BUILDER -	MARCHETTI MILAN
OWNER -	MONTEDISON

36t GLW 2 AXLE TANK

IME 199

A E C C		TOPS INFORMATION						
1951	23.51	AARKND	OPERATING SPEED		BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	1951 23.51	CARKND	60 mile/h UP TO	36 tonne GLW	51 FORCE UP TO	7	5	
		I M X C	110 ABOVE		151 FORCE ABOVE			



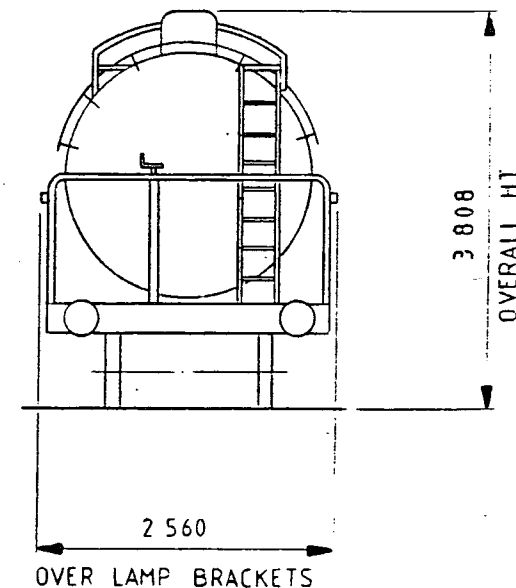
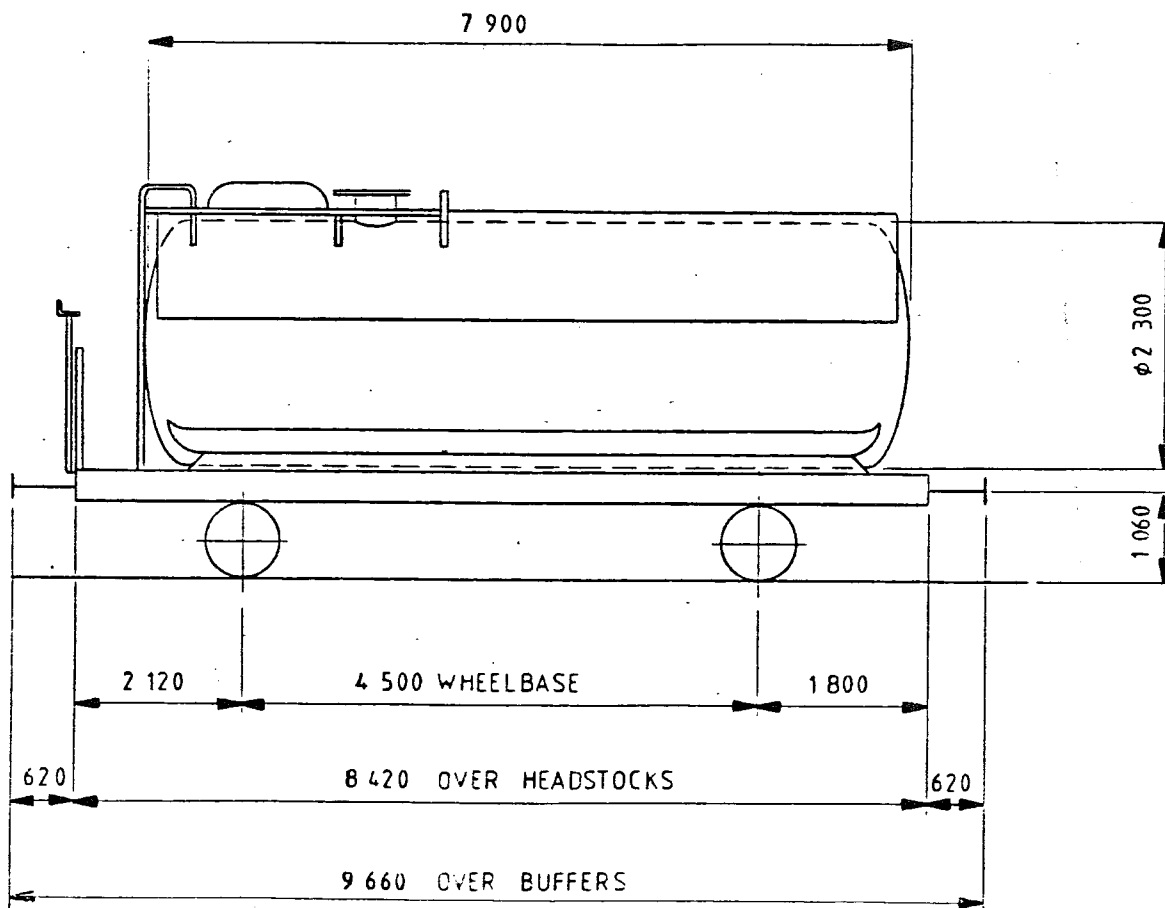
TARE -	12 700 Kg
CAPACITY, WEIGHT -	23.51
CAPACITY, VOLUME -	42 m ³
FLOOR AREA -	21 m ²
MIN. CURVE -	60m
GEN. A-FGT. DRG No. -	01-40-862

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	21 000
JOURNALS -	2130

TYPE -	ZTKKs
WAGON No. -	21 72 2191 000-099
BUILDER -	FAERIKA VAGONA KRAJJEV.
OWNER -	JZ

ISSUE 1

TOPS INFORMATION										
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA	
	17t				CARKND		60 mile/h UP TO		6t FORCE UP TO	
S	17t				I C X B		31 tonne GLW		13t FORCE ABOVE	
									EXCESS LENGTH	RA (GLW)
									6	3
										DESIGN SHEET



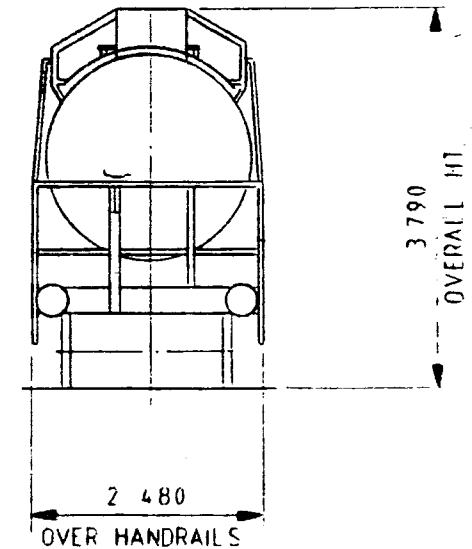
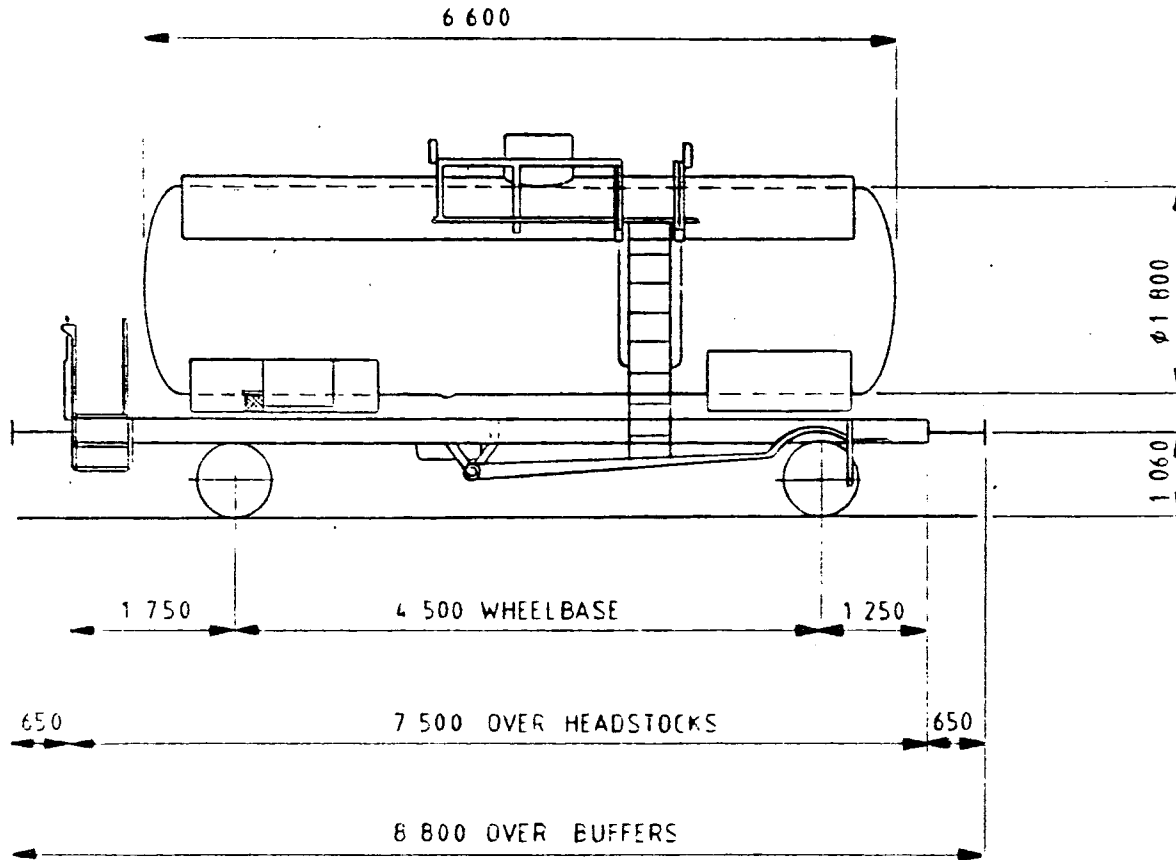
TARE -	14 000 Kg
CAPACITY, WEIGHT-	17t
CAPACITY, VOLUME-	31 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	B 3031-01-2

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 2 370 HD
WHEELS -	φ1 m
JOURNALS -	φ130

TYPE -	Z.f.g.s.
WAGON No. -	23 80 7394 400
BUILDER -	
OWNER -	

ISSUE 1

TOPS INFORMATION											
A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	181			CARKND	50 mile/h UP TO	32 tonne GLW	6t FORCE UP TO	20t GLW	4	3	
				I C X B	mile/h ABOVE		15t FORCE ABOVE				



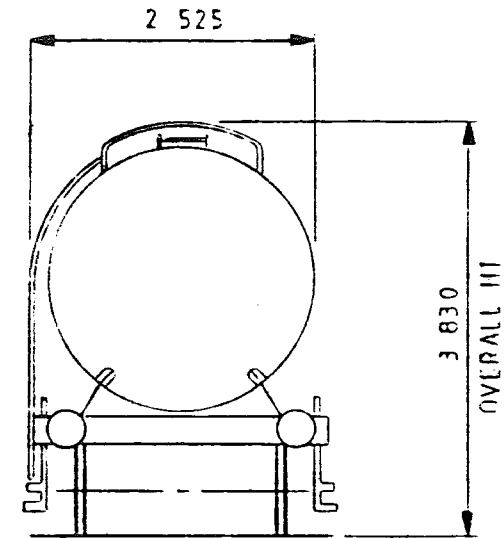
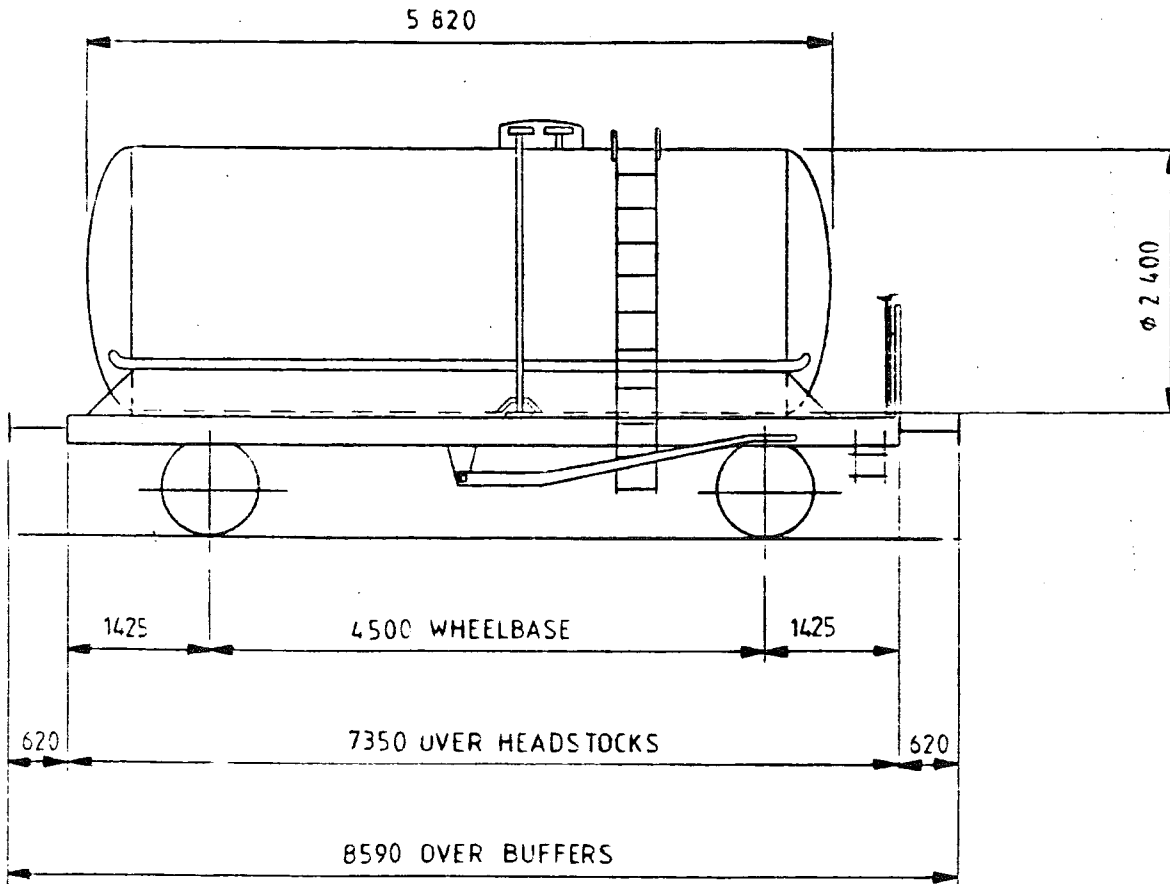
TARE -	14 000 Kg
CAPACITY, WEIGHT-	181
CAPACITY, VOLUME-	15.5 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	2603. 01.296

BRAKE -	DUAL
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1100
JOURNALS -	ϕ 130

TYPE -	Z 1gk
WAGON No. -	23 80 7277 001. 003. 004. 006. 007. 009-012
BUILDER -	V.T.G.
OWNER -	V.T.G.

ISSUE 1

A B C D				TOPS INFORMATION									
20 81 24 81 25 61				AARKND		OPERATING SPEED			BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
				CARKND		50 mile/h UP TO mile/h ABOVE 36 tonne GLW			5 t FORCE UP TO 11 t FORCE ABOVE 14 t GLW		4	5	
				I	C	B	B						



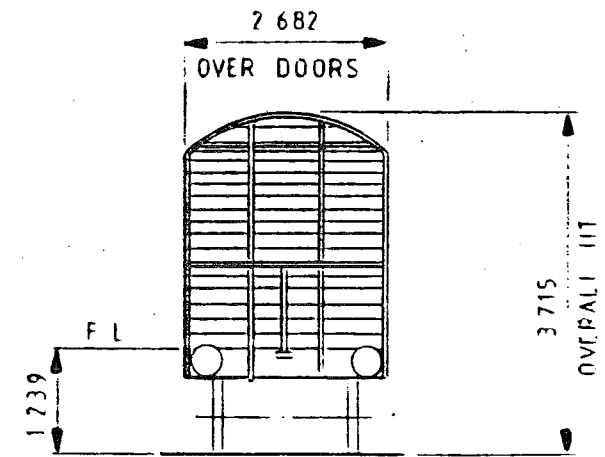
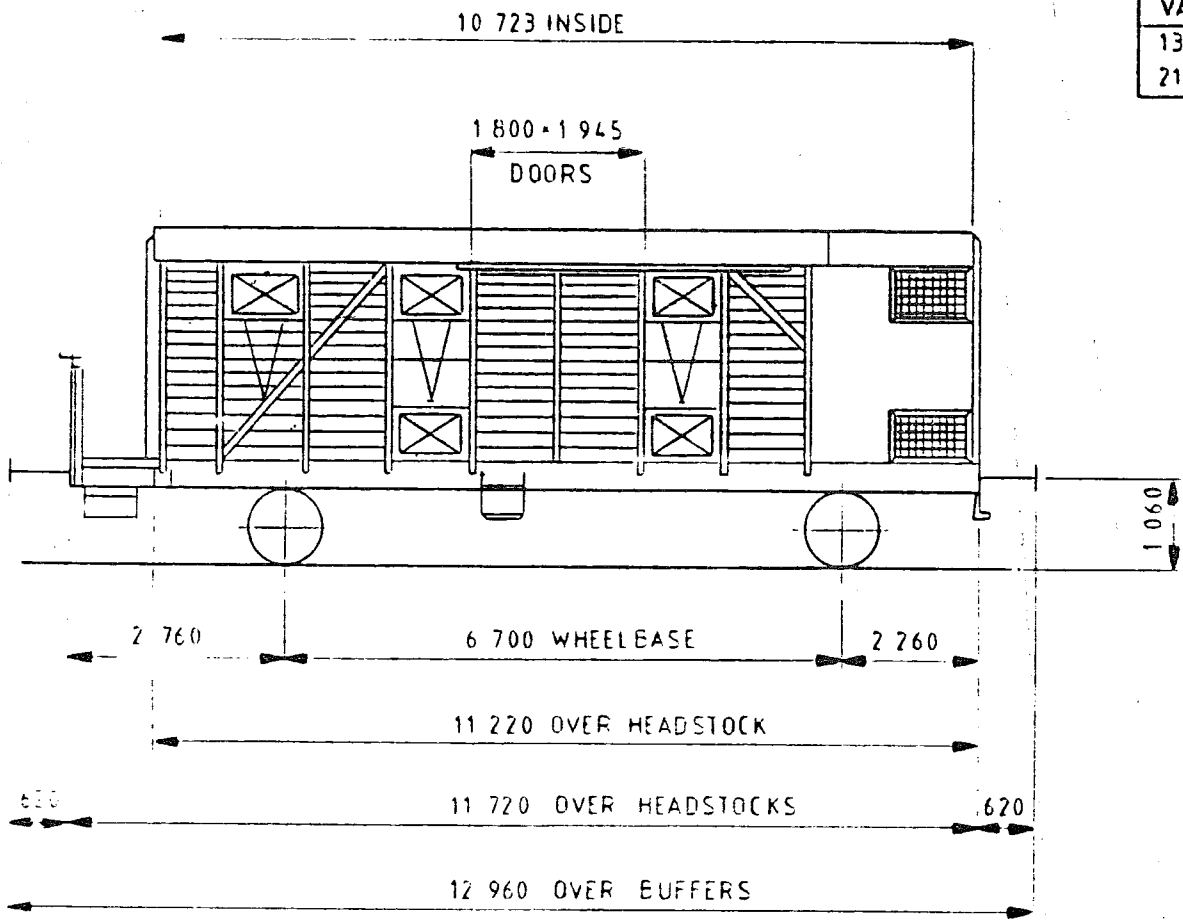
TARE -	11 200 Kg
CAPACITY, WEIGHT -	25 6 t
CAPACITY, VOLUME -	24 4 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG No -	73717

BRAKE -	AIR & VAC THRO PIPE PLATFORM SCREW & LEVER
SUSPENSION -	SINGLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	ø 1 050
JOURNALS -	ø 130

TYPE -	Zct
WAGON No. -	23 87 7191 500
BUILDER -	FAUVET - GIREL
OWNER -	ERMEFER

ISSUE 1

A P C D				TOPS INFORMATION					
191	231	271		AARKND	OPERATING SPEED	AIR BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S 191	231	271		CARKND	60 mile/h UP TO mile/h ABOVE	11t FORCE UP TO 23t GLW 18t FORCE ABOVE	11	6	
				ITXN	40 tonne GLW	VACUUM BRAKE FORCE DATA			
						13t FORCE UP TO 26t GLW 21t FORCE ABOVE			



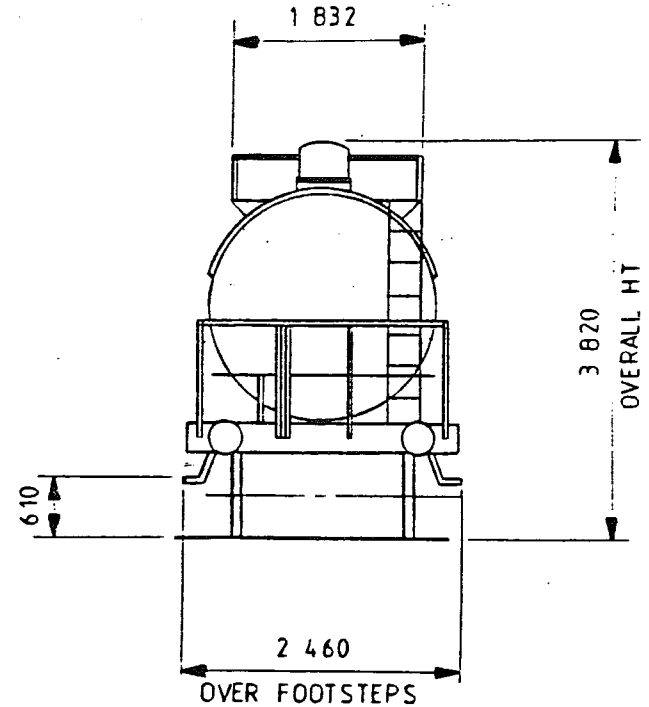
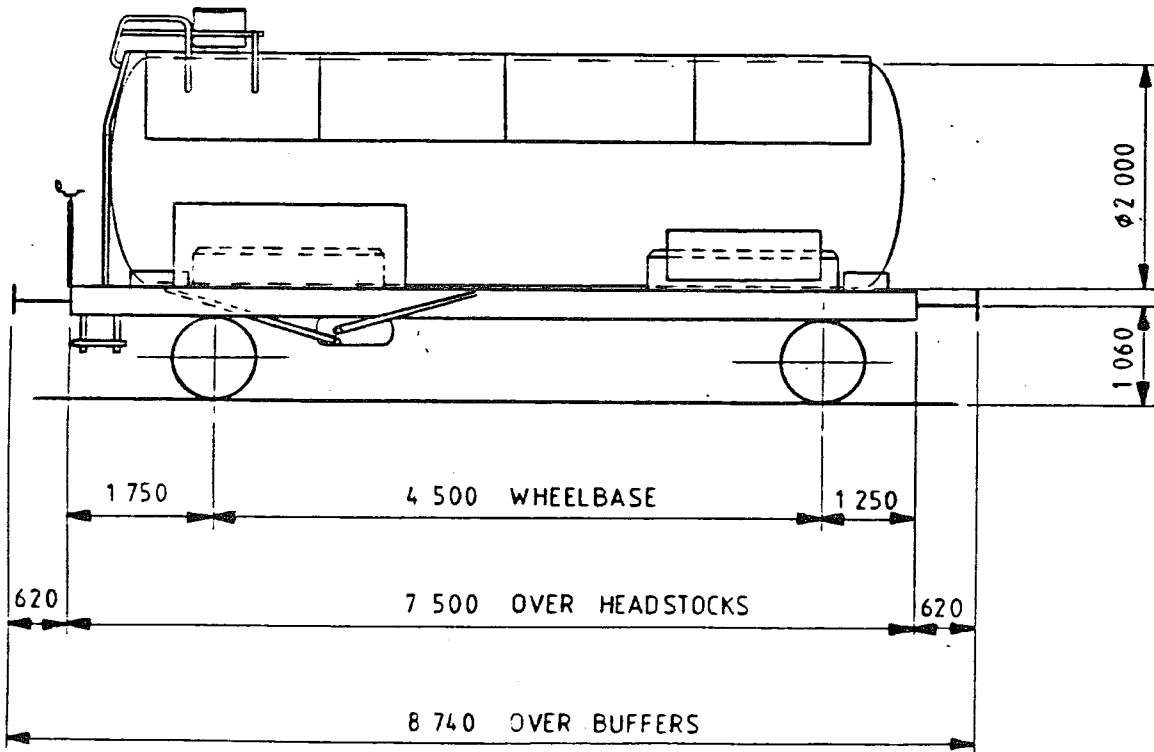
TARE -	13 000 Kg
CAPACITY, WEIGHT -	26.5t
CAPACITY, VOLUME -	51.5 m ³
FLOOR AREA -	25 m ²
MIN. CURVE -	60m
GEN. ARRGT. DES. No. - 15043.01.01	

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C
BUFFERS -	HYDRAULIC ϕ 460 HD
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

TYPE -	Hths
WAGON No. -	2471 2148 397-485
BUILDER -	
OWNER -	TRANSFESA

ISSUE

				TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED 60 mile/h UP TO mile/h ABOVE 26 tonne GLW	BRAKE FORCE DATA		EXCESS LENGTH 4	RA (GLW) 1	DESIGN SHEET
	101			CARKND	71 FORCE UP TO		191 GLW				
S	101			I	C	B	151 FORCE ABOVE				



TARE -	15 500Kg
CAPACITY, WEIGHT-	10t
CAPACITY, VOLUME-	18.5 m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	B 3006.01.1

BRAKE -	AIR & VAC THRO PIPE PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370HD
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

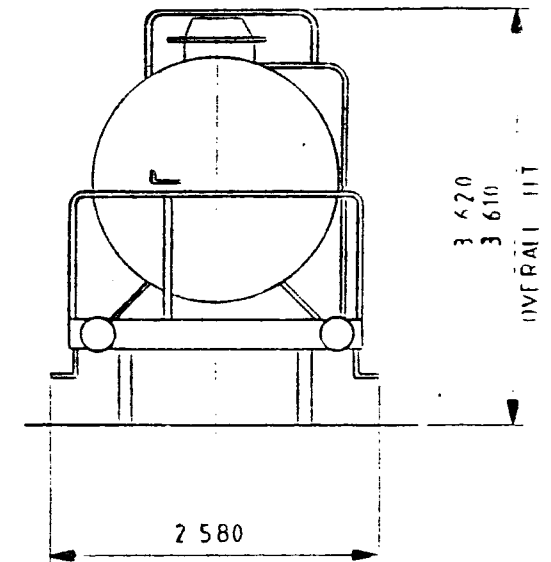
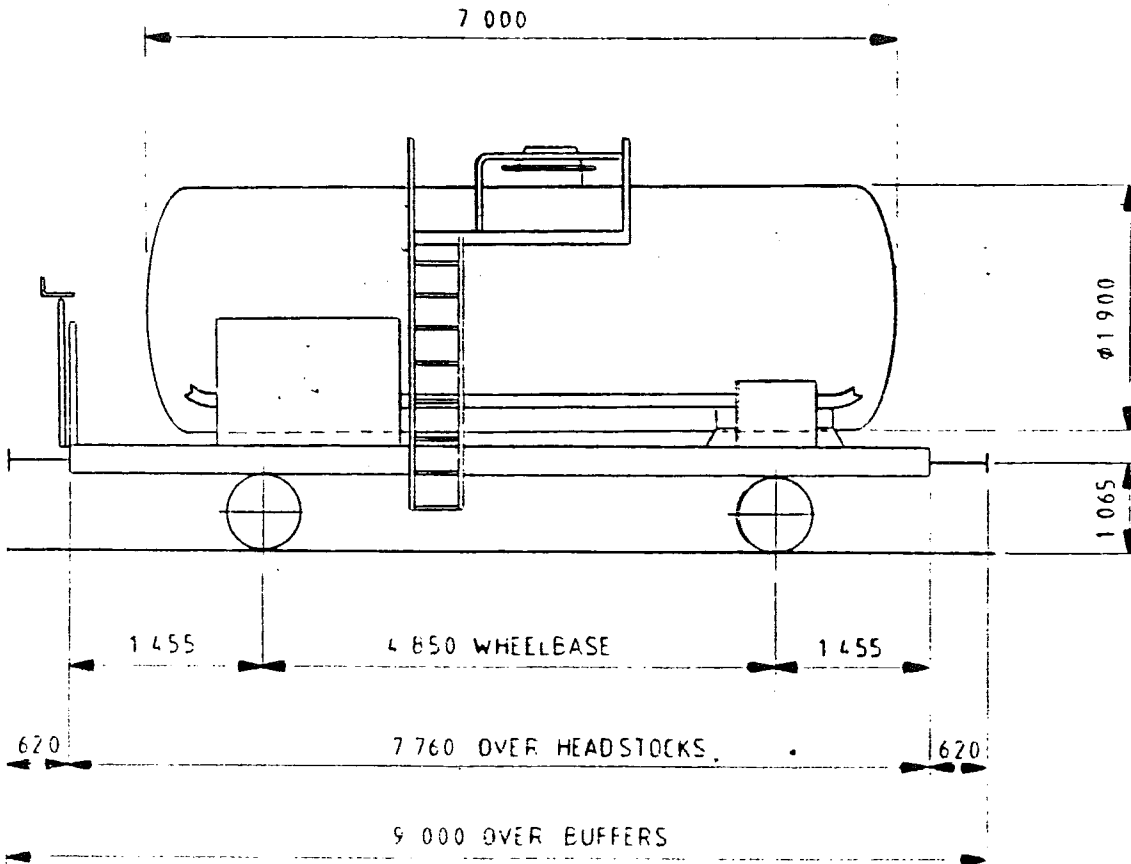
TYPE -	Z f g k s
WAGON No. -	23 80 7395 002 - 005
BUILDER -	UERDINGEN AG KREFELD
OWNER -	HULS CHEMICAL AG

ISSUE 1

36t GLW 2 AXLE TANK

ICE 221

A E C D				TOPS INFORMATION							
21-41	25-41	25-41		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
				CARKND	50 mile/h UP TO mile/h ABOVE		5t FORCE UP TO 11t FORCE ABOVE		5	5	
				I C X B	36 tonne GLW		14t GLW				



NOTE 23 83 7197 018, 019, 020 & 021
ARE FITTED WITH HEATING DEVICES

TARE -	10 600 Kg
CAPACITY, WEIGHT -	25-4 t
CAPACITY, VOLUME -	19 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	1/S

BRAKE -	DUAL
SUSPENSION -	SINGLE
COUPLINGS -	U.I.C
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1000
JOURNALS -	ϕ 130

TYPE -	Z1 & Z e1
WAGON No. -	23 83 7190 000, 001, 002 23 83 7197 018, 019, 020, 021
BUILDER -	GALLINAPI
OWNER -	SICEDISON

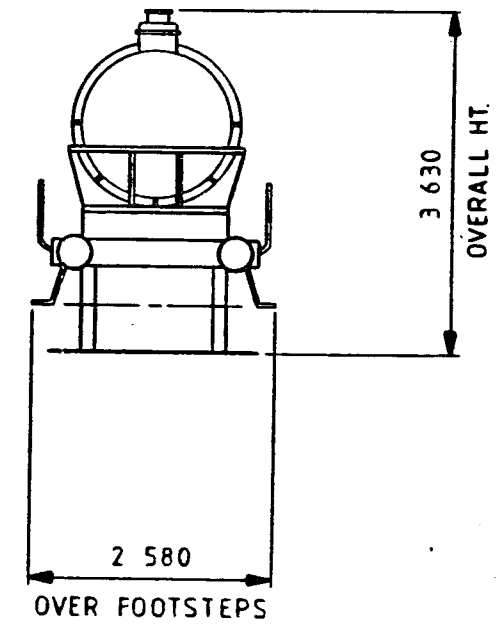
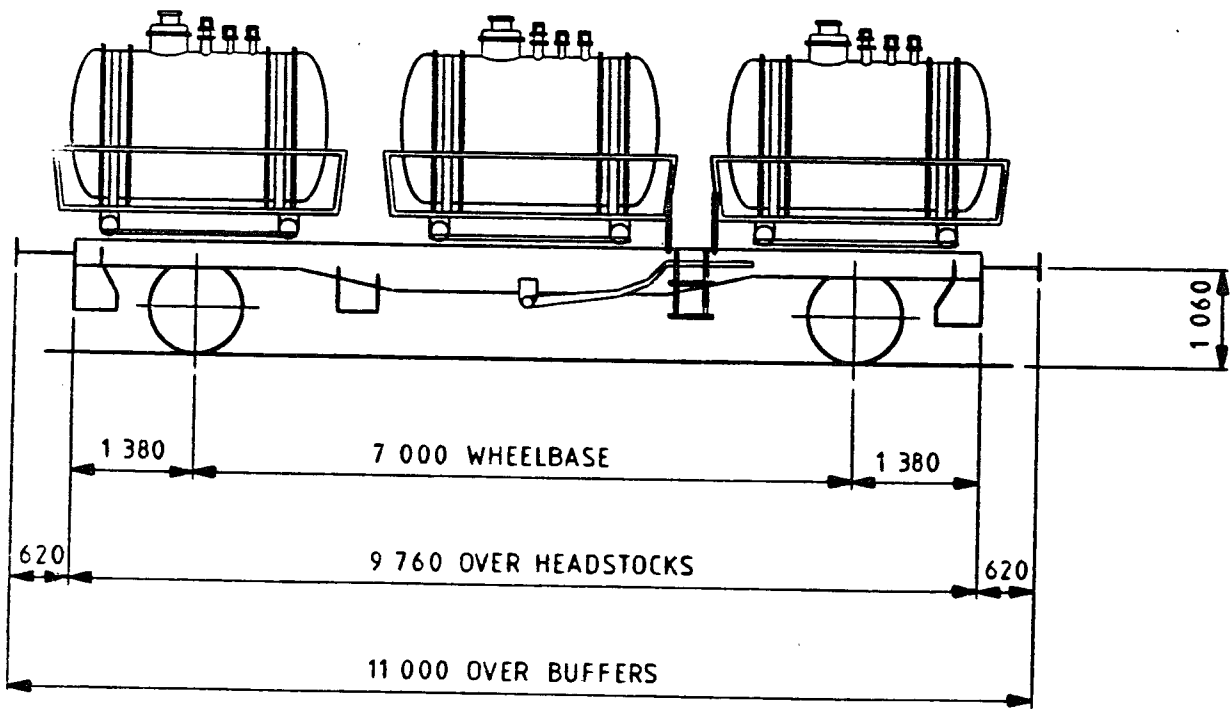
ISSUE 1

30 t GLW 2 AXLE CONTAINER FLAT

IPE 222

	A	B	C	D	TOPS INFORMATION														
		20 t			AARKND				OPERATING SPEED				BRAKE FORCE DATA				EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S		20 t			CARKND				60 mile/h ABOVE UP TO 30 tonne GLW				6 t FORCE UP TO 13 t FORCE ABOVE				8	2	
					I	P	B	F											

NOTE: VARIOUS SIZES OF CONTAINER MAY BE CARRIED
 MAXIMUM OVERALL HEIGHT = 3 630
 MAXIMUM OVERALL WIDTH = 2 032



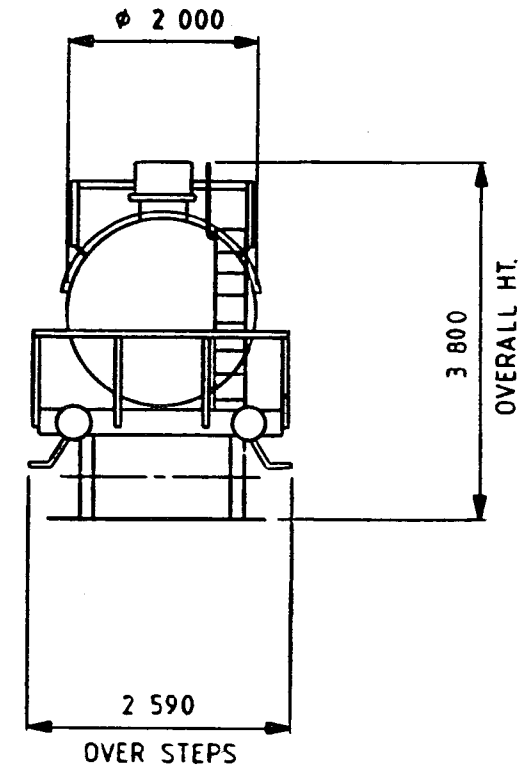
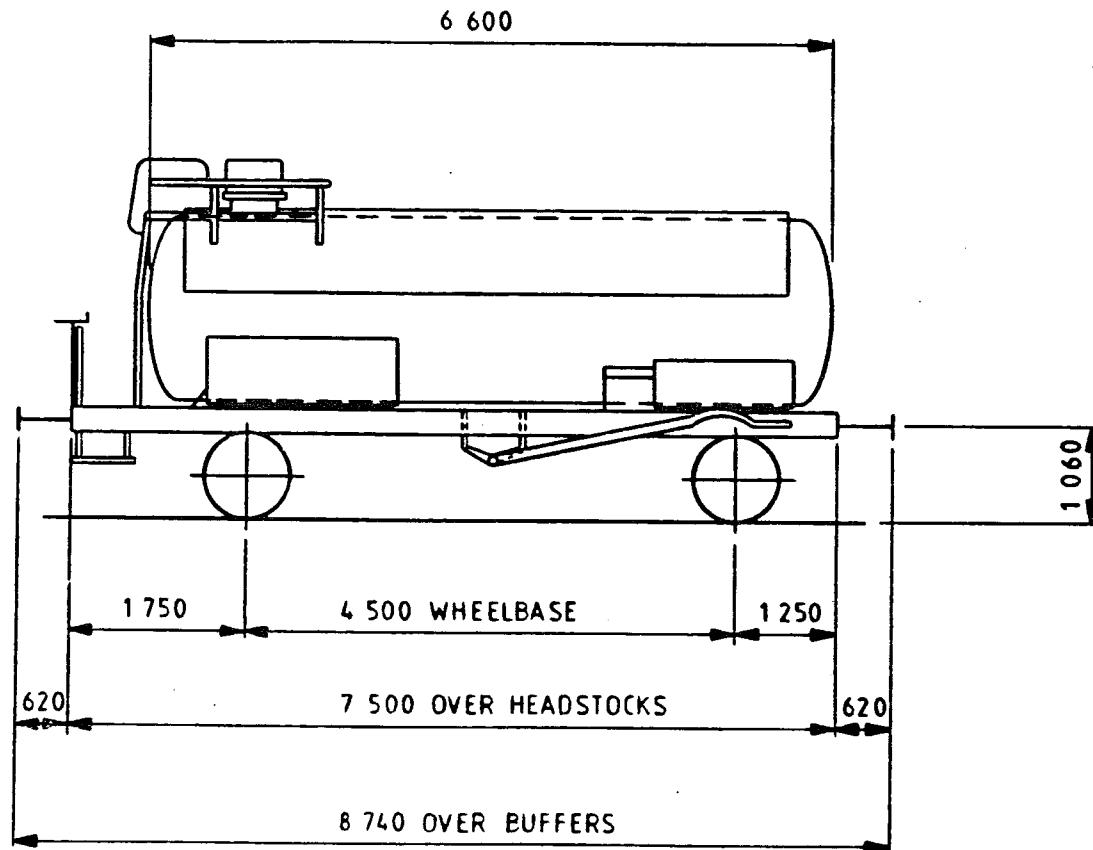
TARE -	9 950 Kg
CAPACITY, WEIGHT-	20 t
CAPACITY, VOLUME-	5 m ³ / CONTAINER
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	2801.01.01

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD.
WHEELS -	ϕ 1 m
JOURNALS -	ϕ 130

TYPE -	Lbfms
WAGON No. -	23 80 4141 000 - 002
BUILDER -	SIEGENER
OWNER -	DEGUSSA

ISSUE 1

TOPS INFORMATION												
A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
17.8t	21.8t	23.1t				50 mile/h UP TO mile/h ABOVE 37 tonne GLW		9 t FORCE UP TO 17 t FORCE ABOVE 22 t GLW		4	5	
				I	C	B	B					



TARE -	14 000 Kg
CAPACITY, WEIGHT-	23.1 t
CAPACITY, VOLUME-	18.5 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	H8886-2

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC φ 370 HD.
WHEELS -	φ 1m
JOURNALS -	φ 130

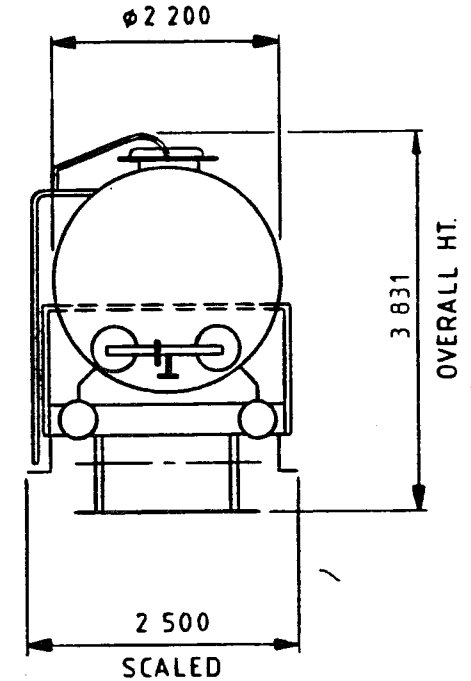
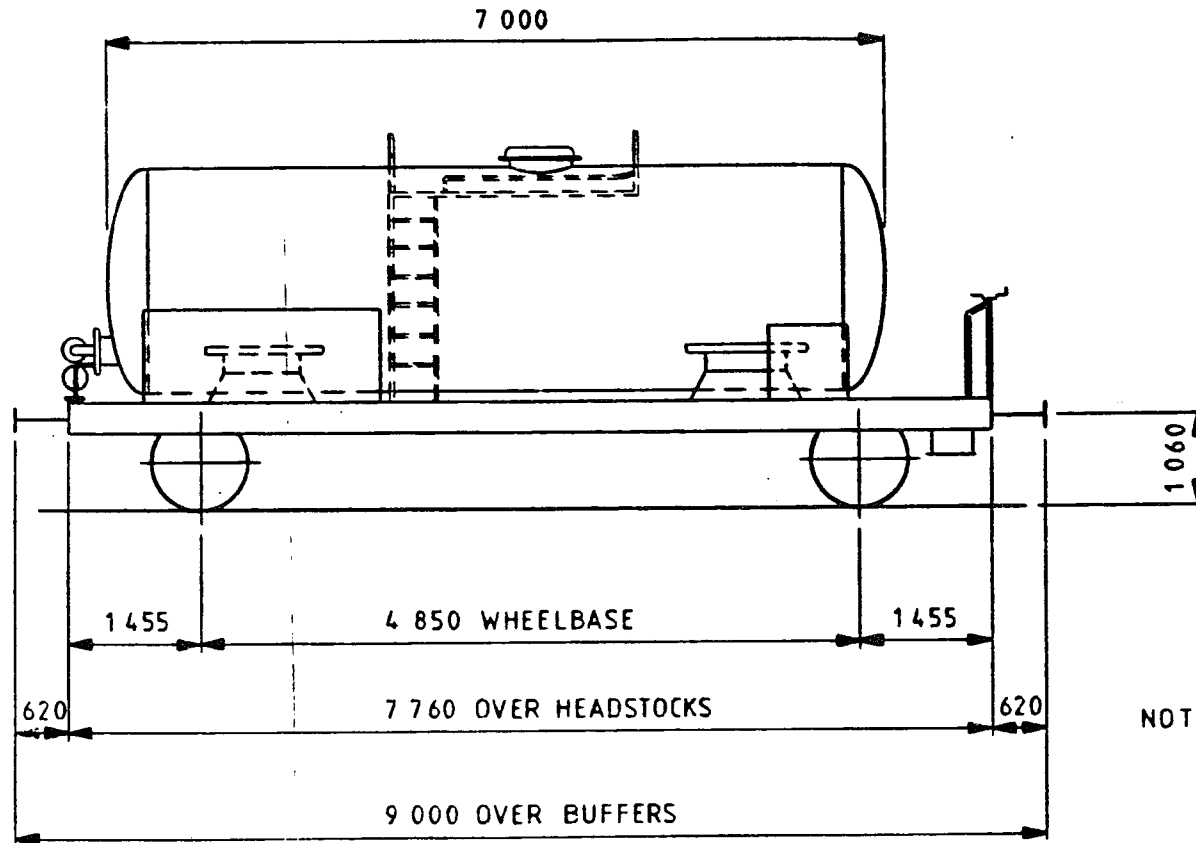
TYPE -	Zfgks
WAGON No. -	23 80 7395 000 , 001
BUILDER -	HÖLS CHEMICAL WORKS
OWNER -	DB

ISSUE 1

40 t GLW 2 AXLE TANK

ICE 225

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
20.2t	24.2t	28.2t			CARKND	50 mile/h UP TO mile/h ABOVE 40 tonne GLW		5 t FORCE UP TO 13 t FORCE ABOVE 21 t GLW		5	6	
					I C B B							



NOTE: BARRELS FITTED WITH HEATING COILS
BOTTOM OUTLETS BLANKED OFF

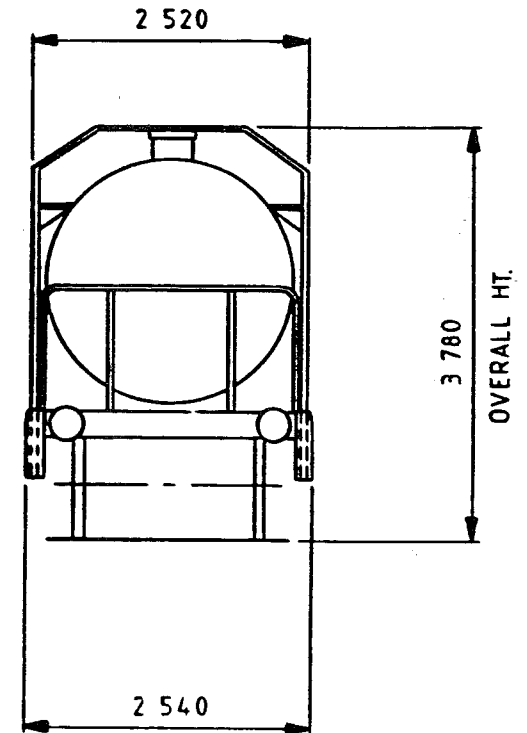
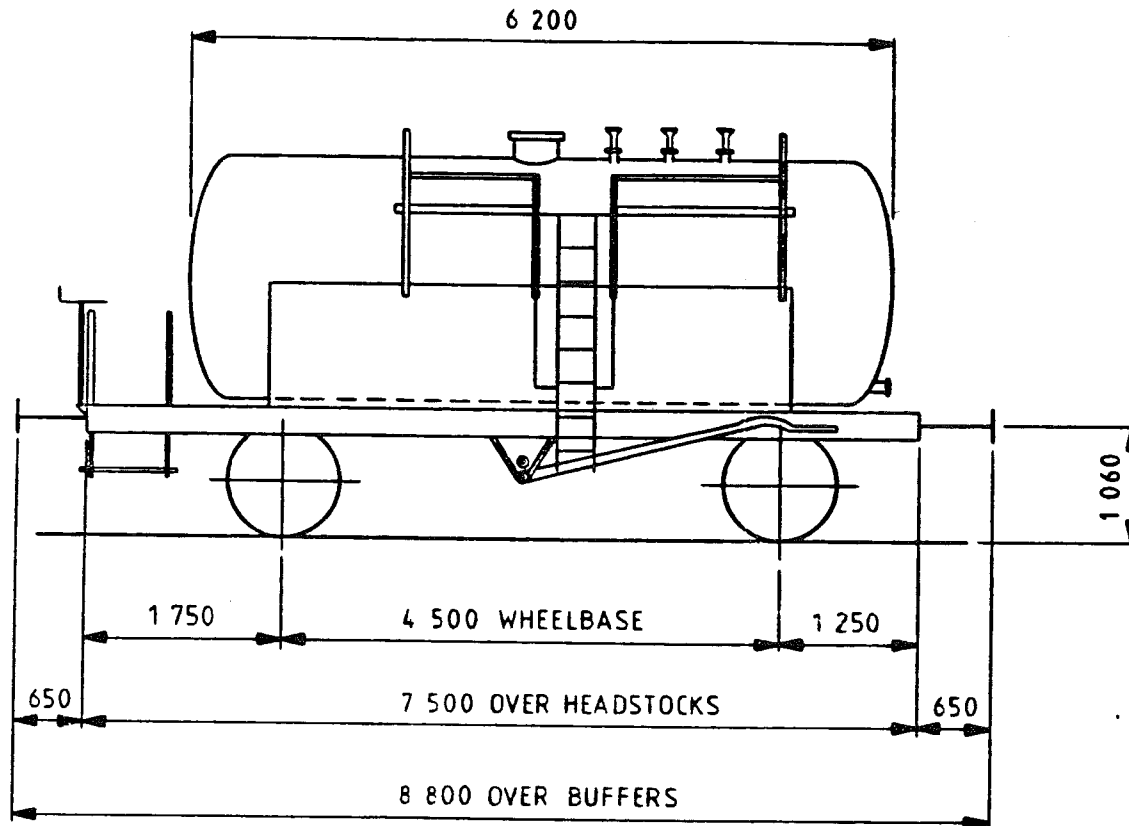
TARE -	11 800 Kg
CAPACITY, WEIGHT-	28.2 t
CAPACITY, VOLUME-	24 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	233-60.0150

BRAKE -	AIR & VAC THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD.
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zef
WAGON No. -	21 83 7197 022, 023
BUILDER -	SIAl - LERICI
OWNER -	SICEDISON

ISSUE 1

					TOPS INFORMATION								
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 4	RA (GLW) 6	DESIGN SHEET
	19.5t	23.5t	27.5t		CARKND		60 mile/h UP TO	36 tonne GLW	6 t FORCE UP TO	23 t GLW			
S	19.5t	23.5t	23.5t		I	C	B	C	50 mile/h ABOVE	18 t FORCE ABOVE			



TARE -	12 300 Kg
CAPACITY, WEIGHT -	27.5 t
CAPACITY, VOLUME -	20 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	BT 1235 - 2

BRAKE -	AIR & VAC THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370 HD.
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

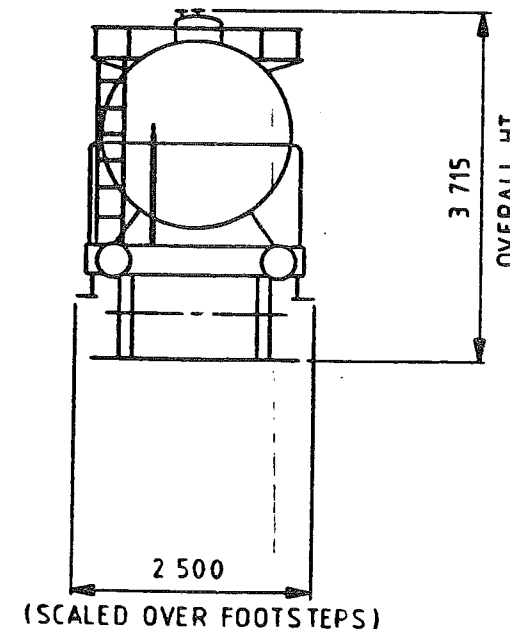
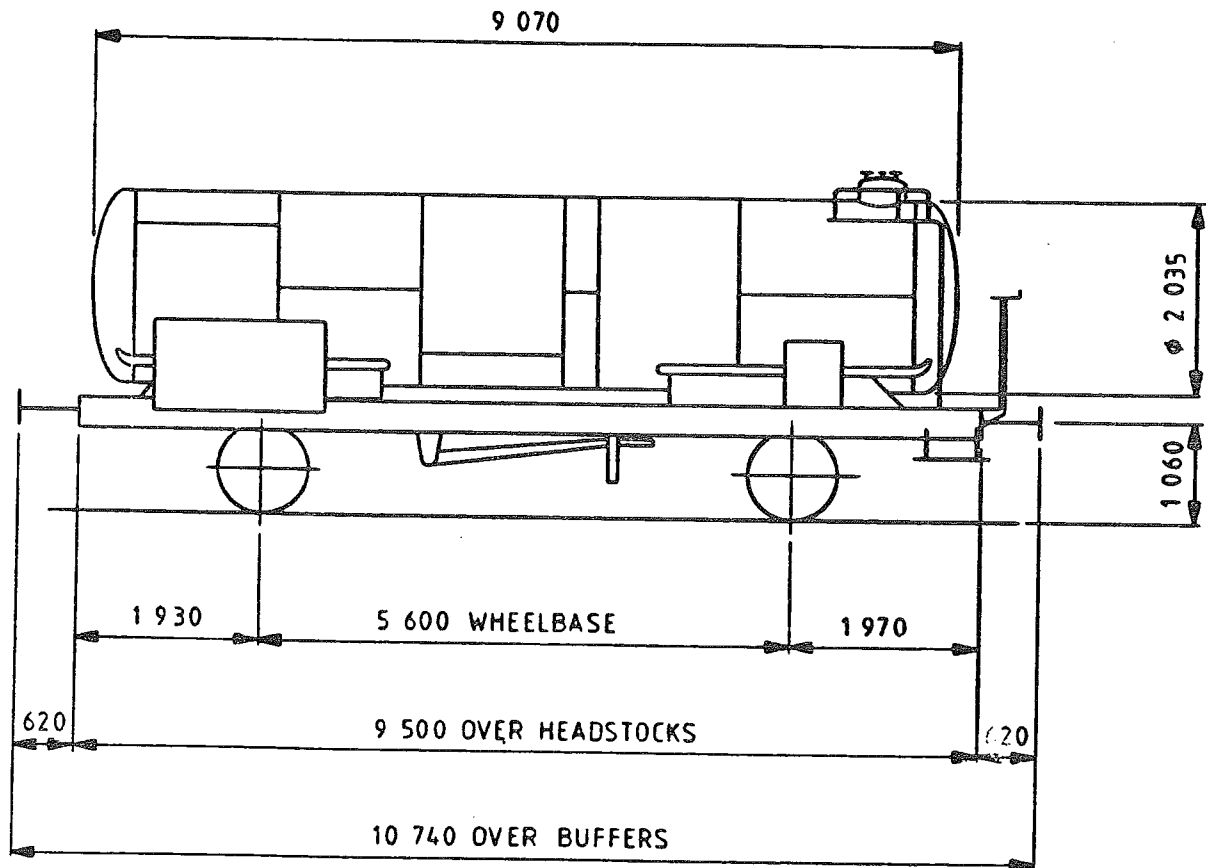
TYPE -	Zcfs
WAGON No. -	23 80 7398 602
BUILDER -	} BADISCHE ANILIN & SODA-FABRIK, LUDWIGSHAVEN.
OWNER -	

ISSUE 1

40 t GLW 2 AXLE TANK

ICE 230

				TOPS INFORMATION								
A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
19.8 t	23.8 t	27.8 t		CARKND		50 mile/h UP TO		5 t FORCE UP TO		7	6	
				I	C	B	C	mile/h ABOVE 40 tonne GLW				
								13 t FORCE ABOVE 17 t GLW				



TARE -	12 200 Kg
CAPACITY, WEIGHT -	27.8
CAPACITY, VOLUME -	29 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	1132 - T

BRAKE -	AIR, VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 960
JOURNALS -	φ 130

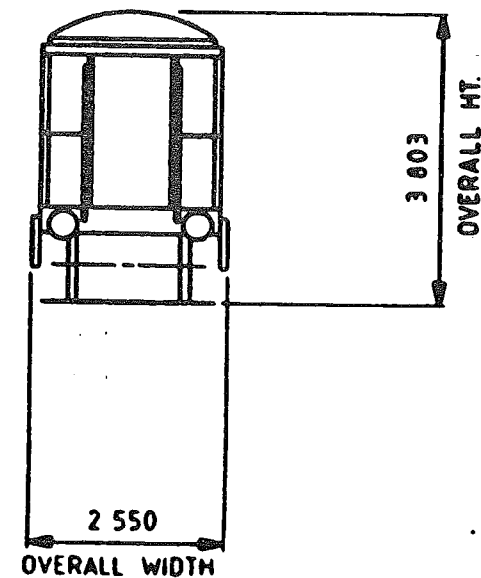
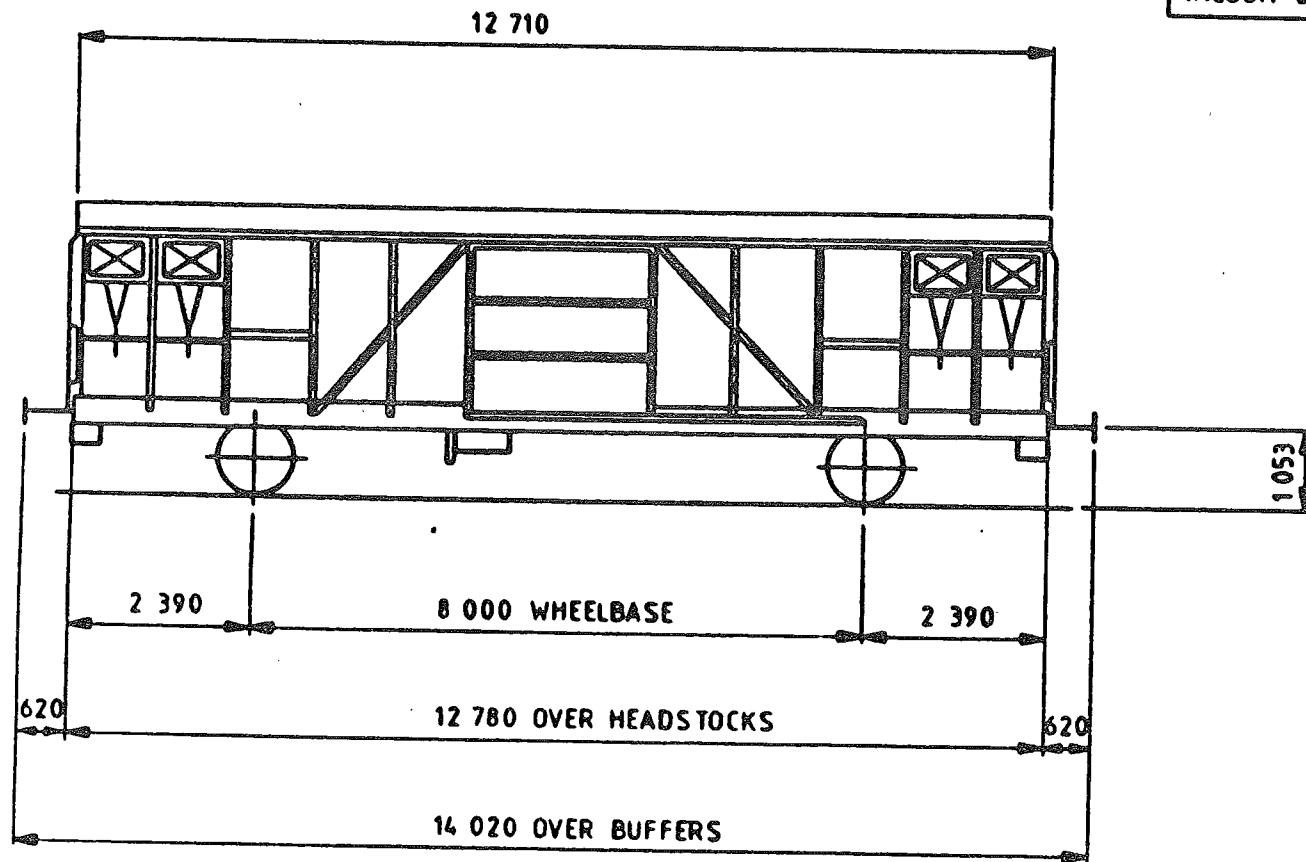
TYPE -	Zef
WAGON No. -	23 83 7197 037 & 038
BUILDER -	MONTECATINI, MILAN
OWNER -	F.S.

ISSUE 1

36 t GLW 2 AXLE VAN

ILE 237

				TOPS INFORMATION									
	A	B	C	D	AARKND		OPERATING SPEED		AIR BRAKE FORCE DATA		EXCESS LENGTH 4	RA (GLW) 4	DESIGN SHEET
	18t	22t	26t		CARKND		60 mile/h UP TO 50 mile/h ABOVE		36 tonne GLW 6 t FORCE UP TO 15 t FORCE ABOVE				
S	18t	22t	22t		I	L	X	L	VACUUM BRAKE 5 t THROUGHOUT				



TARE -	14 000 Kg
CAPACITY, WEIGHT -	26 t
CAPACITY, VOLUME -	65.5 m ³
FLOOR AREA -	28.5 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-1-V-3 201	

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370 HD.
WHEELS -	ϕ 960
JOURNALS -	ϕ 130

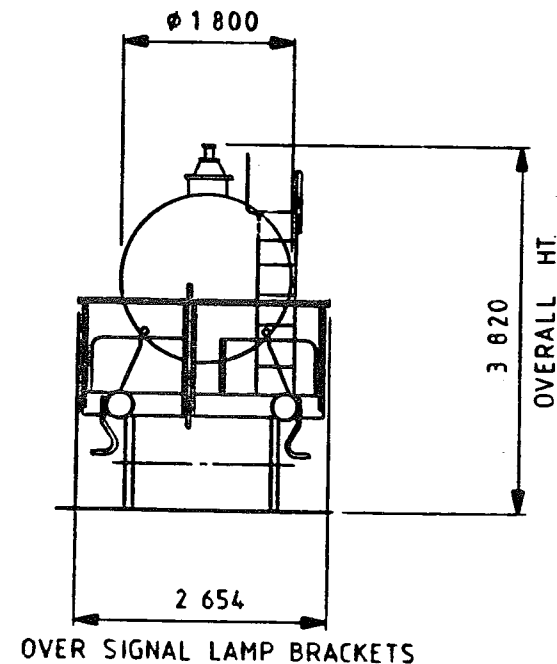
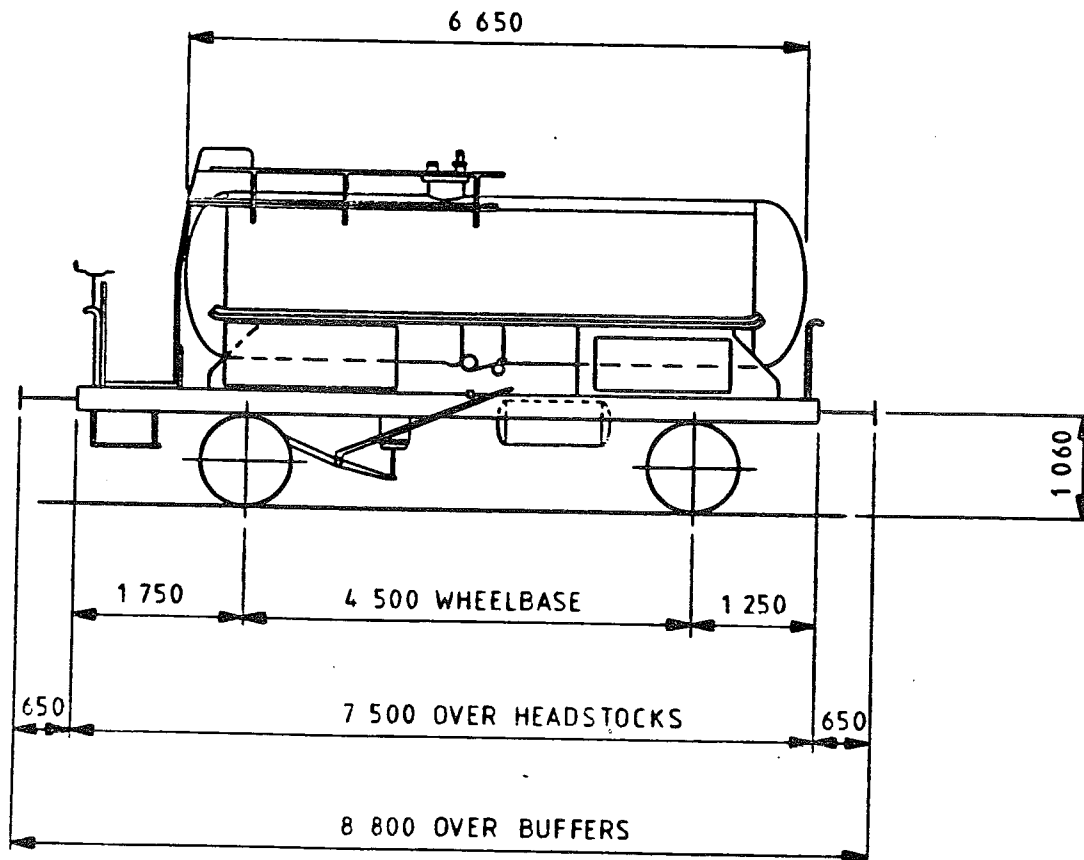
TYPE -	Hfs
WAGON No. -	21 74 2140 000 - 099
BUILDER -	A.S.J. FALUN
OWNER -	S.J.

ISSUE 1

33 t GLW 2 AXLE TANK

ICE 243

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	21-2†	22-2†	22-2†		CARKND	60 mile/h UP TO		7 † FORCE UP TO		4	4	
S	21-2†	22-2†	22-2†		I C B B	mile/h ABOVE 33 tonne GLW		17 † FORCE ABOVE 22 † GLW				



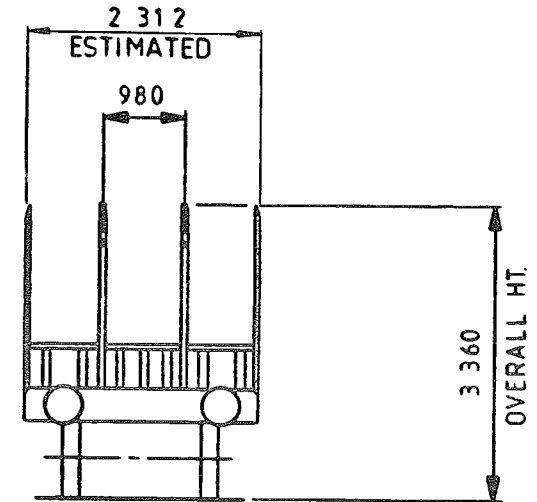
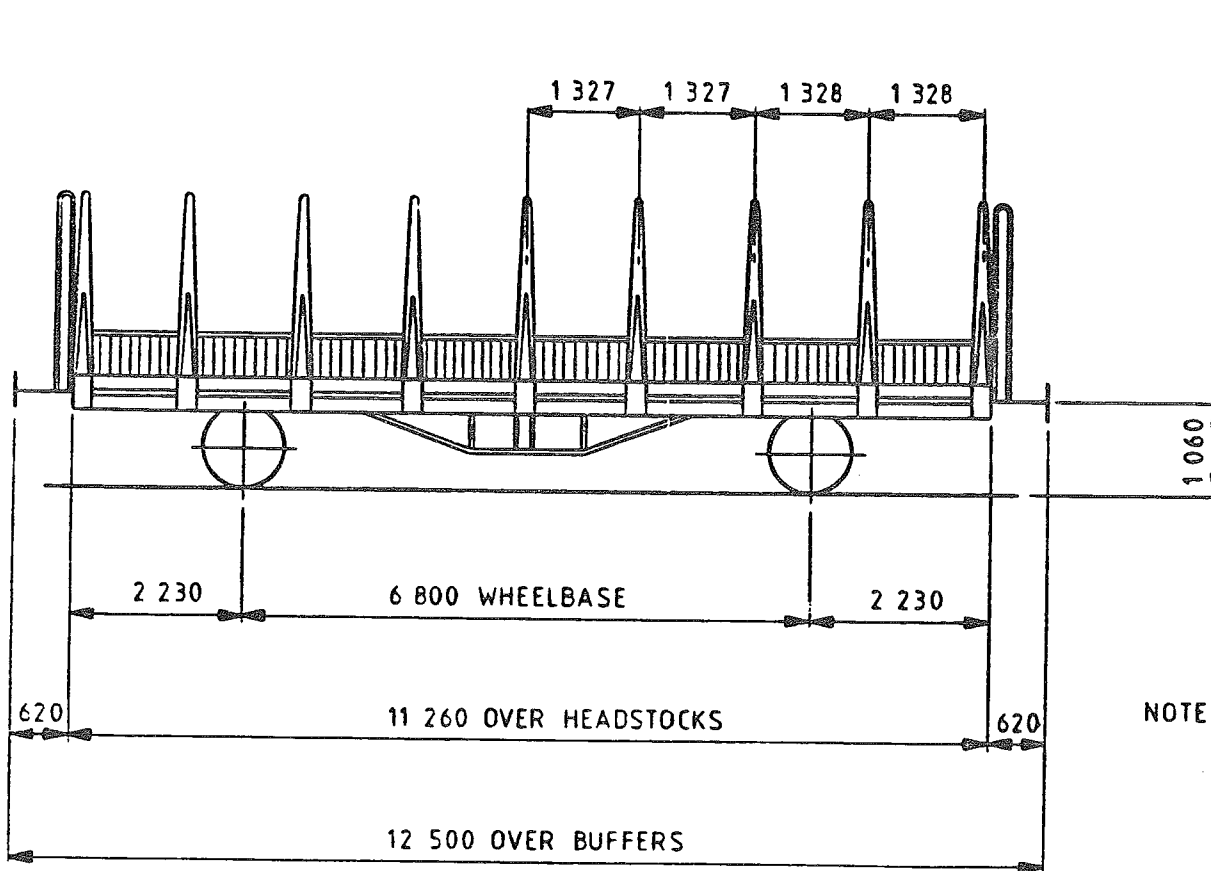
TARE -	10.8 t
CAPACITY, WEIGHT-	22.2 t
CAPACITY, VOLUME-	15 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	13931-2

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC Ø 370 HD.
WHEELS -	Ø 930
JOURNALS -	Ø 130

TYPE -	Zcfkks
WAGON No. -	23 80 7491 400, 401
BUILDER -	CHEMISCHE WERKE HÜLS
OWNER -	RECKLINGHAUSEN

ISSUE 1

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19.5t	23.5t	27.5t		CARKND	60 mile/h UP TO mile/h ABOVE 40 tonne GLW		5 t FORCE UP TO 18 t FORCE ABOVE 22 t GLW		10	6	
S	19.5t	23.5t	27.5t		I F X A							



NOTE : WHOLE FLEET IN THE PROCESS OF BEING CONVERTED TO AIR BRAKE AND VACUUM THROUGH PIPE. CARKND IFB.

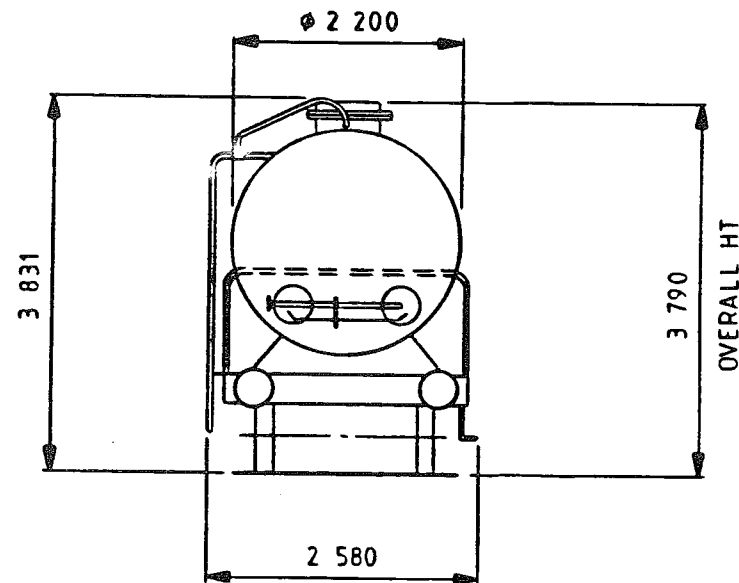
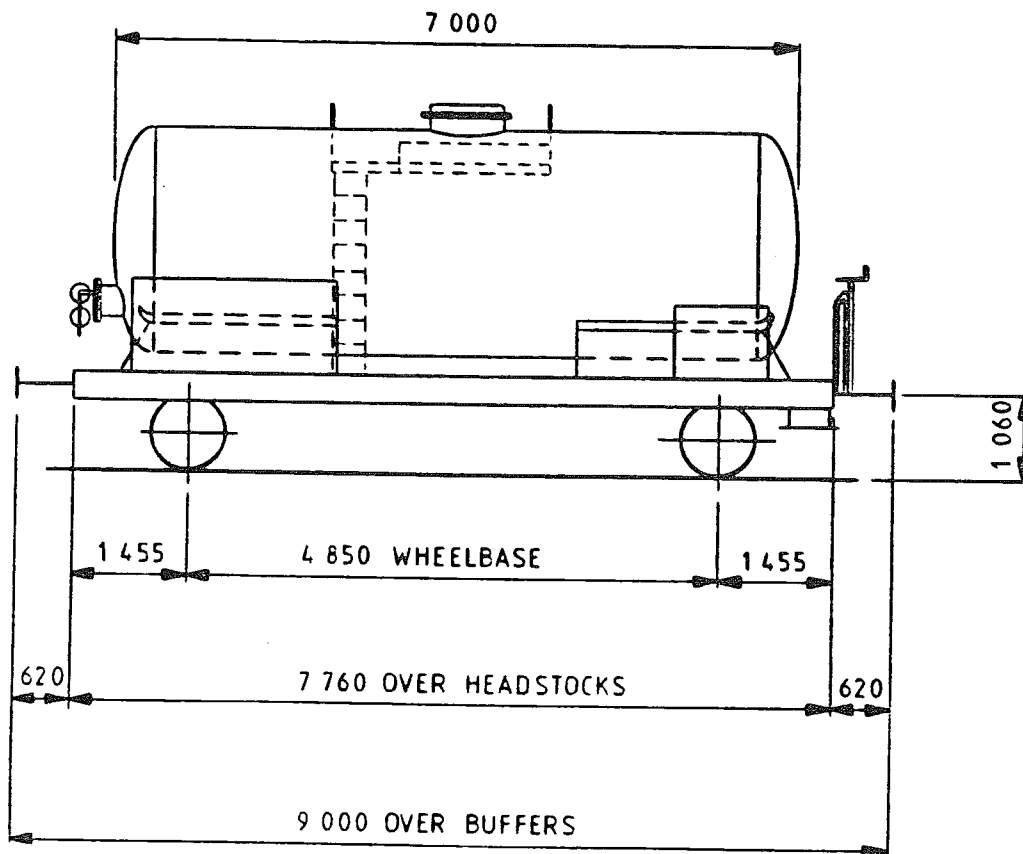
TARE -	12 300 Kg
CAPACITY, WEIGHT-	27.5 t
CAPACITY, VOLUME-	
FLOOR AREA -	234 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	13 133

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER Ø 370
WHEELS -	Ø 1 m
JOURNALS -	Ø 130

TYPE -	Lfms
WAGON No. -	21 80 4142 025 - 154
BUILDER -	LINKE · HOFMANN · BUSCH
OWNER -	DB

ISSUE 1

	A	B	C	D	TOPS INFORMATION								
	202t	242t	242t		AARKND	OPERATING SPEED			BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
					CARKND	50 mile/h UP TO mile/h ABOVE 36 tonne GLW			5 t FORCE UP TO 11 t FORCE ABOVE 20 t GLW		5	5	
					I	C	B	B					



NOTE: FITTED WITH HEATING DEVICES

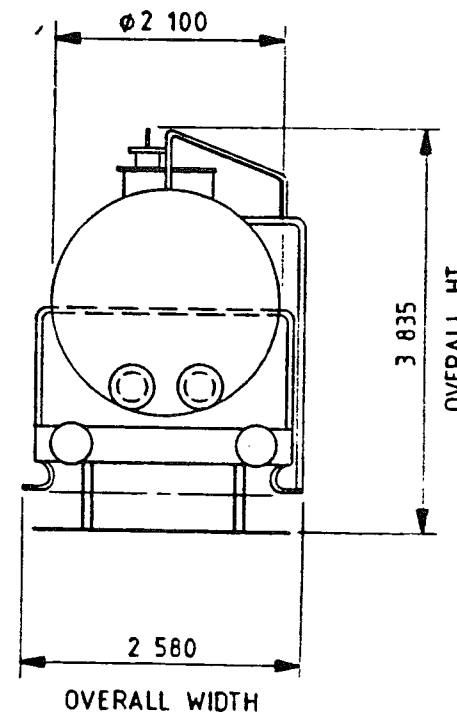
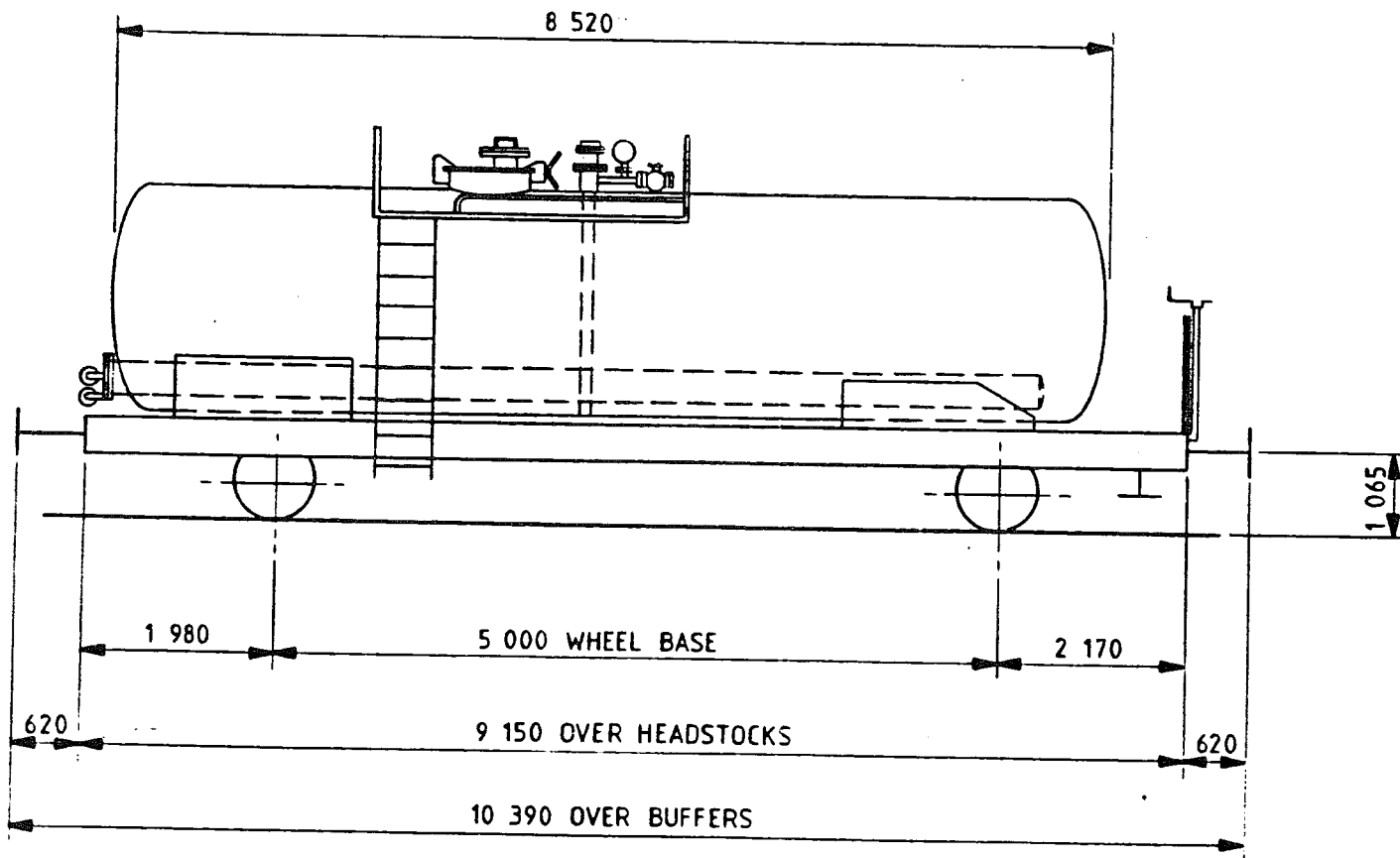
TARE -	11 740 Kg
CAPACITY, WEIGHT-	24.2 t
CAPACITY, VOLUME-	24 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	305/61

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1 m
JOURNALS -	ϕ 130

TYPE -	Zef
WAGON No. -	23 83 7197 030 - 036
BUILDER -	SIAI - LERICI
OWNER -	EDISON, MILAN

ISSUE 1

	A	B	C	D	TOPS INFORMATION							
	20t	24t	28t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
					CARKND	50 mile/h UP TO mile/h ABOVE 40 tonne GLW		6t FORCE UP TO 14t FORCE ABOVE 20t. GLW		7	6	
					I C B B							



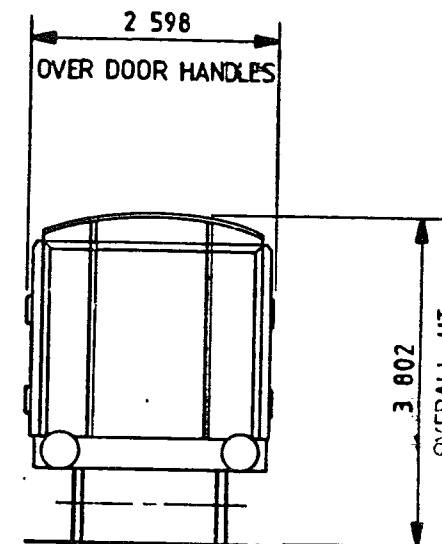
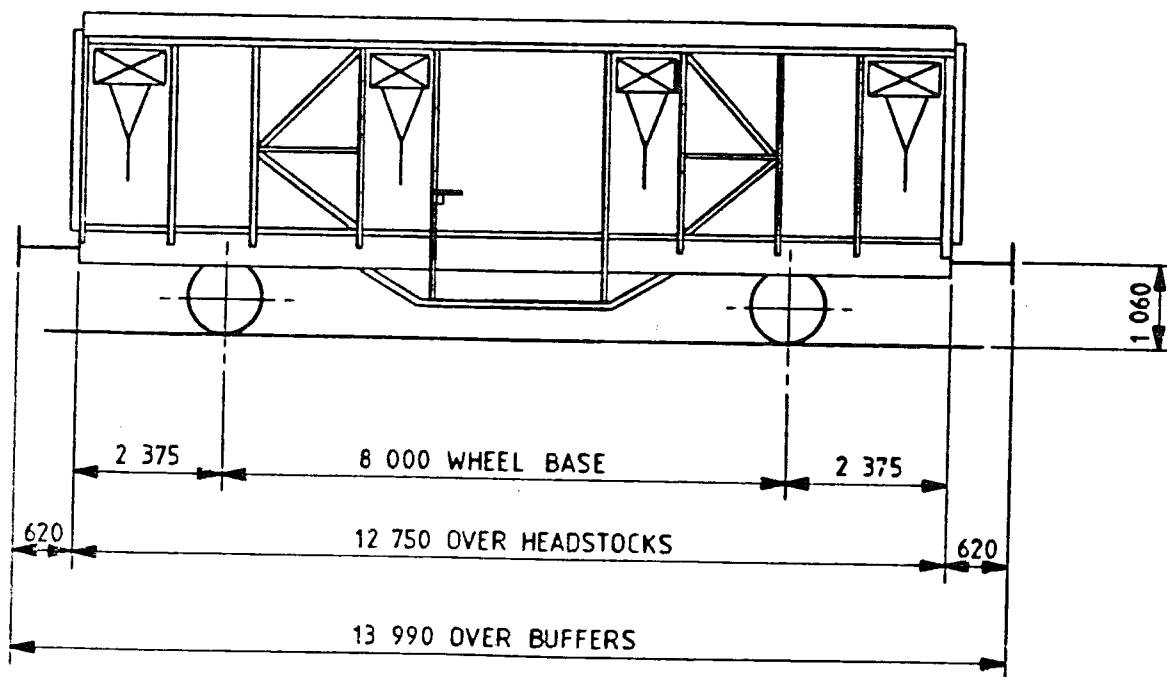
TARE -	11 900kg
CAPACITY, WEIGHT-	28t
CAPACITY, VOLUME-	28m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	4095

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 400 HD
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zef
WAGON No. -	23 83 7197 000-007
BUILDER -	EDISON, MILAN
OWNER -	F.S.

ISSUE 1

	A	B	C	D	TOPS INFORMATION									
	16t	20.5t	24.5t		AARKND			OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 12	RA (GLW) 6	DESIGN SHEET
S	16t	20.5t	20.5t		CARKND			60 mile/h UP TO	36 tonne GLW	6t. FORCE UP TO	19t. GLW			
					I	L	X	L	50 mile/h ABOVE		15t. FORCE ABOVE			



TARE -	15 500kg
CAPACITY, WEIGHT -	24.5t
CAPACITY, VOLUME -	66m ³
FLOOR AREA -	28m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	830.0002M

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	ø1m
JOURNALS -	ø130

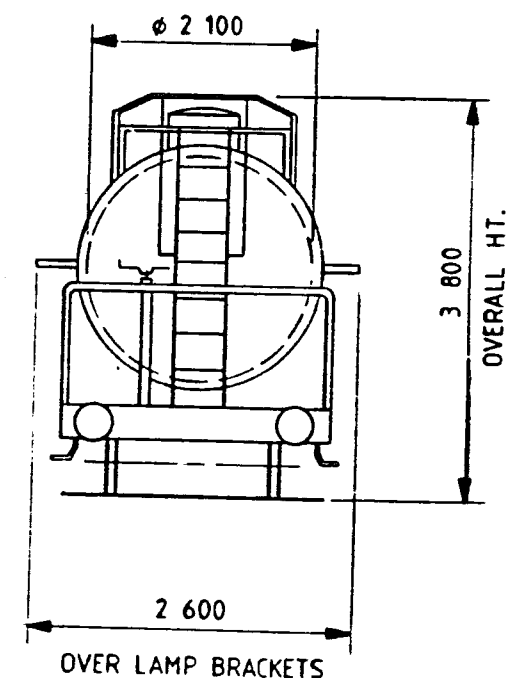
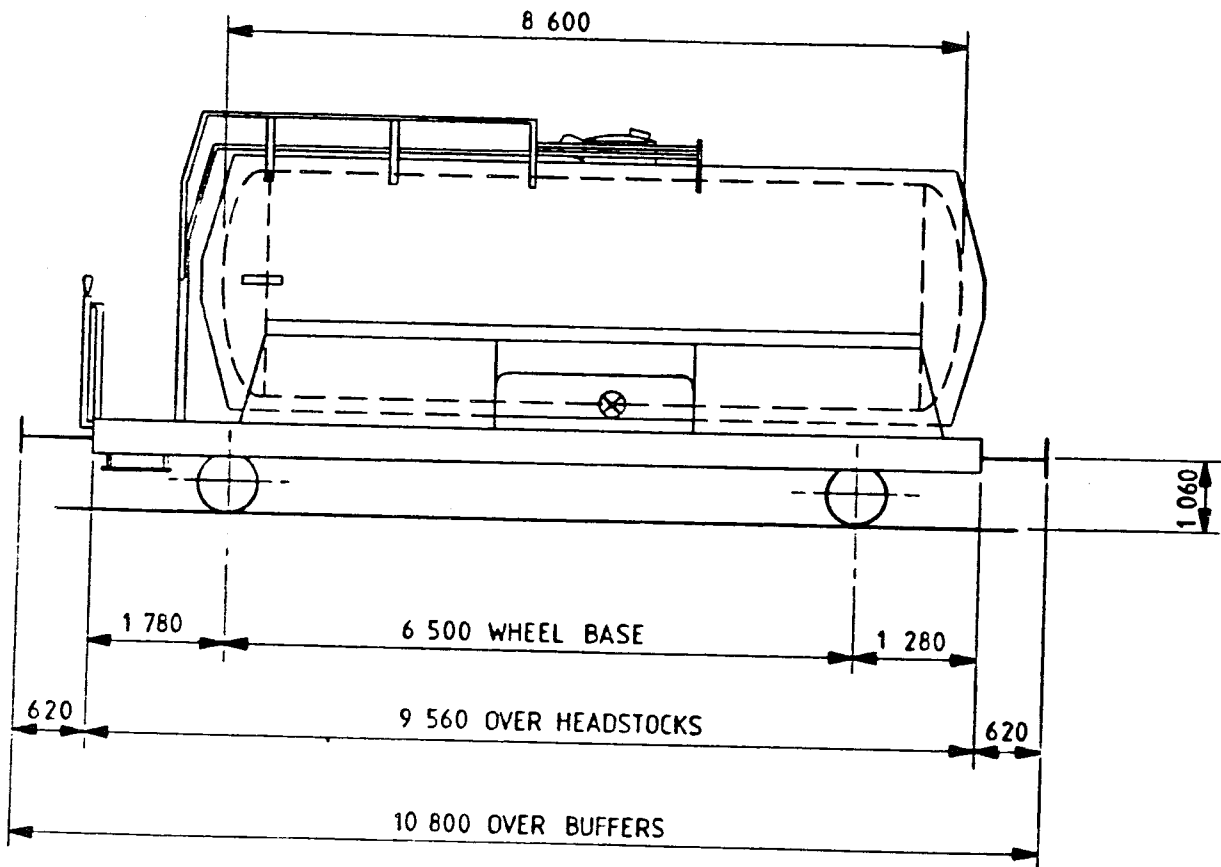
TYPE -	Hbfkks
WAGON No. -	21 88 2390 034, 036 - 097
BUILDER -	S.N.C.B.
OWNER -	S.N.C.B.

ISSUE 1

40t. GLW. 2 AXLE TANK

ICE 269

				TOPS INFORMATION						
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
18-6t	22-6t	26-6t		CARKND						
18-6t	22-6t	26-6t		I C X B	60 mile/h UP TO — mile/h ABOVE	40 tonne GLW		7	6	
						6t FORCE UP TO 15t FORCE ABOVE				



TARE -	13.4t
CAPACITY, WEIGHT-	26.6t
CAPACITY, VOLUME-	28m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	2351.01.387

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370 HD
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zcfs
WAGON No. -	23 80 7398 017
BUILDER -	V.T.G.
OWNER -	V.T.G.

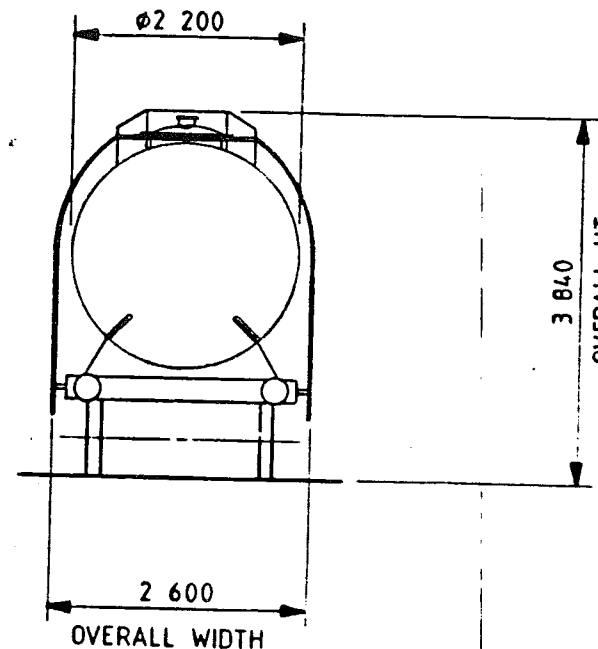
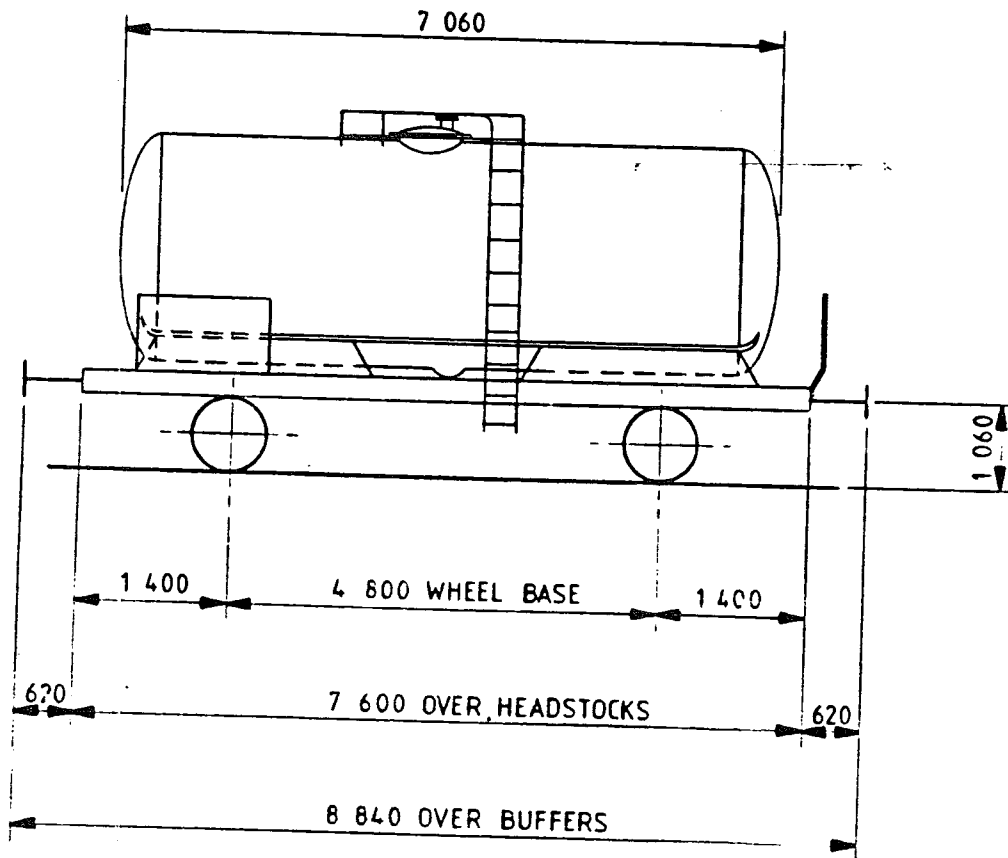
ISSUE 1

40t. GLW. 2 AXLE TANK

ICE 272

	A	B	C	D	TOPS INFORMATION							
	20t	24t	28t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
					CARKND	50 mile/h UP TO mile/h ABOVE 36 tonne GLW		7t FORCE UP TO 20t FORCE ABOVE 25t. GLW		4	6	
					I C B B							

NOTE:- TANK CAPACITY IN U.K. IS 211m³ OR 83% FILLING



TARE -	10 680kg
CAPACITY, WEIGHT-	28t
CAPACITY, VOLUME-	25m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	89005

BRAKE -	AIR & VAC THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ1m
JOURNALS -	φ130

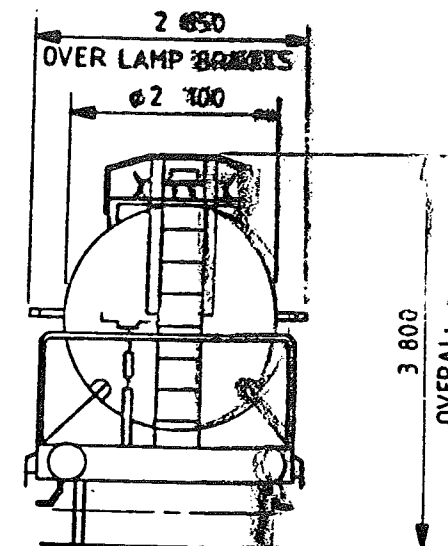
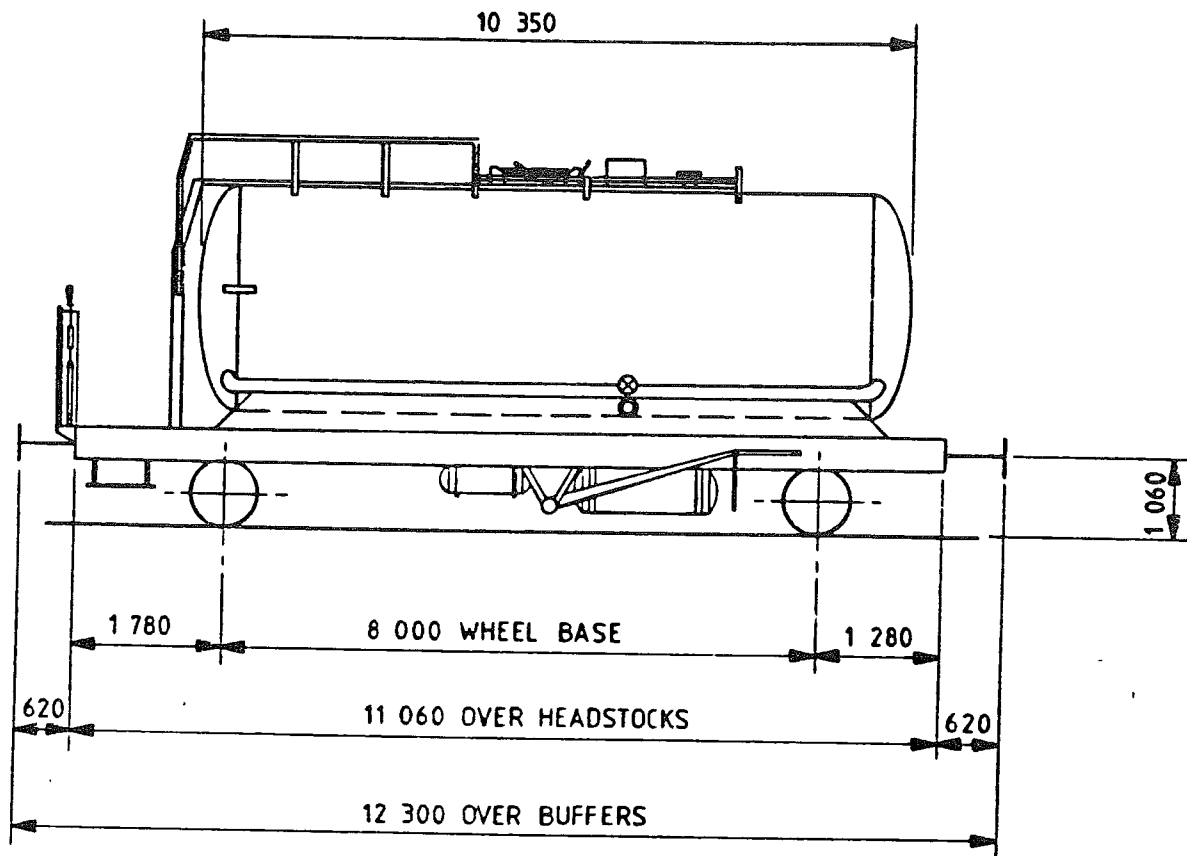
TYPE -	Zcf
WAGON No. -	23 87 7191 020
BUILDER -	FAUVET - GIREL
OWNER -	SOLVAY & CO

ISSUE 1

40t. GLW. 2 AXLE TANK

KE 273

				TOPS INFORMATION								
A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		AXES	BA	DESIGN SHEET
17.2t	21.2t	25.2t		CARKND		60 mile/h UP TO		6t FORCE UP TO		(LEAD)	(GLW)	
17.2t	21.2t	21.2t		I	C	B	C	15t FORCE ABOVE		180	6	
						40 tonne GLW		19t. GLW				



TARE -	14 800kg
CAPACITY, WEIGHT-	25 2t
CAPACITY, VOLUME-	34 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRG. DRG. No.-	01.412

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370 HD
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

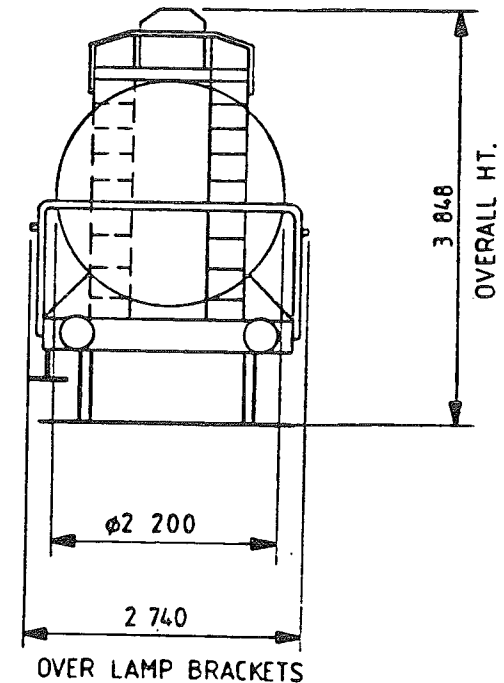
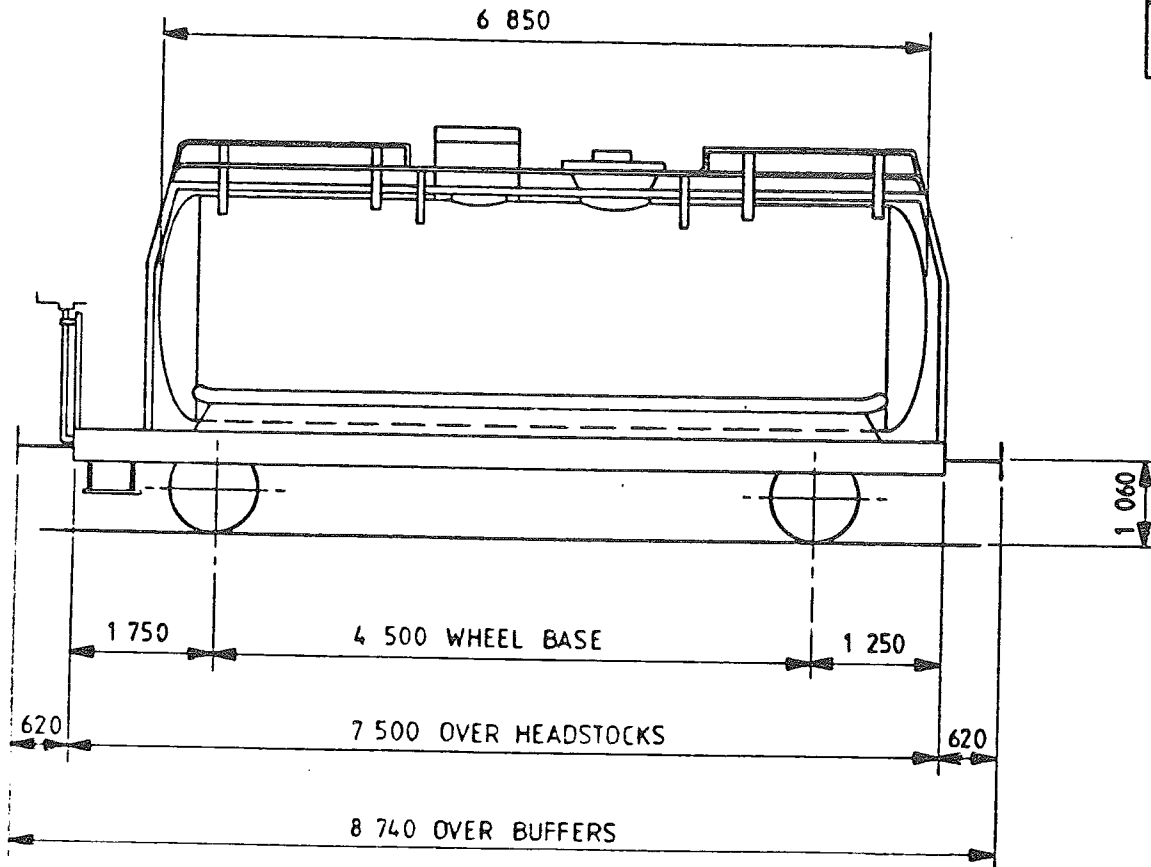
TYPE -	Zcfs ; Zcfs
WAGON No. -	23 80 7391 001-001, 002-004 23 80 7398 001-005
BUILDER -	V.T.G.
OWNER -	V.T.G.

ISSUE 1

40t.GLW. 2 AXLE TANK

ICE 274

	A	B	C	D	TOPS INFORMATION							
	172t	212t	252t		AARKND	OPERATING SPEED		AIR BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	172t	212t	212t		CARKND	60 mile/h UP TO 50 mile/h ABOVE	36 tonne GLW	10t FORCE UP TO 18t FORCE ABOVE	23t. GLW			
					I	C	X	C	VACUUM BRAKE FORCE DATA			
									9t FORCE UP TO 17t FORCE ABOVE	23t. GLW	4	6



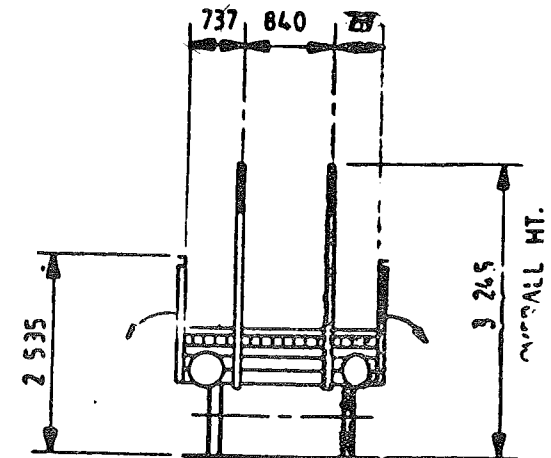
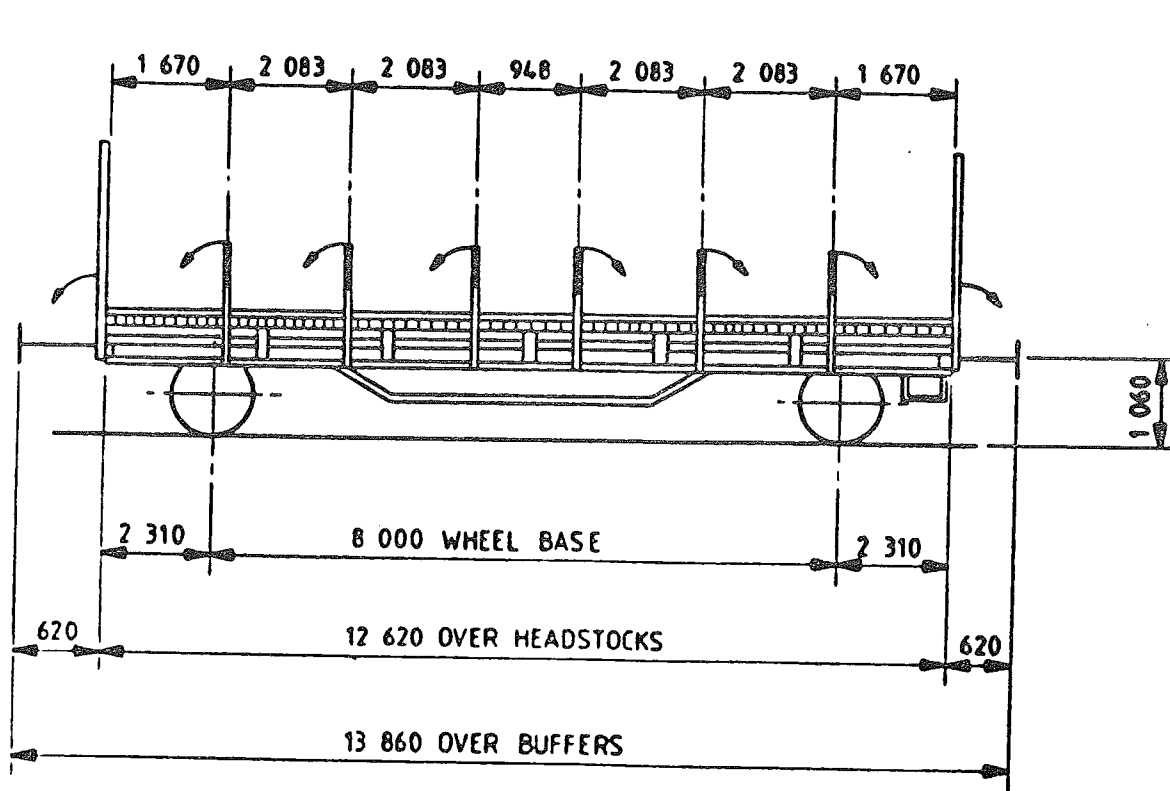
TARE -	14 800 kg
CAPACITY, WEIGHT-	252t
CAPACITY, VOLUME-	24m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	W1450

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370 HD
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zcfs
WAGON No. -	23 80 7391 400,401,402.
BUILDER -	KAMINSKI
OWNER -	EVA

ISSUE 1

				TOPS INFORMATION									
	A	B	C	D	AARKND	OPERATING SPEED			BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	195t	235t	275t		CARKND	60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW			5t FORCE UP TO 15t FORCE ABOVE 19t. GLW		2	6	
S	195t	235t	235t		I F X B								
					POINT LOADS								
					METRES	2	5	8					
					TONNES	16t	19t	23t					



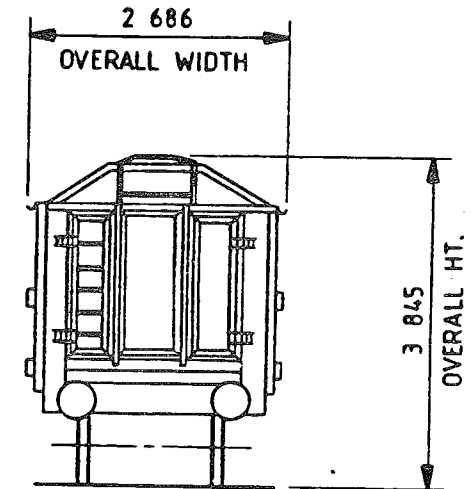
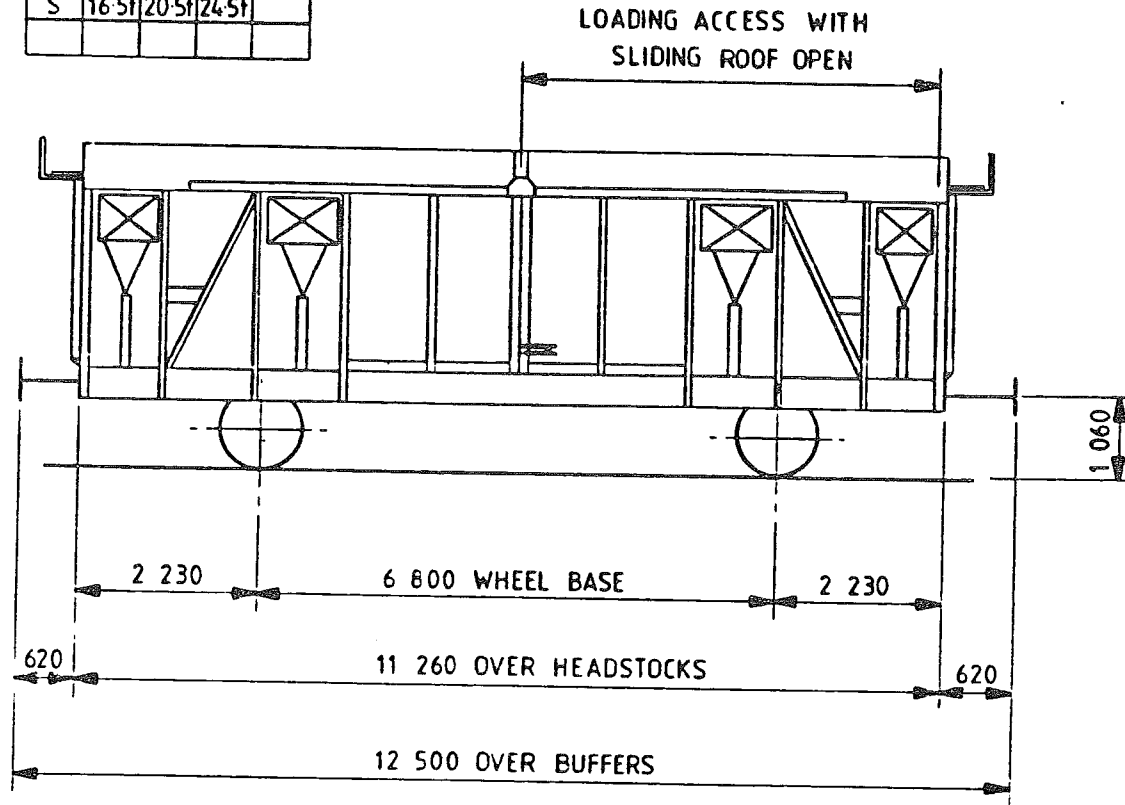
TARE -	12 400kg
CAPACITY, WEIGHT -	27 5t
CAPACITY, VOLUME -	44 m ³
FLOOR AREA -	28 m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	633.0.004

BRAKE -	DUAL, SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	Ø1m
JOURNALS -	Ø130

TYPE -	Lfs
WAGON No. -	21 88 4140 100 - 199
BUILDER -	SNCB
OWNER -	SNCB

	A	B	C	D	TOPS INFORMATION							
	18t	22t	26t		AARKND	OPERATING SPEED		AIR BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	18t	22t	26t		CARKND	60 mile/h UP TO mile/h ABOVE 40 tonne GLW		5t FORCE UP TO 18t FORCE ABOVE 23t. GLW		10	6	
					I M X S							

	A	B	C	D	- 21 80 5795 001, AND 053 ONLY				
	16.5t	20.5t	24.5t						
S	16.5t	20.5t	24.5t						

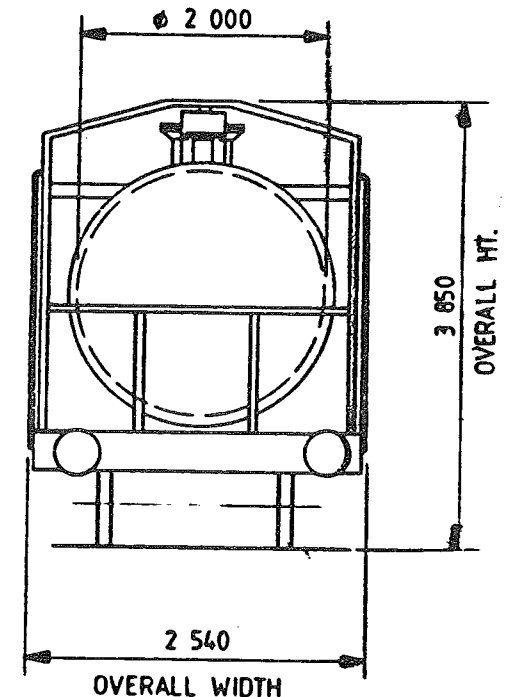
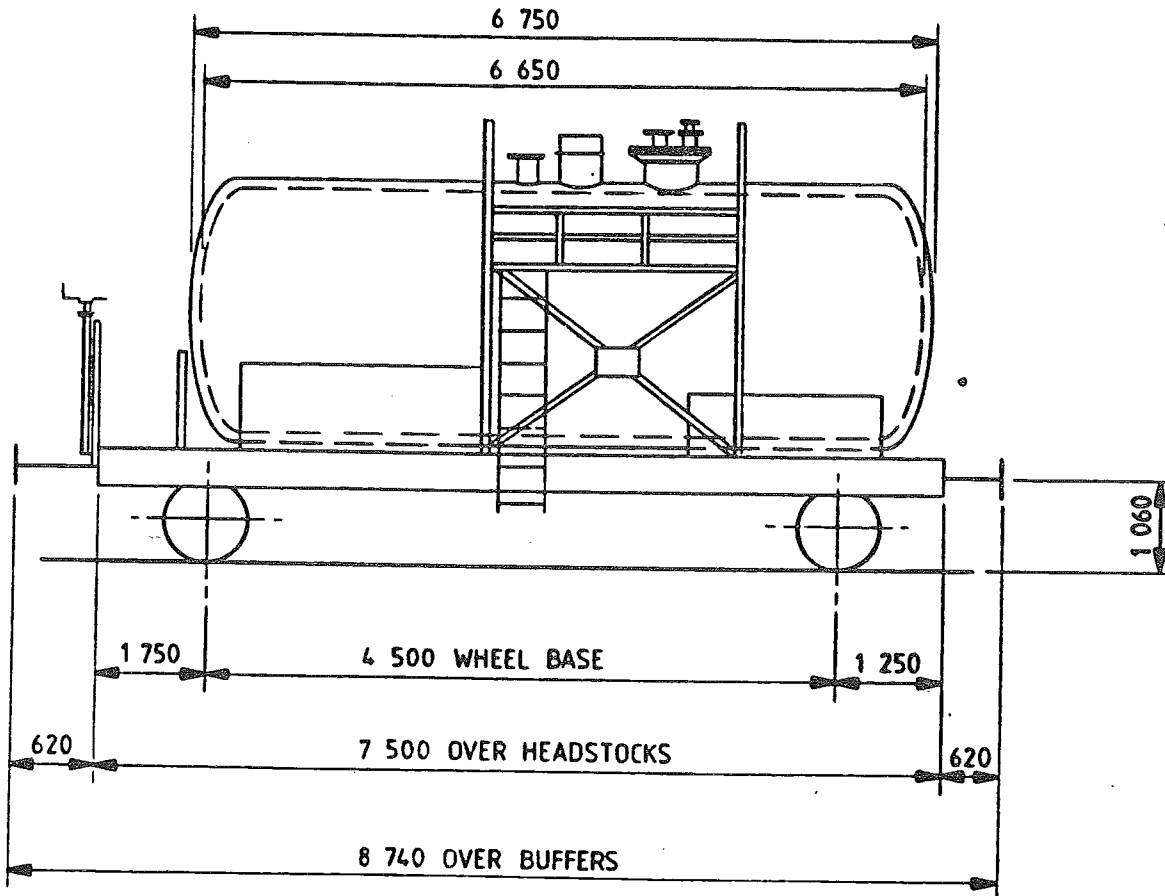


TARE -	13 500kg
CAPACITY, WEIGHT -	26t
CAPACITY, VOLUME -	58m ³
FLOOR AREA -	25m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	12.117.01.01

BRAKE -	DUAL & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER
WHEELS -	ø1m
JOURNALS -	ø130

TYPE -	Tcfs
WAGON No. -	21 80 5795 000-098 (NOT INCLUSIVE)
BUILDER -	C.E.
OWNER -	C.E.

	A	B	C	D	TOPS INFORMATION								
	18t	22t	26t		AARKND	OPERATING SPEED			BRAKE FORCE DATA		EXCESS LENGTH (GLW)	RA	DESIGN SHEET
					CARKND	50 mile/h UP TO mile/h ABOVE 40 tone GLW			8t. FORCE UP TO 16t. FORCE ABOVE 20t. GLW		4	6	
					I	C	B	B					



TARE -	14t
CAPACITY, WEIGHT -	26t
CAPACITY, VOLUME -	19m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	B.T. 1531-2

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zcf
WAGON No. -	23 80 7191 703,704
BUILDER -	BADISCHE ANILIN & SODA FABRIK
OWNER -	BADISCHE ANILIN & SODA FABRIK

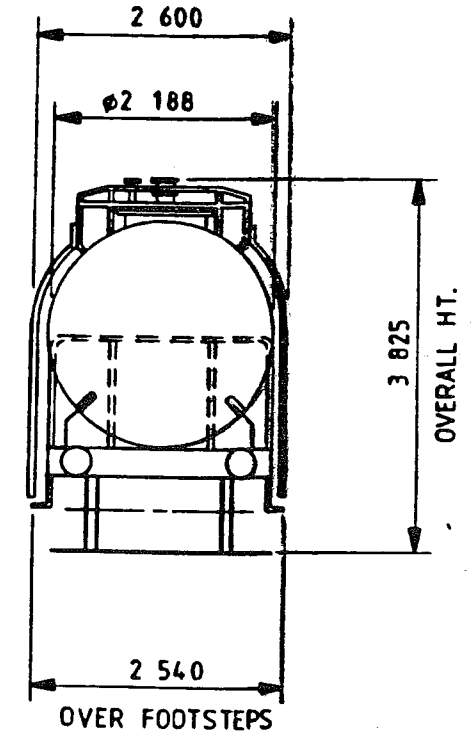
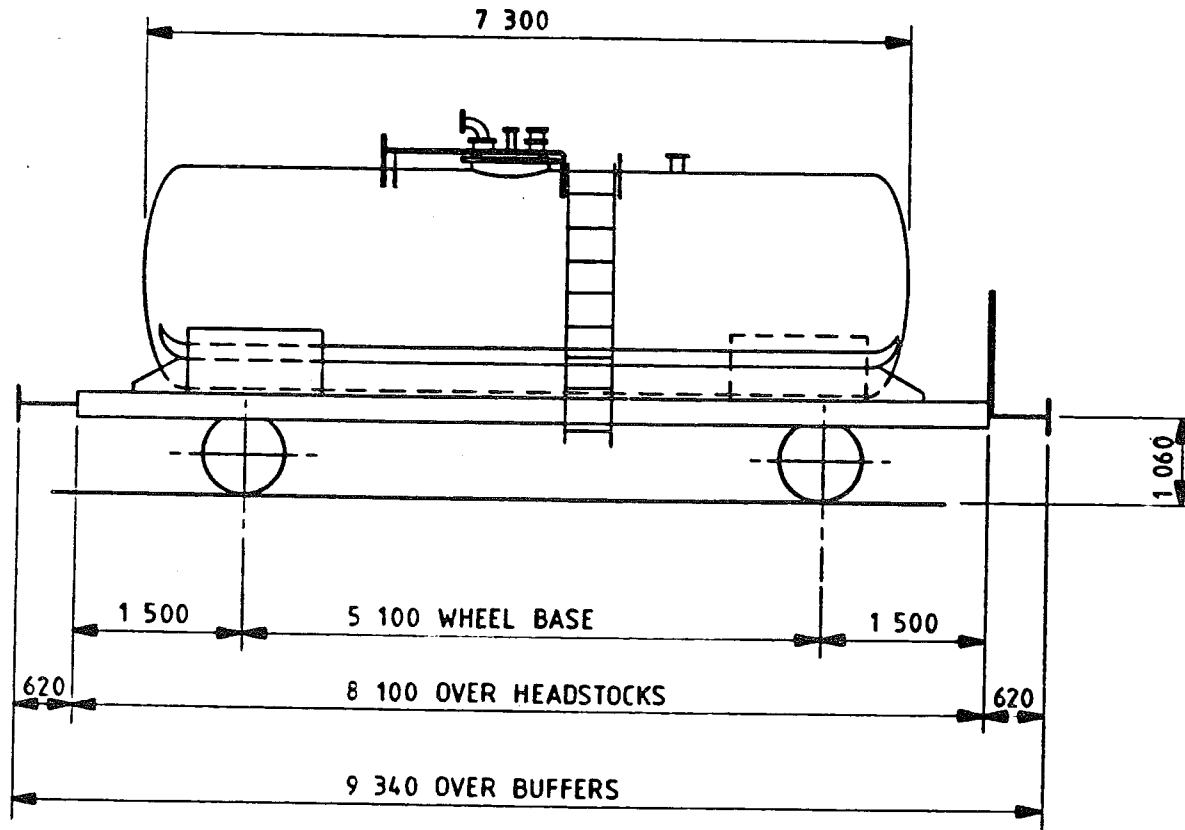
ISSUE 1

40t. GLW. 2 AXLE TANK

ICE 279

	A	B	C	D	TOPS INFORMATION												
	212t	252t	292t		AARKND				OPERATING SPEED				BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
					CARKND				50 mile/h UP TO mile/h ABOVE 40 tonne GLW				7t FORCE UP TO 16t FORCE ABOVE 21t. GLW		5	6	
					I	C	X	B									

NOTE :- FILL TO 93% OF CAPACITY AT 15°C (ALLYL CHLORIDE)



TARE -	10 79t
CAPACITY, WEIGHT-	29.2t
CAPACITY, VOLUME-	26m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	91022

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	
WHEELS -	∅1m
JOURNALS -	∅130

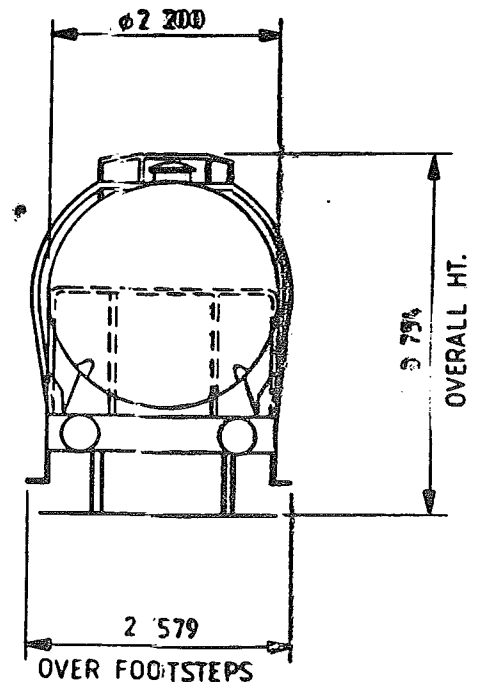
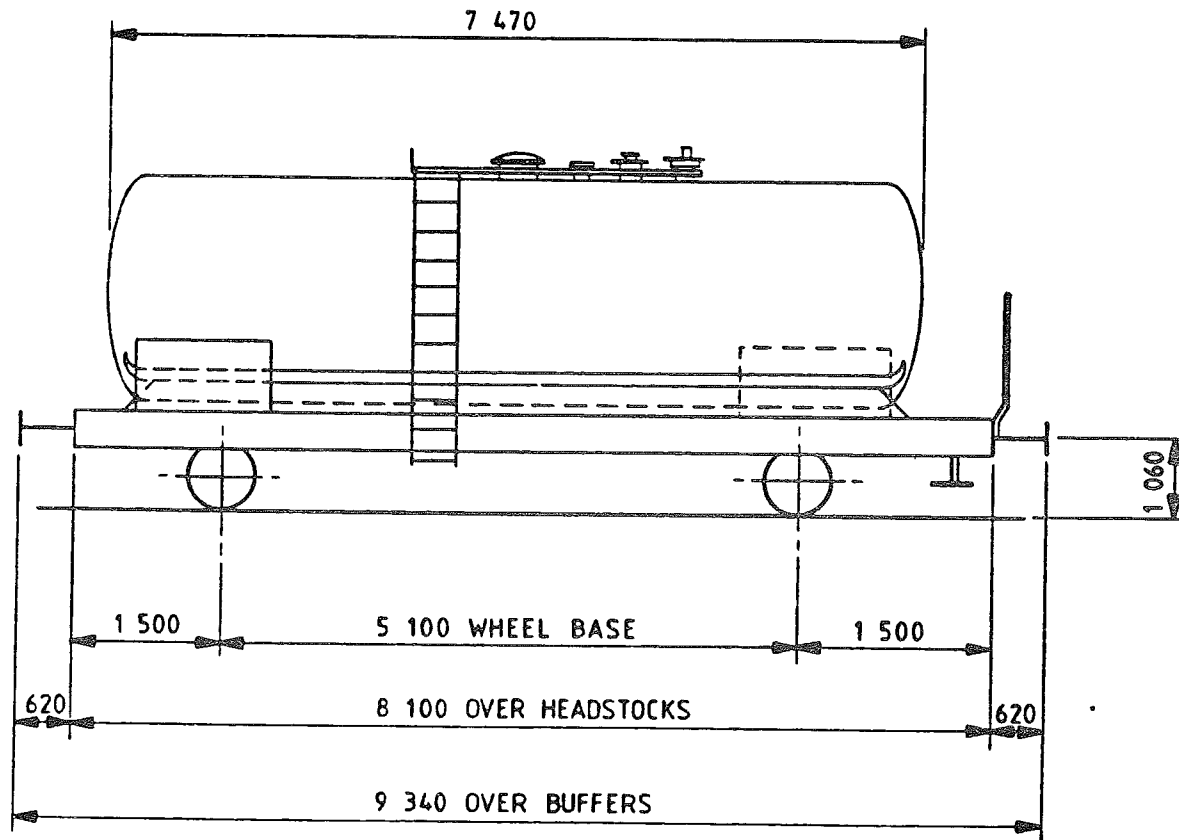
TYPE -	Zf
WAGON No. -	23 87 7191 022
BUILDER -	FAUVET - GIREL
OWNER -	SOLVAY & CO

ISSUE 1

40t. GLW. 2 AXLE TANK

ICE 280

	A	B	C	D	TOPS INFORMATION						
	17-4t	25-4t	29-4t		AARKND	OPERATING SPEED	AIR BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
					CARKND	50 mile/h UP TO 40 tonne GLW	6t FORCE UP TO 16t FORCE ABOVE	21t. GLW	5	6	
					I C X B						



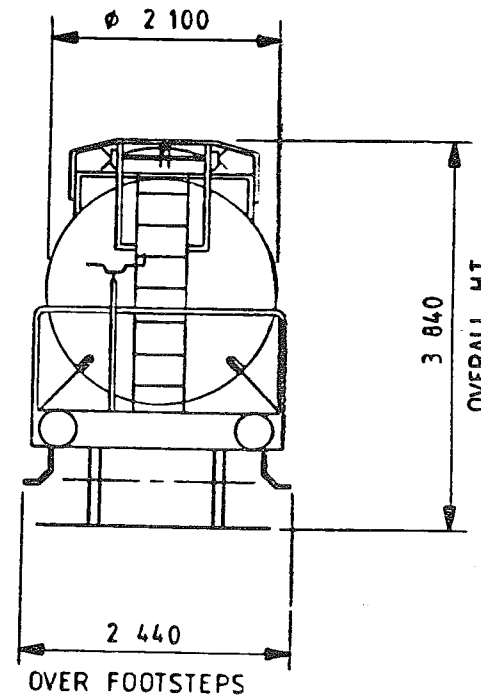
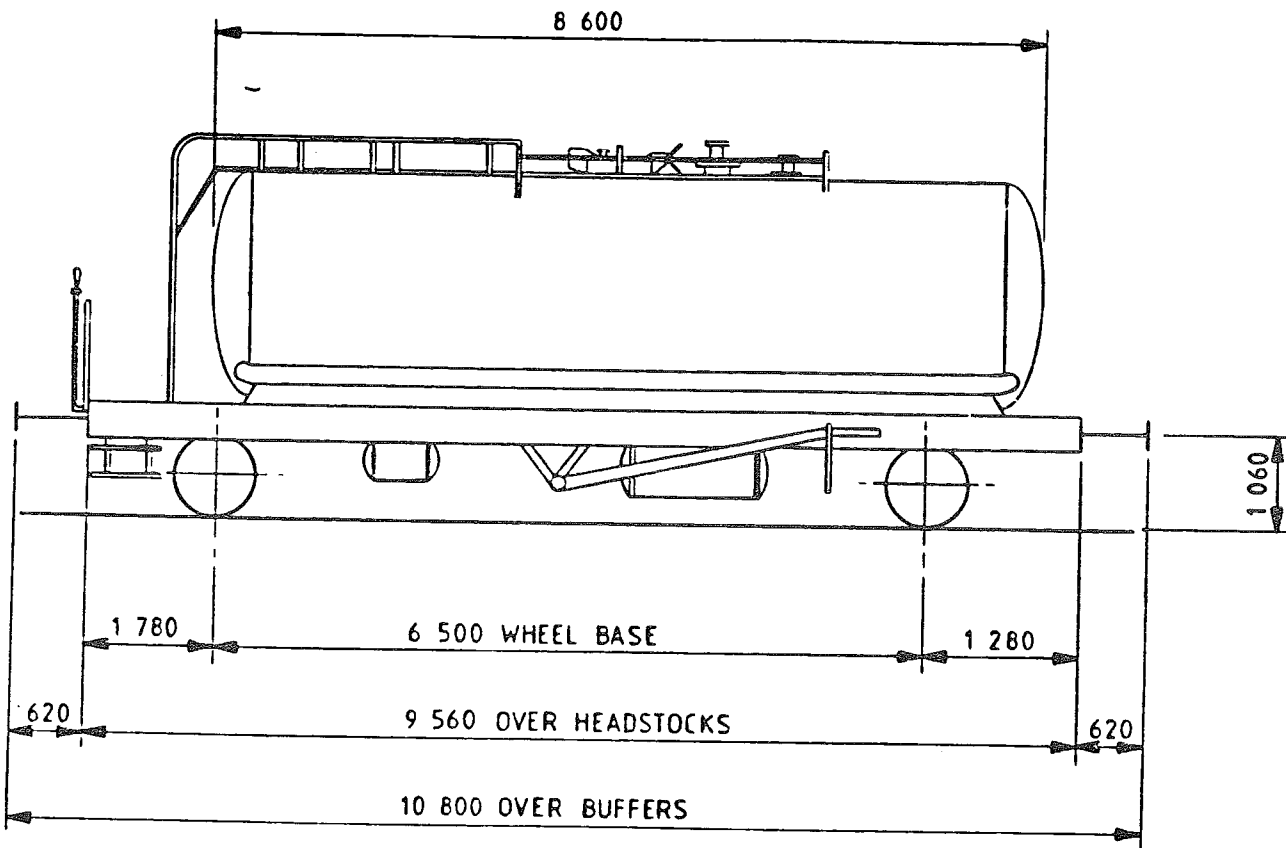
TARE -	10.51t
CAPACITY, WEIGHT-	29.4t
CAPACITY, VOLUME-	26m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	91397

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	
WHEELS -	ø1m
JOURNALS -	ø130

TYPE -	Zt
WAGON No. -	23 87 7191 023
BUILDER -	FAUVET GIREL
OWNER -	INTEROX CHIMIE

ISSUE 1

	A	B	C	D	TOPS INFORMATION								
	19.5t	23.5t	27.5t		AARKND	OPERATING SPEED			BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	19.5t	23.5t	27.5t		CARKND	60 mile/h UP TO mile/h ABOVE 40 tonne GLW			5t FORCE UP TO 15t FORCE ABOVE 19t. GLW		7	6	
					I C B B								



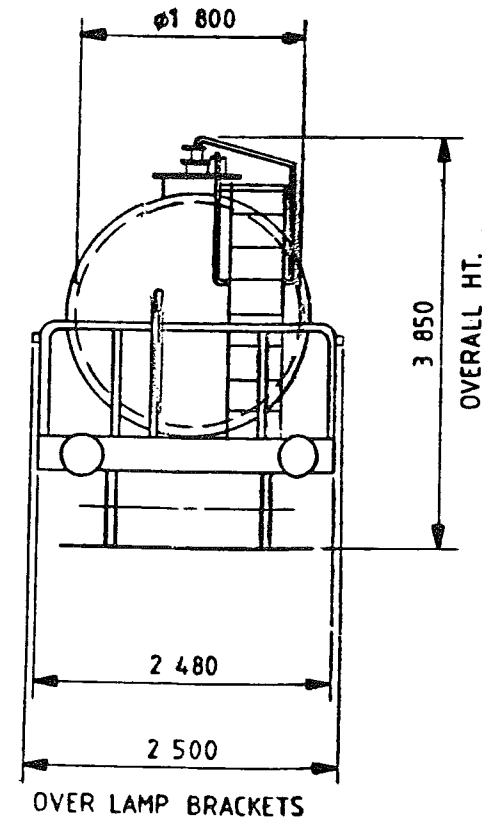
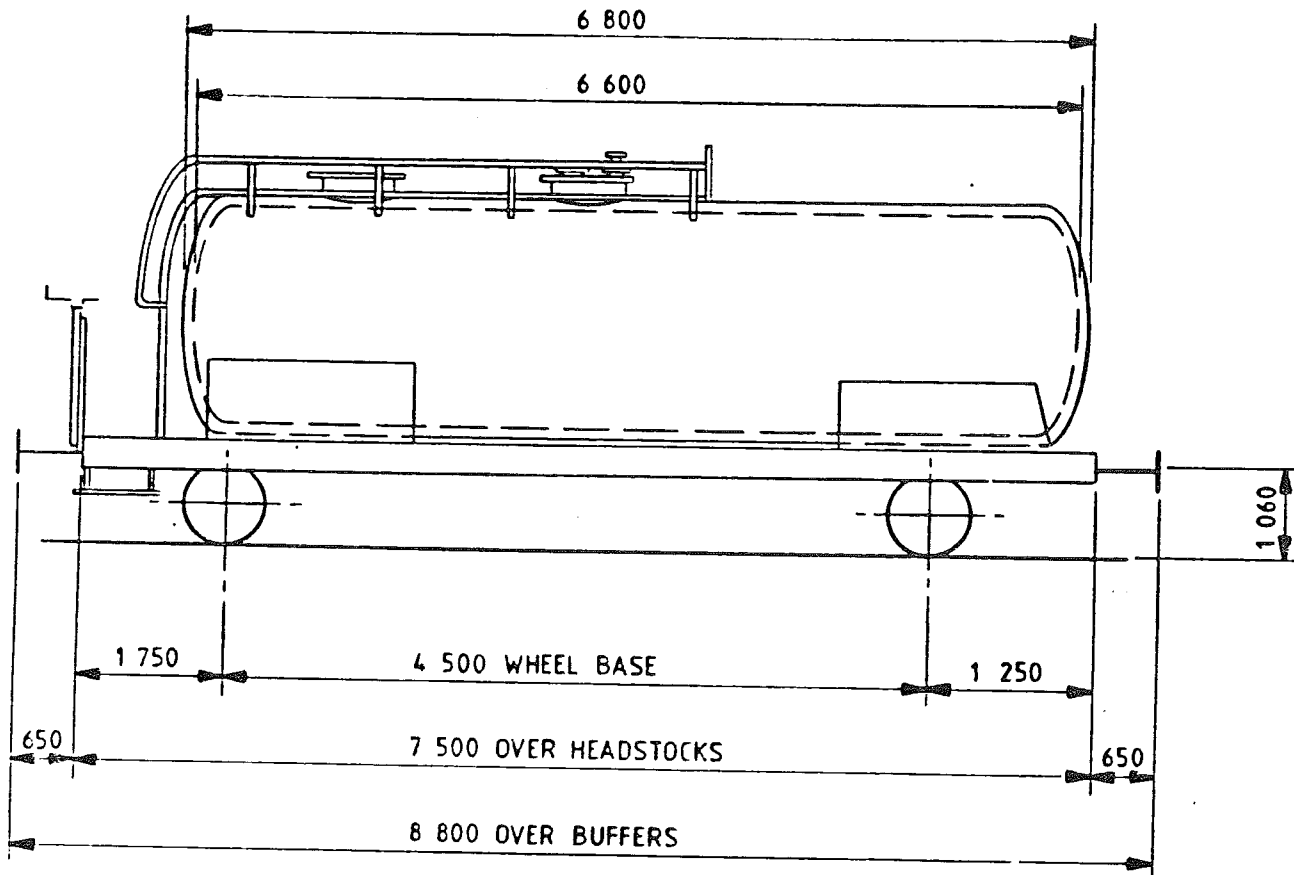
TARE -	12 500kg
CAPACITY, WEIGHT-	27.5t
CAPACITY, VOLUME-	28 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	2233.01.434

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER
WHEELS -	Ø1m
JOURNALS -	Ø130

TYPE -	Zcfs
WAGON No. -	23 80 7398 006,007
BUILDER -	V.T.G.
OWNER -	V.T.G.

ISSUE 1

	A	B	C	D	TOPS INFORMATION							
	20 5t	24 5t	24 5t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LEIGHT	RA (GLW)	DESIGN SHEET
					CARKND	50 mile/h UP TO mile/h ABOVE 36 tonne GLW		5t. FORCE UP TO 5t. FORCE ABOVE		4	4	
					I	C	B	B				



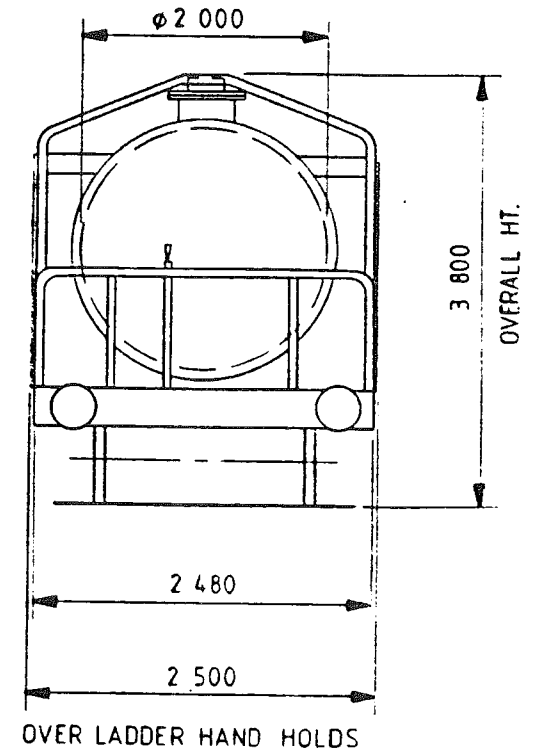
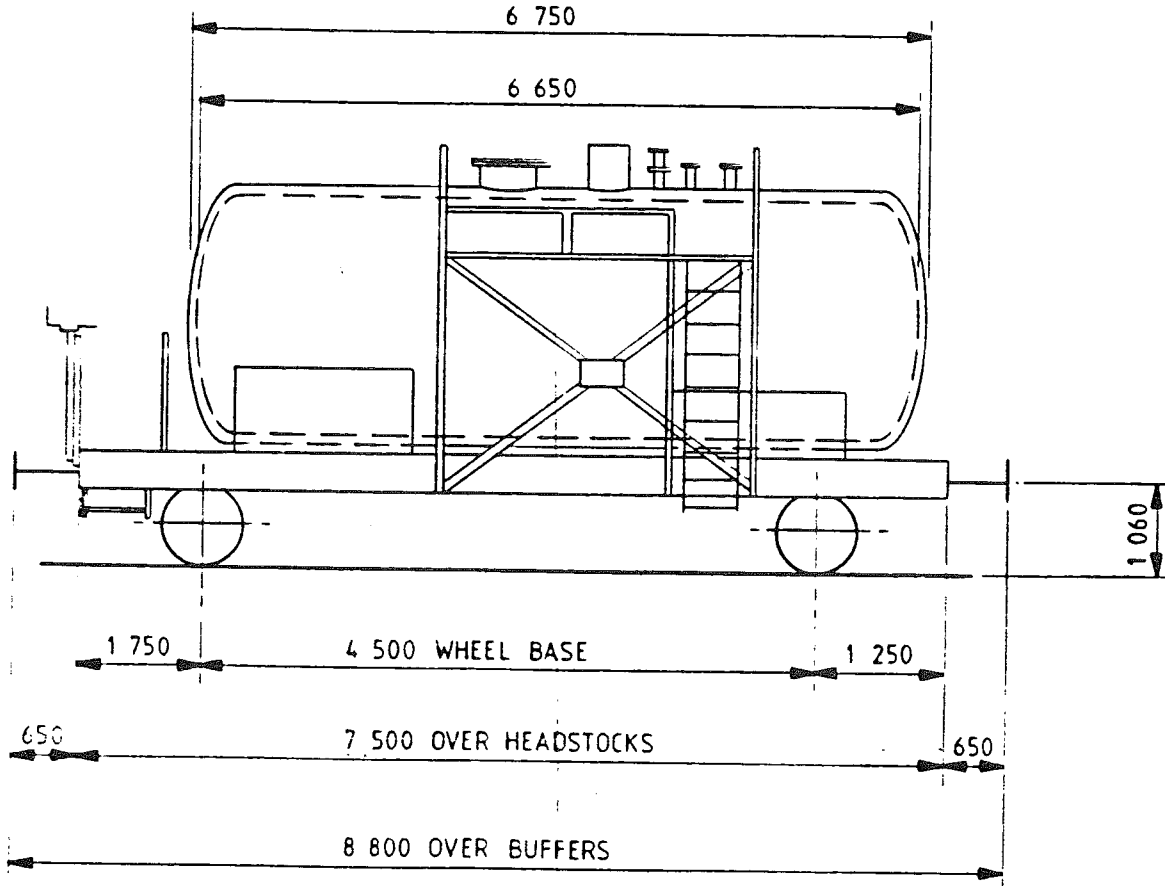
TARE -	11 500kg
CAPACITY, WEIGHT-	24 5t
CAPACITY, VOLUME-	16m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	BT 1554 -2

BRAKE -	AIR & VAC THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ø370 HD
WHEELS -	ø940
JOURNALS -	ø130

TYPE -	Zcf
WAGON No. -	23 80 7191 700
BUILDER -	BADISCHE ANILIN & SODA WORKS
OWNER -	BADISCHE ANILIN & SODA WORKS

ISSUE 1

	A	B	C	D	TOPS INFORMATION							
	17t	21t	25t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	17t	21t	21t		CARKND	60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW		7t. FORCE UP TO 18t. FORCE ABOVE 23t. GLW.		4	6	
					I C A B							



TARE -	14 800kg
CAPACITY, WEIGHT -	25t
CAPACITY, VOLUME -	19m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	B.T. 1555-2

BRAKE -	AIR, PLATFORM SCREW & SIDE LEVER
SUSPENSION -	SINGLE LINK, 9 LEAVE SPRING
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zfs
WAGON No. -	23 60 7390 417
BUILDER -	BADISCHE ANLEN & SODA WORKS
OWNER -	BADISCHE ANLEN & SODA WORKS

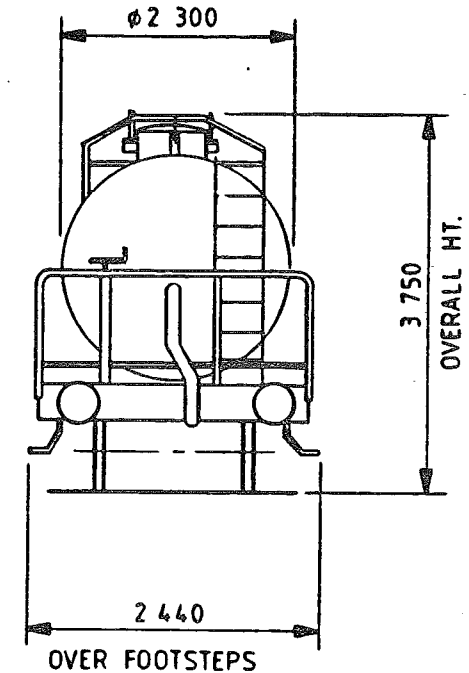
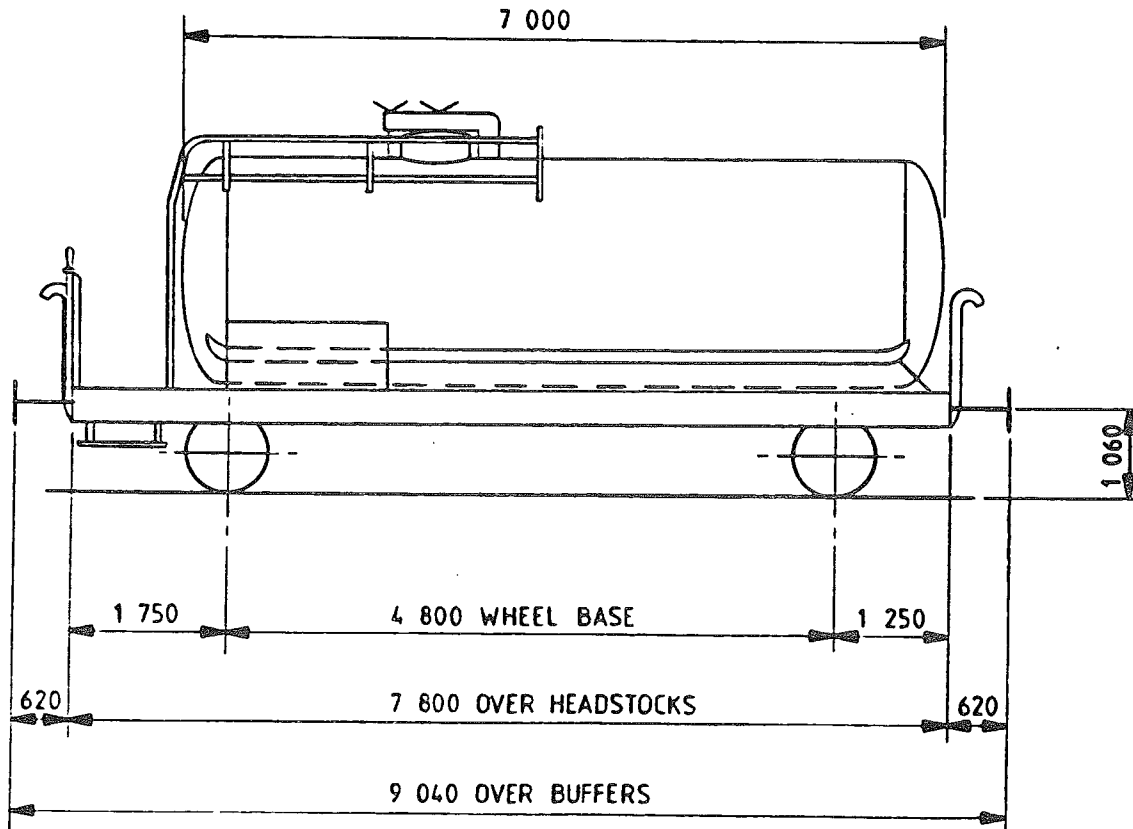
ISSUE 1

40t. GLW. 2 AXLE TANK

ICE 289

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
18t	22t	26t				60 mile/h UP TO		11t. FORCE UP TO		5	6	
S	18t	22t	22t		CARKND	50 mile/h ABOVE 36 tonne GLW		20t. FORCE ABOVE 26t. GLW				
					I C X C							

NOTE :- 10% ULLAGE

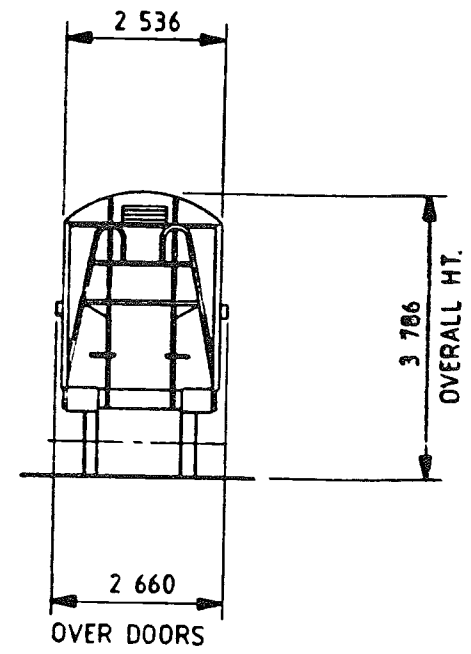
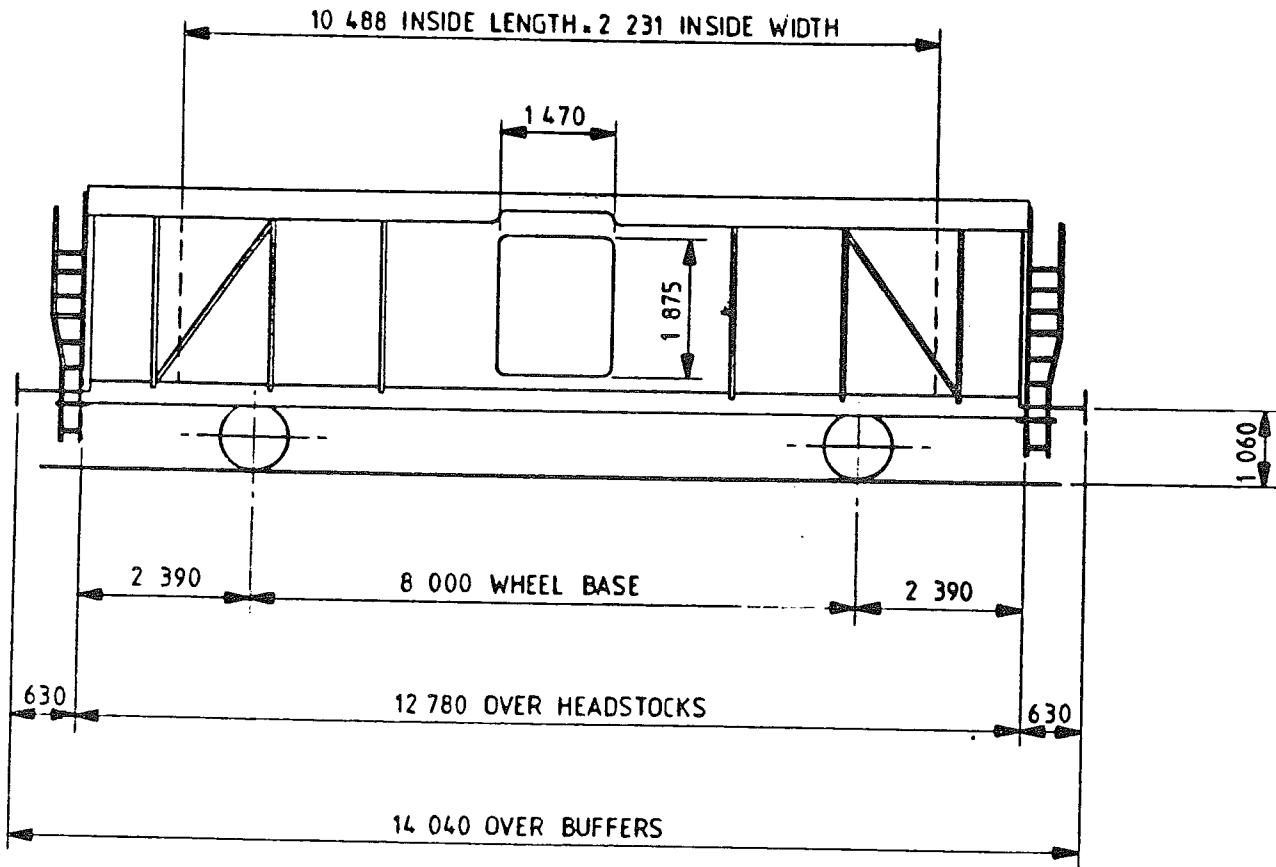


TARE -	14 000kg
CAPACITY, WEIGHT-	26t
CAPACITY, VOLUME-	27m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 450 HD
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zfs
WAGON No. -	23 80 7390 405
BUILDER -	HEINRICH WILHELM
OWNER -	VEBA CHEMICALS

	A	B	C	D	TOPS INFORMATION									
	13.4t	17.4t	21.4t		AARKND		OPERATING SPEED			BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	13.4t	17.4t	17.4t		CARKND		60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW			13t FORCE UP TO 20t FORCE ABOVE 25t. GLW		12	6	
					I	I	X	H						



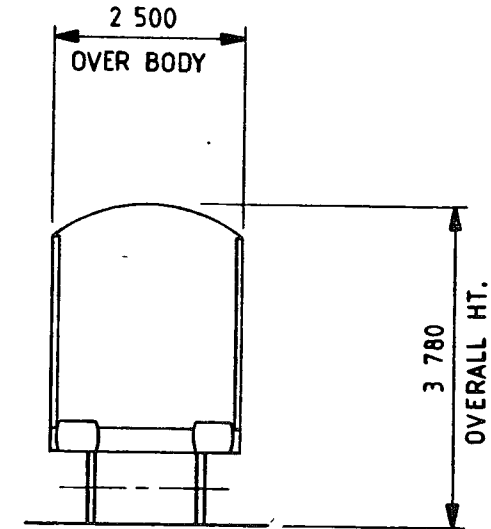
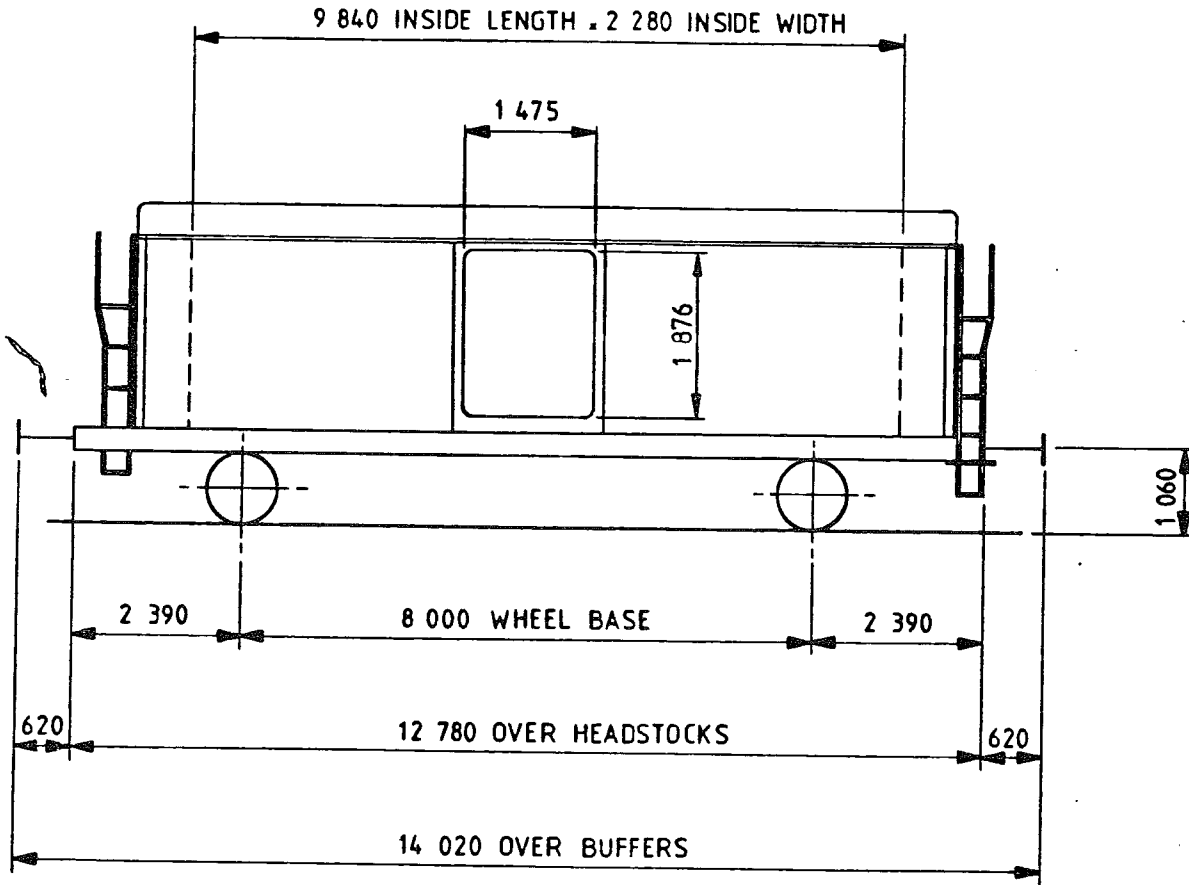
TARE -	18.6t
CAPACITY, WEIGHT -	21.4t
CAPACITY, VOLUME -	44.4 m ³
FLOOR AREA -	23.5 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	892-01-006

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 580.400
WHEELS -	ø1m
JOURNALS -	ø130

TYPE -	Ibefs
WAGON No. -	0488 8092 000-199
BUILDER -	BRUGEOISE ET NIVELLES
OWNER -	INTERFRIGO

ISSUE 1

	A	B	C	D	TOPS INFORMATION							
	13t	17t	19t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	13t	17t	17t		CARKND	60	mile/h UP TO	VARIABLE LOAD = -15.26 + (1.37 * t)		12	5	
SS	13t			I I X L	50	mile/h ABOVE	34					

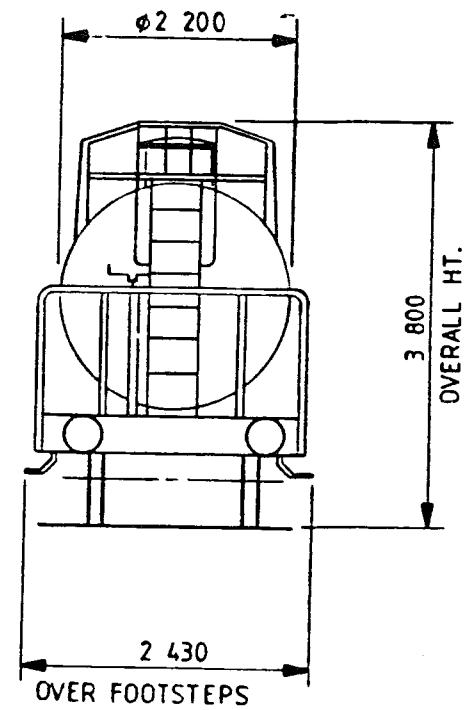
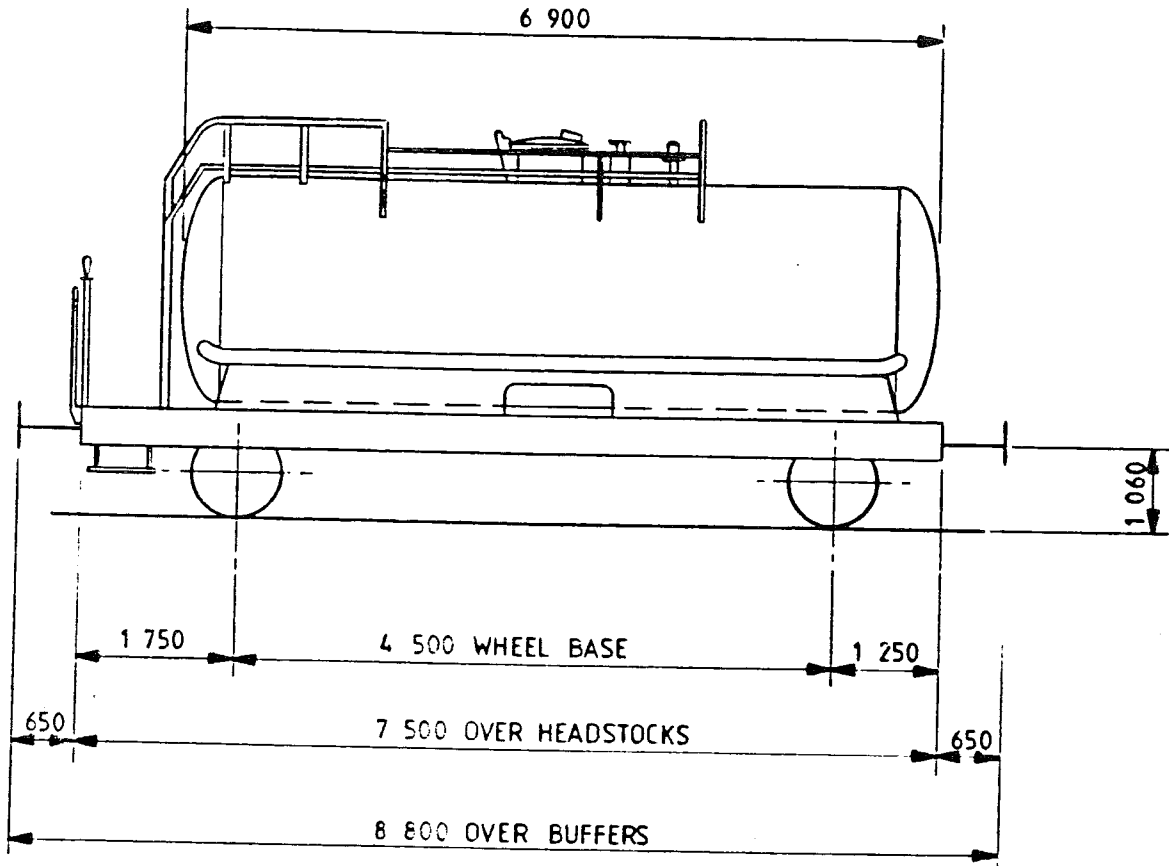


TARE -	17t
CAPACITY, WEIGHT-	19t
CAPACITY, VOLUME-	4.2 m ³
FLOOR AREA -	21.5 m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	893-22-001

BRAKE -	DUAL : SIDE LEVER
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 520 x 400 HD
WHEELS -	ø1m
JOURNALS -	ø130

TYPE -	Ibcefss
WAGON No. -	04 88 8089 983.985. 988-998
BUILDER -	BRUGEOISE AND NIVELLES
OWNER -	INTER FRIGO

	A	B	C	D	TOPS INFORMATION								
	21t	25t	29t		AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	21t	25t	29t		CARKND		60 mile/h UP TO 40 tonne GLW		5t. FORCE UP TO 15t. FORCE ABOVE 19t. GLW		4	6	
					I	C	B	C					



TARE -	11t
CAPACITY, WEIGHT -	29t
CAPACITY, VOLUME -	24m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	2333.01.445

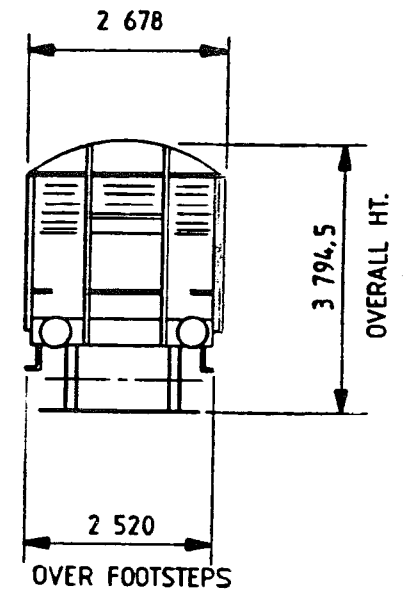
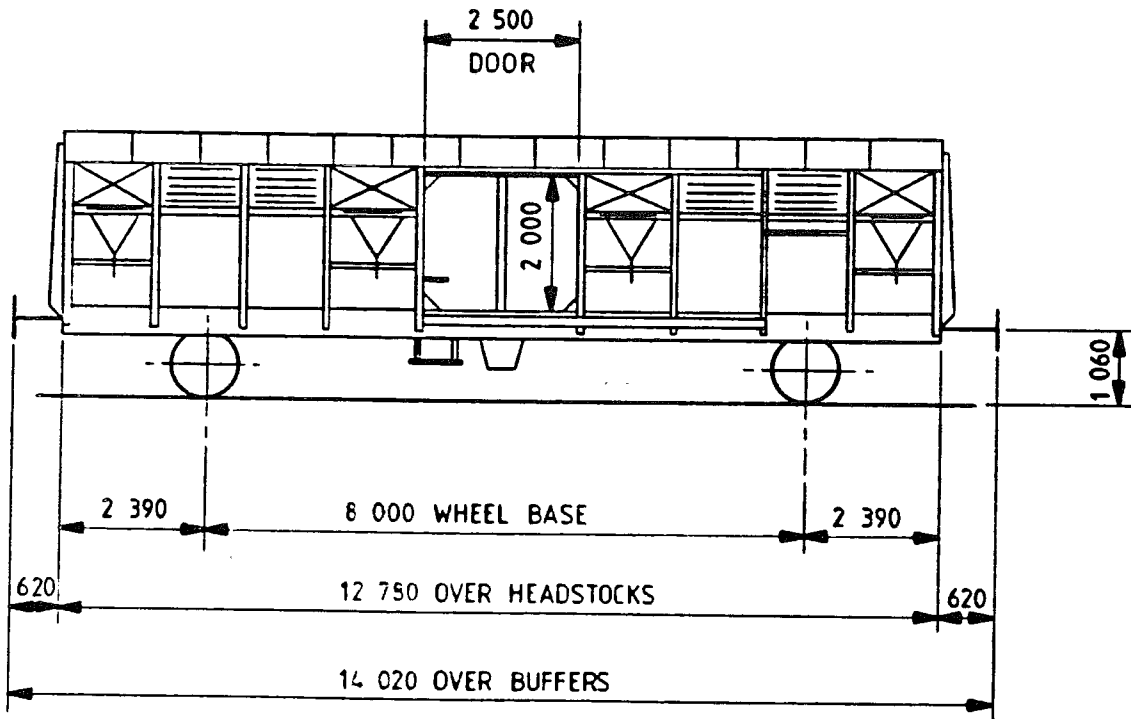
BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 380
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zcfs
WAGON No. -	23 80 7391 016
BUILDER -	V.T.G.
OWNER -	V.T.G.

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				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		AIR BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	18t	22t	26t			60 mile/h UP TO		7t. FORCE UP TO		12	6	
S	18t	22t	25t		CARKND	50 mile/h ABOVE 39 tonne GLW		20t FORCE ABOVE 25t. GLW.				
					I	T	X	L				

NOTE :- RESTRICTED TO 25tonnes
DUE TO BRAKING CHARACTERISTICS



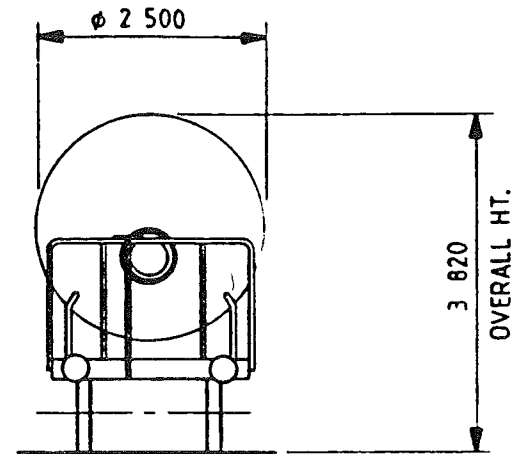
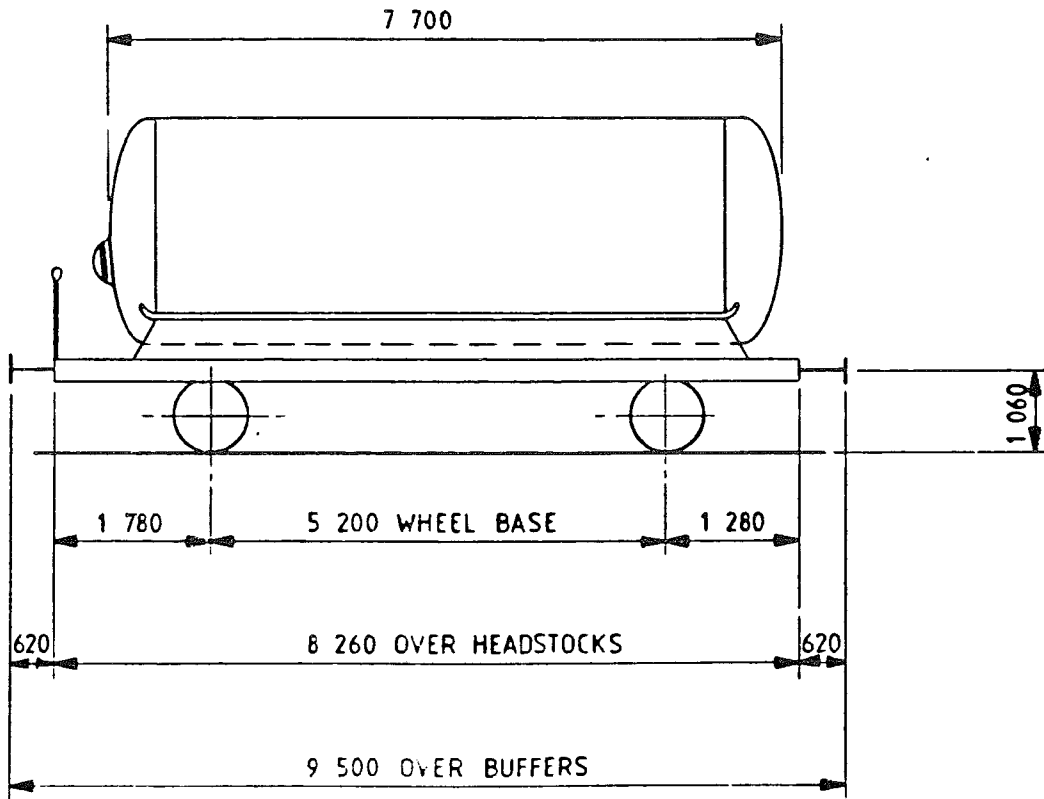
TARE -	14t
CAPACITY, WEIGHT-	26t
CAPACITY, VOLUME-	69 m ³
FLOOR AREA -	29 m ²
MIN. CURVE -	60m.
GEN. ARRGT. DRG. No.-	10. 148 160

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ1m
JOURNALS -	φ130

TYPE -	Hbfs
WAGON No. -	21 87 2380 500-999
BUILDER -	-
OWNER -	S.N.C.F.

ISSUE 1

					TOPS INFORMATION							
	A	B	C	D	AARKND		OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	18t	22t	26t		CARKND		60 mile/h UP TO	10t FORCE UP TO		5	6	
S	18t	22t	26t		I	C	mile/h ABOVE 40 tonne GLW	21t FORCE ABOVE 26t. GLW				

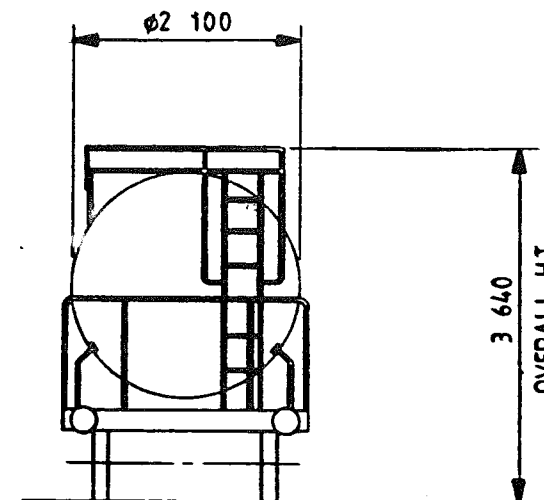
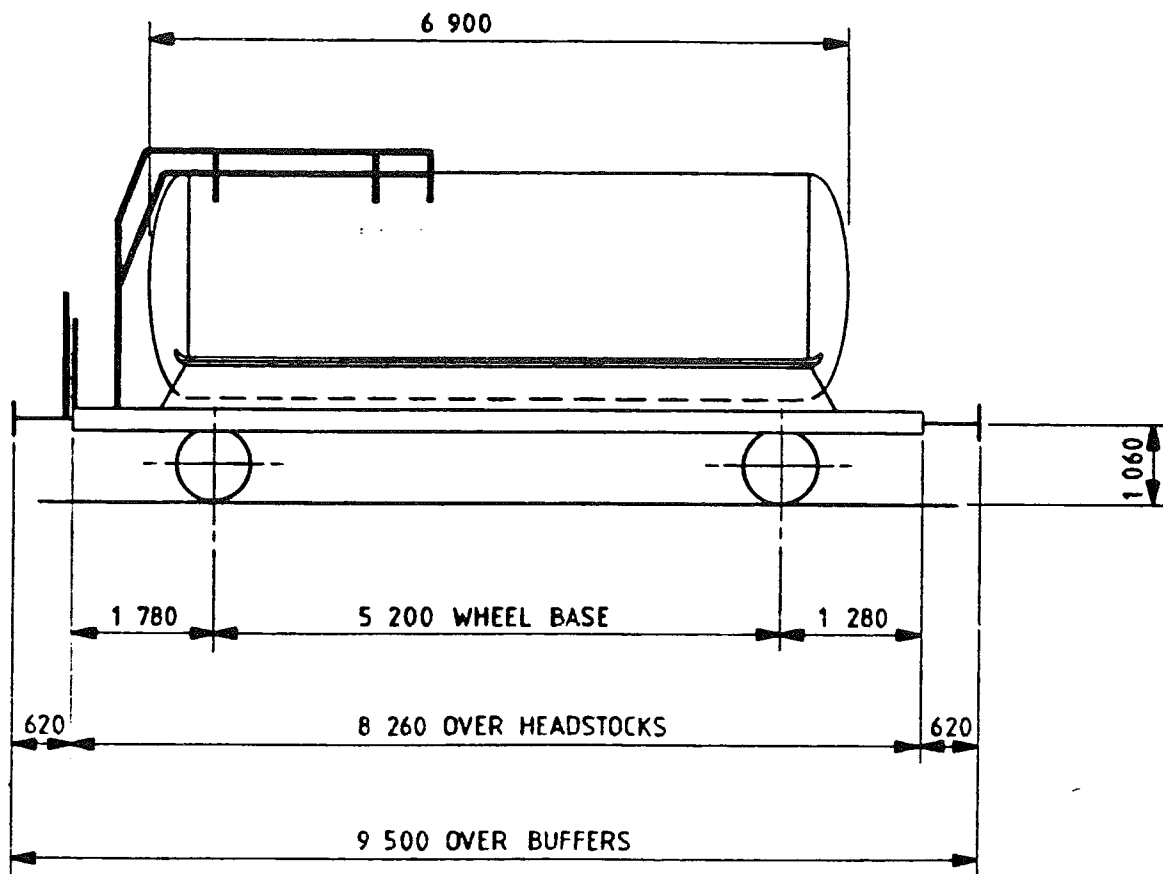


TARE -	14t
CAPACITY, WEIGHT-	26t
CAPACITY, VOLUME-	35m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	2641.01.455

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zfqs
WAGON No. -	23 80 7394 000,001
BUILDER -	V.T.G.
OWNER -	V.T.G.

TOPS INFORMATION													
	A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		WHEELS	RA	DESIGN SHEET
	19t	23t	27t			CARKND	60 mile/h UP TO 40 tonne GLW		6t. FORCE UP TO 19t. GLW		5	6	
S	19t	23t	27t			I C X C	mile/h ABOVE		15t FORCE ABOVE				



TARE -	13t
CAPACITY, WEIGHT -	27t
CAPACITY, VOLUME -	22m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	7511.80

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370 HD
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zfgs
WAGON No. -	23 80 734-005
BUILDER -	V.T.G.
OWNER -	V.T.G.

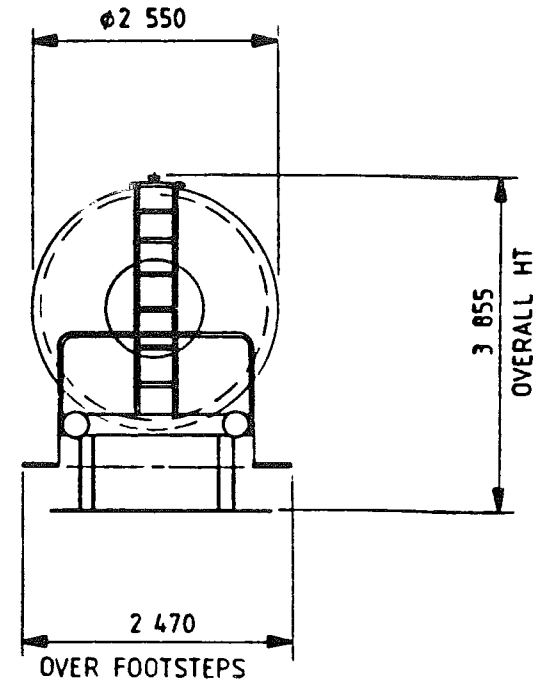
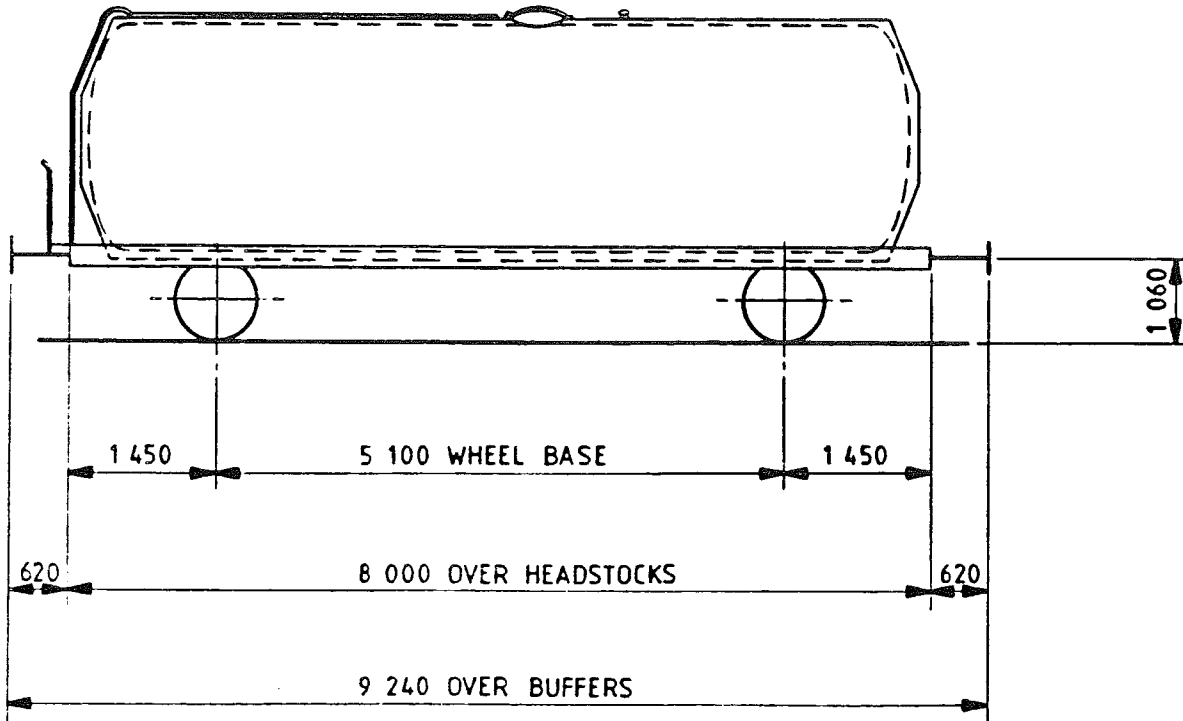
ISSUE 1

40t. GLW. 2 AXLE TANK

ICE 309

TOPS INFORMATION													
	A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	142t	232t	272t			CARKND	60 mile/h UP TO 40 tonne GLW		8t. FORCE UP TO 20t. GLW		5	6	
S	152t	232t	232t			I C X C	50 mile/h ABOVE		16t. FORCE ABOVE				

NOTE:- WITH 8% ULLAGE
VOLUME = 30m³



TARE -	12.8t
CAPACITY, WEIGHT -	27.2t
CAPACITY, VOLUME -	32.5 m ³ (SEE NOTE)
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	1-2-0-154

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC $\phi 400$ HD
WHEELS -	$\phi 1m$
JOURNALS -	$\phi 130$

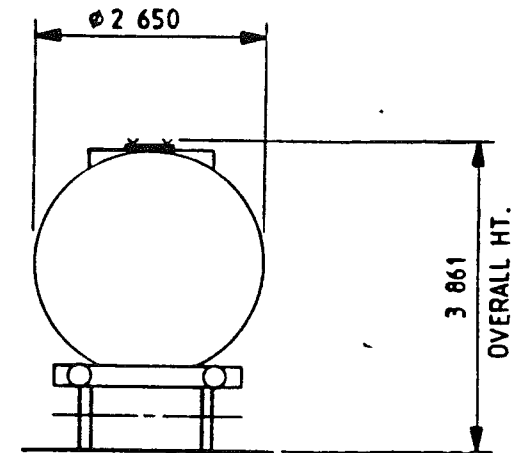
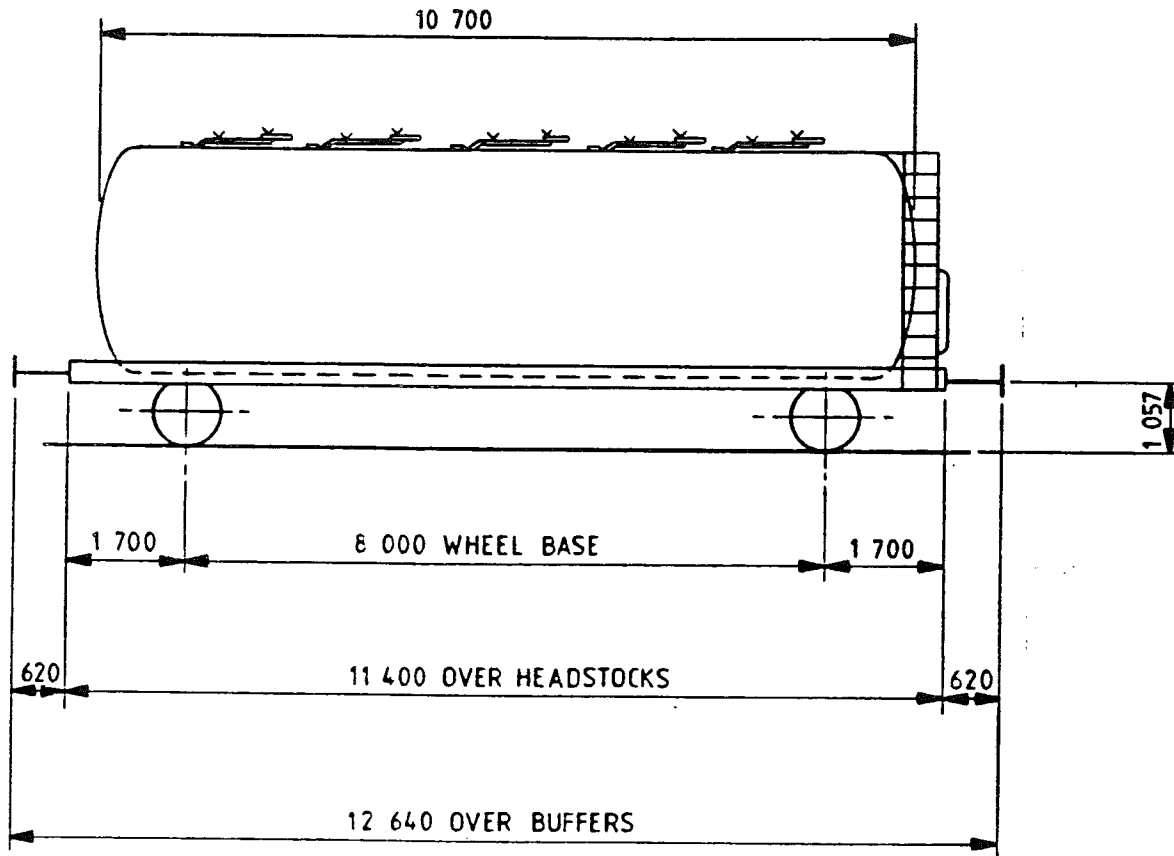
TYPE -	Zefs
WAGON No. -	23 87 7397 000-002
BUILDER -	C.F.P.M.
OWNER -	S.N.C.F.

ISSUE 1

40t. GLW. 2 AXLE TANK

ICE 314

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	16.8t	20.8t	24.8t			60 mile/h UP TO		9t FORCE UP TO		10	6	
S	16.8t	20.8t	24.8t		CARKND	mile/h ABOVE 40 tonne GLW		17t FORCE ABOVE				
					I C B B							



TARE -	15 2t
CAPACITY, WEIGHT-	24 8t
CAPACITY, VOLUME-	49 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	B5067.01.1

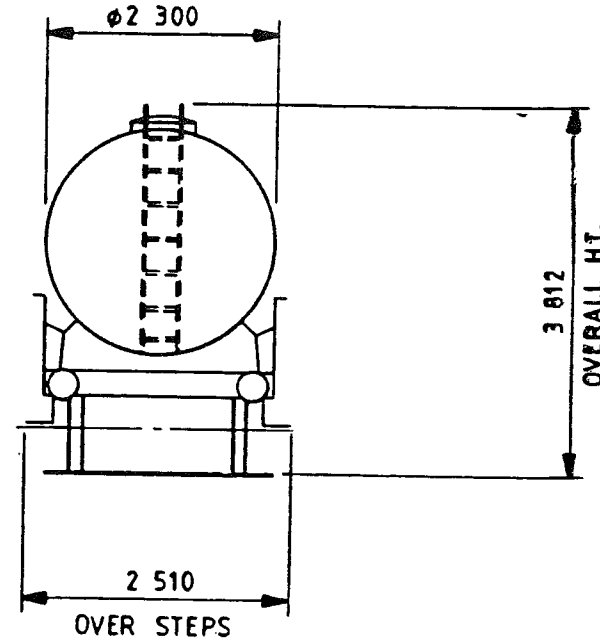
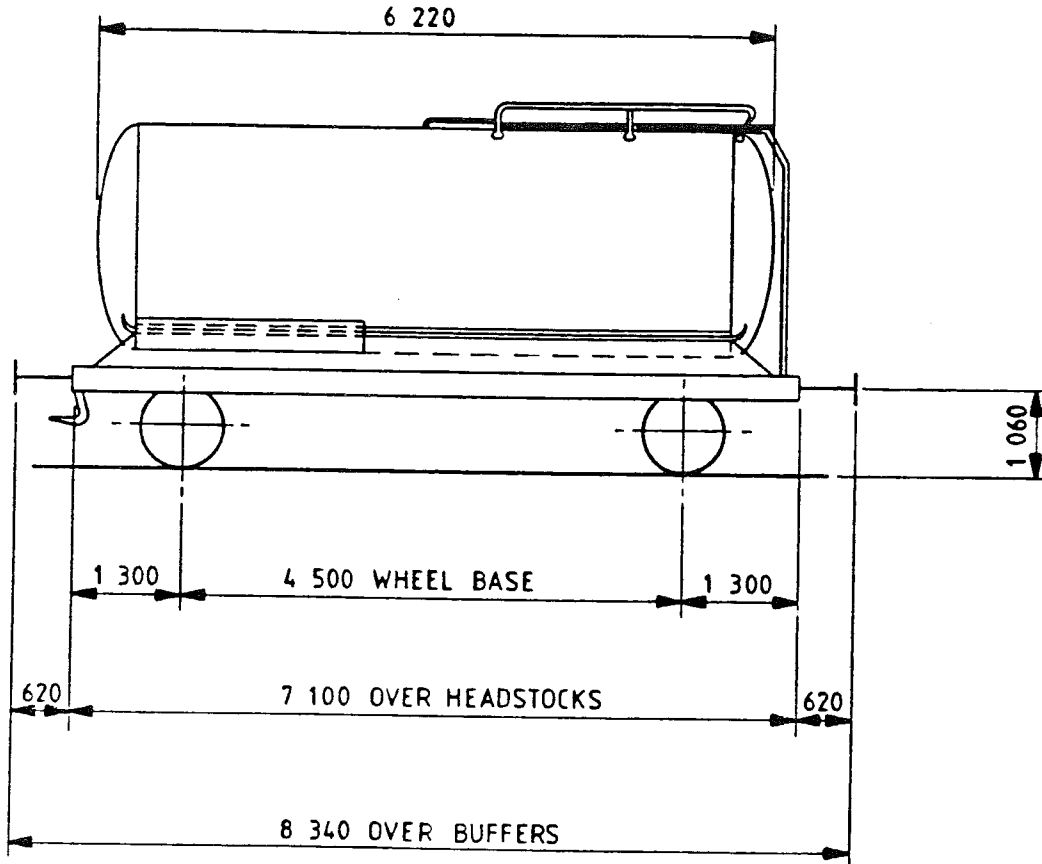
BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	
JOURNALS -	ø130

TYPE -	Ucfkks
WAGON No. -	23 80 9185 000-006
BUILDER -	WAGGON FABRIK
OWNER -	E.V.A.

ISSUE 1

	A	B	C	D	TOPS INFORMATION								
	21.6t	25.8t	25.8t		AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
					CARKND		50 mile/h UP TO mile/h ABOVE 36 tonne GLW		5t FORCE UP TO 16t FORCE ABOVE 20t. GLW		4	5	
					I	C	B	B					

NOTE : NO PLATFORM



TARE -	10.24t
CAPACITY, WEIGHT-	25.8t
CAPACITY, VOLUME-	24 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	92685

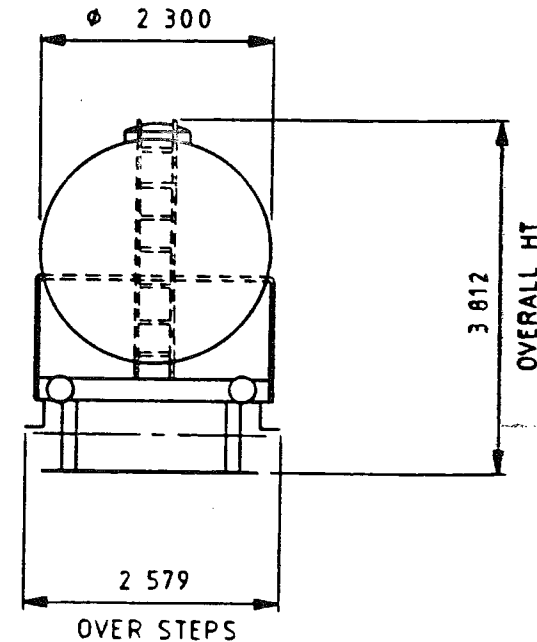
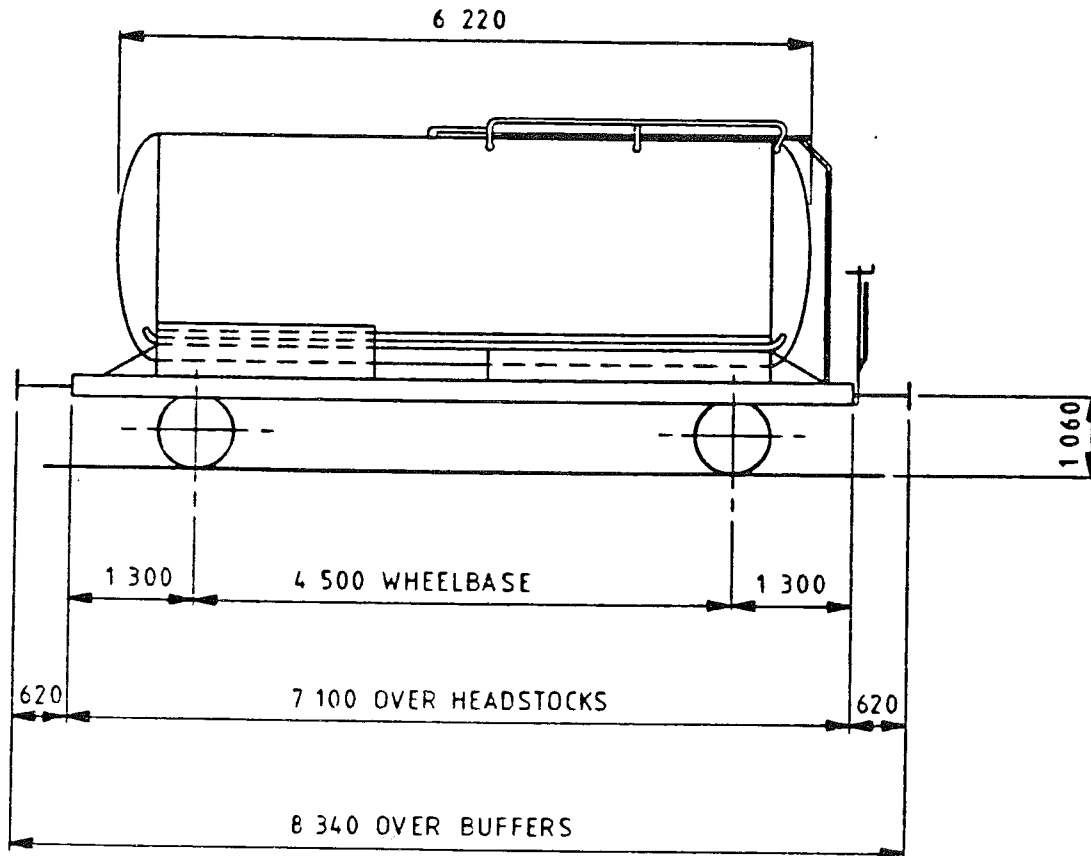
BRAKE -	AIR & VAC THRO' PIPE :SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	SCREW
BUFFERS -	HYDRAULIC ϕ 400 HD
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zf
WAGON No. -	23 87 7190 501-508
BUILDER -	FAUVET GIREL
OWNER -	ERMEWA

40 t GLW 2 AXLE TANK

ICE 316

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	BA (GLW)	DESIGN SHEET
21.6t	25.6t	25.6t			CARKND	50	mile/h UP TO	5 t FORCE UP TO	16 t FORCE ABOVE	4	5	
					I C B B		mile/h ABOVE	36 tonne GLW	20 t GLW			



TARE -	10.30 t
CAPACITY, WEIGHT -	25.6 t
CAPACITY, VOLUME -	24 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	92686

BRAKE -	AIR & VAC THRO' PIPE PLATFORM SCREW & SIDE LEVER.
SUSPENSION -	DOUBLE LINK
COUPLINGS -	SCREW
BUFFERS -	HYDRAULIC ∅ 400 HD.
WHEELS -	∅ 1 m
JOURNALS -	∅ 130

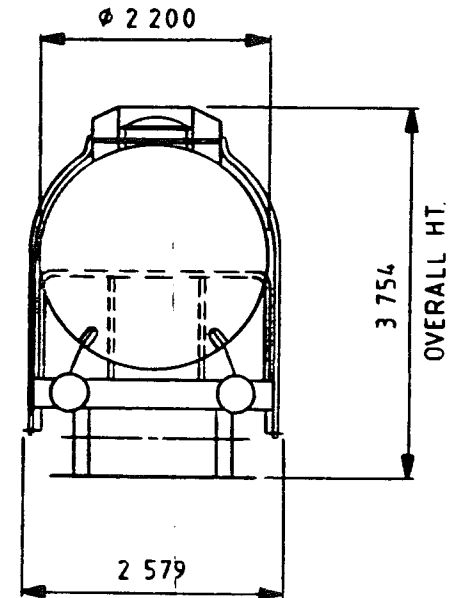
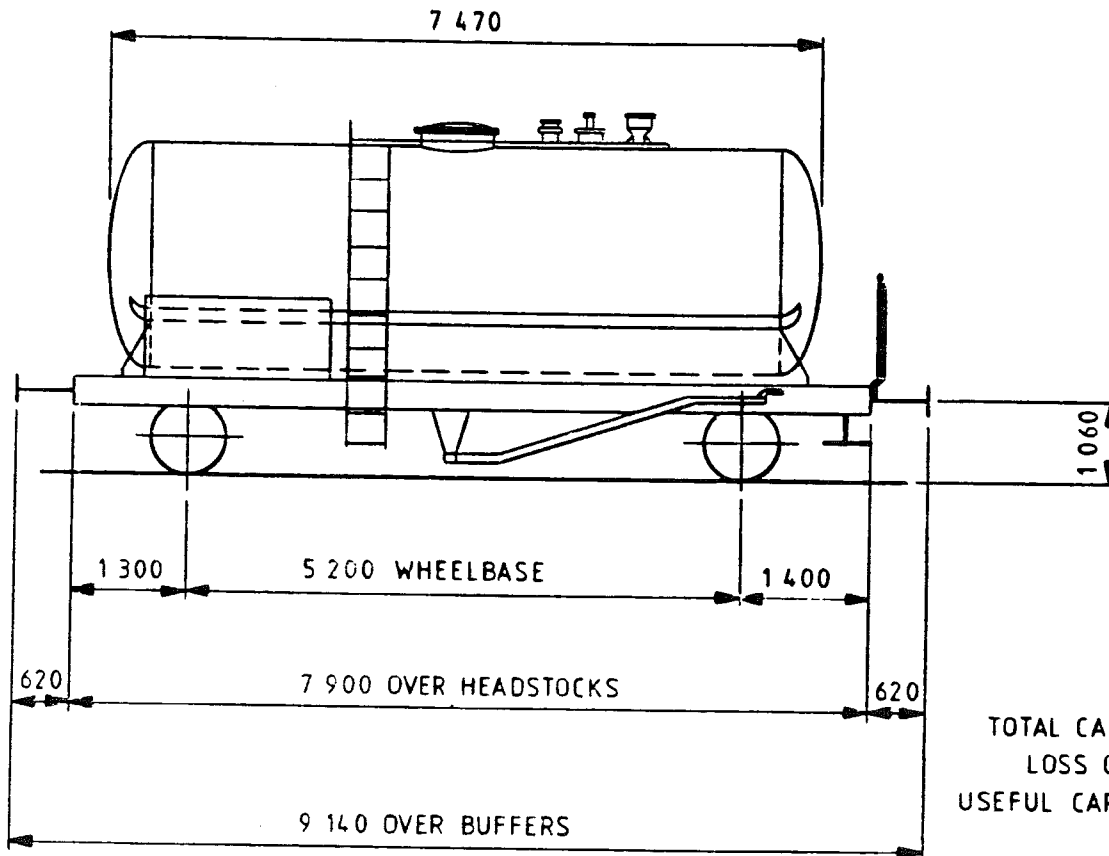
TYPE -	Zf
WAGON No. -	23 87 7190 500,509
BUILDER -	FAUVET GIREL
OWNER -	ERMEWA

ISSUE 1

40 t GLW 2 AXLE TANK

ICE 318

				TOPS INFORMATION								
A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
21.4t	25.4t	29.4t		CARKND		50 mile/h UP TO mile/h ABOVE 40 tonne GLW		6 t FORCE UP TO 14 t FORCE ABOVE 22 t GLW		5	6	
				I	C	X	B					



NOTE:

	FRANCE		ENGLAND	
DENSITY	1.13	1.20	1.13	1.20
TOTAL CAPACITY(hl)	264.5	264.5	264.5	264.5
LOSS ON ROUTE	4%	7.5%	15.2%	20.3%
USEFUL CAPACITY(hl)	254	244.5	224.5	211

TARE -	10.5 t
CAPACITY, WEIGHT-	29.4 t
CAPACITY, VOLUME-	26 m ³ (SEE NOTE)
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRG. DRG. No.-	93 167

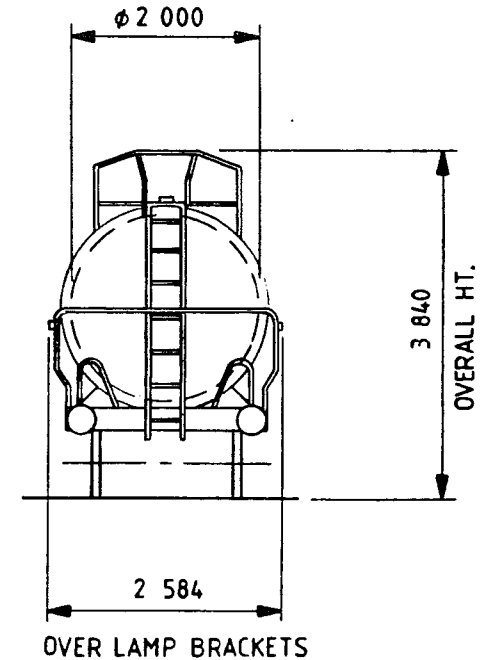
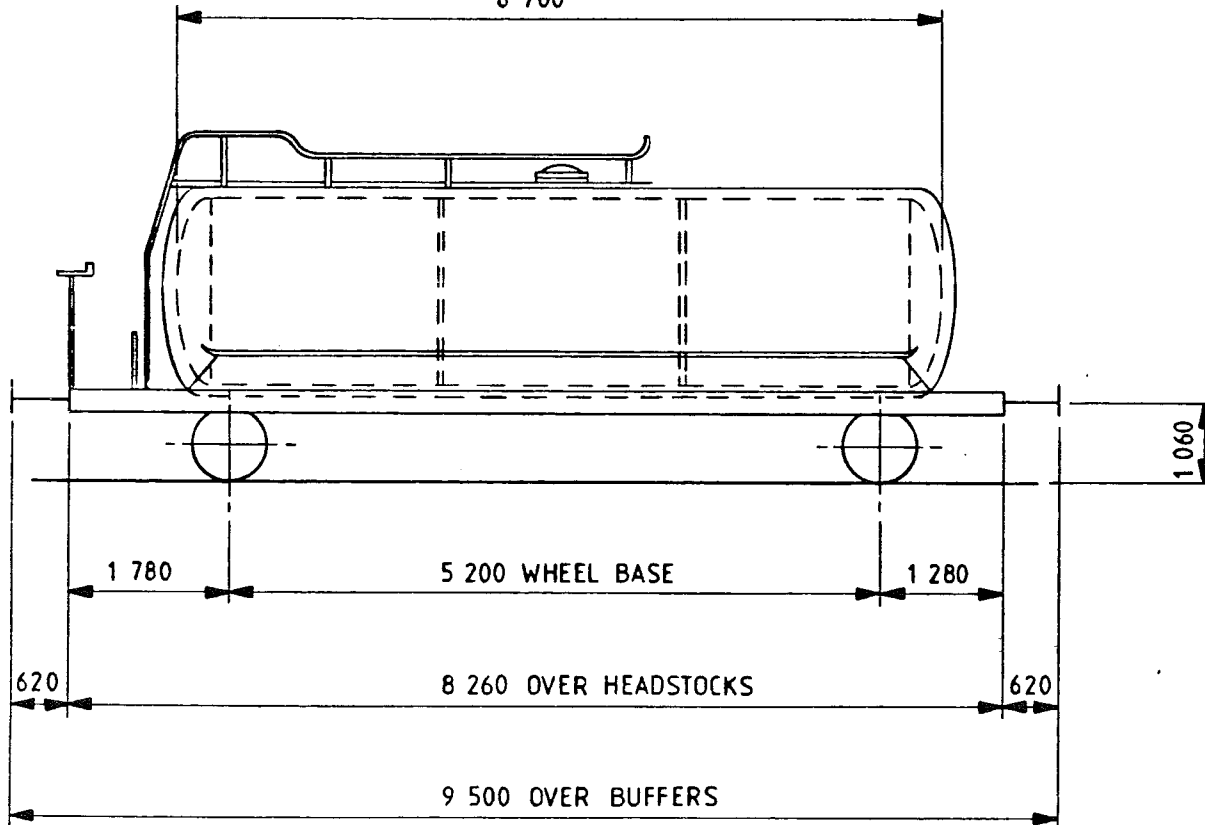
BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C. SCREW
BUFFERS -	HYDRAULIC ϕ 370
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zcf
WAGON No. -	23 87 7191 023
BUILDER -	FAUVET - GIREL
OWNER -	ITEROX CHIMIE

ISSUE 1

				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20.2t	24.2t	28.2t			60 mile/h UP TO		8t. FORCE UP TO		5	6	
S	20.2t	24.2t	28.2t		CARKND	mile/h ABOVE 40 tonne GLW		18t. FORCE ABOVE 23t. GLW				
					I C B C							

NOTE: FITTED WITH HEATING DEVICES
6 700



TARE -	11.8t
CAPACITY, WEIGHT-	28.2t
CAPACITY, VOLUME-	20 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	K194.01.-01

BRAKE -	AIR & VAC. THRO' PIPE : PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zcfs
WAGON No. -	23 80 7398 603
BUILDER -	GRAAFF ELZE
OWNER -	CONTINENTAL OIL TRANSPORT

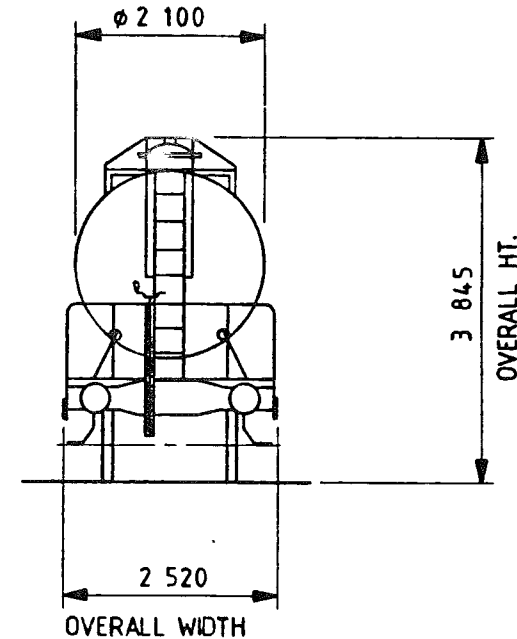
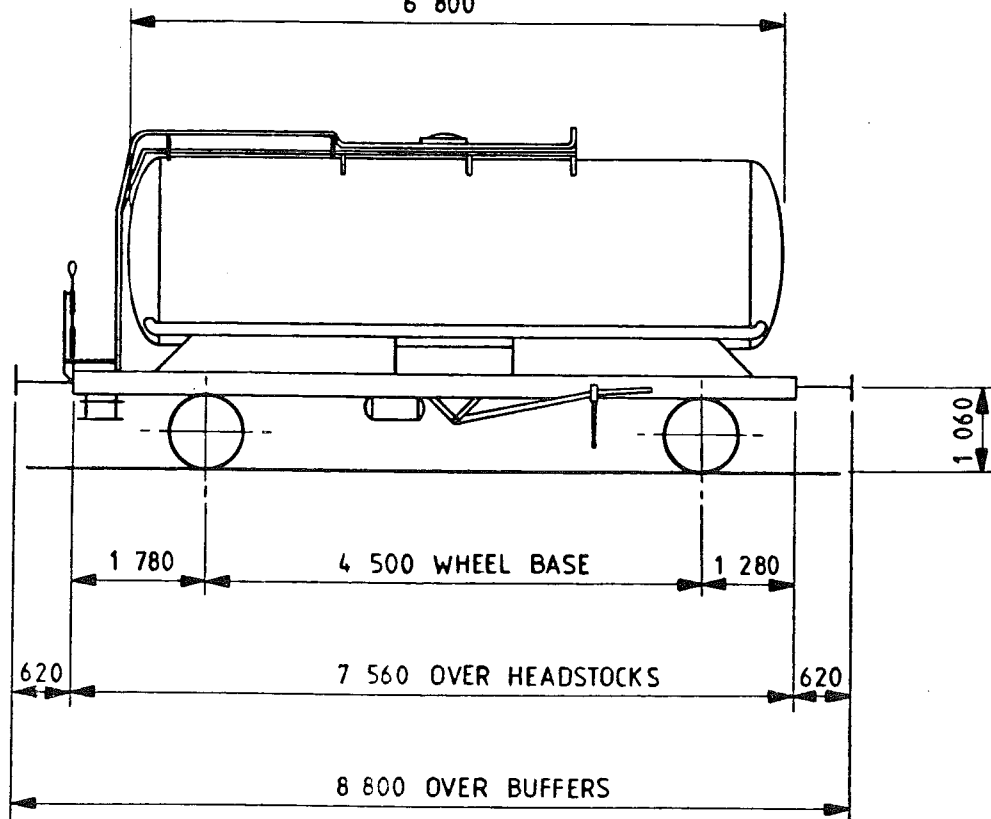
ISSUE 1

40t. GLW. 2 AXLE TANKS

ICE 321

TOPS INFORMATION												
	A	B	C	D		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20-6t	24-6t	28-6t			AARKND	60 mile/h UP TO		6t FORCE UP TO			
S	20-6t	24-6t	24-6t			CARKND	50 mile/h ABOVE 36 tonne GLW		18t FORCE ABOVE 23t. GLW		4	6
						I C B C						

NOTE :- MAXIMUM LOADING FOR THIONYL CHLORIDE
IS 25t, 30% ULLAGE
6 800



TARE -	11.4t
CAPACITY, WEIGHT-	28.6t
CAPACITY, VOLUME-	22m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRG. DRG. No.-	2219.01.479

BRAKE -	AIR & VAC. THRO' PIPE PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

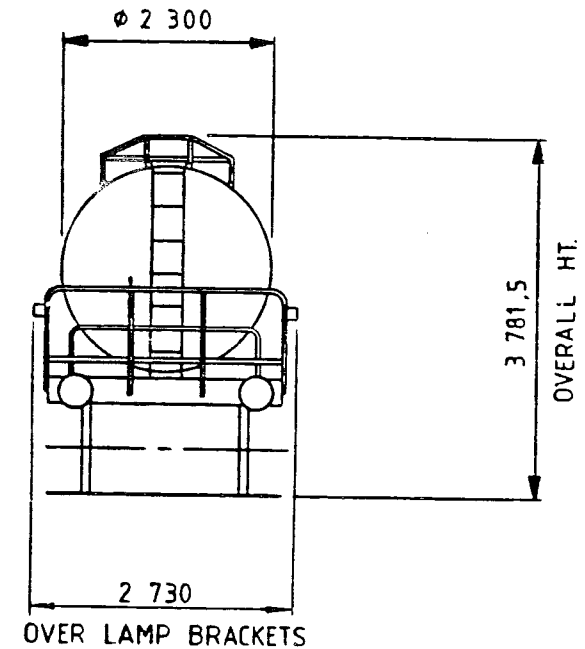
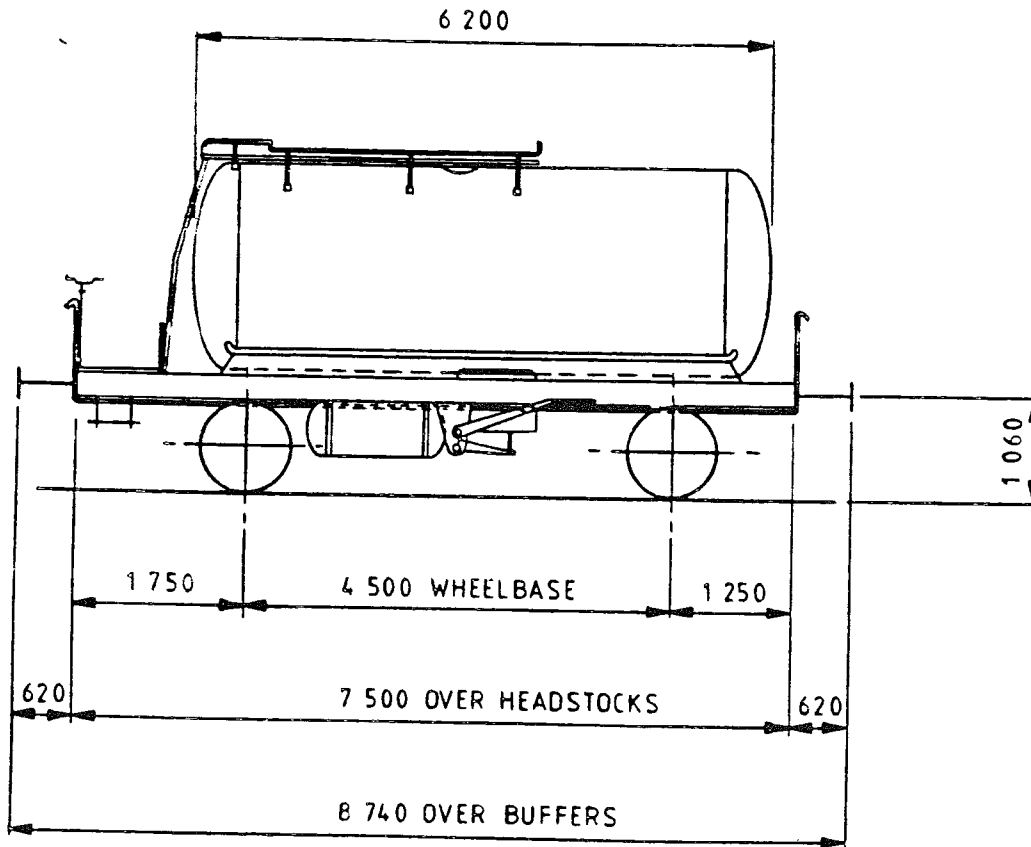
TYPE -	Zcfs
WAGON No. -	23 80 7391 012, 013
BUILDER -	V.T.G.
OWNER -	V.T.G.

ISSUE 1

40 t GLW 2 AXLE TANK

ICE 323

	A	B	C	D	TOPS INFORMATION							
	21 t	25 t	29 t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	21 t	25 t	29 t		CARKND	60 mile/h UP TO mile/h ABOVE 40 tonne GLW		8 t FORCE UP TO 20 t FORCE ABOVE 22 t GLW		4	6	
					I C B B							



TARE -	11 t
CAPACITY, WEIGHT -	29 t
CAPACITY, VOLUME -	24 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	W14 76

BRAKE -	AIR & VAC THRO'PIPE PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RING FEDER
WHEELS -	φ 1m
JOURNALS -	φ 130

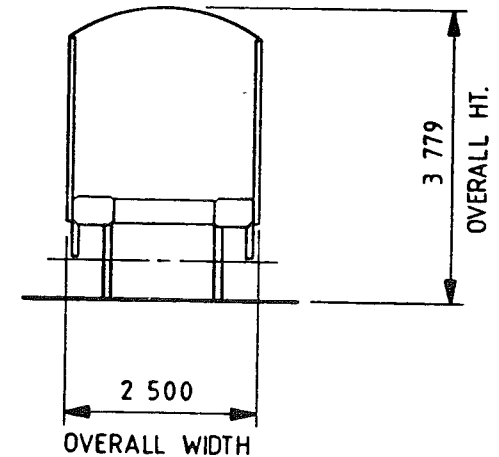
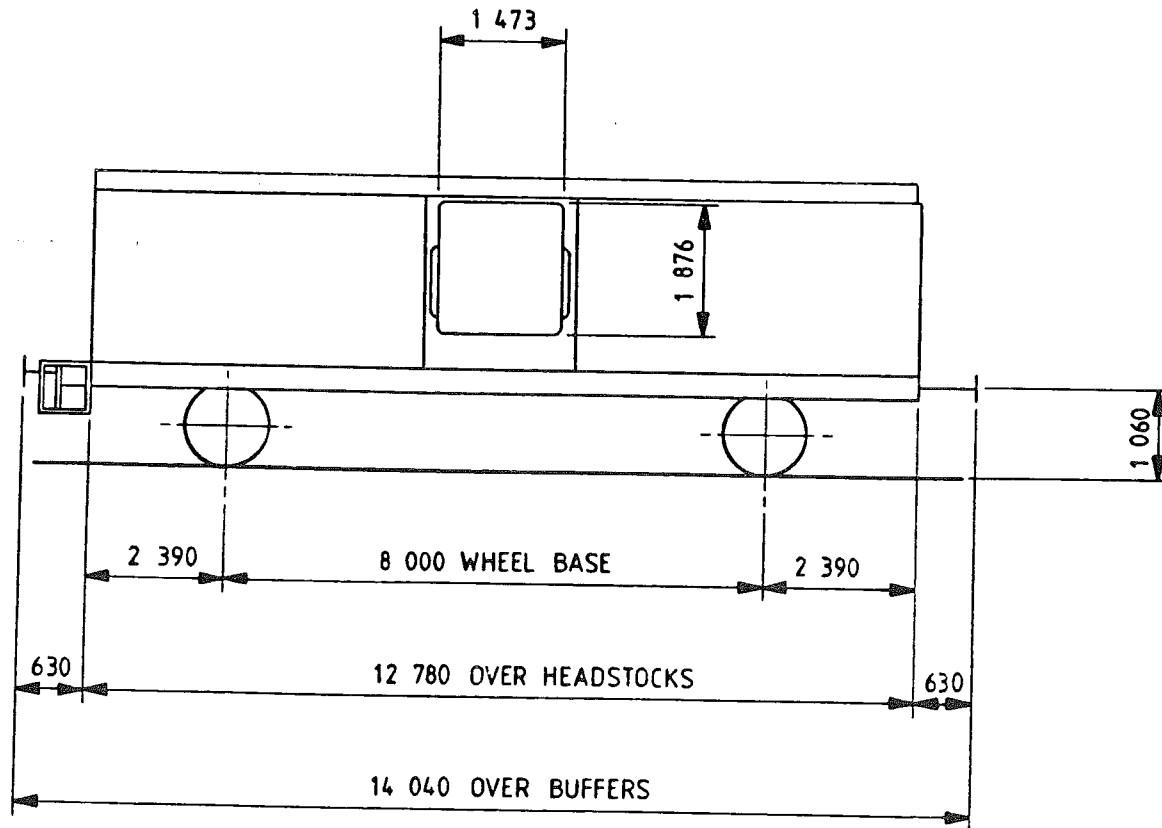
TYPE -	Zfs
WAGON No. -	23 80 7390 406,407.
BUILDER -	KAMINSKI
OWNER -	PEROXID - CHEMIE

ISSUE 1

36t. GLW. 2 AXLE REFRIGERATOR VAN

IIE 326

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	15.3t	19.3t	19.3t									
S	15.3t	19.3t	19.3t		CARKND	75 mile/h UP TO 60 mile/h ABOVE 32 tonne GLW		VARIABLE LOAD = -1.24 + (0.73 * I)		12	5	
SS	15.3t											
					I	I	X	L				



TARE -	16.7t
CAPACITY, WEIGHT-	19.3t
CAPACITY, VOLUME-	51m ³
FLOOR AREA -	26m ²
MIN. CURVE -	60m
GEN. ARRG. DRG. No.-	893-22-007

BRAKE -	DUAL : SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	ø 1m
JOURNALS -	ø 130

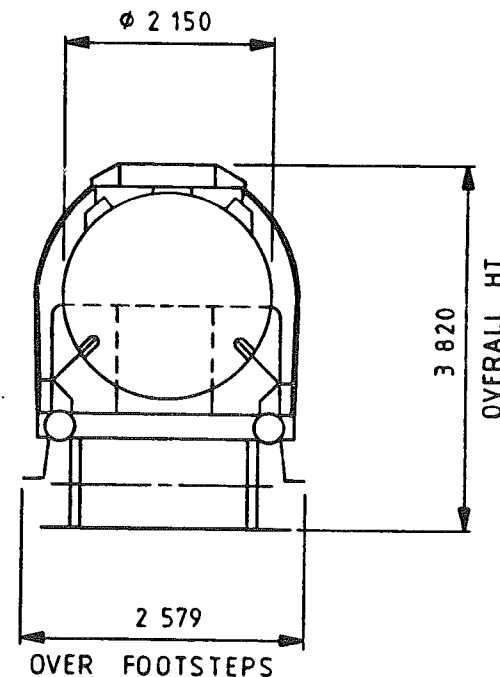
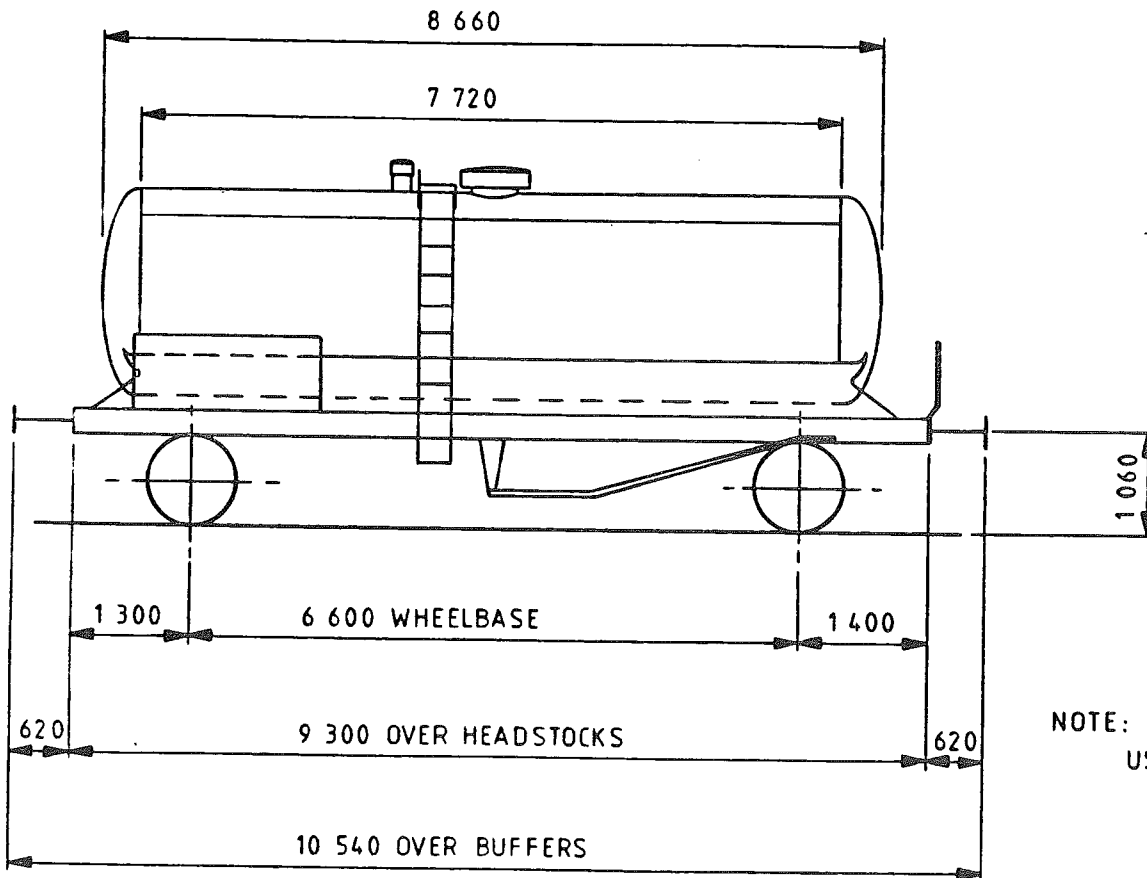
TYPE -	Ibflps
WAGON No. -	04 88 8091 002-008
BUILDER -	LA BRUGEOISE & NIVELLE
OWNER -	INTERFRIGO

ISSUE 1

40 t GLW 2 AXLE TANK

ICE 327

				TOPS INFORMATION						
	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19.3t	23.3t	27.1t			50 mile/h UP TO mile/h ABOVE 40 tonne GLW	6 t FORCE UP TO 18 t FORCE ABOVE 23 t GLW	7	6	
S	19.3t	23.3t	27.1t		CARKND					
					I C X B					



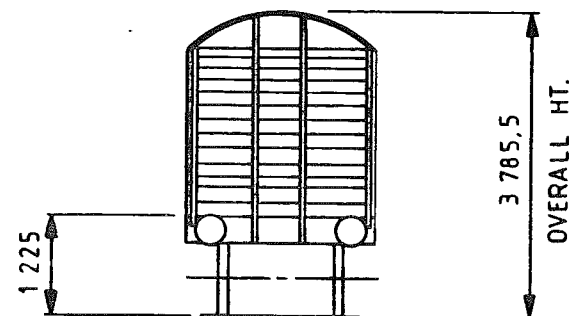
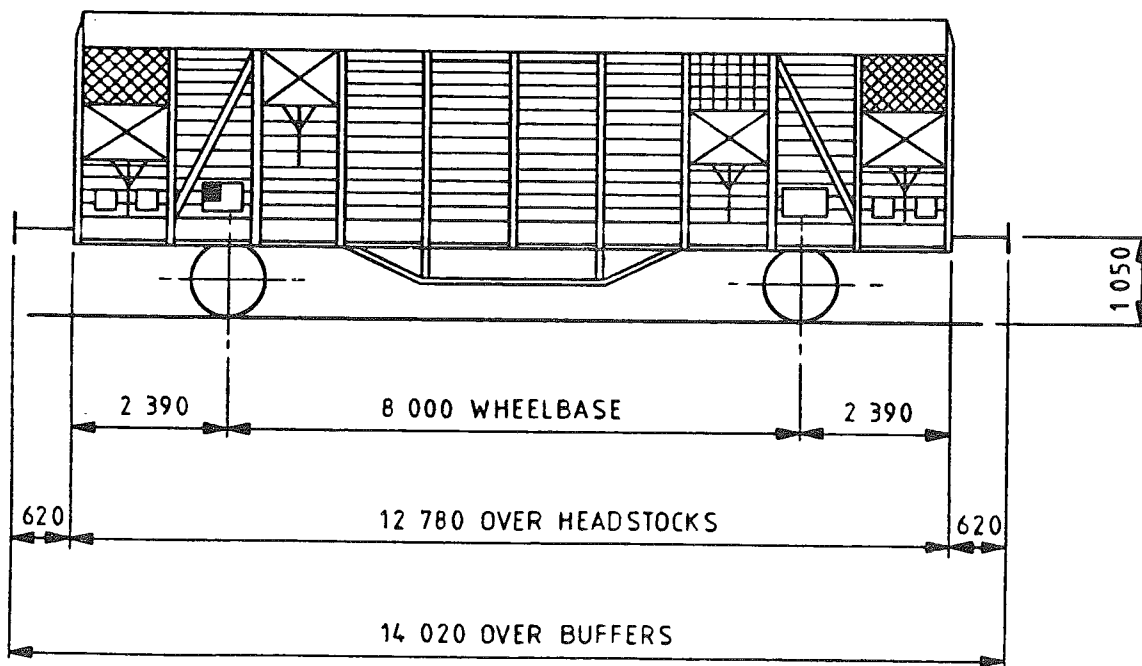
NOTE:
USABLE CAPACITY 24.5 m³ (18.11 % ULLAGE)

TARE -	12.88 t
CAPACITY, WEIGHT -	27.1 t
CAPACITY, VOLUME -	30 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	93731

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zfs
WAGON No. -	23 87 7390 005,006,007.
BUILDER -	FAUVET GIREL
OWNER -	METROPOLITAN SOCIETY FOR SPECIAL TRAFFIC
ISSUE 1	

				TOPS INFORMATION						
	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	18 t	22 t	26 t			60 mile/h UP TO mile/h ABOVE 40 tonne GLW	14 t FORCE UP TO 24 t FORCE ABOVE 30 t GLW	12	5	
S	18 t	22 t	26 t		CARKND					
					I I B L					



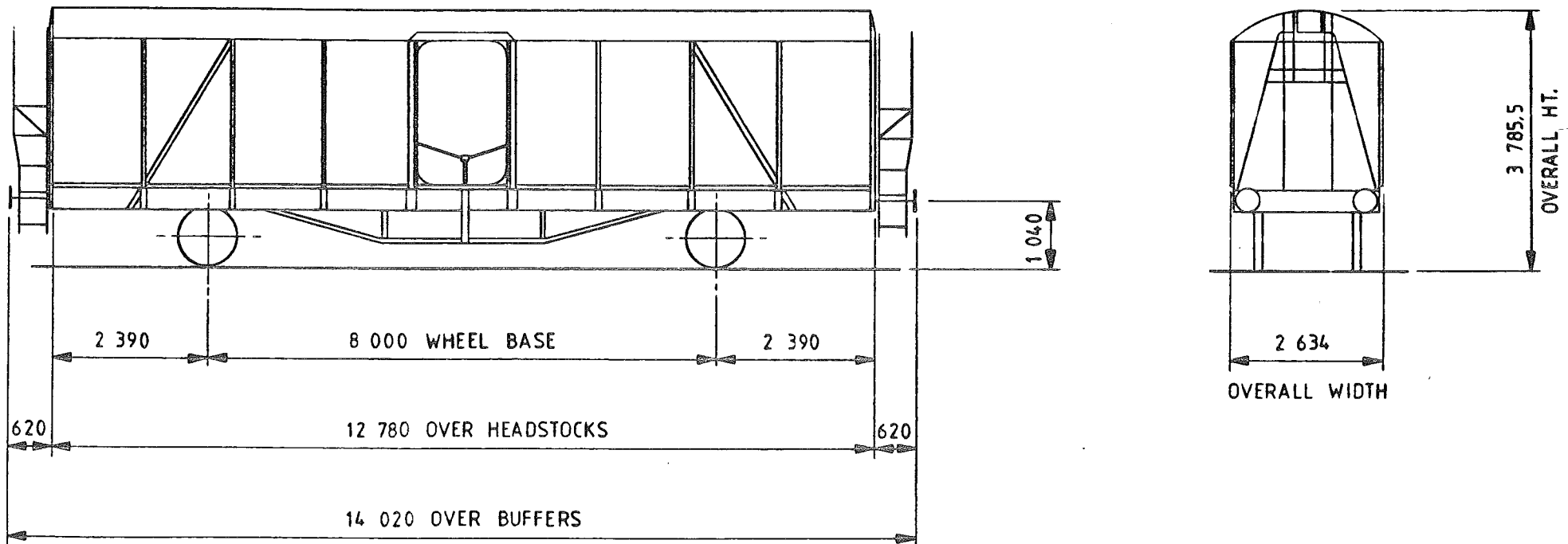
TARE -	14 t
CAPACITY, WEIGHT -	26 t
CAPACITY, VOLUME -	66 m ³
FLOOR AREA -	28 m ²
MIN. CURVE -	60 m
GEN. ARRG. DRG. No. -	38

BRAKE -	AIR & VAC. THRO' PIPE; SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 1 m
JOURNALS -	φ 130

TYPE -	Hbfhs
WAGON No. -	21 83 2382 000 - 299
BUILDER -	F.S.
OWNER -	F.S.

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
14t	18t	18t				60 mile/h UP TO		8t FORCE UP TO		13	5.	
S	14t	18t	18t		CARKND	mile/h ABOVE 36 tonne GLW		15t FORCE ABOVE				
					I I B L							

NOTE: CAPACITY INCLUDES
APPROX 3t OF ICE



TARE -	18t
CAPACITY, WEIGHT-	18t
CAPACITY, VOLUME-	52m ³
FLOOR AREA -	24.5m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	160

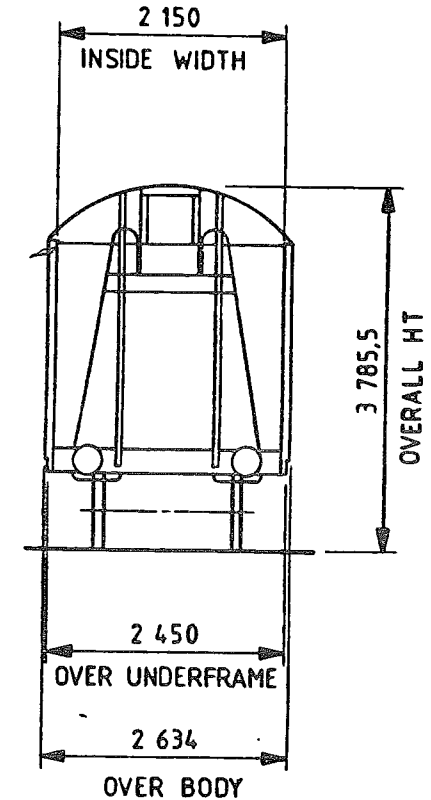
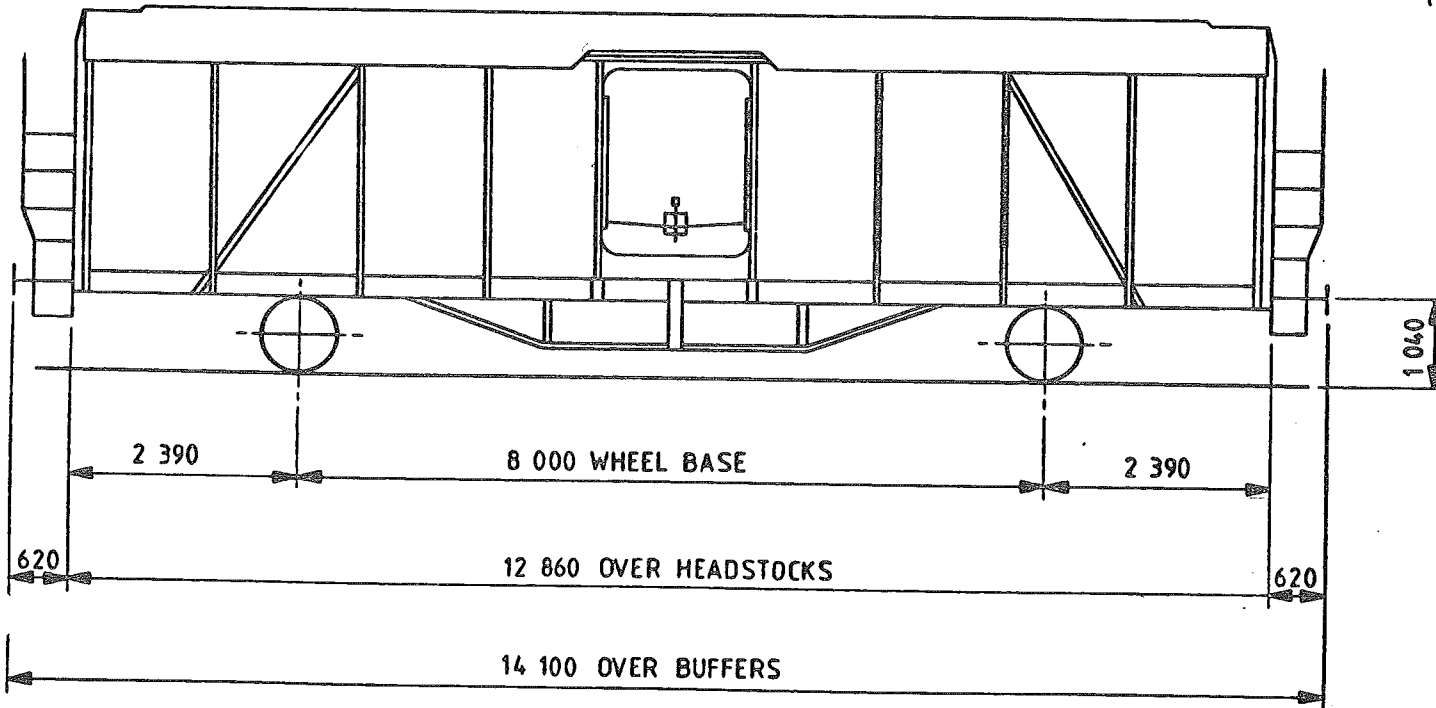
BRAKE -	AIR & VAC THRO' PIPE.
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1m
JOURNALS -	∅ 130

TYPE -	lbefs
WAGON No. -	11 83 8092 900 - 999
BUILDER -	F.S.
OWNER -	F.S.

ISSUE 1

	A	B	C	D	TOPS INFORMATION							
	13.3t	17.3t	17.3t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	13.3t	17.3t	17.3t		CARKND	60 mile/h UP TO mile/h ABOVE 36 tonne GLW		8t FORCE UP TO 15t FORCE ABOVE 19t. GLW		13	5	
					I I B L							

NOTE : CAPACITY INCLUDES APPROX 3t OF ICE



TARE -	18.65t
CAPACITY, WEIGHT -	17.3t
CAPACITY, VOLUME -	46 m ³
FLOOR AREA -	23 m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	160

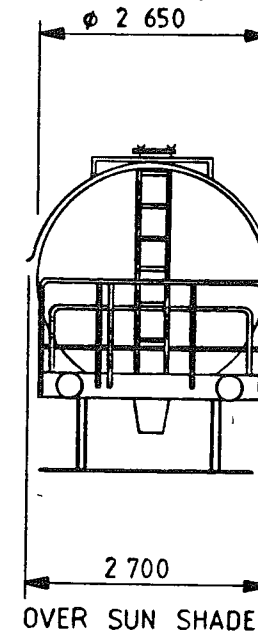
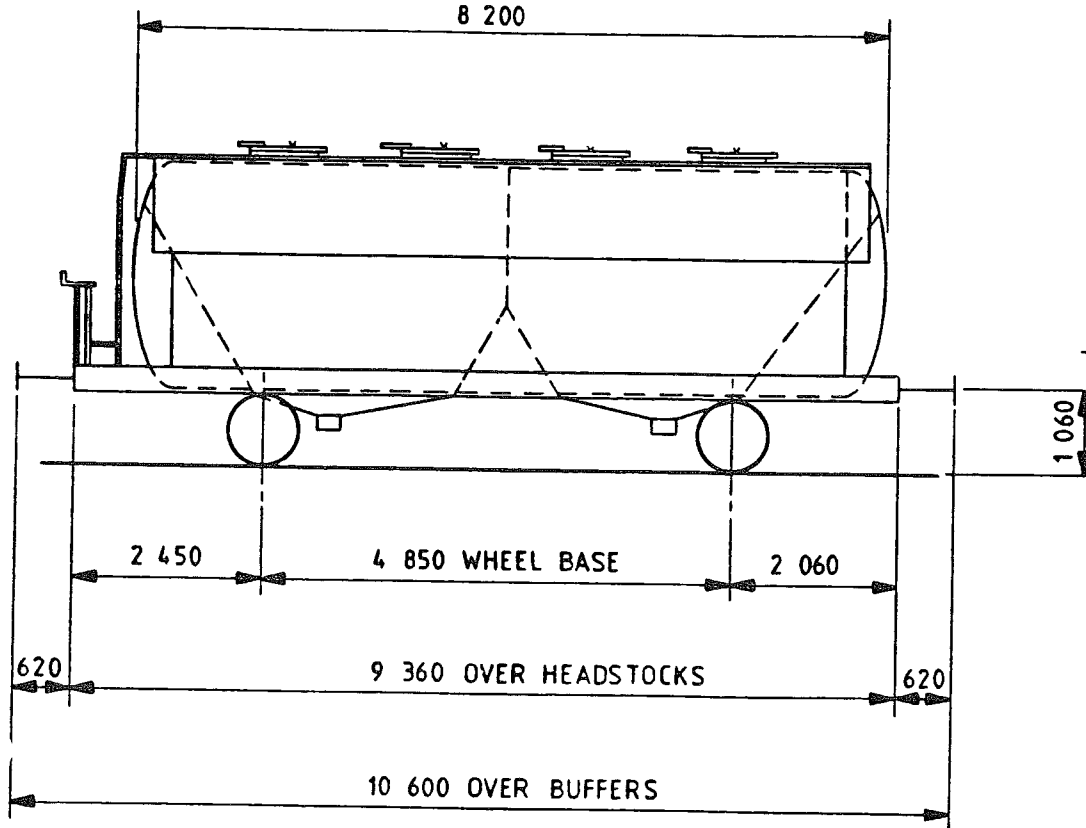
BRAKE -	AIR & VAC THRO' PIPE : SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	ø1m
JOURNALS -	ø130

TYPE -	Ibefhqs
WAGON No. -	11 83 8090 000 - 049
BUILDER -	F.S.
OWNER -	F.S.

ISSUE 1

					TOPS INFORMATION								
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	16.5t	20.5t	24.5t				60 mile/h UP TO mile/h ABOVE 40 tonne GLW		11t FORCE UP TO 22t FORCE ABOVE 27t. GLW				
S	16.5t	20.5t	24.5t		CARKND								
					I	C	B	B					

NOTE:- TWO COMPARTMENT AIR DISCHARGE SPECIAL WAGON FOR CONVEYANCE OF POWDERS



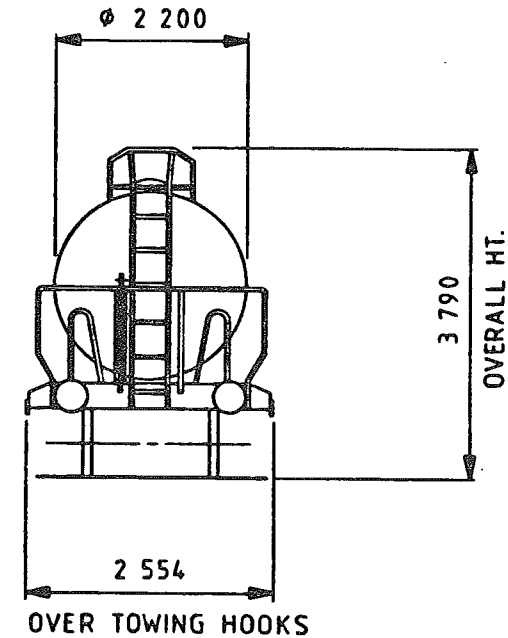
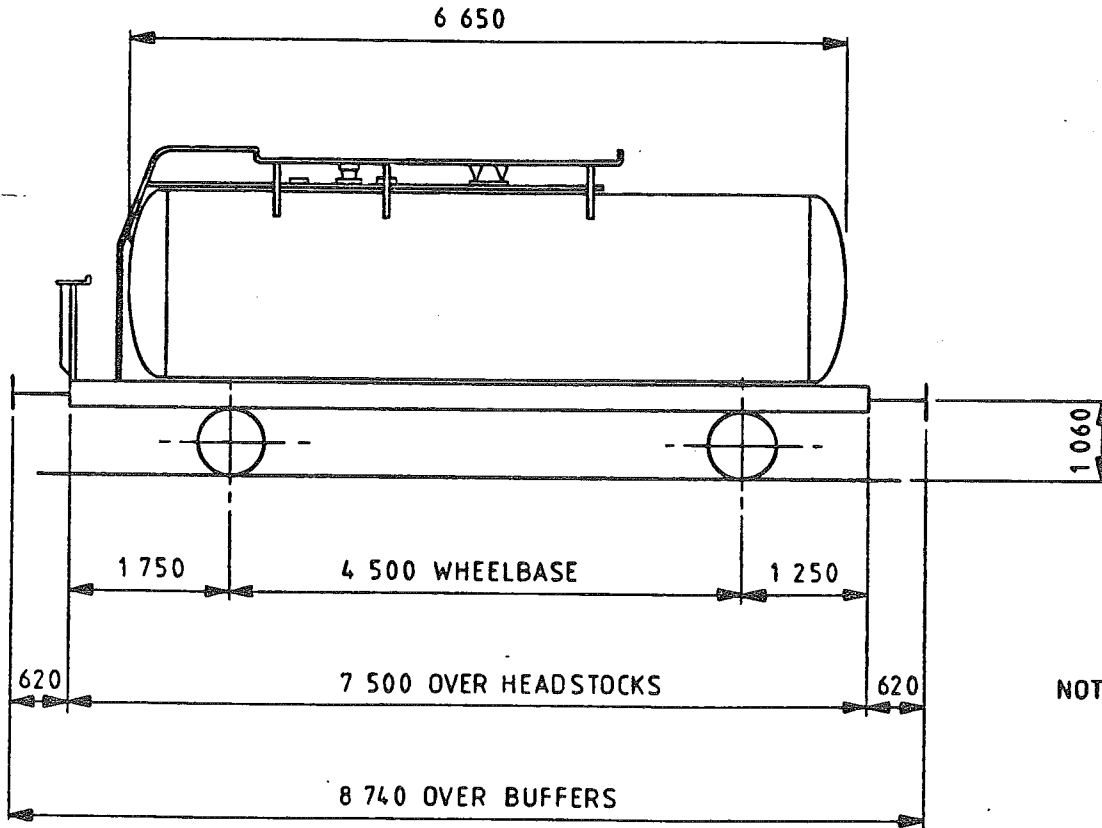
TARE -	15.5t
CAPACITY, WEIGHT-	24.5t
CAPACITY, VOLUME-	35m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRG. DRG. No.-	B5090.01.1

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER
WHEELS -	φ1m
JOURNALS -	φ130

TYPE -	Ucfkks
WAGON No. -	23 80 9185 000-009
BUILDER -	WAGGONFABRIK, KREFELD
OWNER -	E.V.A.

ISSUE 1

TOPS INFORMATION											
	A	B	C	D		AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	21 t	25 t	29 t				60 mile/h UP TO	8 t FORCE UP TO	4	6	
S	21 t	25 t	25 t			CARKND	50 mile/h ABOVE	36 tonne GLW	18 t FORCE ABOVE	23 t GLW	
						I C B B					



NOTE: NORMAL FILLING ONLY POSSIBLE WITH SPECIFIC GRAVITY OF 1.1 OR LESS.

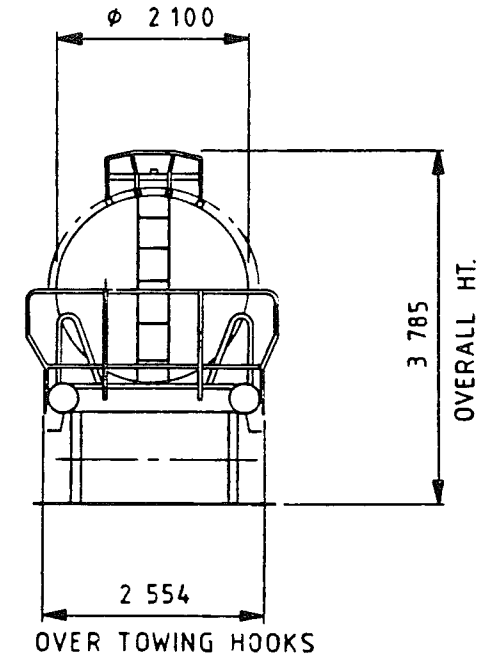
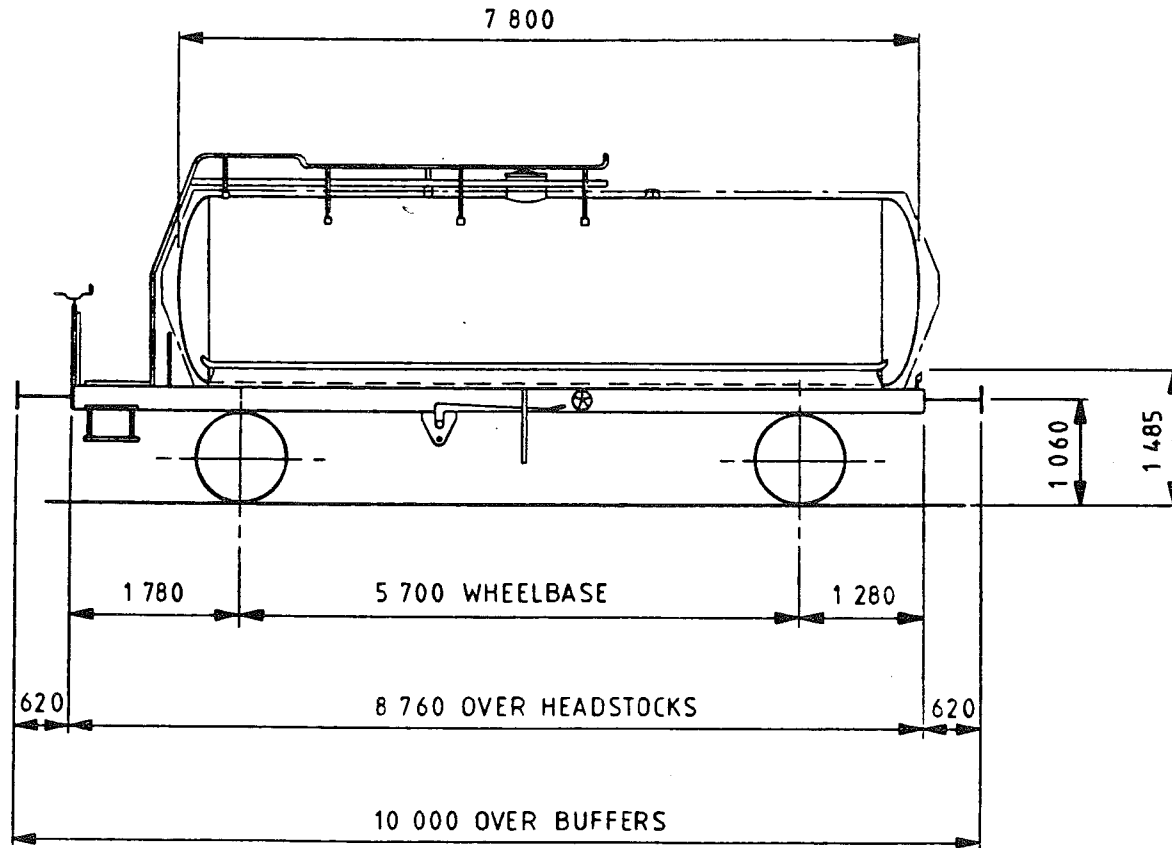
TARE -	11 t
CAPACITY, WEIGHT -	29 t
CAPACITY, VOLUME -	24 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	K 219-32-01

BRAKE -	AIR & VAC. THRO' PIPE PLATFORM SCREW, SIDE SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER Ø 370
WHEELS -	Ø 1 m
JOURNALS -	Ø 130

TYPE -	Zefs
WAGON No. -	23 80 7397 001 - 005
BUILDER -	GRAAF
OWNER -	E.V.A.

ISSUE 1

				TOPS INFORMATION								
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET		
19.6t	23.6t	27.6t			60 mile/h UP TO mile/h ABOVE	40 tonne GLW		8 t FORCE UP TO 18 t FORCE ABOVE	23 t GLW	6	6	
S	19.6t	23.6t	27.6t	CARKND								
				I C B C								



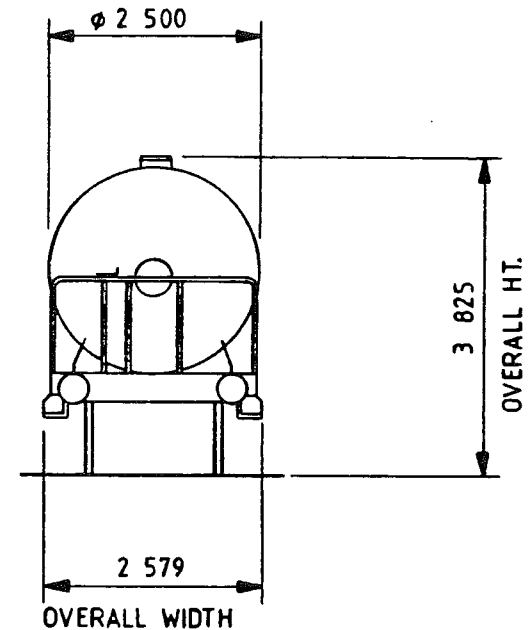
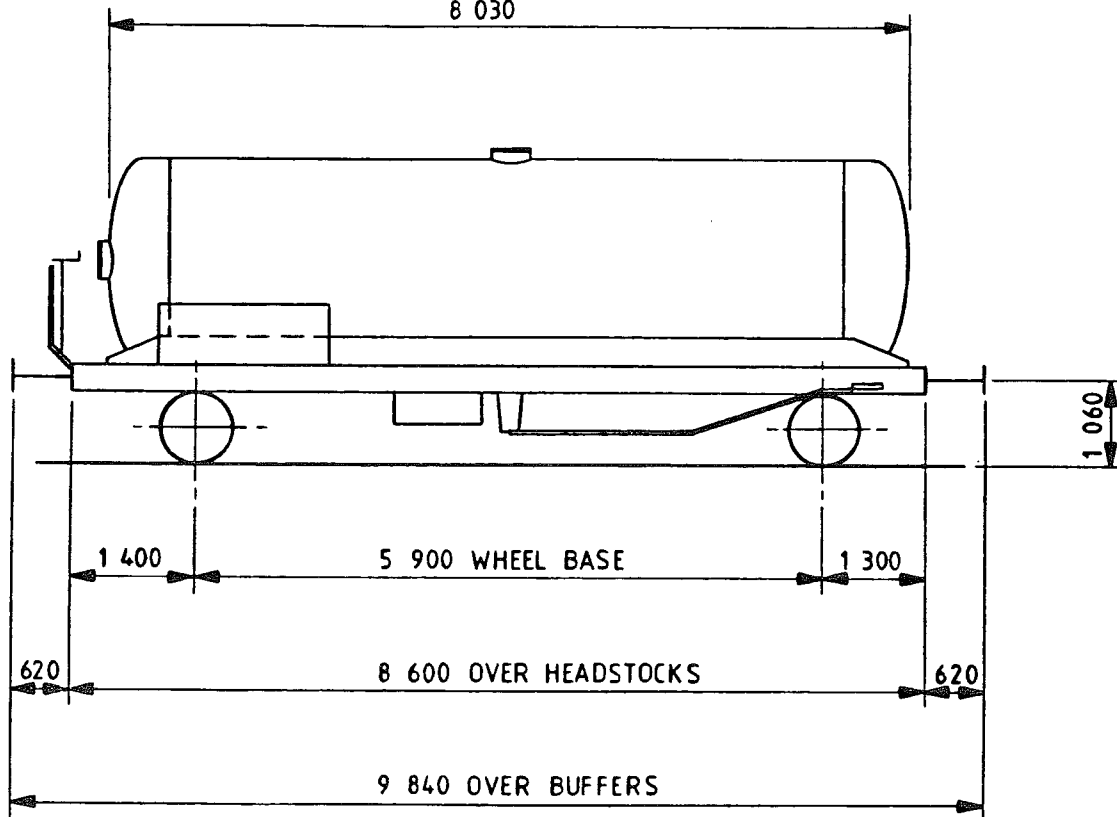
TARE -	12.4 t
CAPACITY, WEIGHT-	27.6 t
CAPACITY, VOLUME-	24 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	K 332.01.00

BRAKE -	AIR & VAC THRO' PIPE PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RING FEDER ϕ 370 HD.
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Zcfs
WAGON No. -	23 80 7391 703,704,705,706,707 401,402,403,404,405
BUILDER -	GRAAFF
OWNER -	CONTINENTAL OIL TRANSPORT

TOPS INFORMATION													
	A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	192†	232†	272†				60 mile/h UP TO		5† FORCE UP TO		6	6	
S	192†	232†	232†			CARKND	50 mile/h ABOVE 36 tonne GLW		15† FORCE ABOVE 19†.GLW				
						I C B C							

NOTE :- TOTAL CAPACITY = 367 HECTOLITRES, ULLAGE FOR METHYL MERCAPTAN IS 18.6 %
 USABLE CAPACITY = 299 HECTOLITRES
 8 030



TARE -	12.65†
CAPACITY, WEIGHT-	27.2†
CAPACITY, VOLUME-	36.74 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	94547

BRAKE -	AR & VAC. THRO' PIPE, PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

TYPE -	Z fgks
WAGON No. -	23 87 7395 000
BUILDER -	FAUVET - GIREL
OWNER -	SIMOTRA

40t GLW 2 AXLE REFRIGERATOR VAN

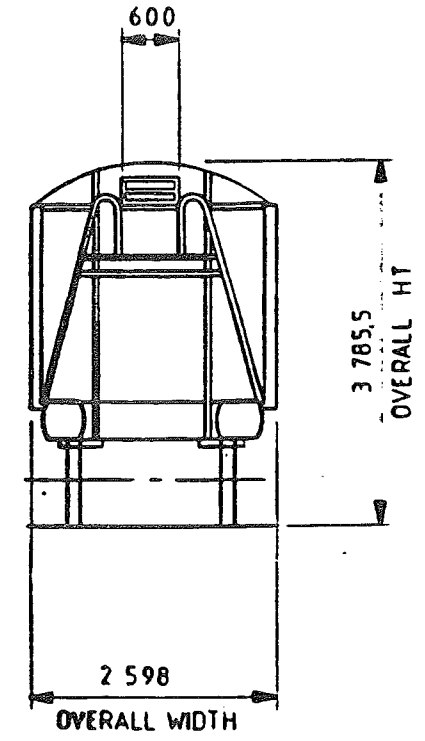
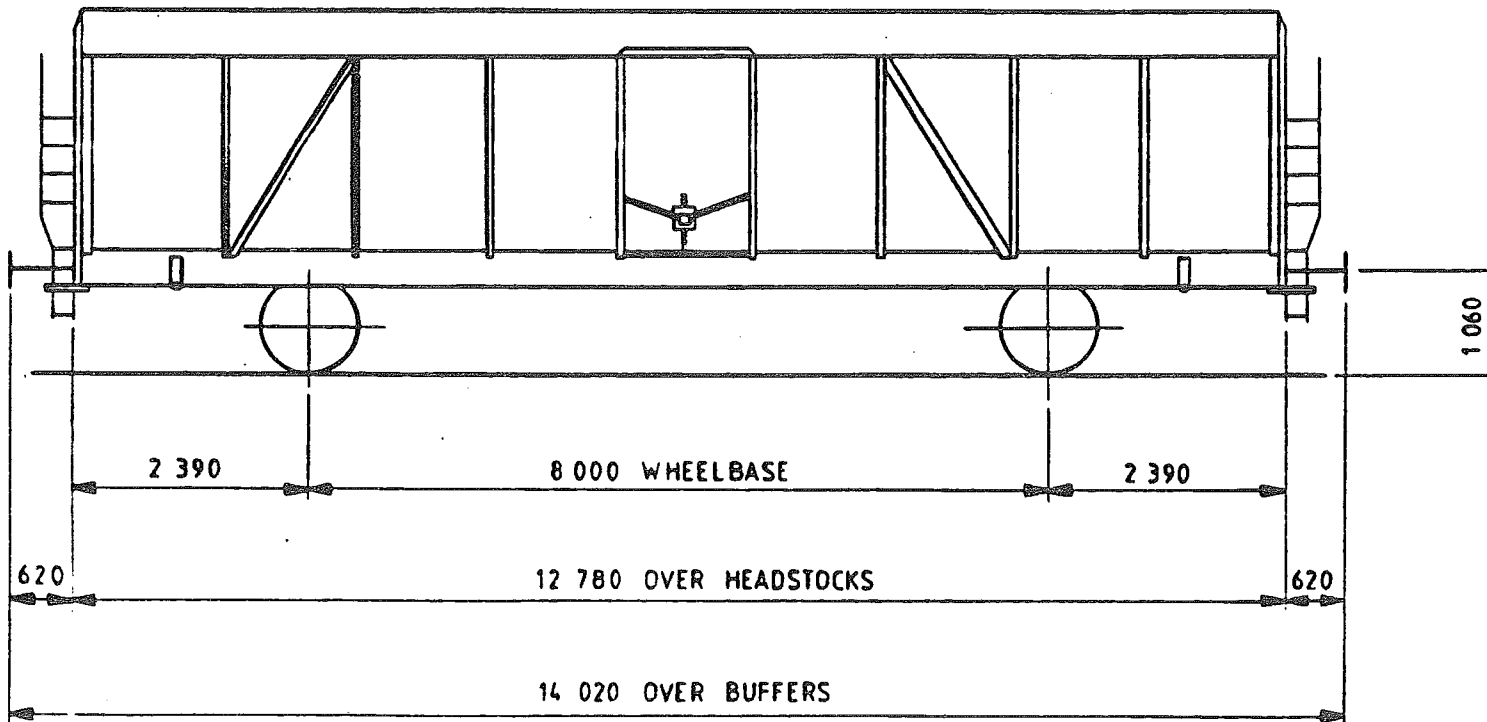
IIE 348

				TOPS INFORMATION								
A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
15.2t	19.2t	23.2t				60 mile/h UP TO 50 mile/h ABOVE		9t FORCE UP TO 18t FORCE ABOVE		12	6	
S	15.2t	19.2t	19.2t	CARKND			36 tonne GLW		23t GLW			
				I	I	B	H					

04 83 8088 000-024
TARE 16.8 t
ibefps

04 83 8092 430-482	A	B	C	D
TARE 18t	14t	18t	22t	
ibefps	S	14t	18t	18t

04 83 8092 200-429	A	B	C	D
TARE 17.4 t	14.6 t	18.6 t	22.6 t	
ibefps	S	14.6 t	18.6 t	18.6 t



TARE -	SEE ABC PANELS
CAPACITY, WEIGHT -	SEE ABC PANELS
CAPACITY, VOLUME -	43 m ³
FLOOR AREA -	23.5 m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	IF 01/1

BRAKE -	AIR & VAC THRO PIPE; SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	Ø1000
JOURNALS -	Ø130

TYPE -	SEE ABC PANEL
WAGON No. -	04 83 8088 000-024 04 83 8092 200-482
BUILDER -	BRUGEOISE & NIVELLES BRUGES
OWNER -	F.S.

ISSUE 1

2 AXLE TANK WAGON

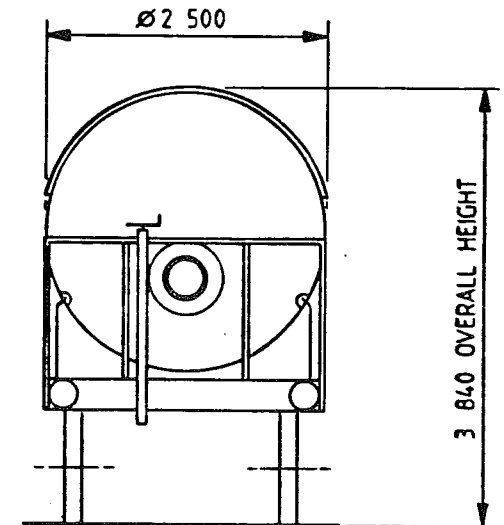
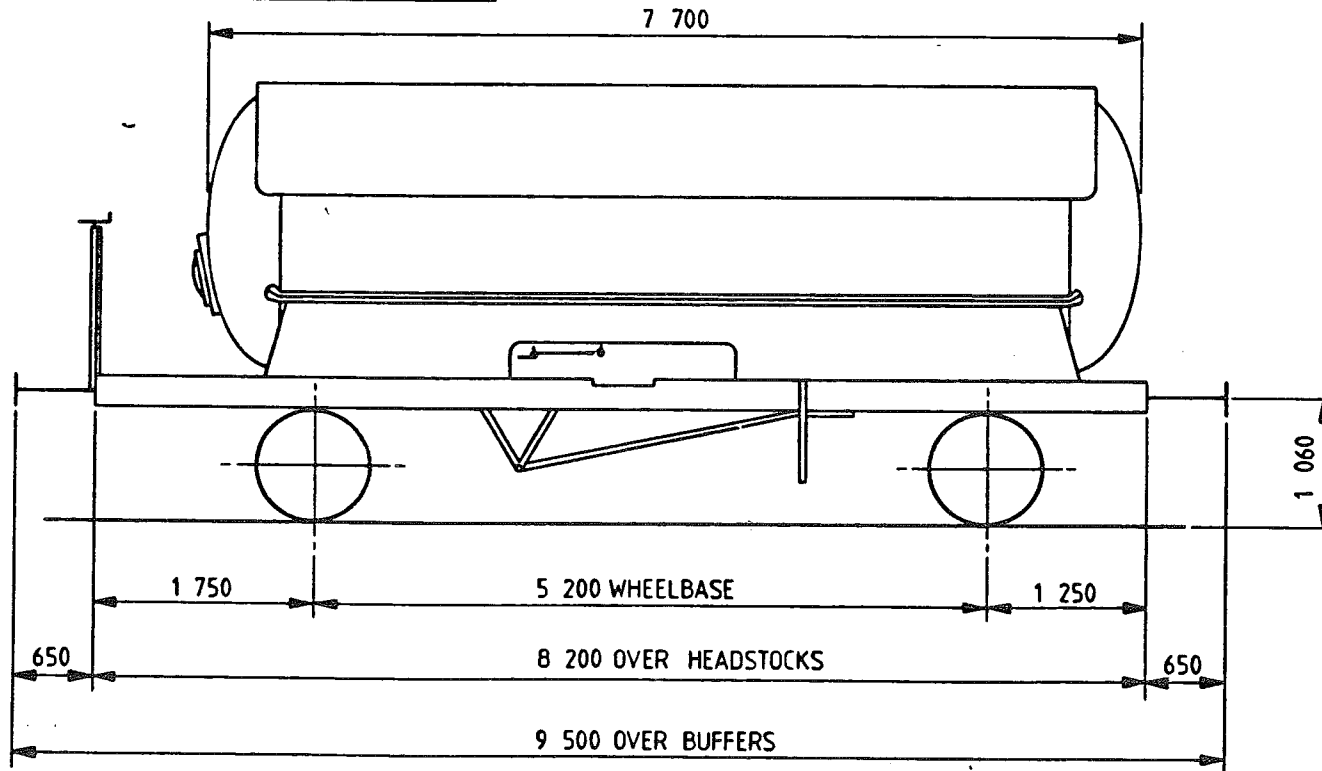
ICE 350

No 020

No 020					TOPS INFORMATION									
A	B	C	D	TYPE	AARKND		OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET		
18t	20.6t	25t		Zfgs	CARKND		60 mile/h UP TO 50 mile/h ABOVE 20.6 tonne GLW	10t FORCE UP TO 18t FORCE ABOVE 23t GLW					5	5
S	18t	20.6t	20.6t		I	C				B	B			

No's 000-001

No's 000-001					TYPE
A	B	C	D		Zfgkks
18t	20.6t	20.6t			
S	18t	20.6t	20.6t		



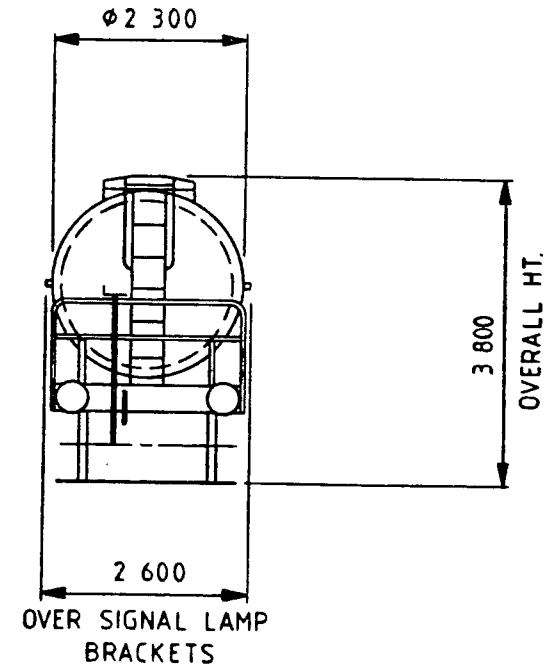
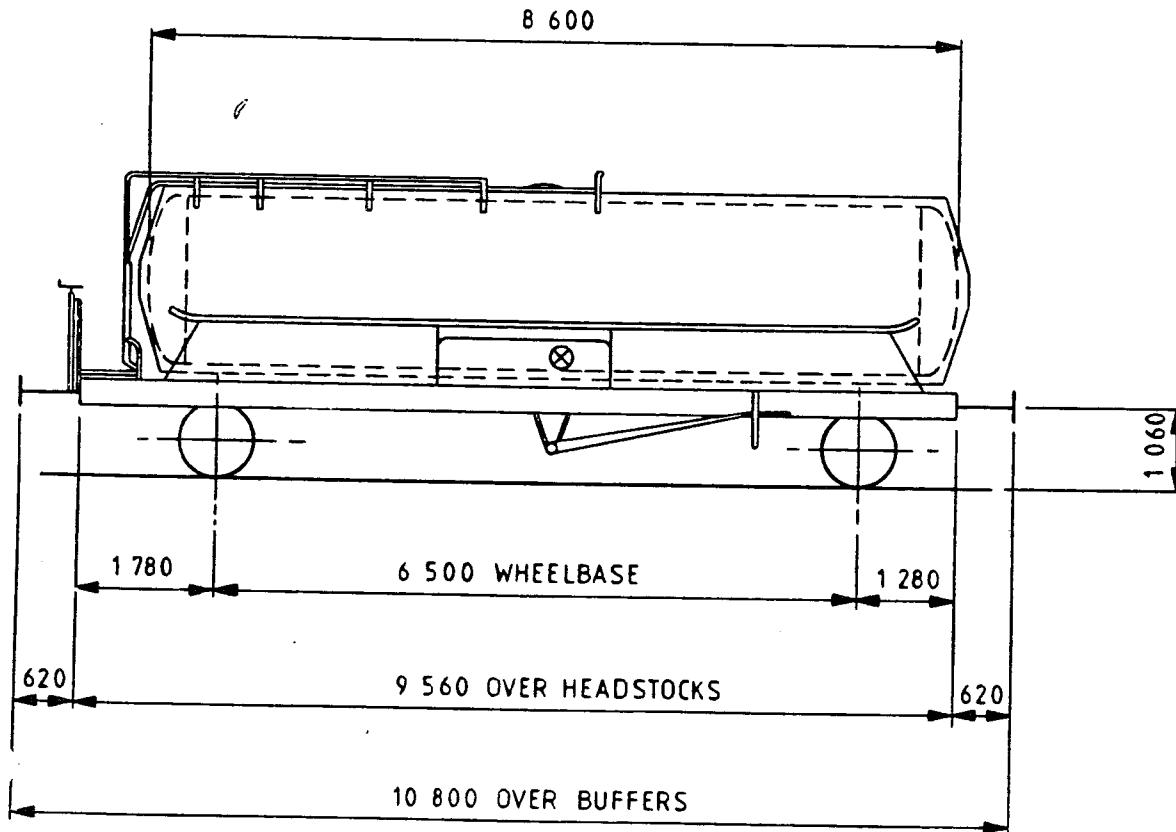
TARE -	14t
CAPACITY, WEIGHT-	SEE 'ABC' PANEL
CAPACITY, VOLUME-	35m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	2641.01.532

BRAKE -	AIR & VAC THRO PIPE, PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER Ø 370
WHEELS -	Ø 1 000
JOURNALS -	Ø 130

TYPE -	SEE 'ABC' PANEL
WAGON No. -	23 80 7394 020 23 80 7492 000,001
BUILDER -	V.T.G.
OWNER -	V.T.G.

ISSUE 1

	A	B	C	D	TOPS INFORMATION								
	18.6t	22.6t	26.6t		AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 7	RA (GLW) 6	DESIGN SHEET
S	18.6t	22.6t	26.6t		CARKND		60 mile/h UP TO mile/h ABOVE 40 tonne GLW	8 t FORCE UP TO 19 t FORCE ABOVE 24 t GLW					
					I	C	B	C					



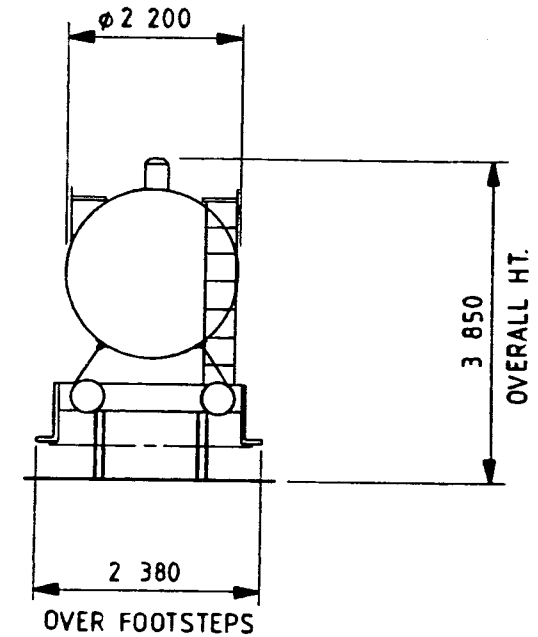
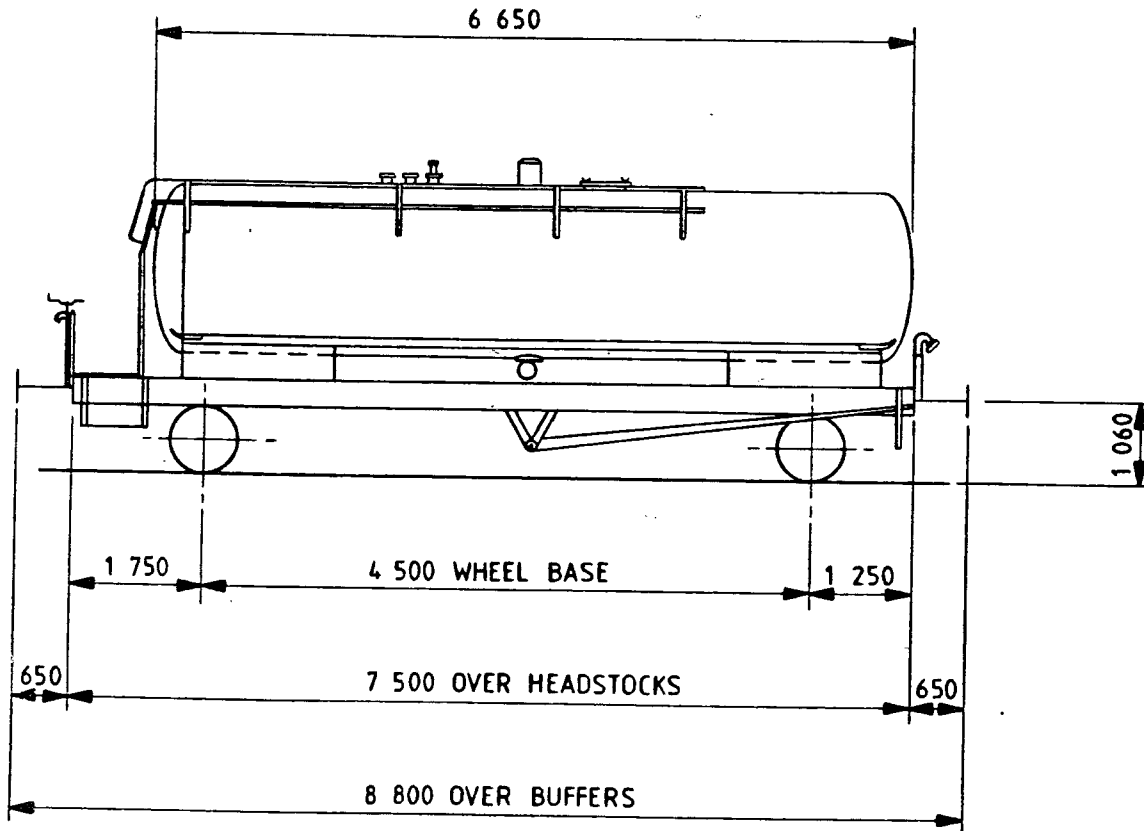
TARE -	13.4 t
CAPACITY, WEIGHT-	26.6 t
CAPACITY, VOLUME-	28 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	2351.01.533

BRAKE -	AIR & VAC THRD PIPE PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370 HD.
WHEELS -	ϕ 1 m
JOURNALS -	ϕ 130

TYPE -	Zcfs
WAGON No. -	23 80 7398 000
BUILDER -	V.T.G.
OWNER -	V.T.G.

ISSUE 1

	A	B	C	D	TOPS INFORMATION								
	21t	25t	29t		AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
					CARKND		50 mile/h UP TO mile/h ABOVE 40 tonne GLW		8t FORCE UP TO 18t FORCE ABOVE 23t. GLW		4	6	
					I	C	B	C					



TARE -	11t
CAPACITY, WEIGHT -	29t
CAPACITY, VOLUME -	24 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	328.2

BRAKE -	AIR & VAC. THRO' PIPE. SIDE LEVER, PLATFORM SCREW
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 400 HD.
WHEELS -	ϕ 940
JOURNALS -	ϕ 130

TYPE -	Zcf
WAGON No. -	23 80 7191 400
BUILDER -	E.V.A.
OWNER -	E.V.A.

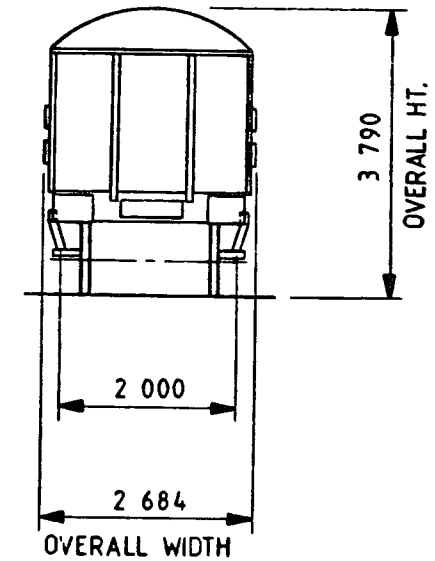
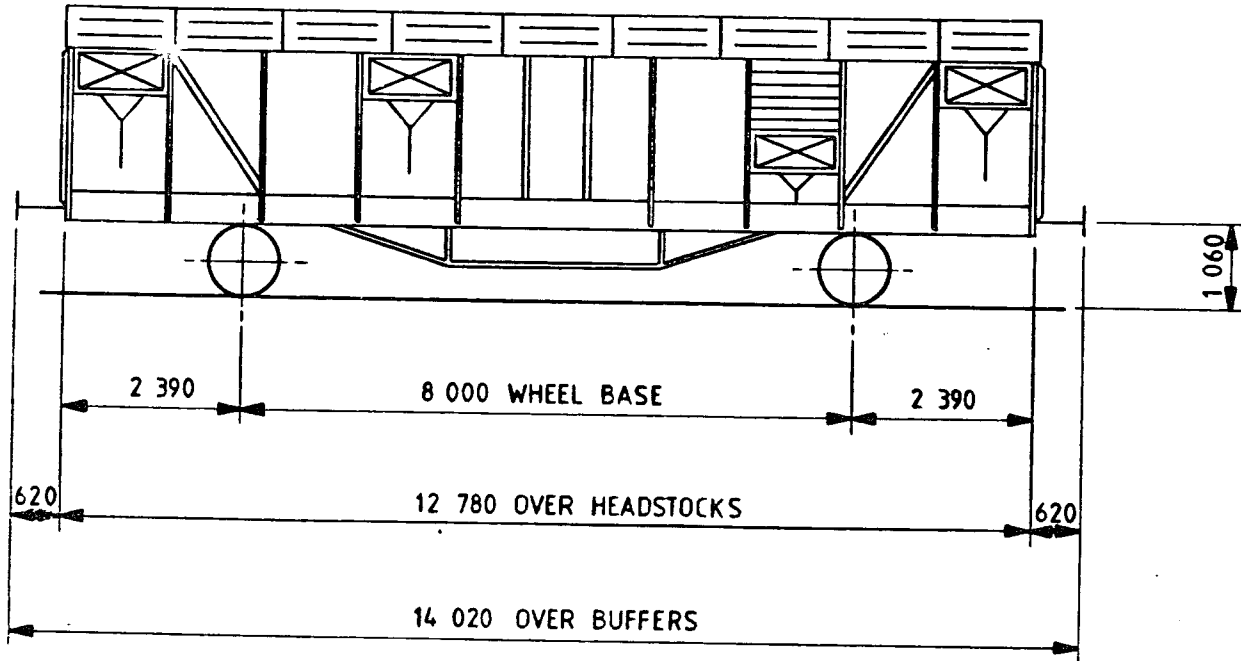
ISSUE 1

40t. GLW. 2 AXLE VAN

ILE 353

				TOPS INFORMATION									
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
	17.5t	21.5t	25.5t			60	mile/h UP TO	7t. FORCE UP TO		12	6		
S	17.5t	21.5t	21.5t		CARKND	50	mile/h ABOVE	36 tonne GLW	15t. FORCE ABOVE				
					I L B L				19t. GLW				

NOTE :- LENGTH OF LOAD | CARRYING CAPACITY
 1.5m IN THE MIDDLE | 13.78t
 3.0m IN THE MIDDLE | 15.74t



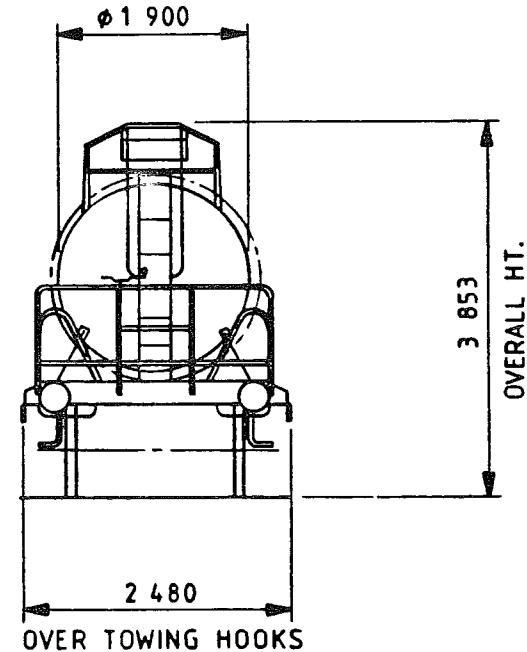
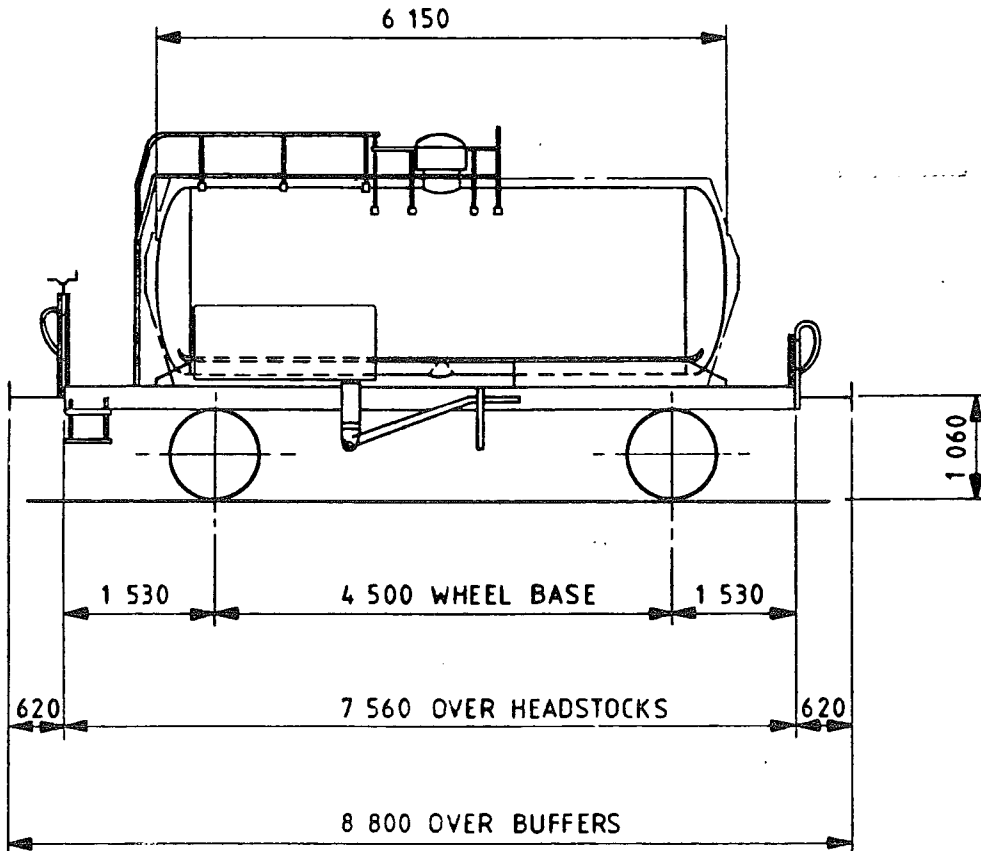
TARE -	14.5t
CAPACITY, WEIGHT-	25.5t
CAPACITY, VOLUME-	66m ³
FLOOR AREA -	28.5m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	459.9.502.00.00.0

BRAKE -	AIR & VAC. THRO' PIPE: SDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 450 x 350 HD
WHEELS -	φ1m
JOURNALS -	φ130

TYPE -	Hbfs
WAGON No. -	21 54 2380 000-099
BUILDER -	
OWNER -	C.S.D.

ISSUE 1

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
17.2t	21.2t	25.2t				50 mile/h UP TO		6t FORCE UP TO		4	6	
S	17.2t	21.2t	25.2t		CARKND	mile/h ABOVE 40 tonne GLW		15t FORCE ABOVE				
					I C B B							



TARE -	14.8t
CAPACITY, WEIGHT-	25.2t
CAPACITY, VOLUME-	16m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	2013.01.536

BRAKE -	AIR & VAC. THRO' PIPE : SIDE LEVER & PLATFORM SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER Ø370 HD
WHEELS -	Ø1m
JOURNALS -	Ø130

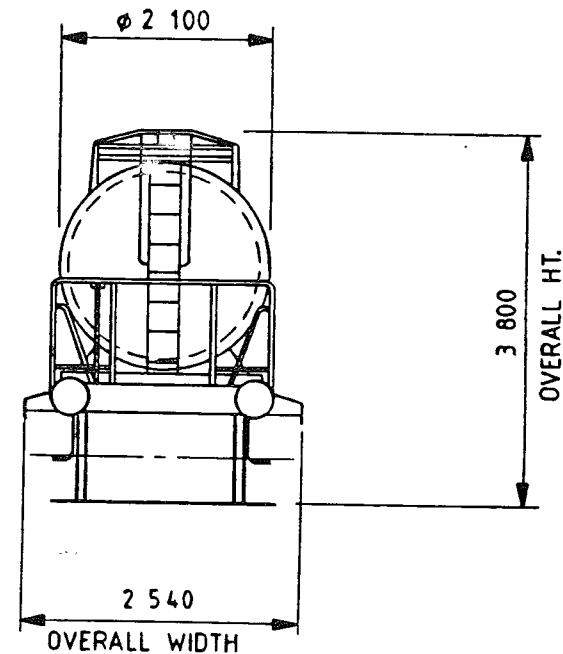
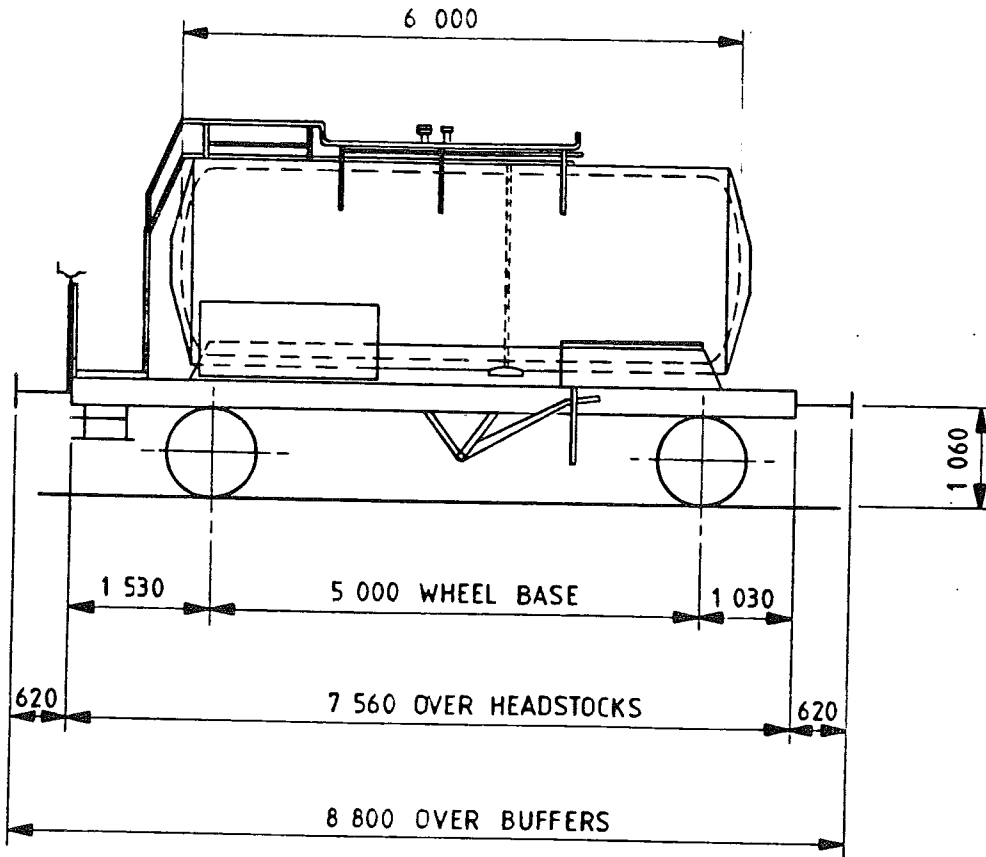
TYPE -	Zcfs : Zcfkks
WAGON No. -	23 80 7391 017-023,049-051 23 80 7491 000-012
BUILDER -	V.T.G.
OWNER -	V.T.G.

ISSUE 1

40t.GLW. 2 AXLE TANK

ICE 356

	A	B	C	D	DB	C	TOPS INFORMATION							
	19.3t	23.3t	27.3t		ONLY		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	19.3t	23.3t	23.3t		S	27.3t	CARKND	60 mile/h UP TO	36 tonne GLW	6t FORCE UP TO	20t FORCE ABOVE	4	6	
							I C B C	50 mile/h ABOVE						

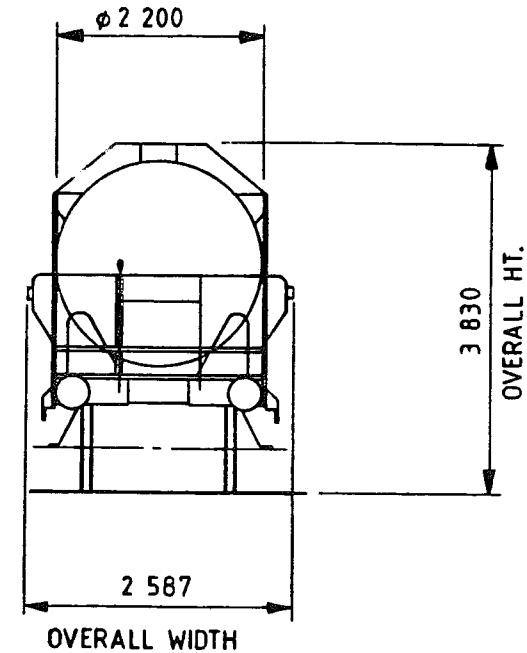
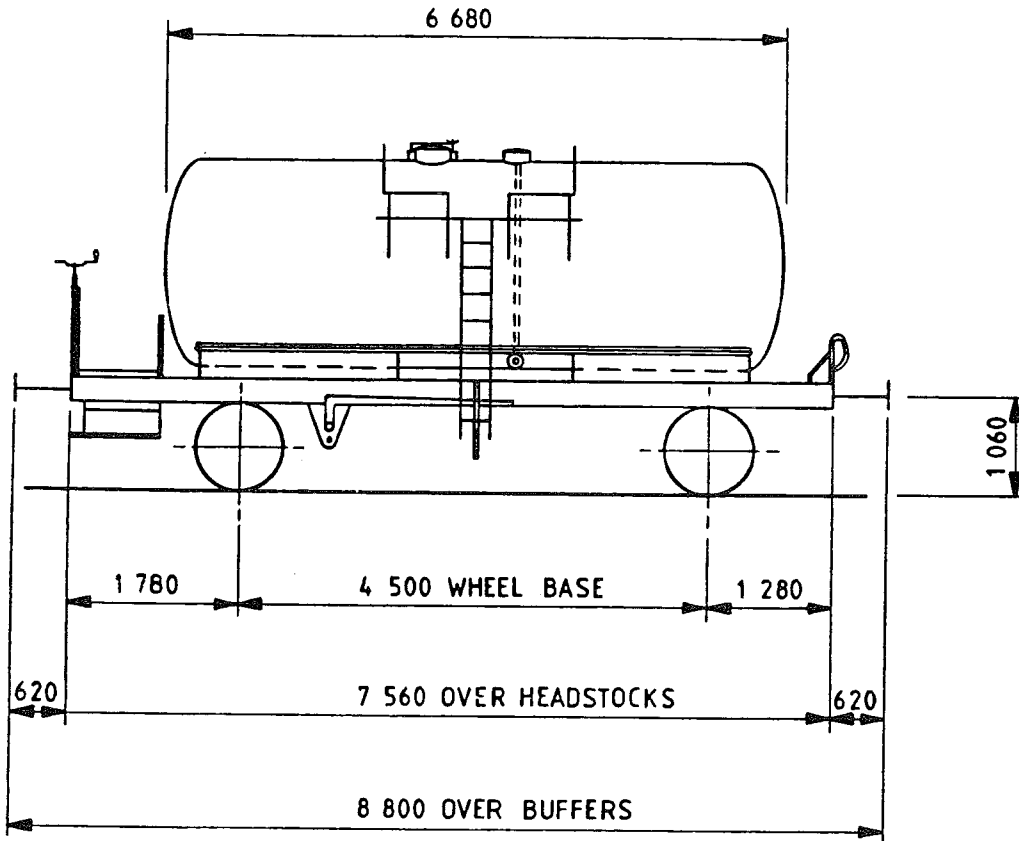


TARE -	12.7t
CAPACITY, WEIGHT -	27.3t
CAPACITY, VOLUME -	18 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	2017.01.541

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER φ370 HD
WHEELS -	φ1m
JOURNALS -	φ130

TYPE -	Zcfs
WAGON No. -	23 80 7391 024,025
BUILDER -	V.T.G.
OWNER -	V.T.G.

							TOPS INFORMATION							
	A	B	C	D	DB	C	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19.5t	23.5t	27.5t		ONLY			60 mile/h UP TO	36 tonne GLW	9t FORCE UP TO	24t. GLW	4	6	
S	19.5t	23.5t	23.5t		S	27.5t	CARKND	50 mile/h ABOVE		21t FORCE ABOVE				
							I C B C							

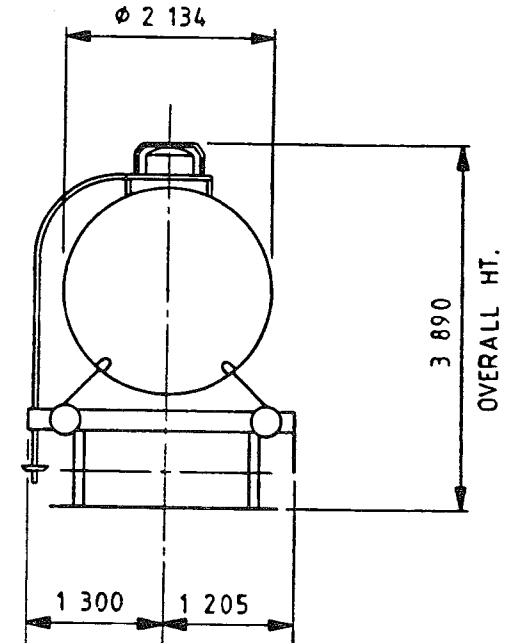
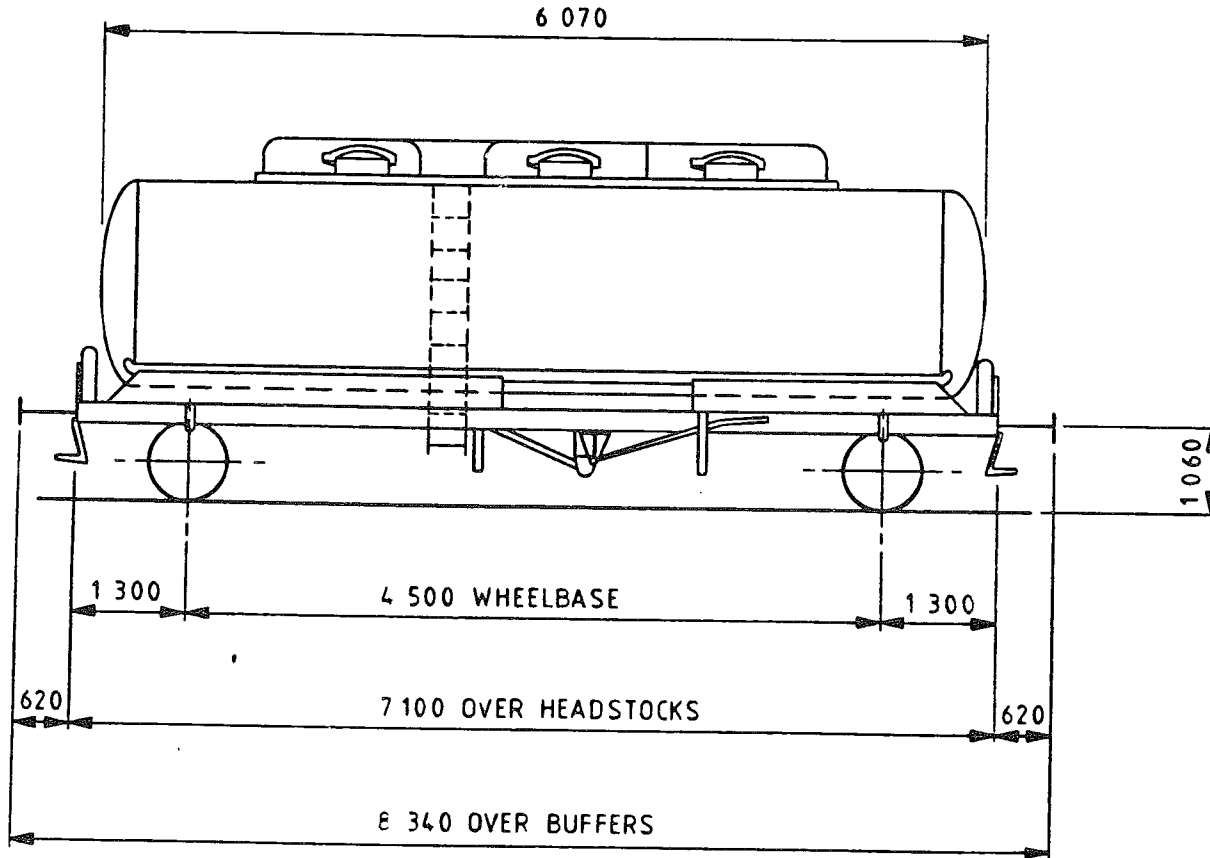


TARE -	12.5t
CAPACITY, WEIGHT-	27.5t
CAPACITY, VOLUME-	24 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	K309.01.00

BRAKE -	AIR & VAC THRO' PIPE :SIDE LEVER & PLATFORM SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

TYPE -	Zefs
WAGON No. -	23 80 7397 000
BUILDER -	GRAAFF
OWNER -	EVA

					TOPS INFORMATION								
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 4	RA (GLW) 5	DESIGN SHEET
	19.4t	23.4t	27.4t				60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW		8 t FORCE UP TO 21 t FORCE ABOVE 24 t GLW				
S	19.4t	23.4t	23.4t		CARKND								
					I	C	B	B					



TARE -	12.54 t
CAPACITY, WEIGHT -	27.4 t
CAPACITY, VOLUME -	21 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRG. DRG. No. -	426

BRAKE -	AIR & VAC. THRO PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1m
JOURNALS -	∅ 130

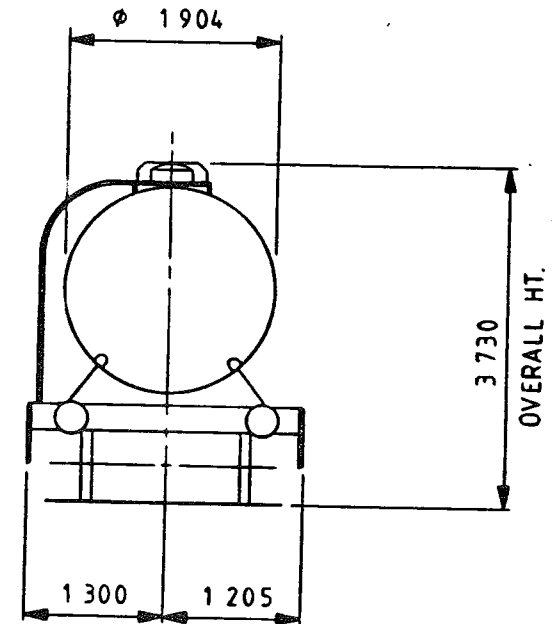
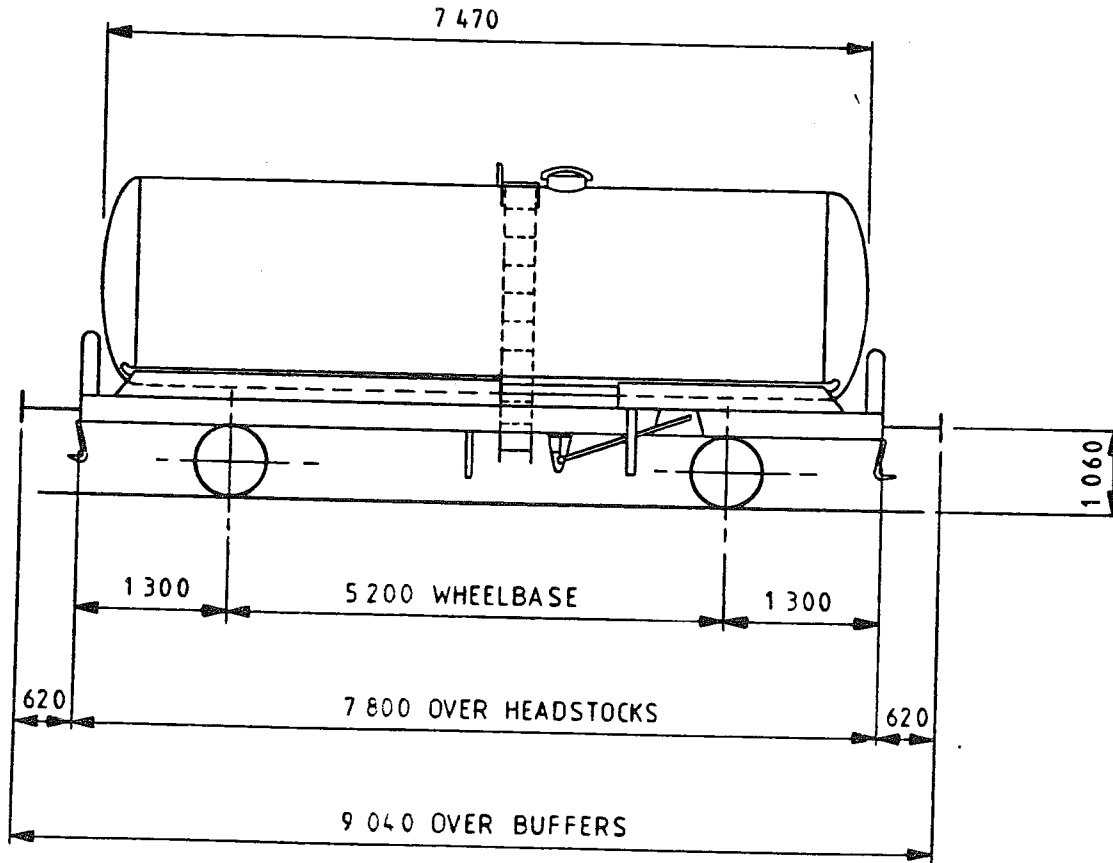
TYPE -	Zfs
WAGON No. -	23 87 7390 514
BUILDER -	ATELIERS-DE JOIGNY
OWNER -	ERMEWA

ISSUE 1

40 t GLW 2 AXLE TANK

ICE 362

				TOPS INFORMATION										
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 5	RA (GLW) 5	DESIGN SHEET	
	21t	25t	9t				60 mile/h UP TO 50 mile/h ABOVE		36 tonne GLW					5 t FORCE UP TO 15 t FORCE ABOVE
S	21t	25t	25t		CARKND									
					I	C	B	B						



TARE -	11 t
CAPACITY, WEIGHT-	29 t
CAPACITY, VOLUME-	20 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	427

BRAKE -	AIR; VAC THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

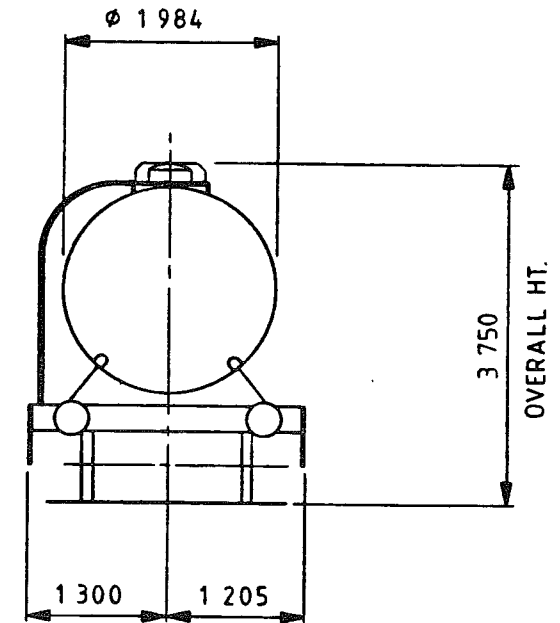
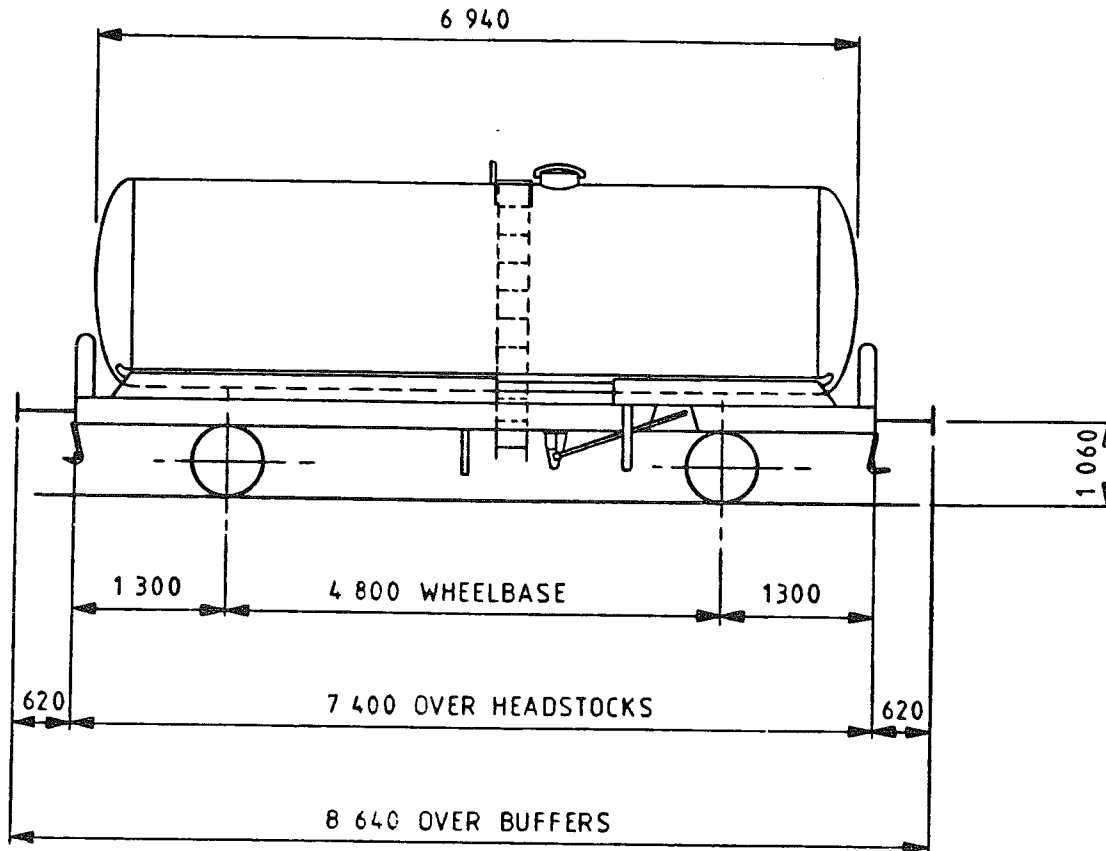
TYPE -	Zfs
WAGON No. -	23 87 7390 507
BUILDER -	ATELIERS DE JOIGNY
OWNER -	ERMEWA

ISSUE 1

40 t GLW 2 AXLE TANK

ICE 363

					TOPS INFORMATION								
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 4	RA (GLW) 5	DESIGN SHEET
	20.9t	24.9t	28.9t		CARKND		60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW		5 t FORCE UP TO 15 t FORCE ABOVE 19 t GLW				
S	20.9t	24.9t	24.9t		I	C	B	B					



TARE -	11.1 t
CAPACITY, WEIGHT-	28.9 t
CAPACITY, VOLUME-	21 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRG. DRG. No.-	440

BRAKE -	AIR; VACUUM THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1m
JOURNALS -	∅ 130

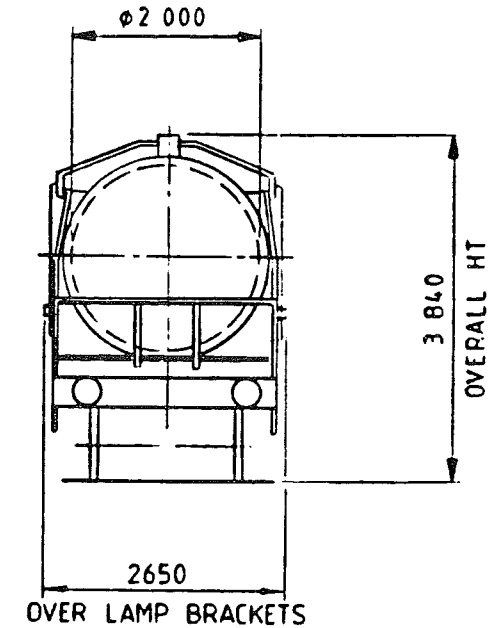
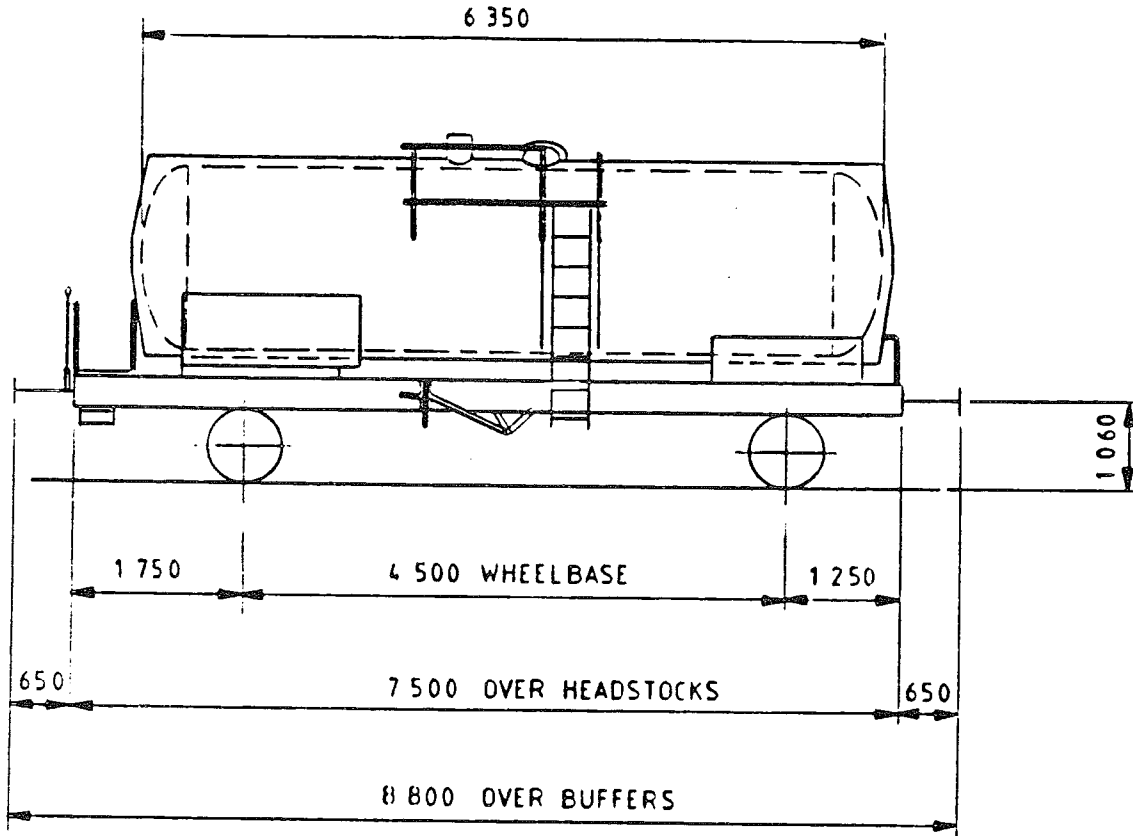
TYPE -	Zfs
WAGON No. -	23 87 7390 504
BUILDER -	ATELIERS DE JOIGNY
OWNER -	ERMEWA

ISSUE 1

40t GLW 2 AXLE TANK

ICE 365

				TOPS INFORMATION							
A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
191	231	271			CARKND	50 mile/h UP TO	40 tonne GLW	51 FORCE UP TO			
				I	C	B	C	131 FORCE ABOVE	4	6	



TARE -	131
CAPACITY, WEIGHT-	271
CAPACITY, VOLUME-	19.2 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	1204.01.559

BRAKE -	AIR; VAC THRO PIPE
SUSPENSION -	SINGLE LINK; 9 PLATE
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370 HD
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

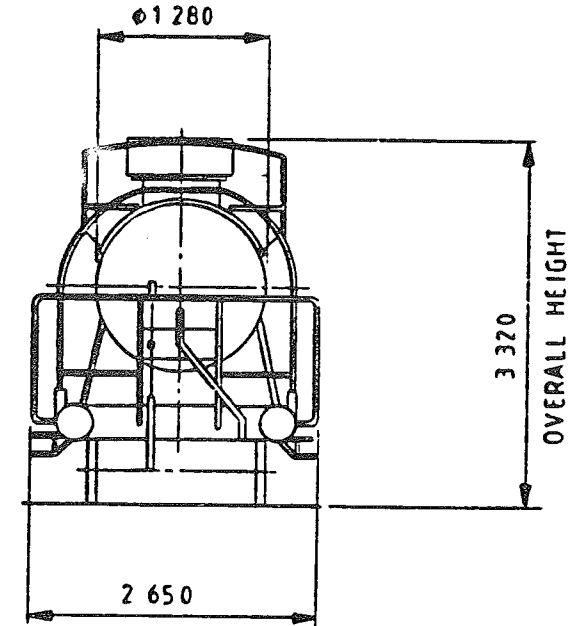
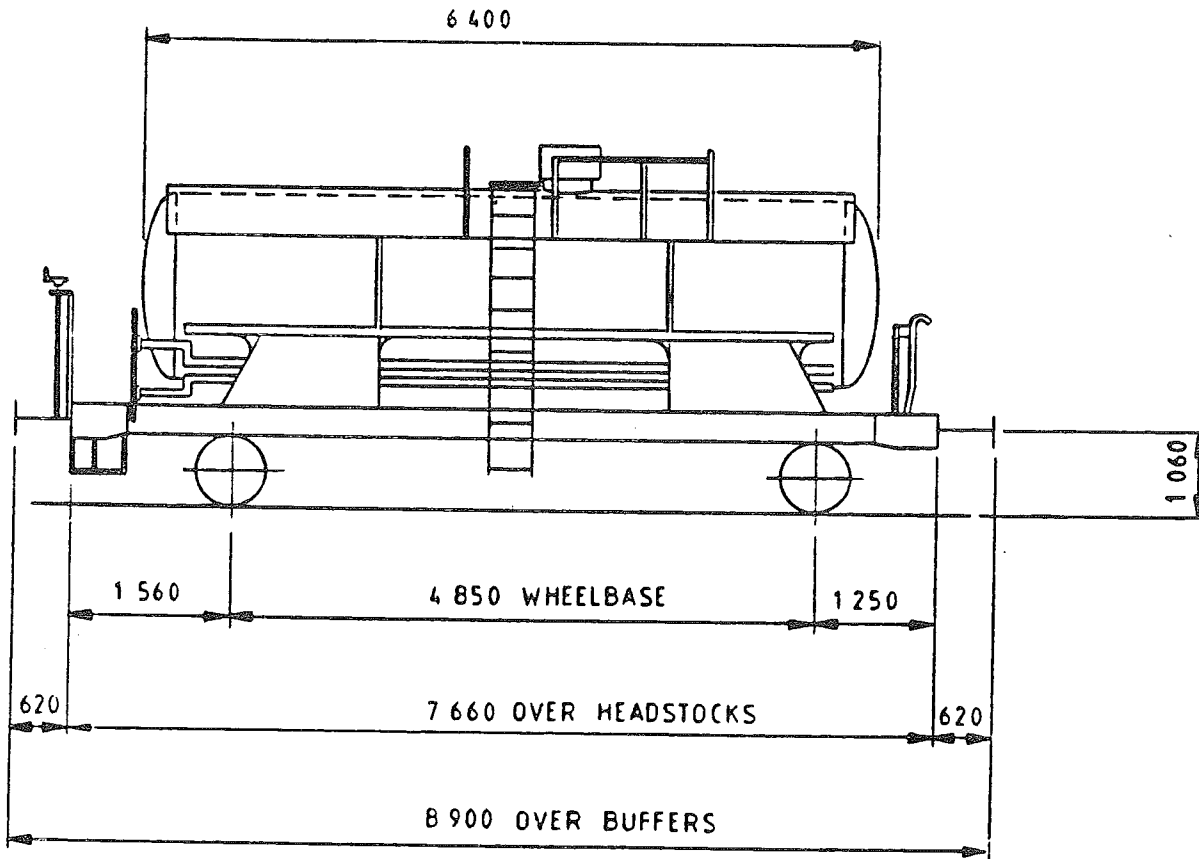
TYPE -	Z ef
WAGON No. -	23 80 7197 029
BUILDER -	V.T.G.
OWNER -	V.T.G.

ISSUE 1

36t GLW 2 AXLE TANK

ICE 366

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	18-31	22-31	22-31			60 mile/h UP TO		6t FORCE UP TO		4	5	
S	18-31	22-31	22-31		CARKND	36 tonne GLW		15t FORCE ABOVE				
					I C B C	mile/h ABOVE		19t GLW				



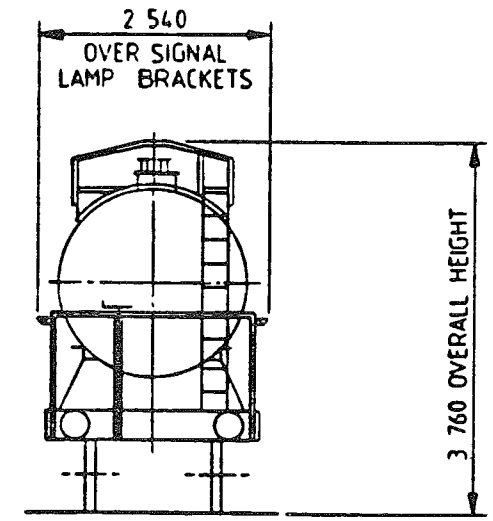
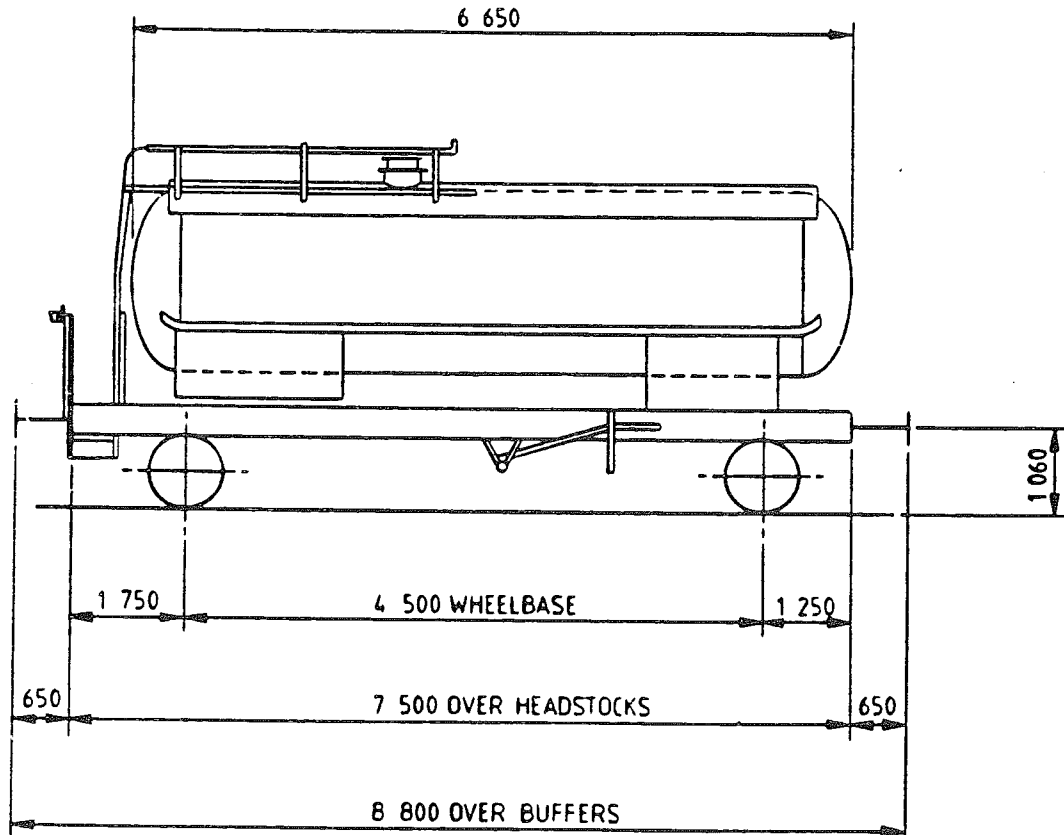
TARE -	13.7t
CAPACITY, WEIGHT -	22.3t
CAPACITY, VOLUME -	7.8 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	3 110264

BRAKE -	AIR & VAC THRO PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC Ø450 HD
WHEELS -	Ø920
JOURNALS -	Ø130

TYPE -	Zfgkks
WAGON No. -	2385 7492 200 201 700
BUILDER -	JOSEPH MEYER
OWNER -	

ISSUE 1

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
22-4t	22-4t	22-4t				50 mile/h UP TO mile/h ABOVE 32 tonne GLW		5t FORCE UP TO 10t FORCE ABOVE 2t GLW		4	4	
					I	C	B	B				



TARE -	9.6t
CAPACITY, WEIGHT-	22.4t
CAPACITY, VOLUME-	14 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	2309.01.531

BRAKE -	AIR; VACUUM THROUGH PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER \varnothing 370 HD
WHEELS -	\varnothing 1 000
JOURNALS -	\varnothing 130

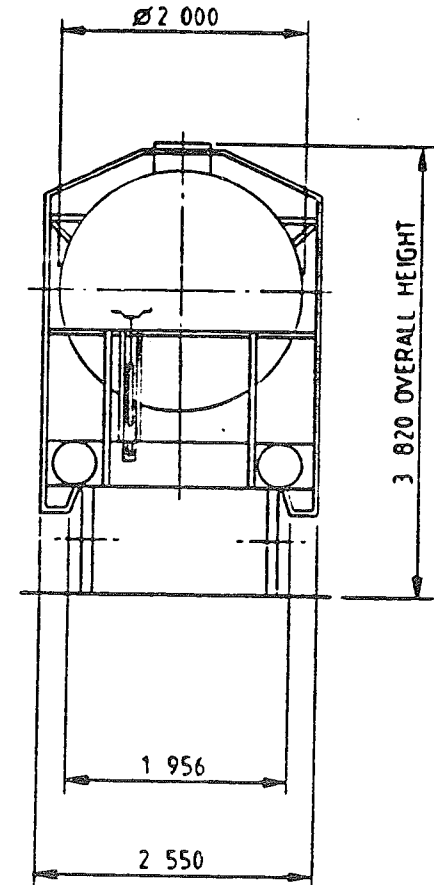
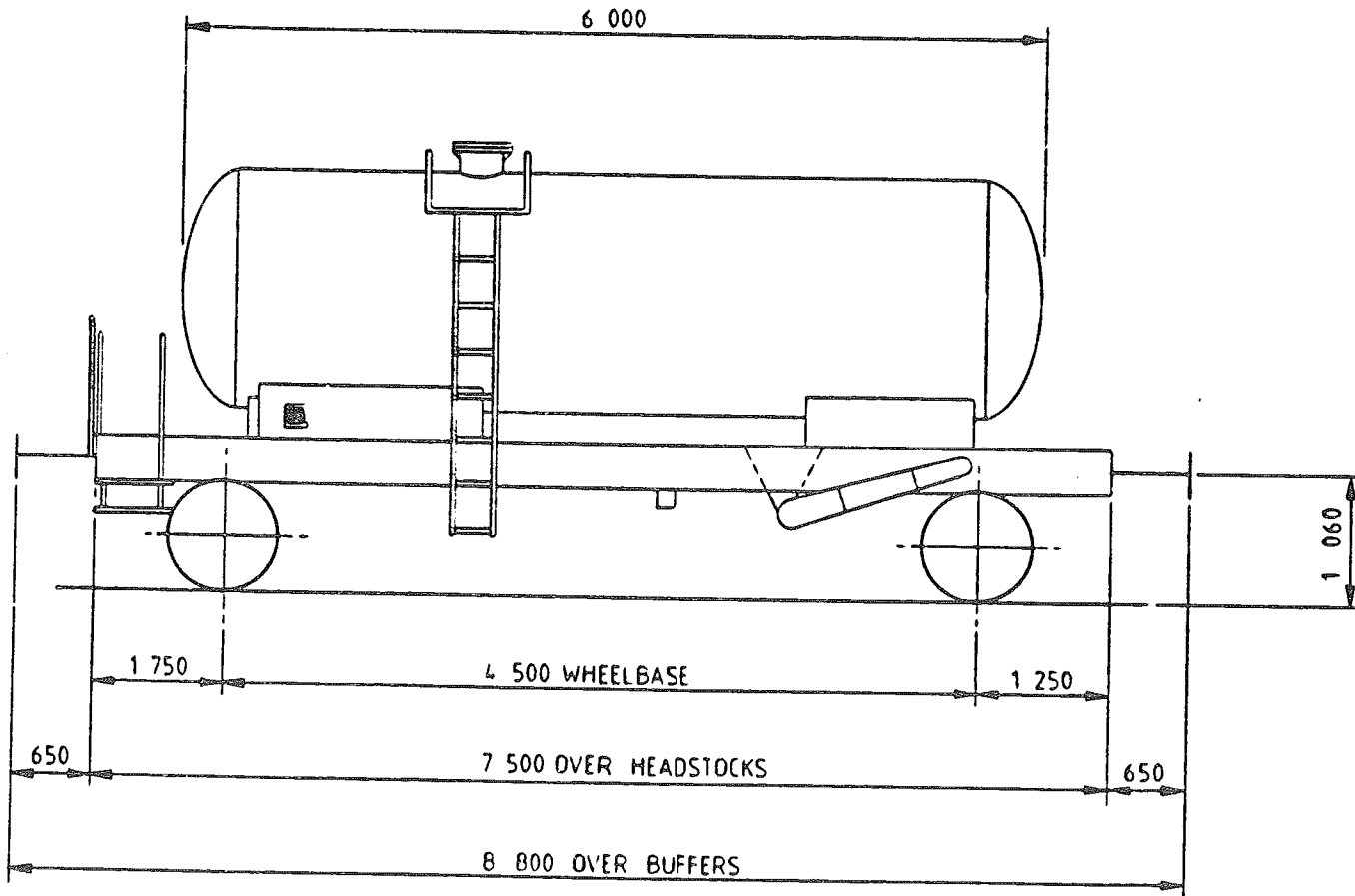
TYPE -	Zcfkk
WAGON No. -	23 80 7287 006
BUILDER -	V.T.G.
OWNER -	V.T.G.

ISSUE 1

36t GLW 2 AXLE TANK

ICE 368

				TOPS INFORMATION								
A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
20t	24t	24t		CARKND		50 mile/h UP TO mile/h ABOVE 36 tonne GLW		9t FORCE UP TO 17t FORCE ABOVE 21t GLW				
				I	C	B	B			4	5	



TARE -	12t
CAPACITY, WEIGHT -	24t
CAPACITY, VOLUME -	20 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	1806

BRAKE -	AIR; VACUUM THROUGH PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC HD Ø370
WHEELS -	Ø 1 000
JOURNALS -	Ø 130

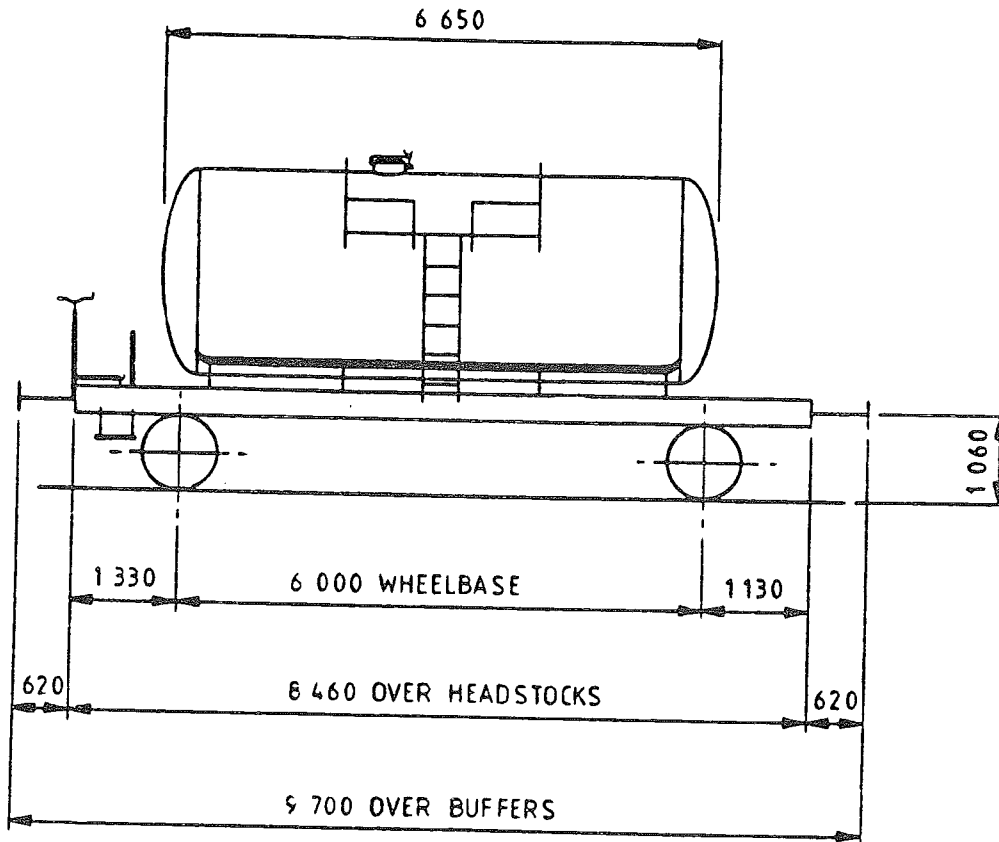
TYPE -	Zkk
WAGON No. -	23 81 7204 050,057
BUILDER -	
OWNER -	ROBERT METZGER, VIENNA

ISSUE 1

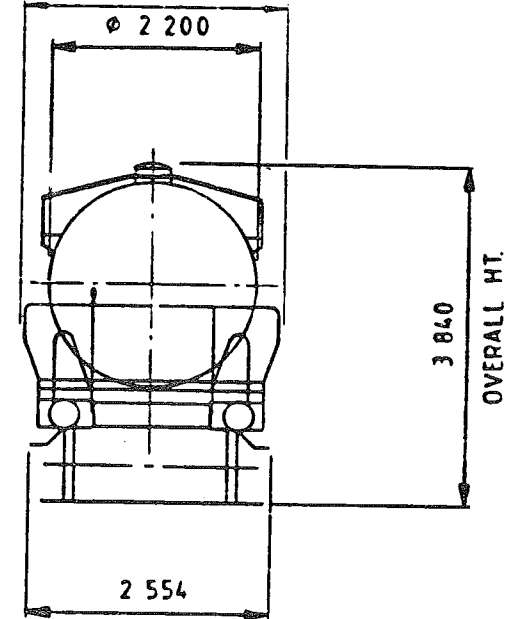
40 t GLW 2 AXLE TANK

ICE 371

TOPS INFORMATION													
	A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19.5t	23.5t	27.5t			CARKND	60 mile/h UP TO	36 tonne GLW	9 t FORCE UP TO	25 t GLW	6	6	
S	19.5t	23.5t	23.5t			I C B C	50 mile/h ABOVE		21 t FORCE ABOVE				



2587 OVER LAMP BRACKETS



TARE -	12.5 t
CAPACITY, WEIGHT -	27.5 t
CAPACITY, VOLUME -	24.4 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	410-1

BRAKE -	AIR; VAC. THRO' PIPE
SUSPENSION -	SINGLE LINK; 9 PLATE
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER, HD ϕ 370
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

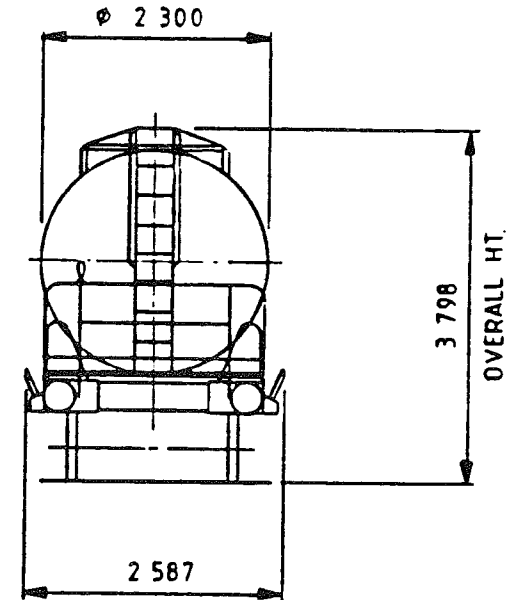
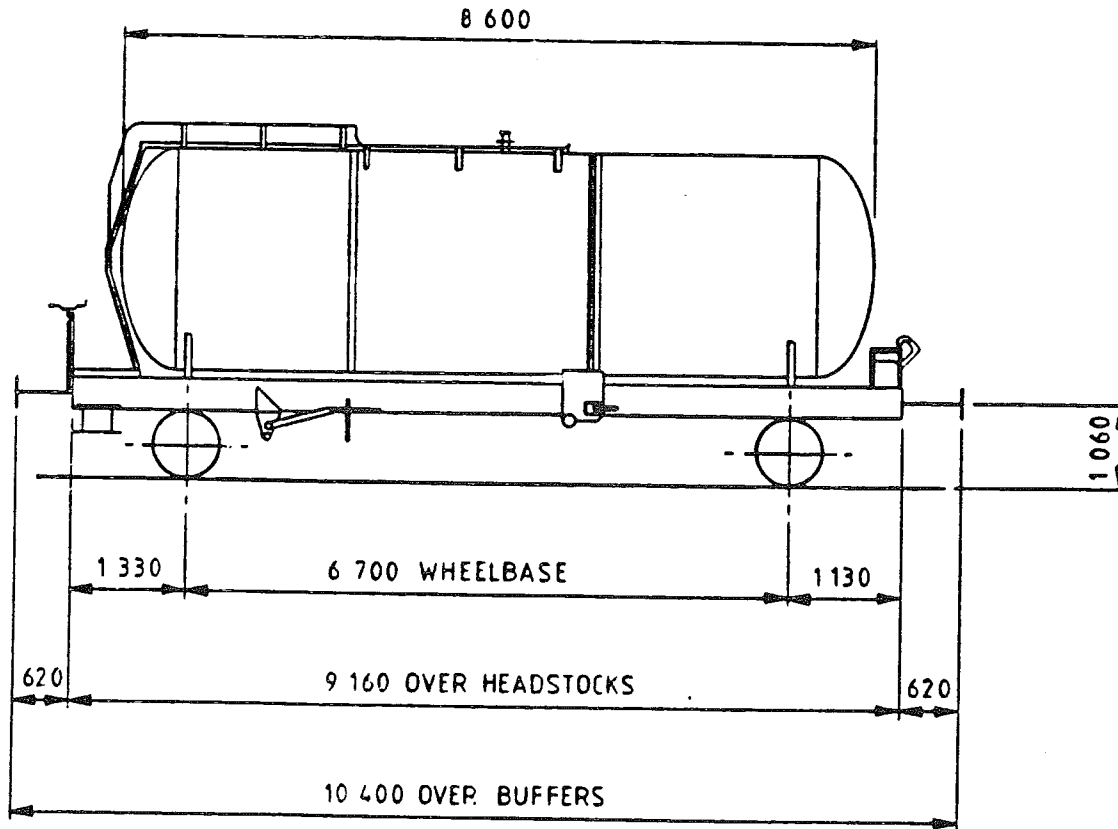
TYPE -	Zcefs
WAGON No. -	23 80 7398 400
BUILDER -	DB MINDEN
OWNER -	TRANSGAZ

ISSUE 1

40 t GLW 2 AXLE TANK

ICE 372

	A	B	C	D	TOPS INFORMATION							
	19.4t	23.4t	27.4t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	19.4t	23.4t	27.4t		CARKND	60 mile/h UP TO mile/h ABOVE 40 tonne GLW		10 t FORCE UP TO 21 t FORCE ABOVE 27 t GLW		7	6	
					I C B C							



TARE -	12,520 t
CAPACITY, WEIGHT-	27.4 t
CAPACITY, VOLUME-	34 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	K 360.01.00

BRAKE -	AIR; VAC THRO' PIPE
SUSPENSION -	SINGLE LINK; 9 PLATE
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER
WHEELS -	∅ 920
JOURNALS -	∅ 130

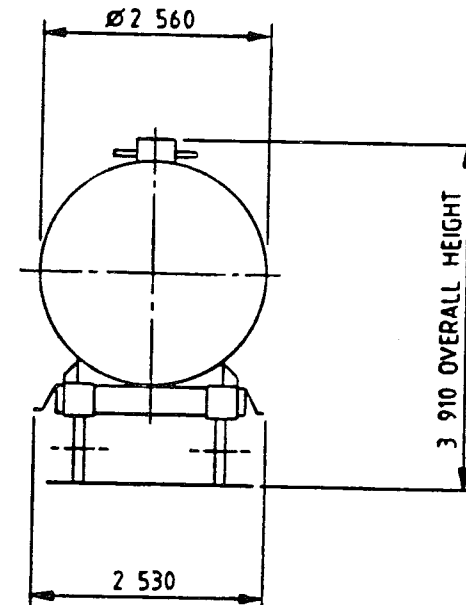
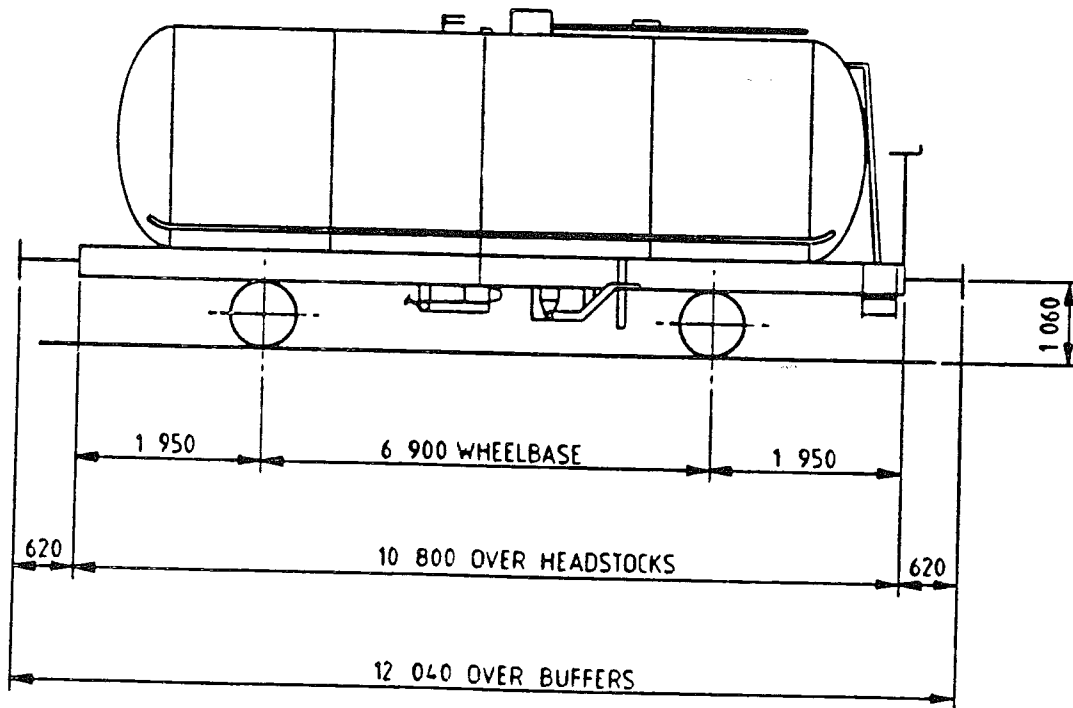
TYPE -	Zcfs
WAGON No.-	23 80 7391 026 · 034
BUILDER -	GRAAFF ELZE
OWNER -	V.T.G.

ISSUE 1

40t GLW 2 AXLE TANK

ICE 373

				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19.4t	23.4t	27.4t									
S	19.4t	23.4t	23.4t		CARKND	60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW		8t FORCE UP TO 17t FORCE ABOVE 21t GLW		9	6	
					I C B C							



TARE -	12.6t
CAPACITY, WEIGHT -	27.4t
CAPACITY, VOLUME -	38 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	C.1553.1

BRAKE -	AIR & VACUUM THROUGH PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1 000
JOURNALS -	∅ 130

TYPE -	Zcfs
WAGON No. -	23 87 7391 001-004
BUILDER -	LORMAFER
OWNER -	ALGECO

ISSUE 1

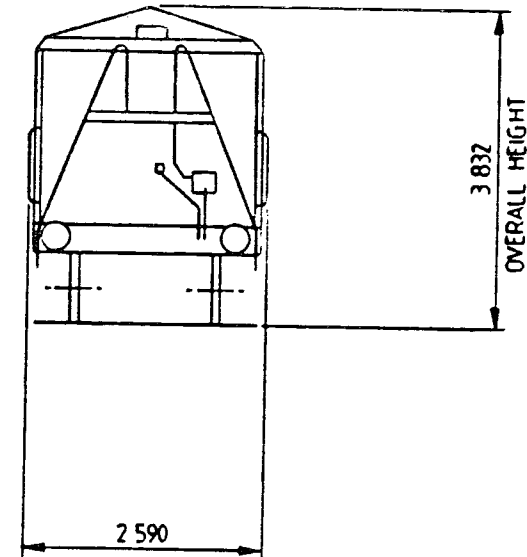
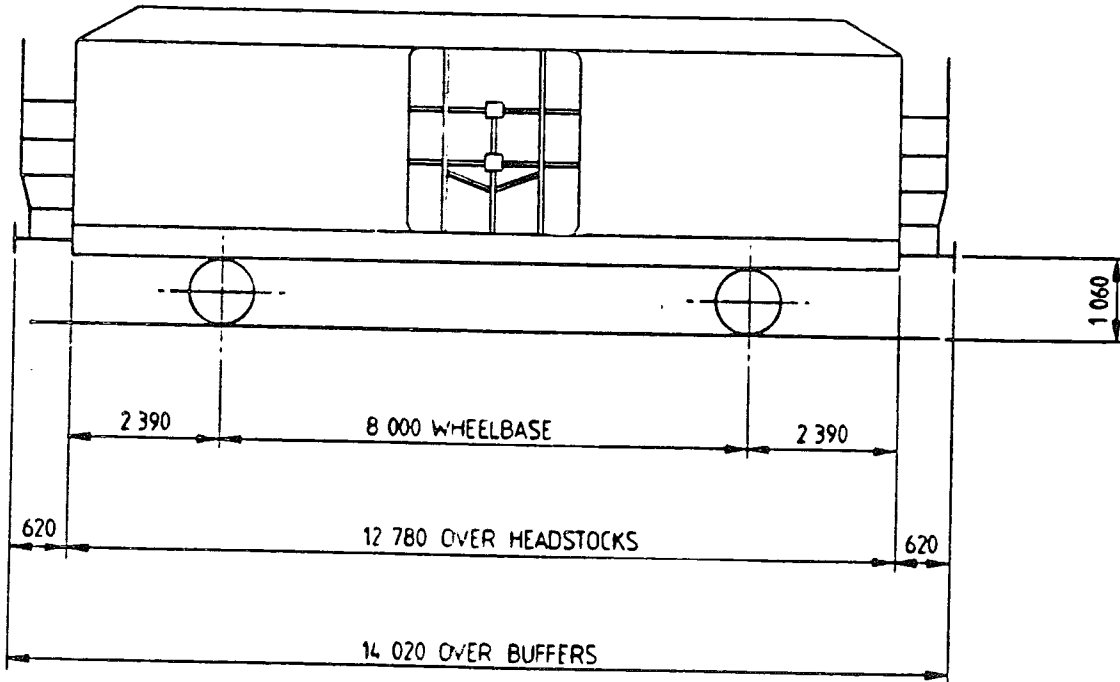
40t GLW 2AXLE REFRIGERATOR VAN

IIE 375

No's 680-979					TOPS INFORMATION													
	A	B	C	D	TARE	AARKND				OPERATING SPEED			BRAKE FORCE DATA			EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	17.8t	21.8t	25.8t			CARKND				60 mile/h UP TO mile/h ABOVE			40 tonne GLW			12	6	
S	17.8t	21.8t	25.8t		14.2t	I	I	B	L	VARIABLE LOAD = 2.32 + (0.692 * t)								

No's 000-349					
	A	B	C	D	TARE
	17.6t	21.6t	25.6t		
S	17.6t	21.6t	25.6t		14.4t

No's 350-499					
	A	B	C	D	TARE
	17.9t	21.9t	25.9t		
S	17.9t	21.9t	25.9t		14.1t

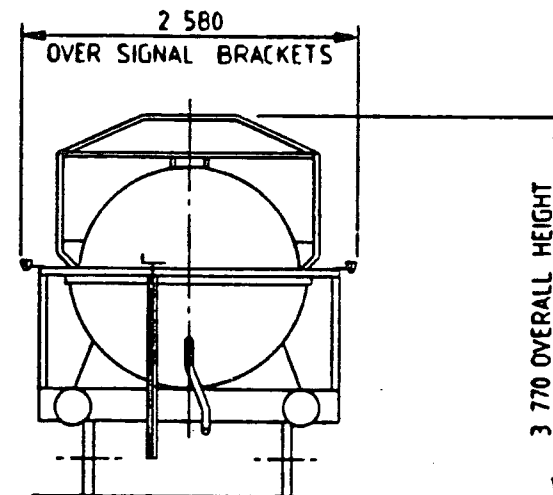
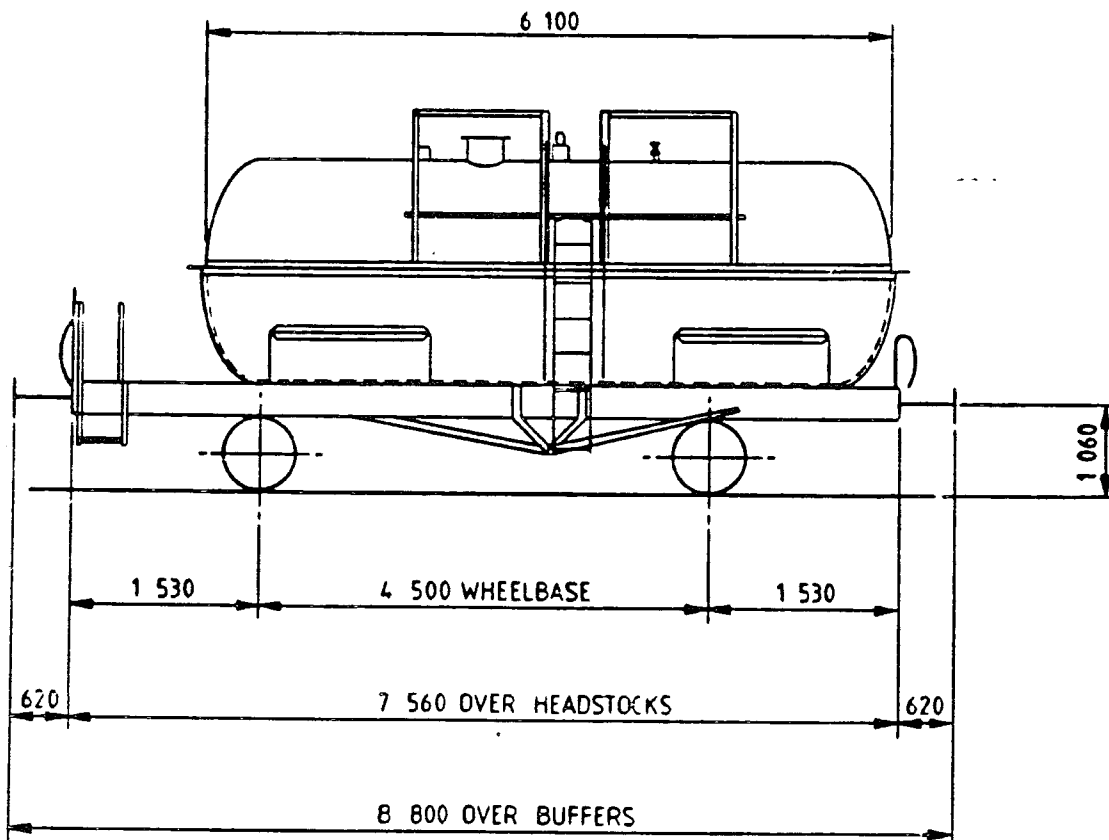


TARE -	SEE ABOVE
CAPACITY, WEIGHT -	SEE ABOVE
CAPACITY, VOLUME -	44 m ³
FLOOR AREA -	23.6 m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	2138

BRAKE -	AIR & VACUUM THRO. PIPE; SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C
BUFFERS -	HYDRAULIC
WHEELS -	Ø920
JOURNALS -	Ø130

TYPE -	1befts
WAGON No. -	03 83 8089 000-499 03 83 8089 680-979
BUILDER -	SNIA VISCOSA
OWNER -	INTERFRIGO

	A	B	C	D	TOPS INFORMATION							
	18-6t	22-6t	22-6t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
					CARKND	50 mile/h UP TO mile/h ABOVE 36 tonne GLW		9t FORCE UP TO 17t FORCE ABOVE 21t GLW		4	5	
					I C B B							



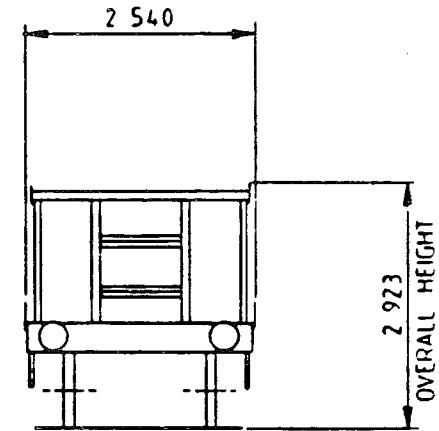
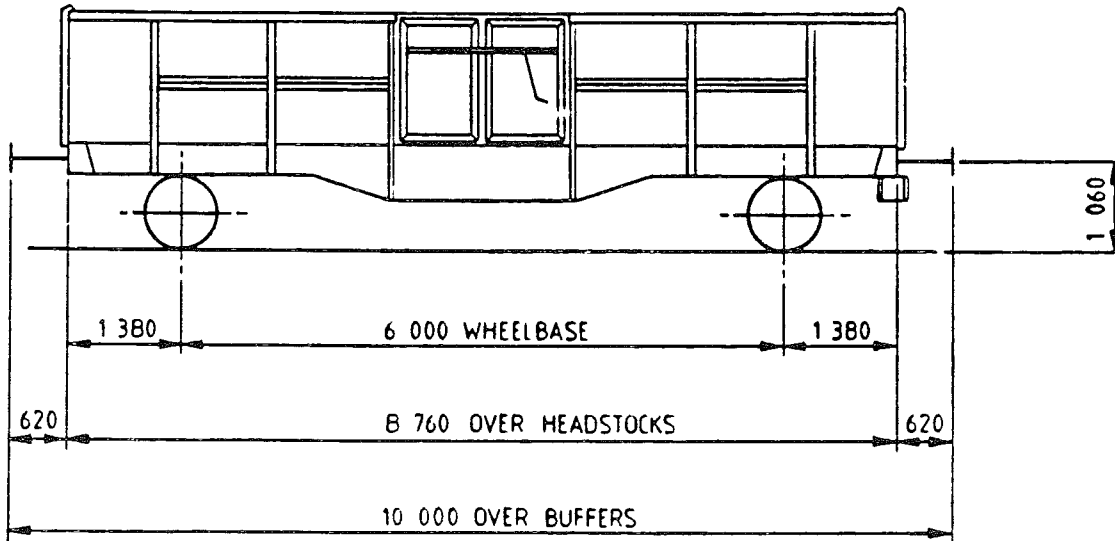
TARE -	13.4t
CAPACITY, WEIGHT-	22.6t
CAPACITY, VOLUME-	13.5 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	01.578

BRAKE -	AIR; VACUUM THROUGH PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U. I. C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 920
JOURNALS -	∅ 130

TYPE -	Zcefkk
WAGON No. -	23 80 7187 000
BUILDER -	LINKE-HOFMANN-BUSCH
OWNER -	V. T. G.

ISSUE 1

					TOPS INFORMATION								
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19.5t	23.5t	27.5t		CARKND		60 mile/h UP TO mile/h ABOVE 40 tonne GLW		7t FORCE UP TO 18t FORCE ABOVE 20t GLW		6	6	
S	19.5t	23.5t	27.5t		I	O	B	B					



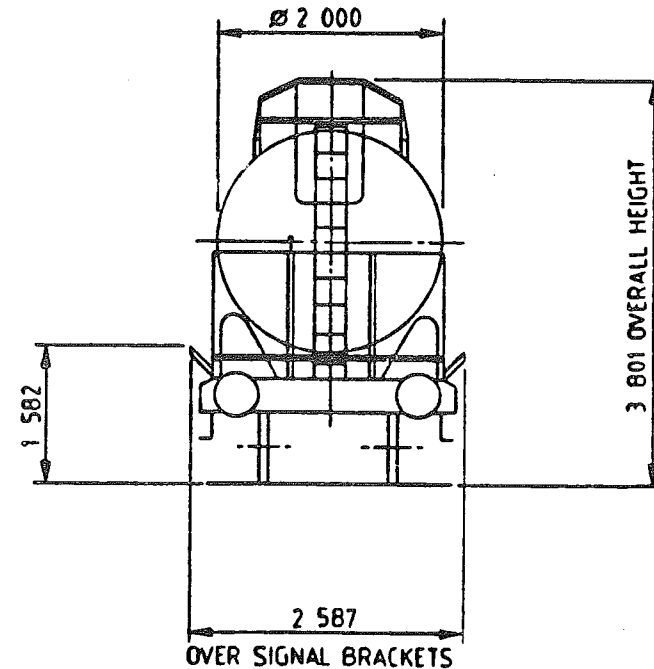
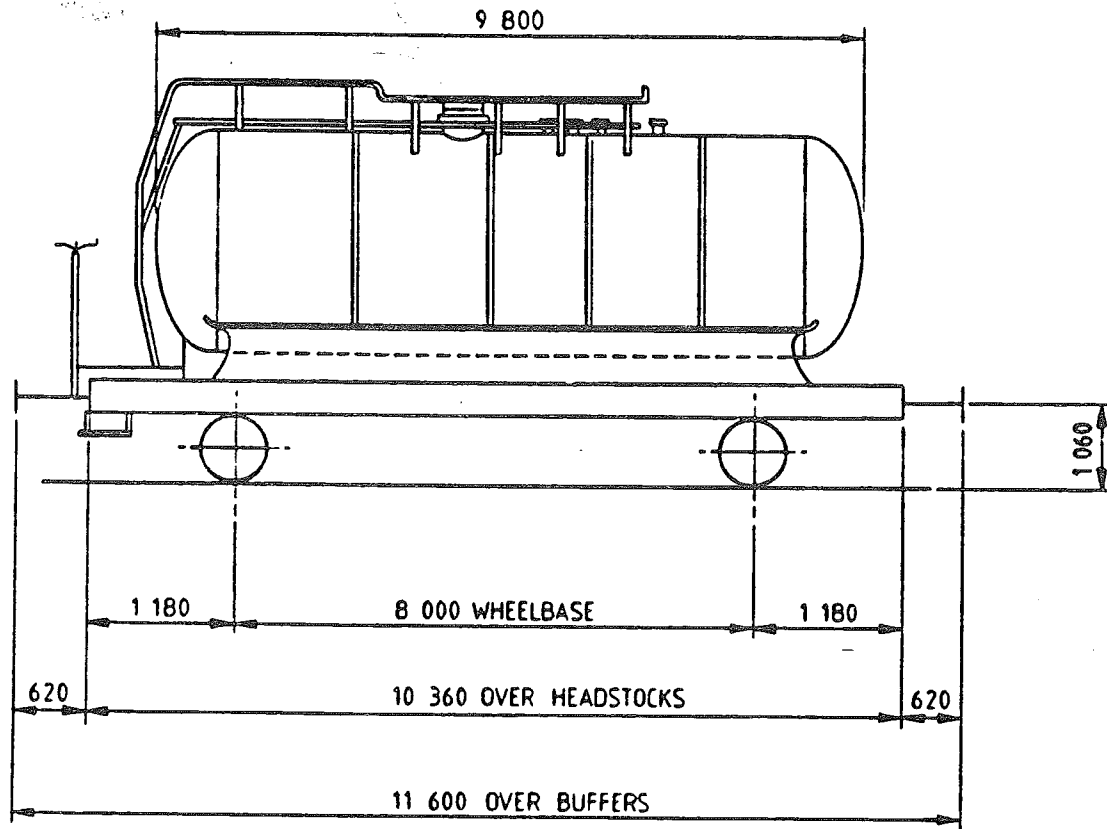
TARE -	12t
CAPACITY, WEIGHT-	27.5t
CAPACITY, VOLUME-	34.4 m ³
FLOOR AREA -	23 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	E75-0-002M

BRAKE -	AIR & VACUUM THROUGH BRAKE
SUSPENSION -	B PLATES • 120 • 16
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1 000
JOURNALS -	∅ 130

TYPE -	Ffs
WAGON No. -	21 88 6094 000-019
BUILDER -	
OWNER -	SNCB

ISSUE 1

		A	B	C	D	TOPS INFORMATION								
		18t	22t	26t		AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S		18t	22t	22t		CARKND		60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW		10t FORCE UP TO 21t FORCE ABOVE 26t GLW		9	6	
						I	C	A	B					



TARE -	14 t
CAPACITY, WEIGHT -	26 t
CAPACITY, VOLUME -	30 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	K 383 01 00

BRAKE -	AIR; PLATFORM AND SIDE LEVER
SUSPENSION -	SINGLE LINK 9*1 400 SPRINGS
COUPLINGS -	INTERNATIONAL SCREW
BUFFERS -	RINGFEDER
WHEELS -	Ø 940
JOURNALS -	Ø 130

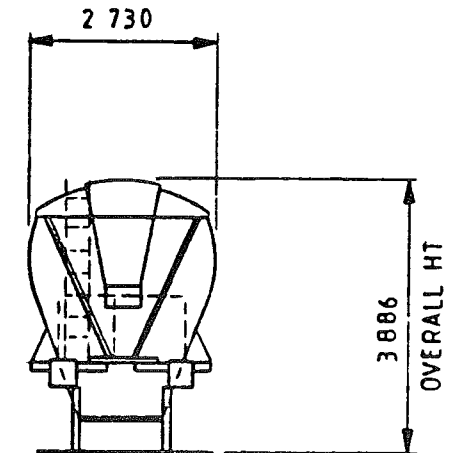
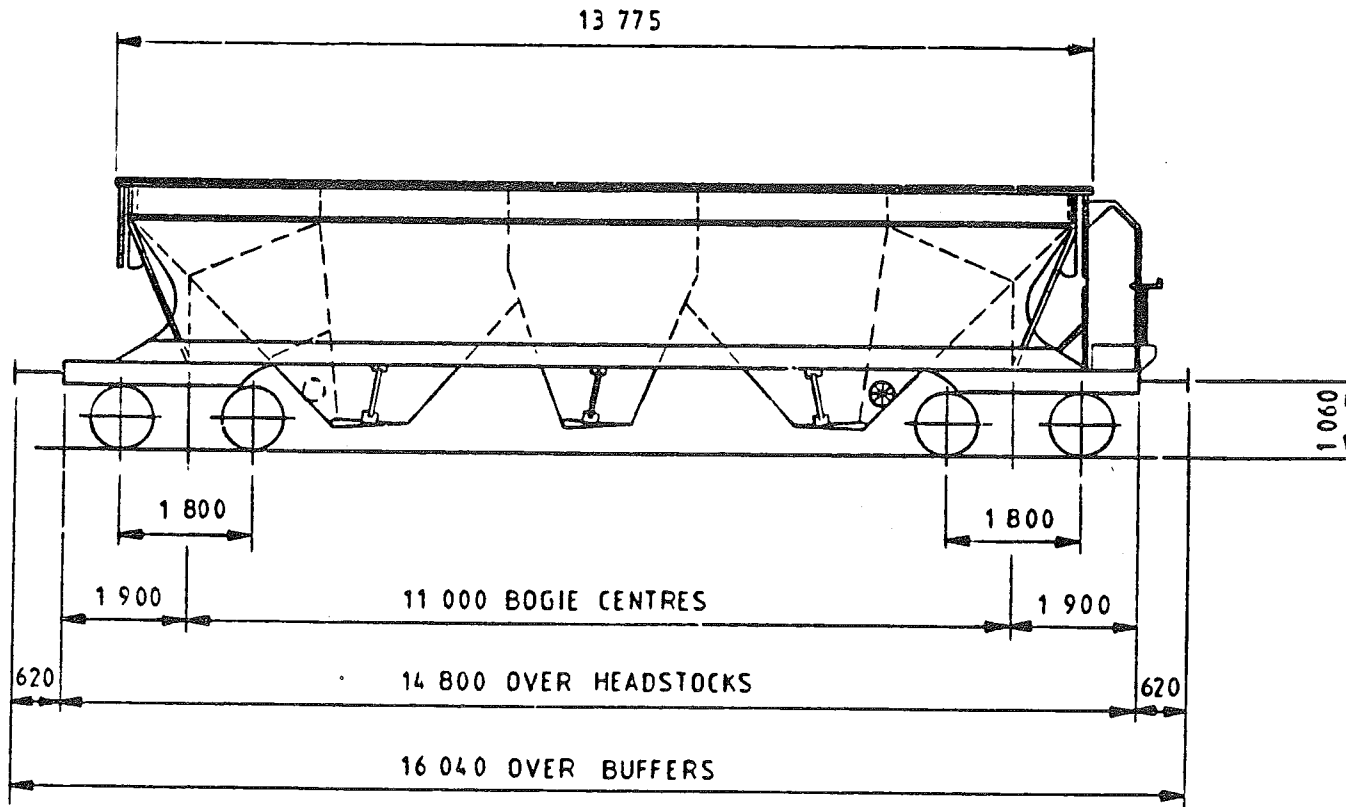
TYPE -	Zcfs
WAGON No. -	23 80 7391 046
BUILDER -	GRAAF ELZE
OWNER -	V.T.G. HAMBURG

ISSUE 1

80t GLW BOGIE HOPPER

IPE 389

					TOPS INFORMATION							
90	A 40-61	B 48-61	C 56-61	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	40-61	48-61	56-61		CARKND	60 mile/h UP TO mile/h ABOVE 80 tonne GLW		14t FORCE UP TO 36t FORCE ABOVE 40t GLW		6	6	
					I P B H							



TARE -	23 350
CAPACITY, WEIGHT-	56-6t
CAPACITY, VOLUME-	70 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	105604

BRAKE -	AIR & VACUUM THRO PIPE
SUSPENSION -	Y25 Csi BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC U5 450x340MD
WHEELS -	Ø 920
JOURNALS -	Ø 130

TYPE -	Tafos
WAGON No.-	33 87 5699 001
BUILDER -	FAUVET-GIREL
OWNER -	COMPAGNIE AUXILIAIRE DUNORD

66 t GLW WELL WAGON

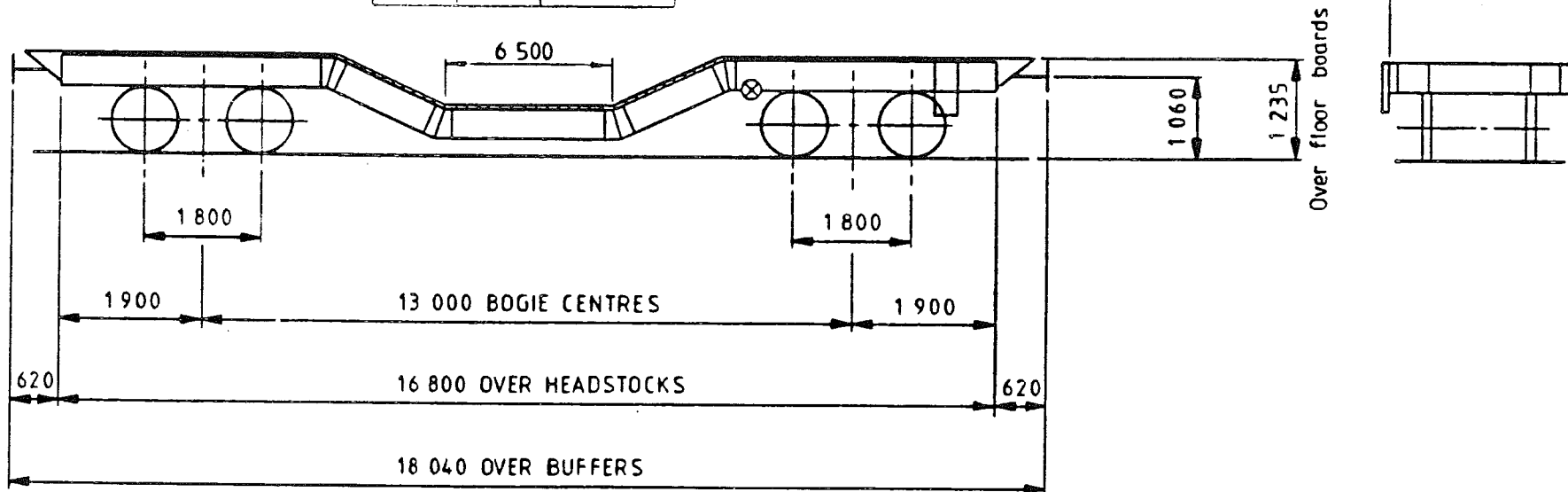
IXE 393

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	37 t	39 t	39 t			60 mile/h UP TO		5 t FORCE UP TO		9	4	
S	37 t	39 t	39 t		CARKND	mile/h ABOVE 66 tonne GLW		10 t FORCE ABOVE				
					I X B W							

OVERALL FLOOR AREA = 39 m²

WELL AREA = 15 m²

LOADING UNIFORM DISTRIBUTION	CAPACITY ON TWO SUPPORTS	
3m	25t	30t
5m	27t	33t
6.5m	30t	39t



TARE -	27 tonnes
CAPACITY, WEIGHT -	39 t
CAPACITY, VOLUME -	-
FLOOR AREA -	SEE ABOVE
MIN. CURVE -	R ≥ 30,17 m
GEN. ARRGT. DRG. No. -	28501

BRAKE -	AIR, VACUUM THRO' PIPE
SUSPENSION -	Y 27E BOGIE
COUPLINGS -	INTERNATIONAL SCREW.
BUFFERS -	HYDRAULIC type U5H
WHEELS -	φ 920
JOURNALS -	φ 130

TYPE -	Uafiks
WAGON No. -	31 87 9899 000 · 004
BUILDER -	
OWNER -	SNCF

80t GLW BOGIE TANK

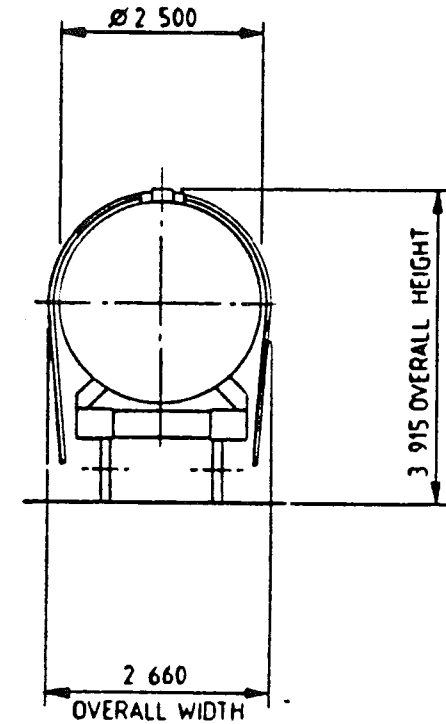
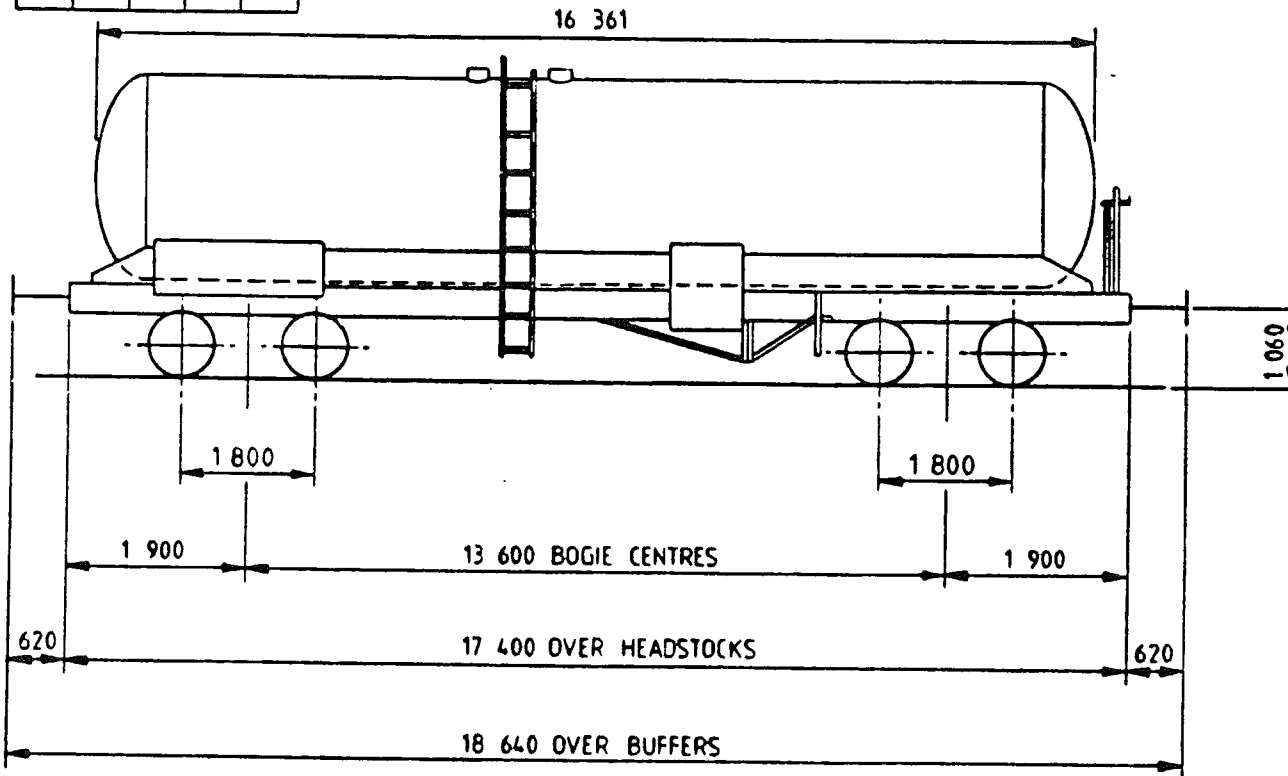
ICE 394

No's 000-003,005

TOPS INFORMATION												
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	41t	49t	57t		CARKND	60 mile/h UP TO		15t FORCE UP TO		10	6	
S	41t	49t	57t		I C B D	mile/h ABOVE 80 tonne GLW		37t FORCE ABOVE 40t GLW				

No's 004,006

	A	B	C	D
	41t	49t	57t	
S	41t	49t	49t	



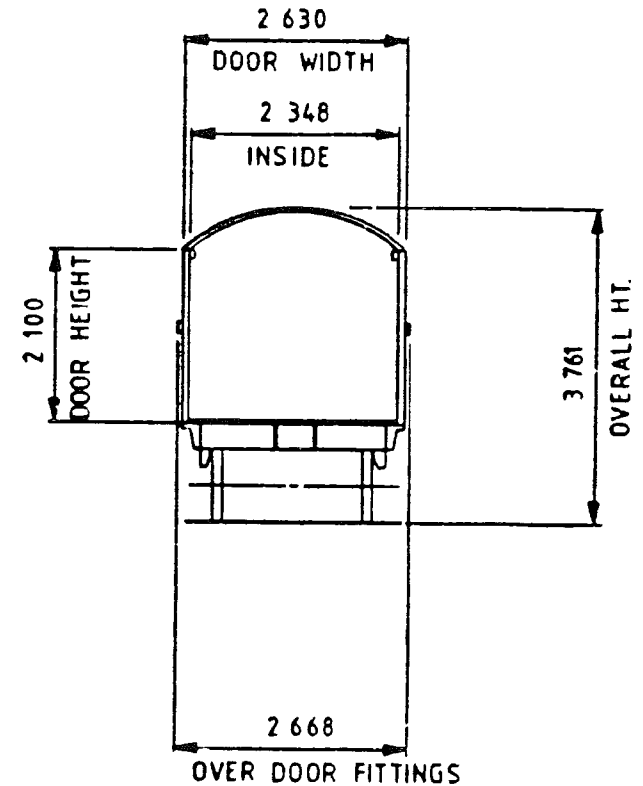
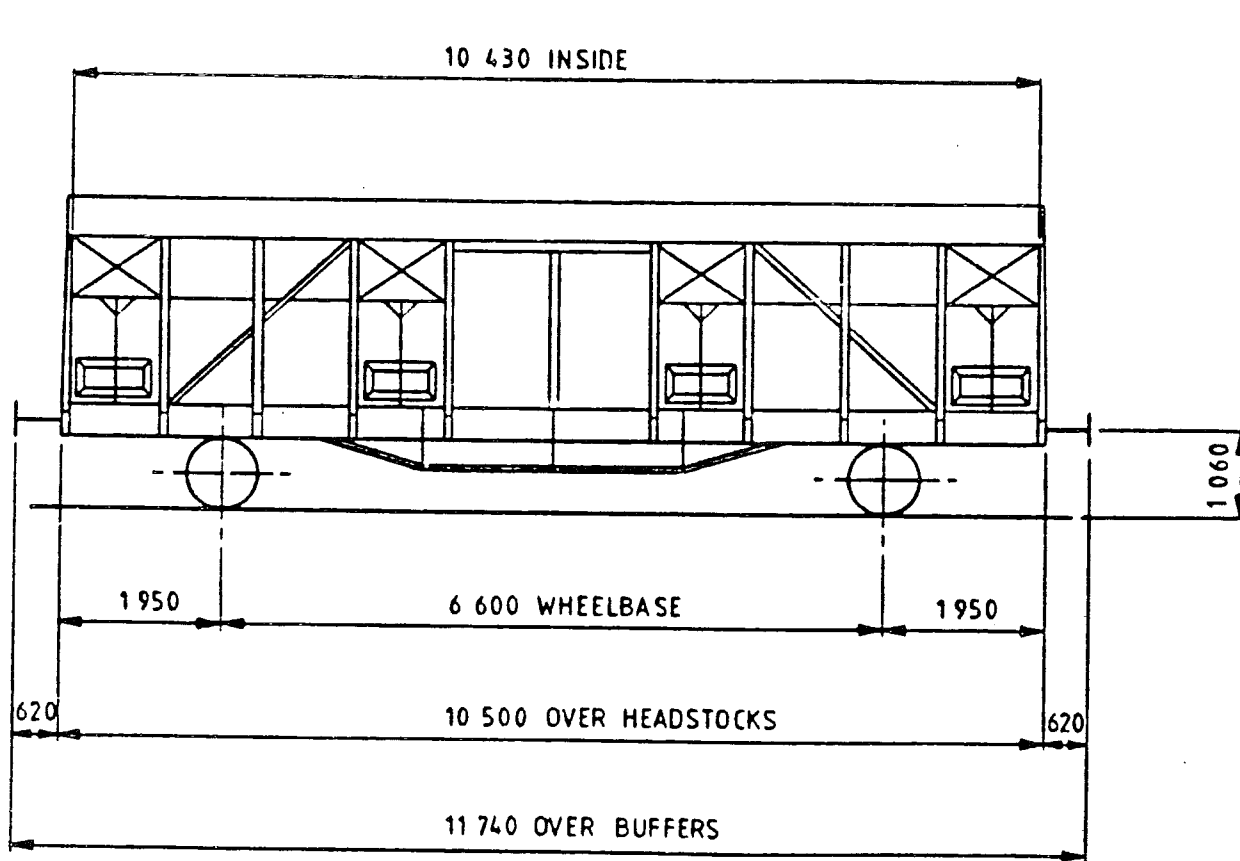
TARE -	23t
CAPACITY, WEIGHT -	SEE ABOVE
CAPACITY, VOLUME -	77m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	98599

BRAKE -	AIR; VACUUM THROUGH PIPE
SUSPENSION -	Y25C BOGIE
COUPLINGS -	U. I. C.
BUFFERS -	HYDRAULIC US
WHEELS -	Ø 920
JOURNALS -	Ø 130

TYPE -	Zacfs
WAGON No. -	33 87 7895 000-006
BUILDER -	FAUVET-GIRÉL
OWNER -	ERMEWA

ISSUE 1

	A	B	C	D	TOPS INFORMATION							
	17t	21t	25t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	17t	21t	25t		CARKND	60 mile/h UP TO mile/h ABOVE 40 tonne GLW		7 t FORCE UP TO 18 t FORCE ABOVE 21 t GLW		9	6	
					I T X M							



TARE -	15 t
CAPACITY, WEIGHT-	25 t
CAPACITY, VOLUME-	50 m ³
FLOOR AREA -	24.5 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	W1-0156 & W1-0157

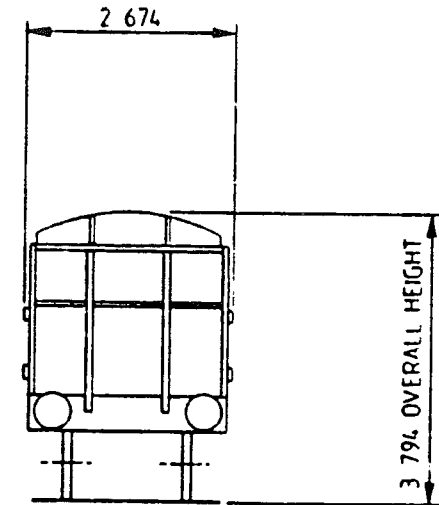
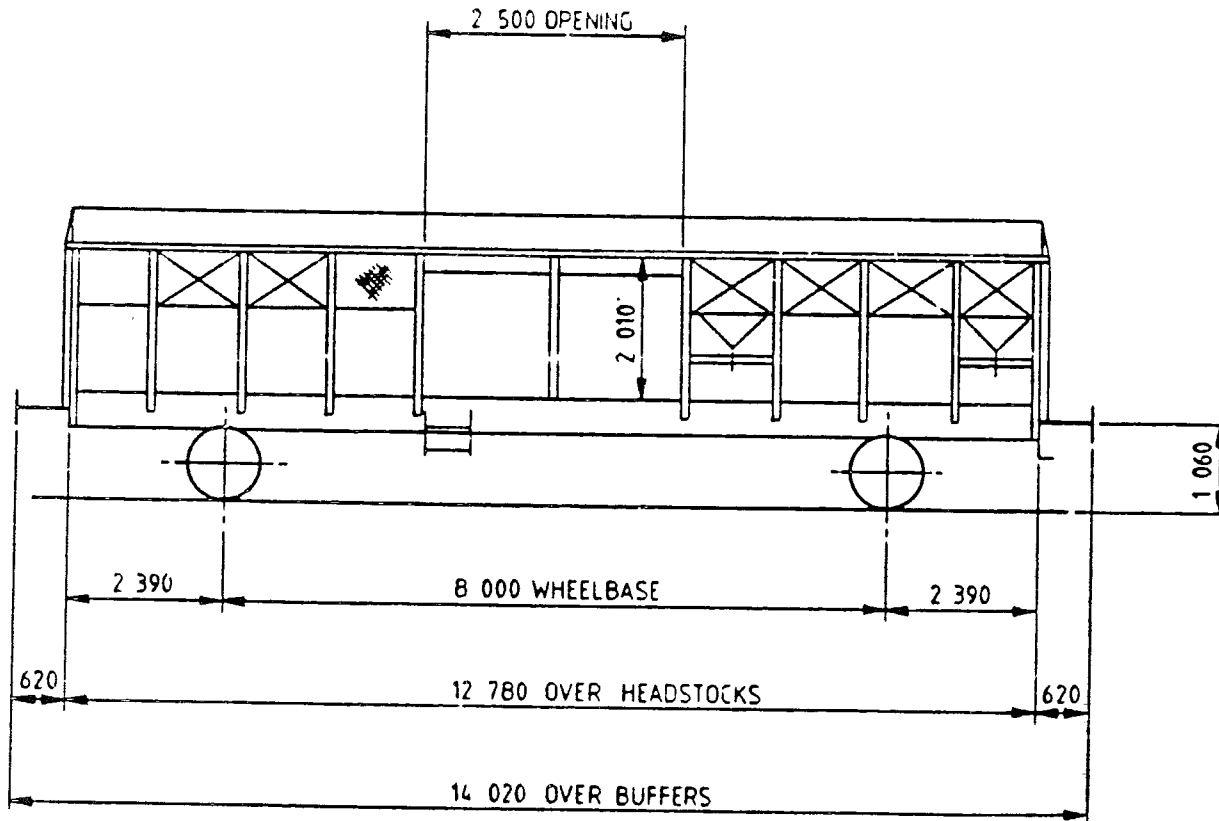
BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 460 x 370 HD
WHEELS -	φ 1 000
JOURNALS -	φ 130

TYPE -	Hths
WAGON No. -	24 71 2148 993 - 999 24 71 2149 000 - 055
BUILDER -	SEMAT, CARPETA
OWNER -	TRANSFESA

40t GLW 2 AXLE VAN

ILE 415

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 12	RA (GLW) 6	DESIGN SHEET
	17.5t	21.5t	21.5t			60 mile/h UP TO mile/h ABOVE	35 tonne GLW	7t FORCE UP TO 18t FORCE ABOVE	20t GLW			
S	17.5t	21.5t	21.5t		CARKND							
					I L B L							



TARE -	14t
CAPACITY, WEIGHT-	21.5t
CAPACITY, VOLUME-	69m ³
FLOOR AREA -	28.7m ²
MIN. CURVE -	60m
GEN. ARRG. DRG. No.-	304379

BRAKE -	AIR; VACUUM THROUGH PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1 000
JOURNALS -	∅ 130

TYPE -	Hbfkks
WAGON No. -	21 72 2390 000-064
BUILDER -	FRANCO BELGE
OWNER -	JZ

40t GLW REFRIGERATOR VAN

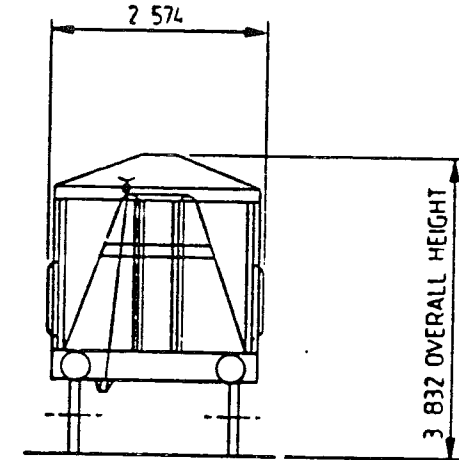
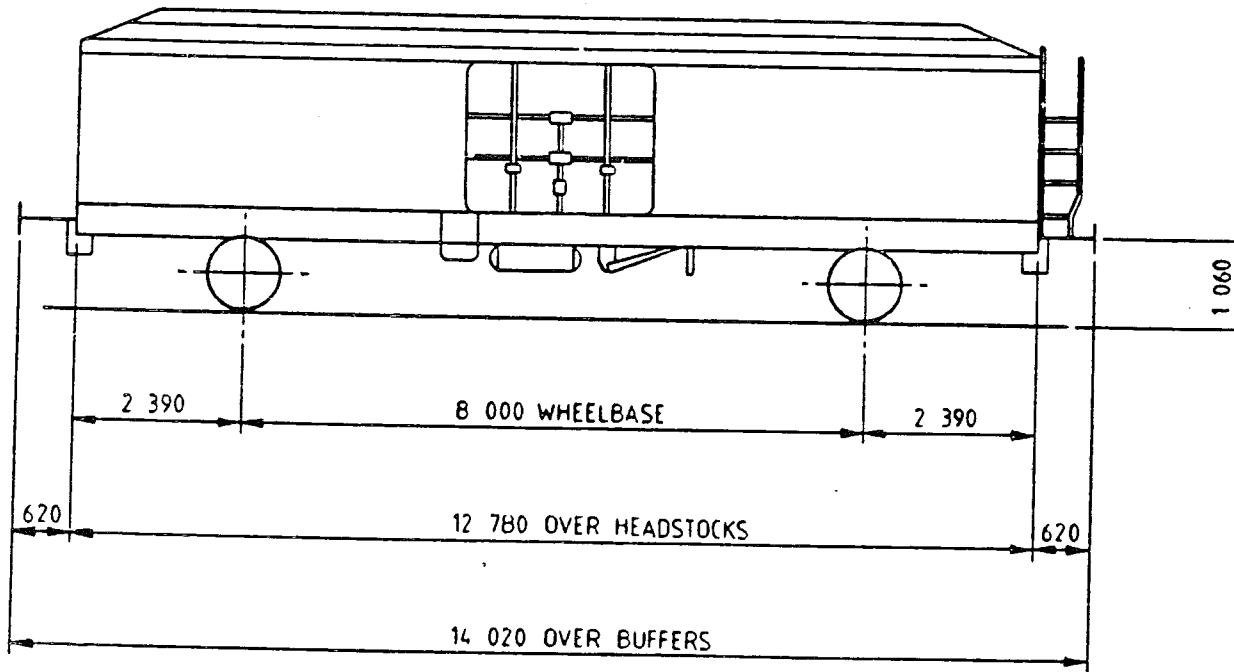
11E 418

No's 741-750

				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	18.5t	22.5t	26.5t			45 mile/h UP TO mile/h ABOVE 40 tonne GLW		14t FORCE UP TO 24t FORCE ABOVE 27t GLW		12	6	
S	18.5t	22.5t	22.5t		CARKND							
					I I X L							

No's 700-740

	A	B	C	D
	19t	23t	27t	
S	19t	23t	23t	



NOTE:-
No's 06 83 8083 700-743
HAVE NO END LADDERS

TARE -	13.3t
CAPACITY, WEIGHT -	SEE ABC PANELS
CAPACITY, VOLUME -	51m ³
FLOOR AREA -	26.5m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	56

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	
WHEELS -	P10 PROFILES
JOURNALS -	

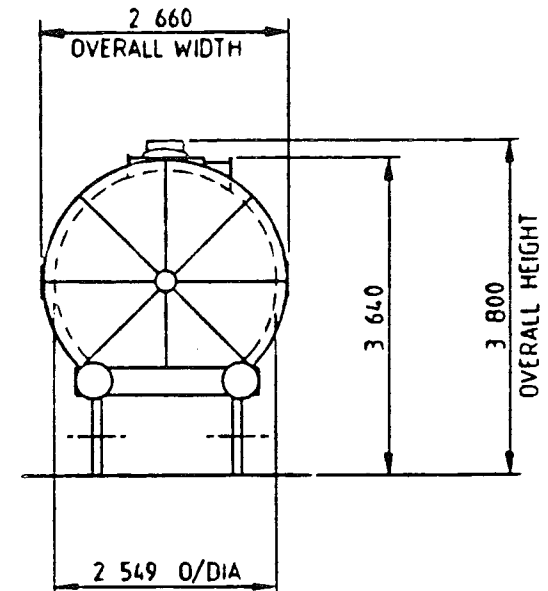
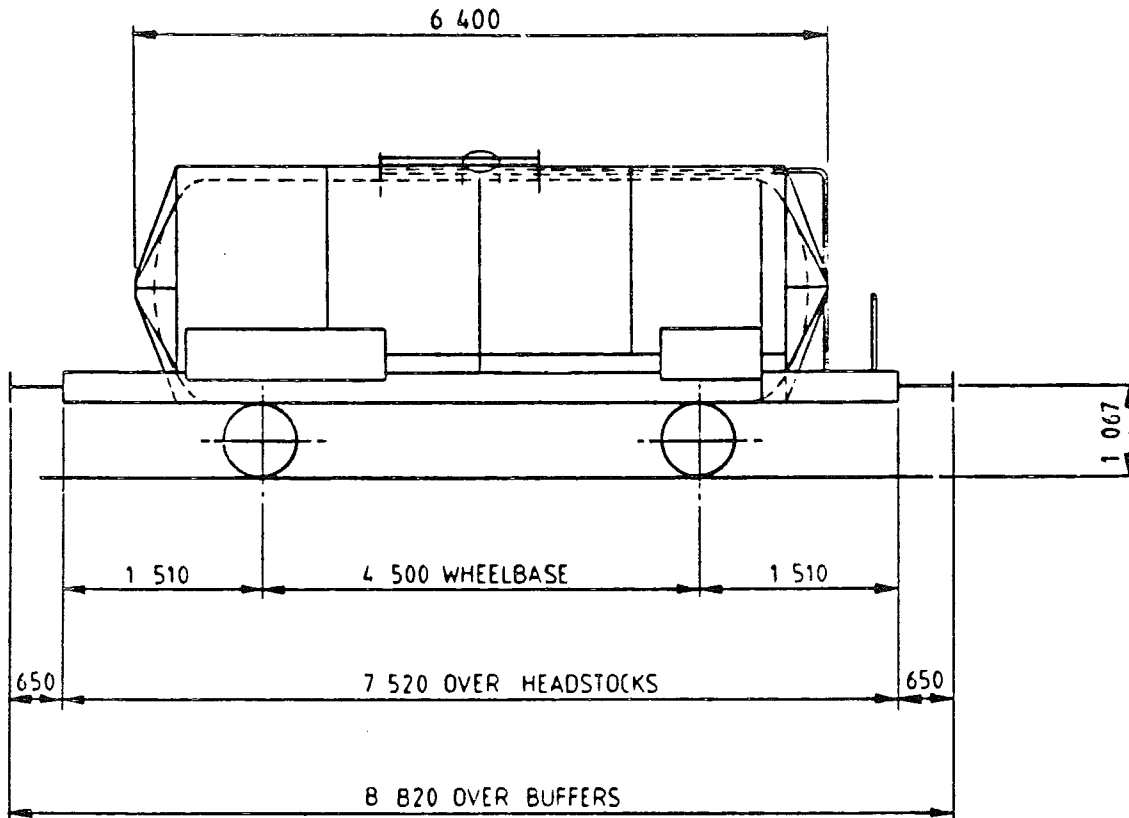
TYPE -	Ibfggps
WAGON No. -	06 83 8083 700-750
BUILDER -	SNIA VISCOSA
OWNER -	TRANSFESA

ISSUE 1

40t GLW TANK WAGON

ICE. 425

				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20t	24t	28t			60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW		8t FORCE UP TO 26t FORCE ABOVE 32t GLW		4	6	
S	20t	24t	28t		CARKND							
					I C B B							



TARE -	12t
CAPACITY, WEIGHT-	28t
CAPACITY, VOLUME-	30m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	W 72

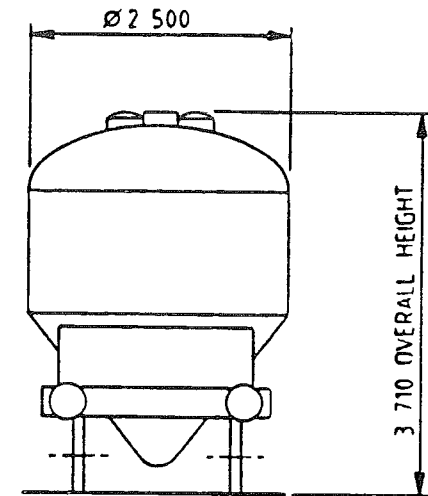
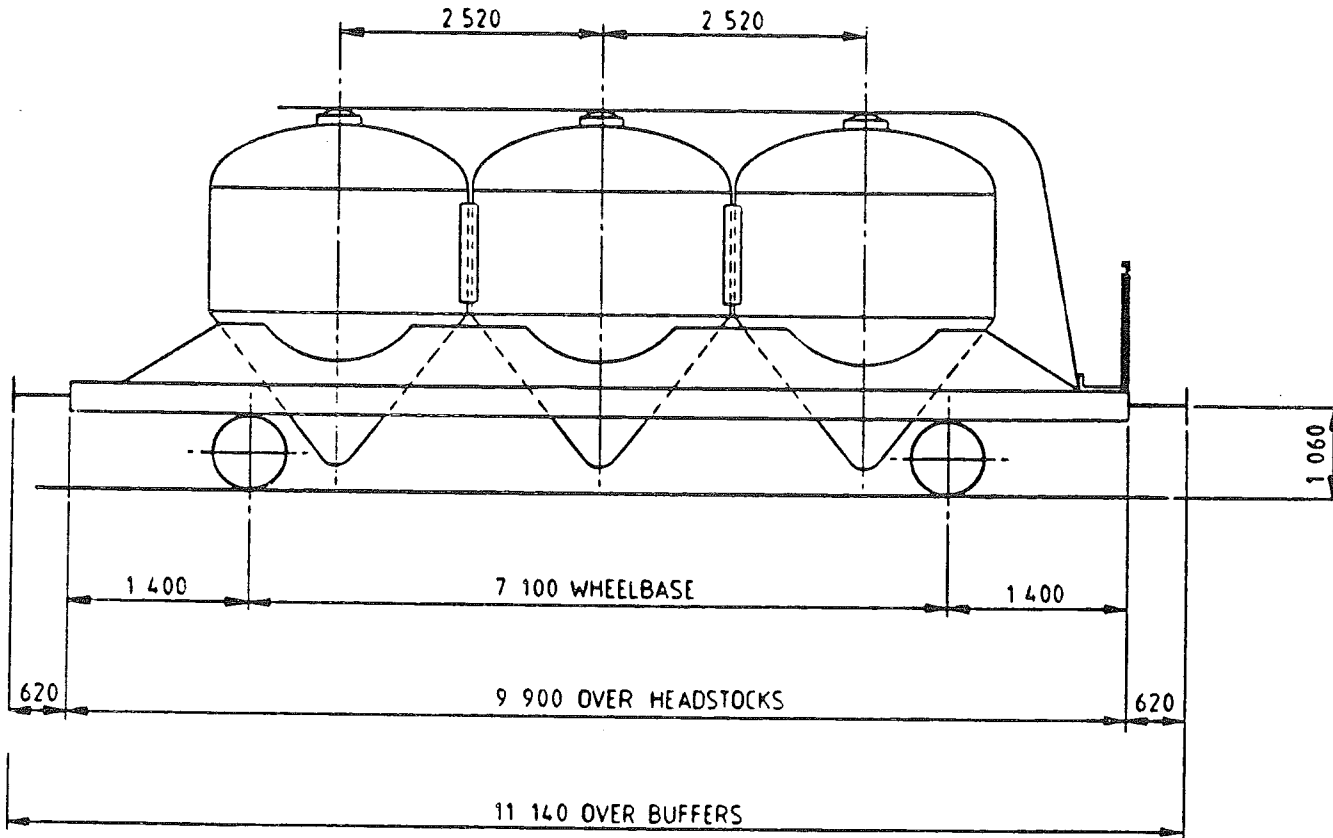
BRAKE -	AIR & VACUUM THROUGH PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC HD Ø 380
WHEELS -	Ø 1 000
JOURNALS -	Ø 130

TYPE -	Zefkks
WAGON No. -	23 88 7499 001, 004, 005, 007, 008, 009, 010
BUILDER -	S.A.T.I. ANTWERP
OWNER -	CIE AUXILIARE I.B.

40t GLW SILO WAGON

IPE 426

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	17-2†	21-2†	25-2†			60 mile/h UP TO 50 mile/h ABOVE		36 tonne GLW		8	6	
S	17-2†	21-2†	25-2†		CARKND			7† FORCE UP TO 18† FORCE ABOVE				
					I P B J			23† GLW				



TARE -	14.81
CAPACITY, WEIGHT-	25.2†
CAPACITY, VOLUME-	33 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	100824

BRAKE -	AIR & VACUUM THROUGH PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	TYPE U
WHEELS -	Ø 1 000
JOURNALS -	Ø 130

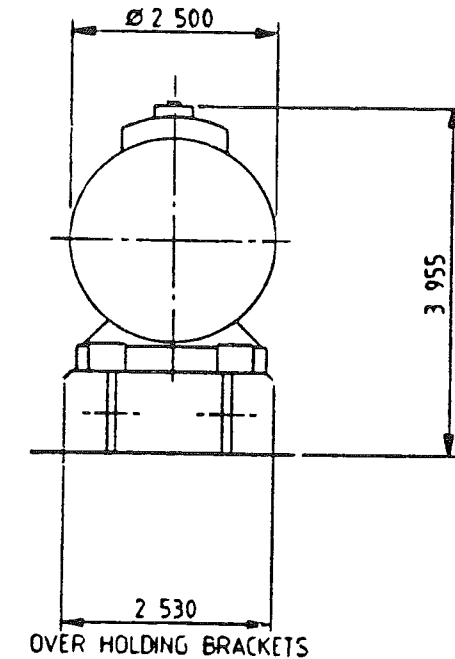
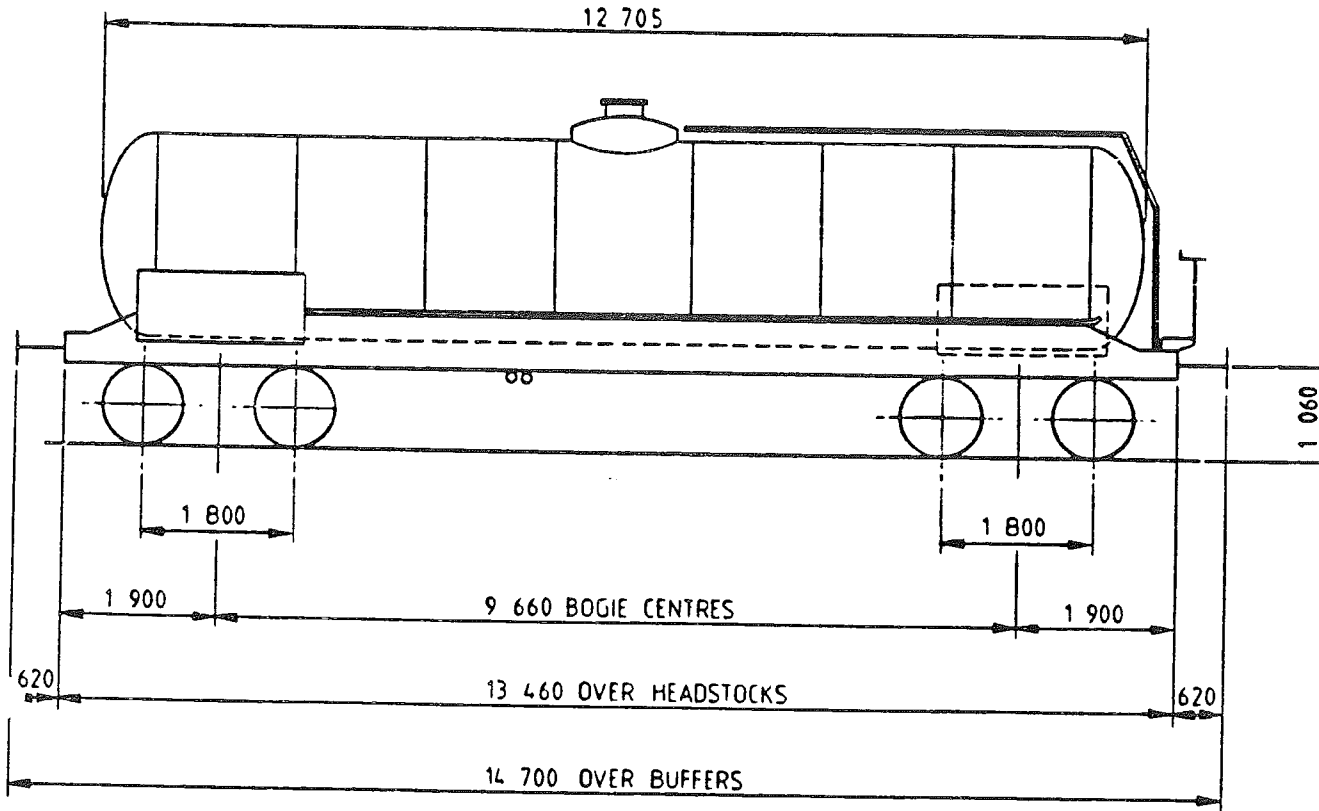
TYPE -	Ucfs
WAGON No. -	23 87 9152 000
BUILDER -	FAUVET-GIREL
OWNER -	SOTRANPA-WILLYNCK

ISSUE 1

80t GLW BOGIE TANK

ICE 428

		A	B	C	D	TOPS INFORMATION							
		44.5t	51.5t	60.5t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 3	RA (GLW) 6	DESIGN SHEET
S		44.5t	51.5t	60.5t		CARKND	60 mile/h UP TO mile/h ABOVE 80 tonne GLW		12t FORCE UP TO 36t FORCE ABOVE 40t GLW				
						I	C	B	B				



TARE -	19.5t
CAPACITY, WEIGHT -	60.5t
CAPACITY, VOLUME -	60m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	107467

BRAKE -	AIR; VACUUM THROUGH PIPE
SUSPENSION -	Y25 CS2 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	U5 HYDRAULIC 450-340 HD
WHEELS -	$\varnothing 920$
JOURNALS -	$\varnothing 130$

TYPE -	Zafs
WAGON No. -	33 87 7890 555-564
BUILDER -	FAUVET-GIREL
OWNER -	ERMEFER, GENEVA

ISSUE 1

80t GLW BOGIE TANK

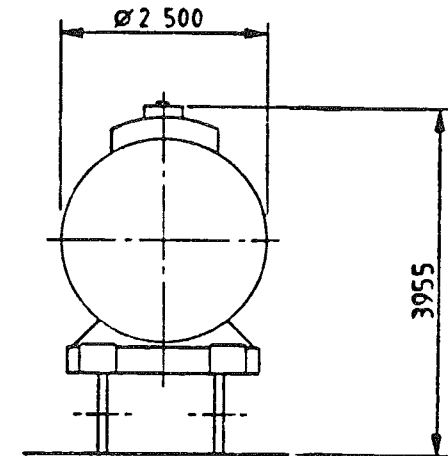
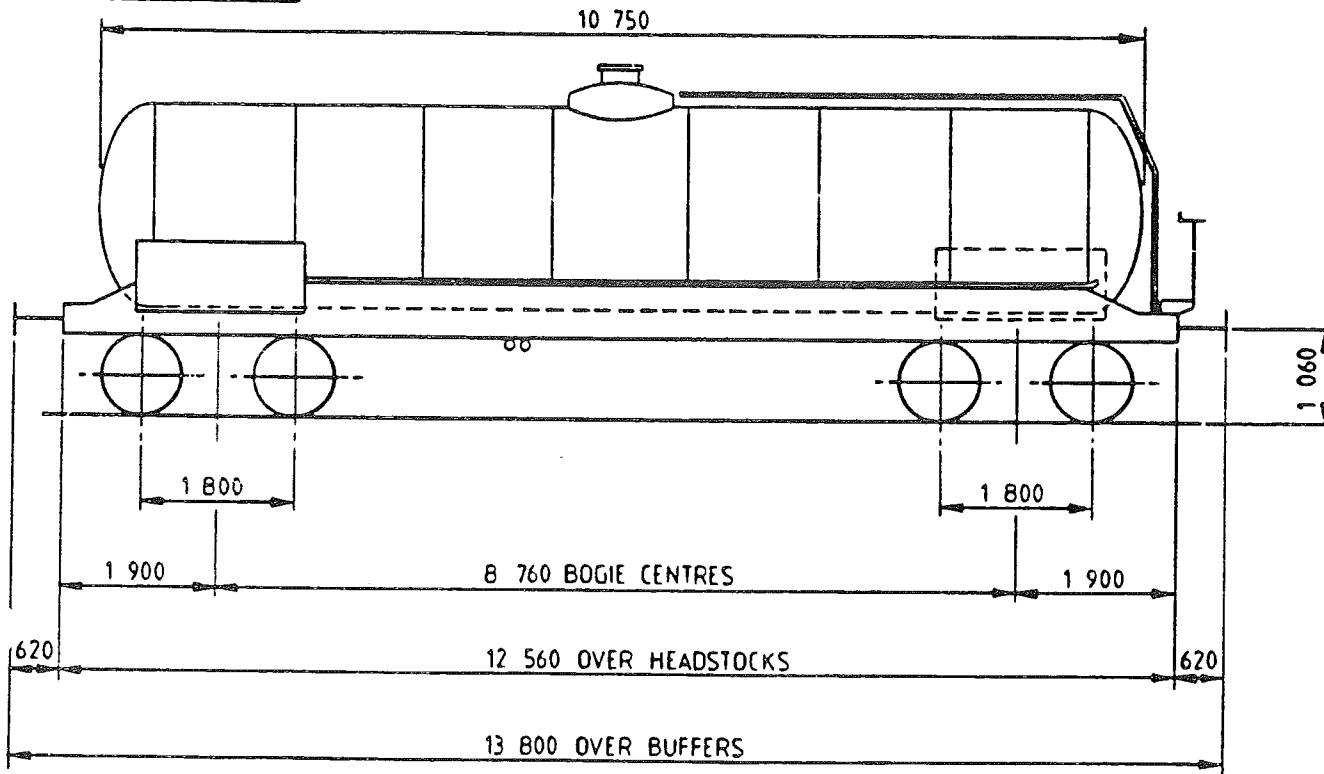
ICE 429

No's 565-584
EXCEPT THOSE BELOW

				TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	DESIGN SHEET	
	45:3t	53:3t	61:3t			60 mile/h UP TO mile/h ABOVE	80 tonne GLW	12t FORCE UP TO 36t FORCE ABOVE	45t GLW	2	5
S	45:3t	53:3t	61:3t		CARKND						
					I C E B						

No's 565, 571, 574

	A	B	C	D
	45:2t	53:2t	53:2t	
S	45:2t	53:2t	53:2t	



TARE -	18.7t
CAPACITY, WEIGHT -	61.3t
CAPACITY, VOLUME -	50.6 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRG. DRG. No. -	107398

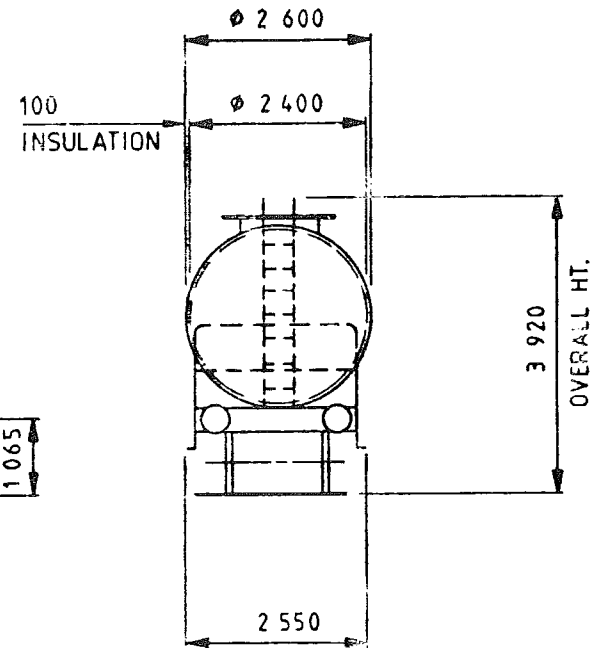
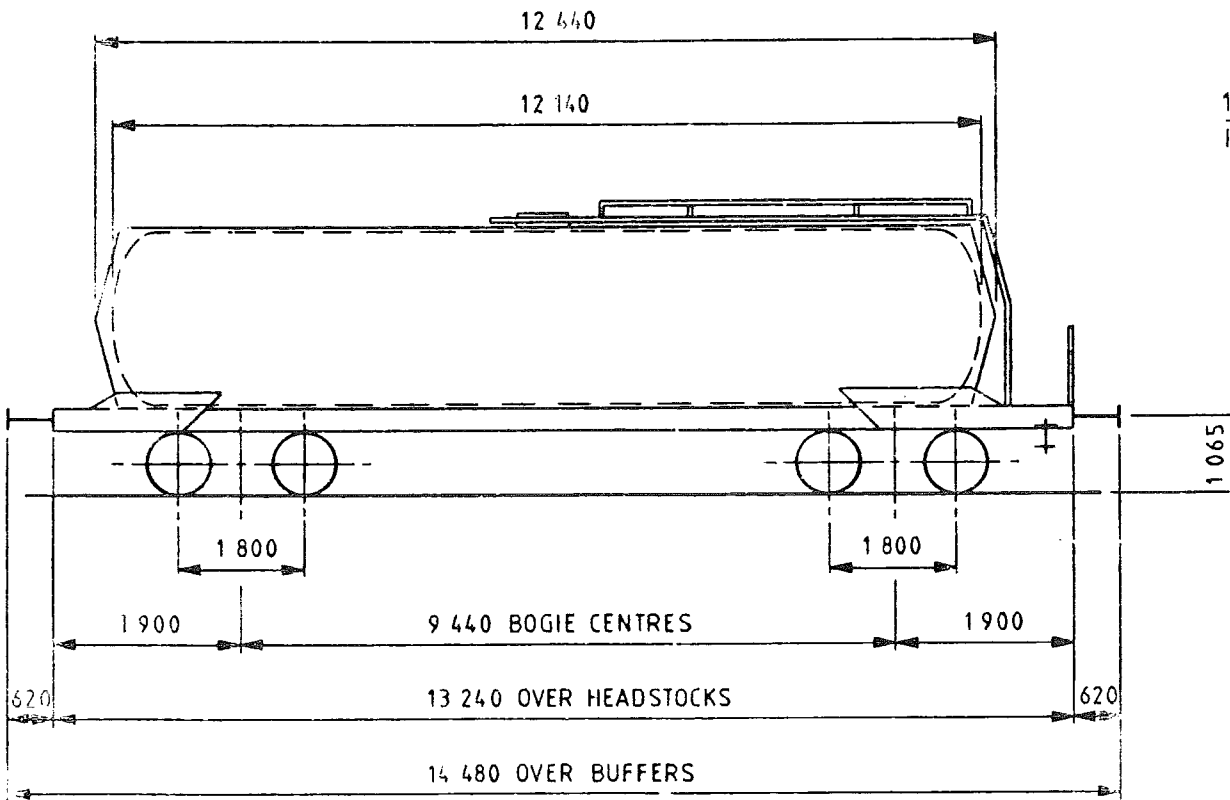
BRAKE -	AIR; VACUUM THROUGH PIPE
SUSPENSION -	Y 25 CS2 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	U5 HYDRAULIC 450 = 340 HD
WHEELS -	$\varnothing 920$
JOURNALS -	$\varnothing 130$

TYPE -	Zafs
WAGON No. -	33 87 7890 565-584 SEE 'ABC' PANELS
BUILDER -	FAUVEY - GIREL
OWNER -	ERMEWA

80 t GLW BOGIE TANK

ICE 432

				TOPS INFORMATION							
90	44 t	52 t	60 t	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	44 t	52 t	60 t	CARKND	60 mile/h UP TO	72 tonne GLW	13 t FORCE UP TO	40 t GLW	3	6	
				I C B D	50 mile/h ABOVE		36 t FORCE ABOVE				



TARE -	20 t
CAPACITY, WEIGHT -	60 t
CAPACITY, VOLUME -	52 m ³
FLOOR AREA -	
MIN. CURVE -	30 m
GEN. ARRGT. DRG. No. -	10242

BRAKE -	AIR; VAC THROUGH PIPE
SUSPENSION -	
COUPLINGS -	U.I.C.
BUFFERS -	U5,450 x 340 HD
WHEELS -	φ 920
JOURNALS -	φ 130

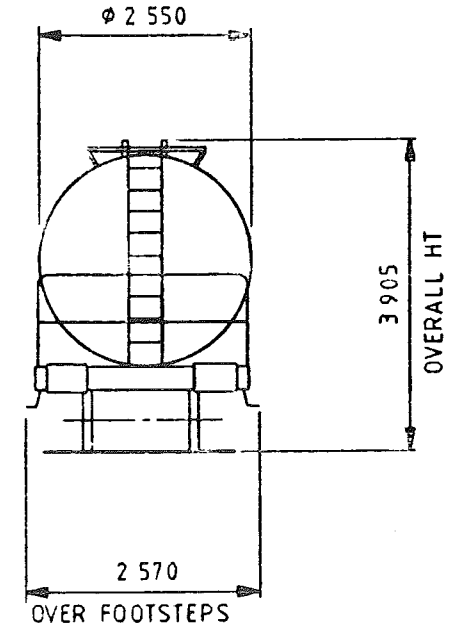
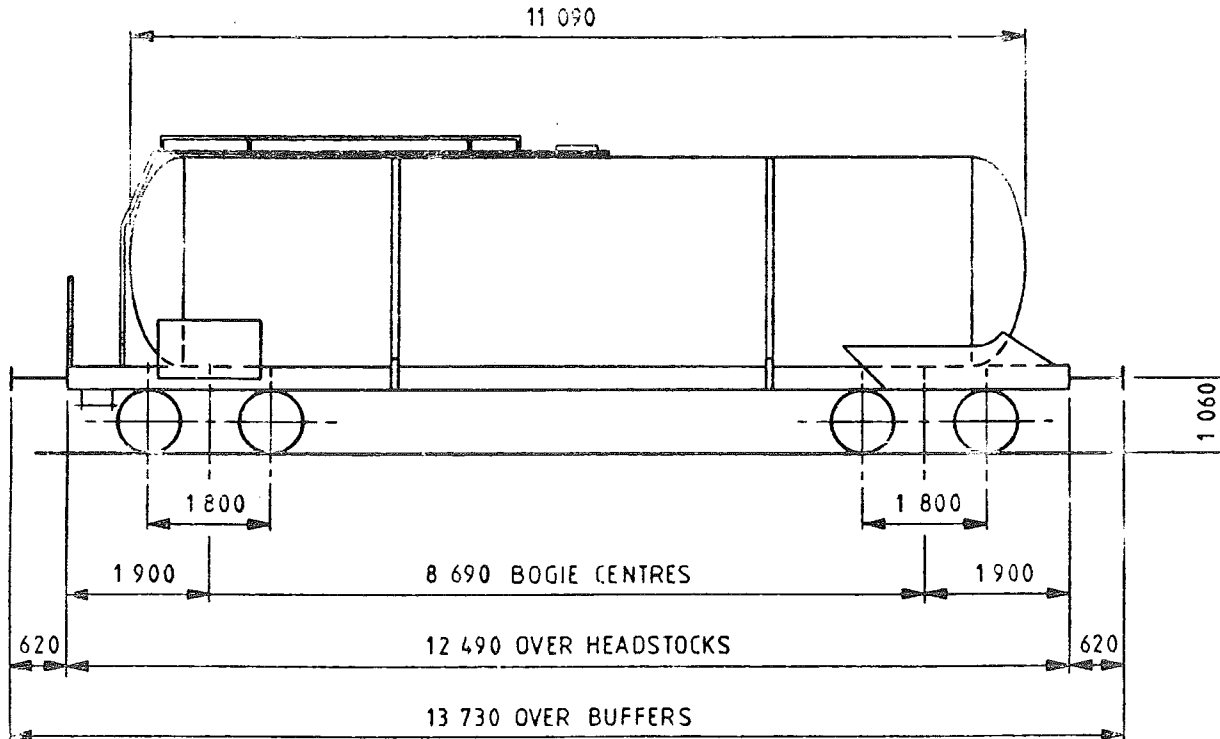
TYPE -	Zafs
WAGON No. -	33 87 7890 613,614,615,616
BUILDER -	C.F.M.F.
OWNER -	TRANSCITERNE, GENEVA

ISSUE 1

80 t GLW BOGIE TANK

ICE 440

TOPS INFORMATION												
A	B ₁	B ₂	C		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
465t	512t	545t	625t			60 mile/h UP TO mile/h ABOVE 80 tonne GLW		11 t FORCE UP TO 35 t FORCE ABOVE 38 t GLW		2	6	
S	465t	512t	545t	625t	CARKND	I	C	B	D			



TARE -	17.5 t
CAPACITY, WEIGHT-	62.5 t
CAPACITY, VOLUME-	54.5 m ³
FLOOR AREA -	
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	1.1.0.660

BRAKE -	AIR; VAC THROUGH PIPE
SUSPENSION -	Y25 CS2
COUPLINGS -	U.I.C.
BUFFERS -	U5; 450 x 340 HD
WHEELS -	φ 920
JOURNALS -	φ 130

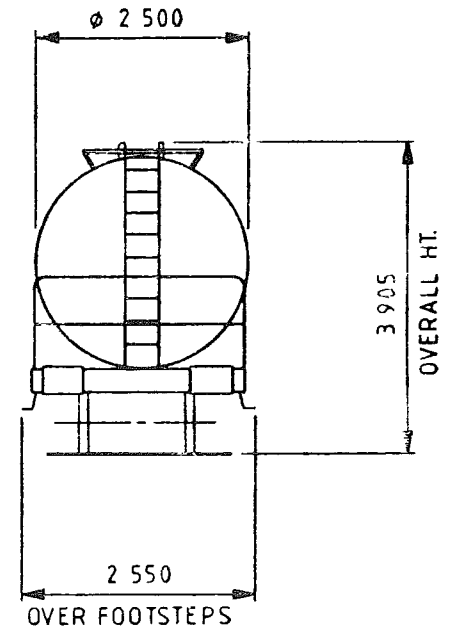
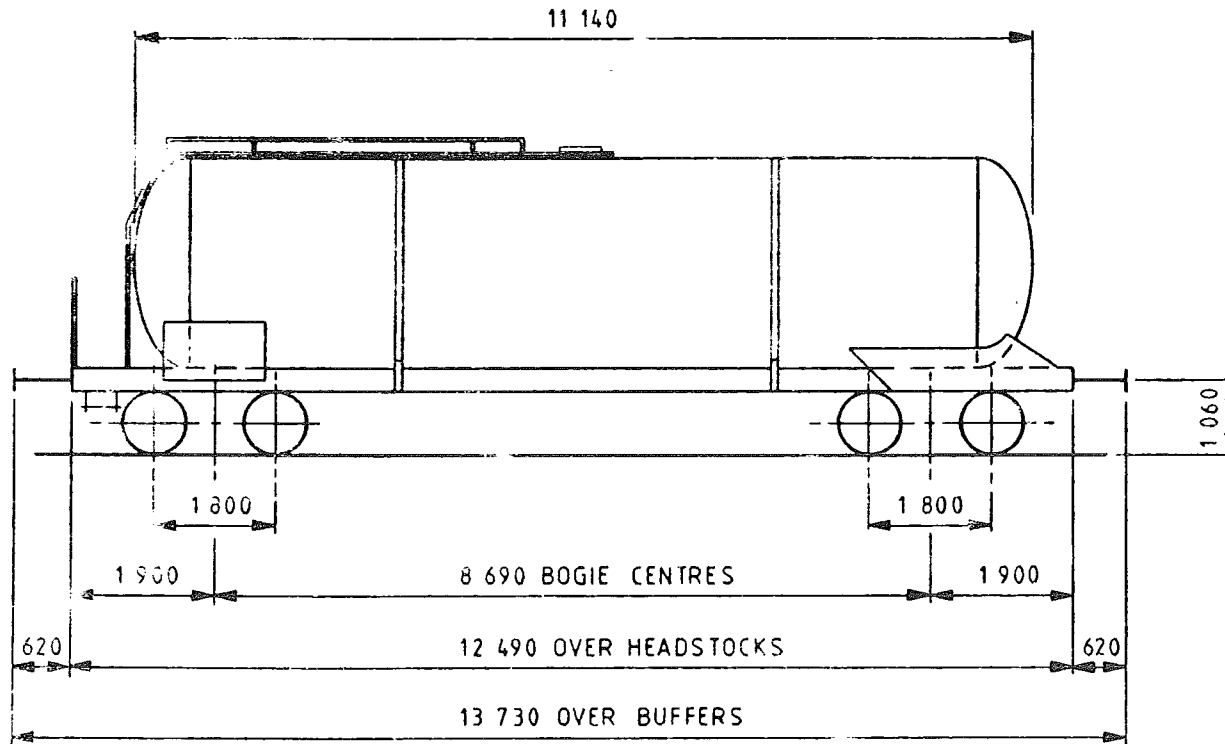
TYPE -	Uafhs
WAGON No.-	33 87 7890 599 - 610
BUILDER -	C. F. M. F.
OWNER -	FERT & Co

ISSUE 1

80 t GLW BOGIE TANK

ICE 441

TOPS INFORMATION													
	A	B ₁	B ₂	C		OPERATING SPEED			BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	45.3t	50t	53.3t	61.3t		60 mile/h UP TO			11 t FORCE UP TO		2	6	
S	45.3t	50t	53.3t	61.3t		mile/h ABOVE 80 tonne GLW			35 t FORCE ABOVE				
						I	C	B	C				



TARE -	18.7 t
CAPACITY, WEIGHT-	61.3 t
CAPACITY, VOLUME-	52.2 m ³
FLOOR AREA -	
MIT. CURVE -	35 m
GEN. ARRGT. DRG. No.-	1-4-0648

BRAKE -	AIR; VACUUM THROUGH PIPE
SUSPENSION -	Y25 CS2 BOGIE
COUPLINGS -	UIC.
BUFFERS -	US; 450 x 340 HD.
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

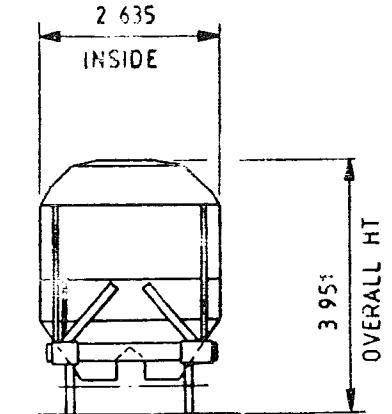
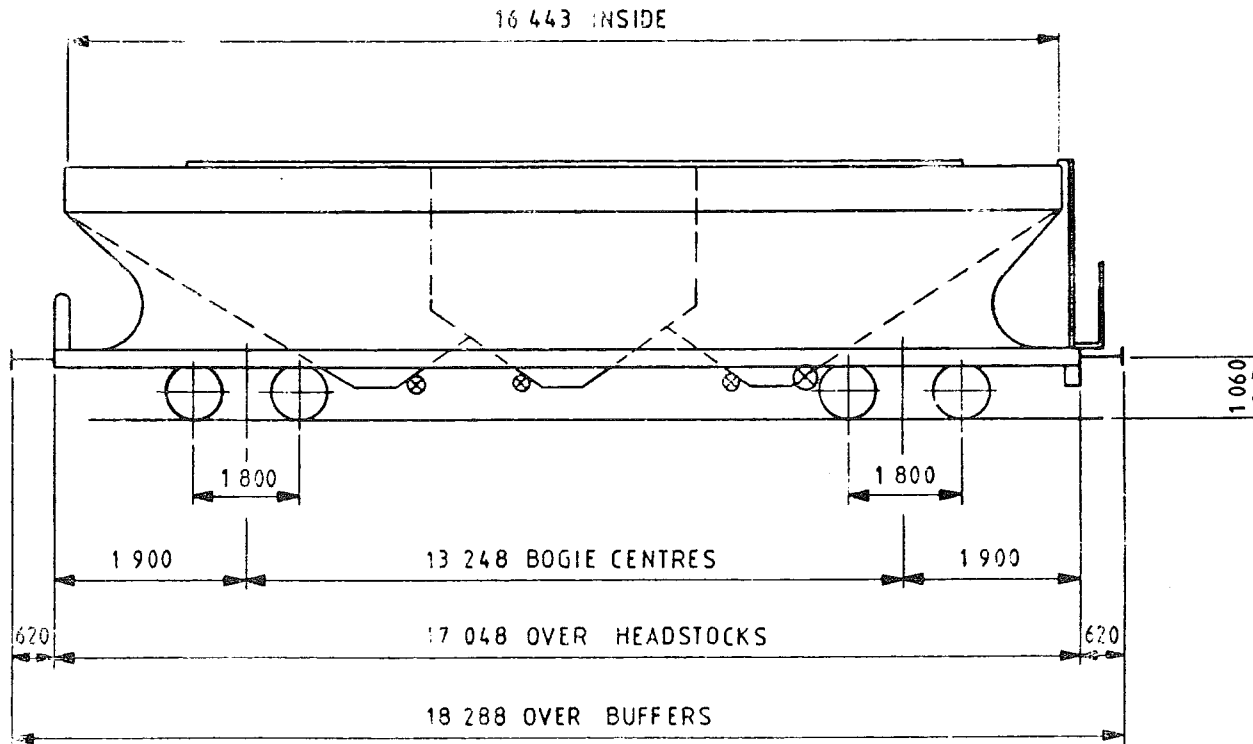
TYPE -	Uafhs
WAGON No. -	33 87 7890 611,612
BUILDER -	C.F.M.F.
OWNER -	FERT & Co.

ISSUE 1

80t GLW BOGIE HOPPER

IPE 442

					TOPS INFORMATION					
	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	43t	51t	59t			60 mile/h UP TO 80 tonne GLW	14t FORCE UP TO 40t GLW	9	6	
S	43t	51t	59t		CARKND	60 mile/h UP TO 80 tonne GLW	36t FORCE ABOVE			
					I P B H					



TARE -	21t
CAPACITY, WEIGHT-	59t
CAPACITY, VOLUME-	95m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	10 7280

BRAKE -	AIR: VACUUM THROUGH PIPE
SUSPENSION -	Y 25 C BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	U5 105 STROKE 440x350 HD
WHEELS -	ø920
JOURNALS -	ø130

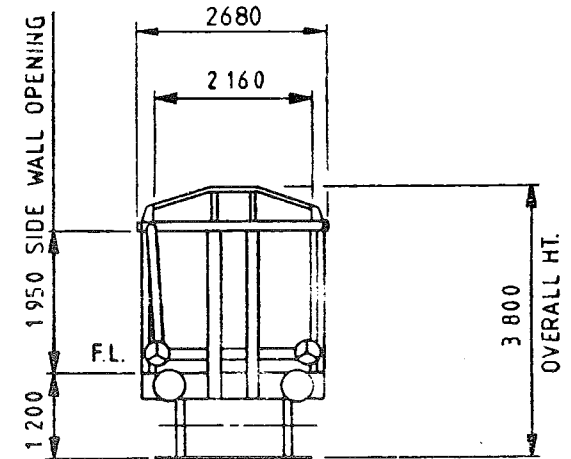
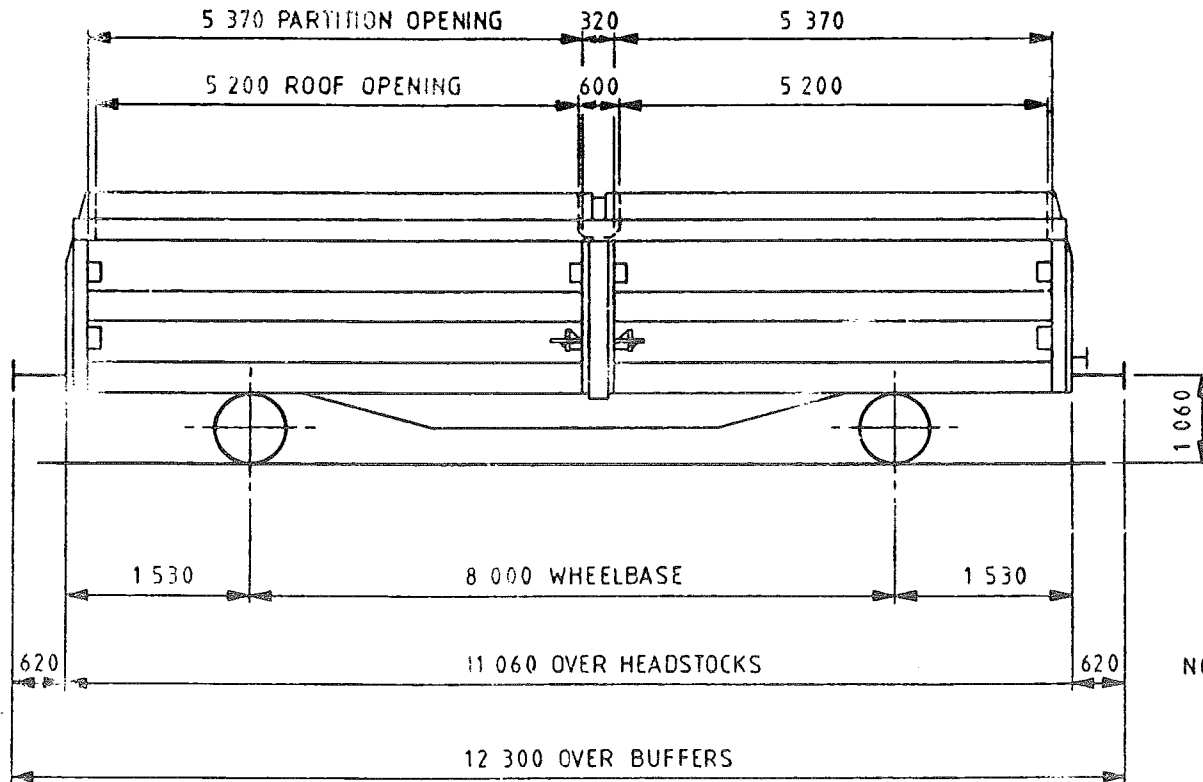
TYPE -	Uafs
WAGON No. -	100-110 33 88 9380 010-053 (not incl)
BUILDER -	FAUVET-GIREL
OWNER -	S.N.Y. KREVINO, CITA SA.

ISSUE 1

40 t GLW 2 AXLE COVERED WAGON

IPE 443

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	18†	22†	26†			60	mile/h UP TO	12 † FORCE UP TO		10	6	
S	18†	22†	22†		CARKND	50	mile/h ABOVE	21 † FORCE ABOVE	27 † GLW			
					I P B L							



NOTE.
SLIDING WALLS AND ROOF

TARE -	14 †
CAPACITY, WEIGHT-	26 †
CAPACITY, VOLUME-	48.4 m ³
FLOOR AREA -	24.2 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	8AZ 125 0031

BRAKE -	AIR; VACUUM THROUGH PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RING FEDER ϕ 440
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

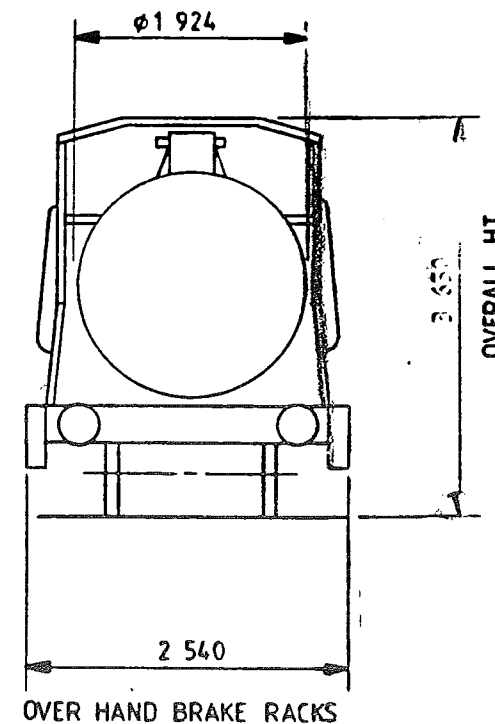
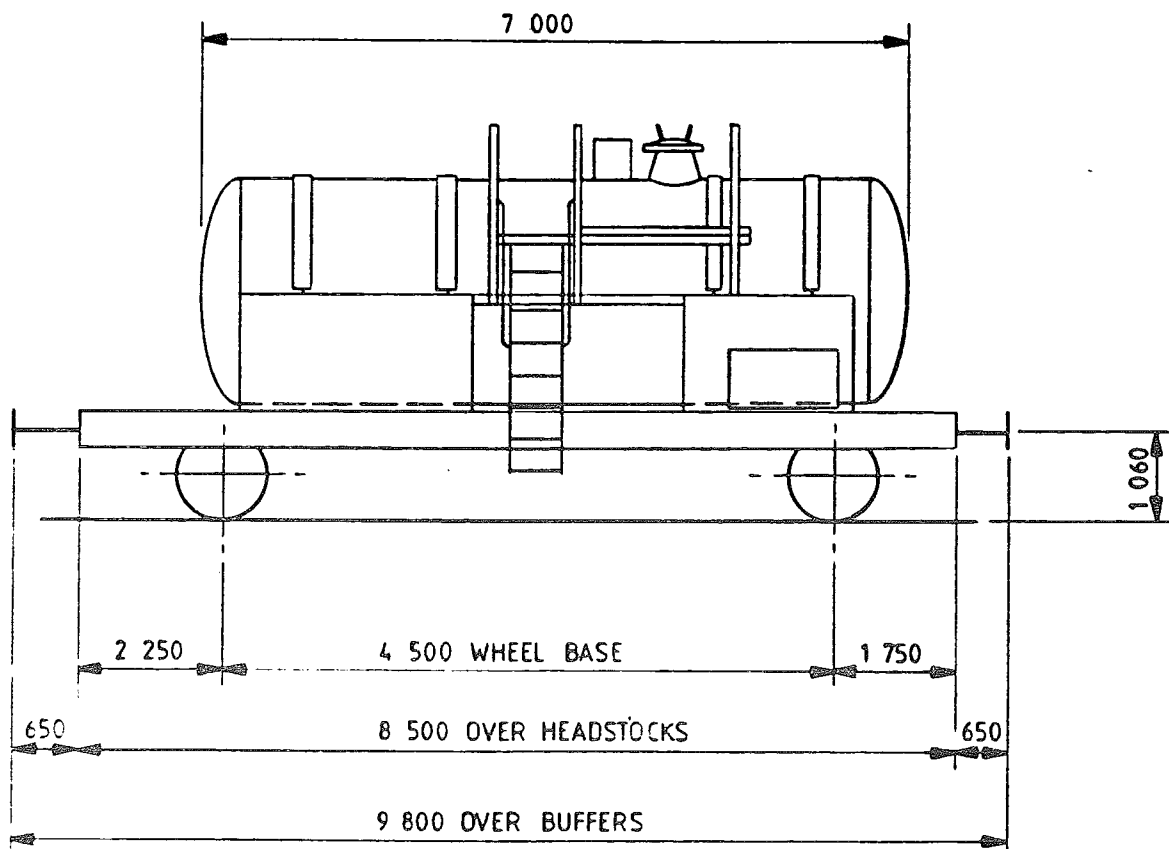
TYPE -	Tfikks
WAGON No. -	23 80 5798 000 - 002
BUILDER -	WAGGON UNION
OWNER -	DEGUSSA

ISSUE 1

40t. GLW. 2 AXLE TANK

ICE 444

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20.5t	24.5t	28.5t		CARKND	60 mile/h UP TO 50 mile/h ABOVE 40 tonne GLW		5t. FORCE UP TO 18t. FORCE ABOVE 23t. GLW		4	6	
S	20.5t	24.5t	24.5t		I	C	B	B				



TARE -	11t
CAPACITY, WEIGHT -	28.5t
CAPACITY, VOLUME -	20m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	BJ.1053

BRAKE -	AIR & VAC THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1m
JOURNALS -	ϕ 130

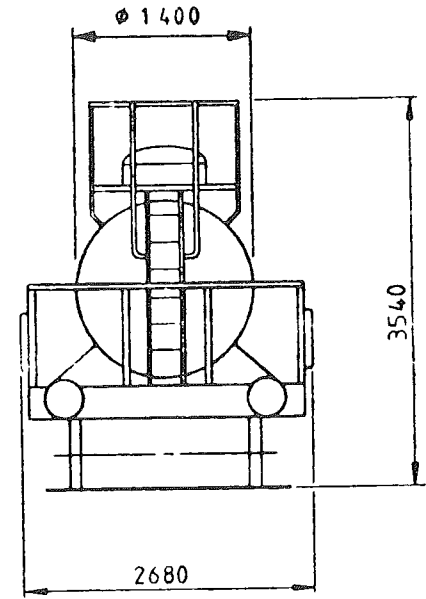
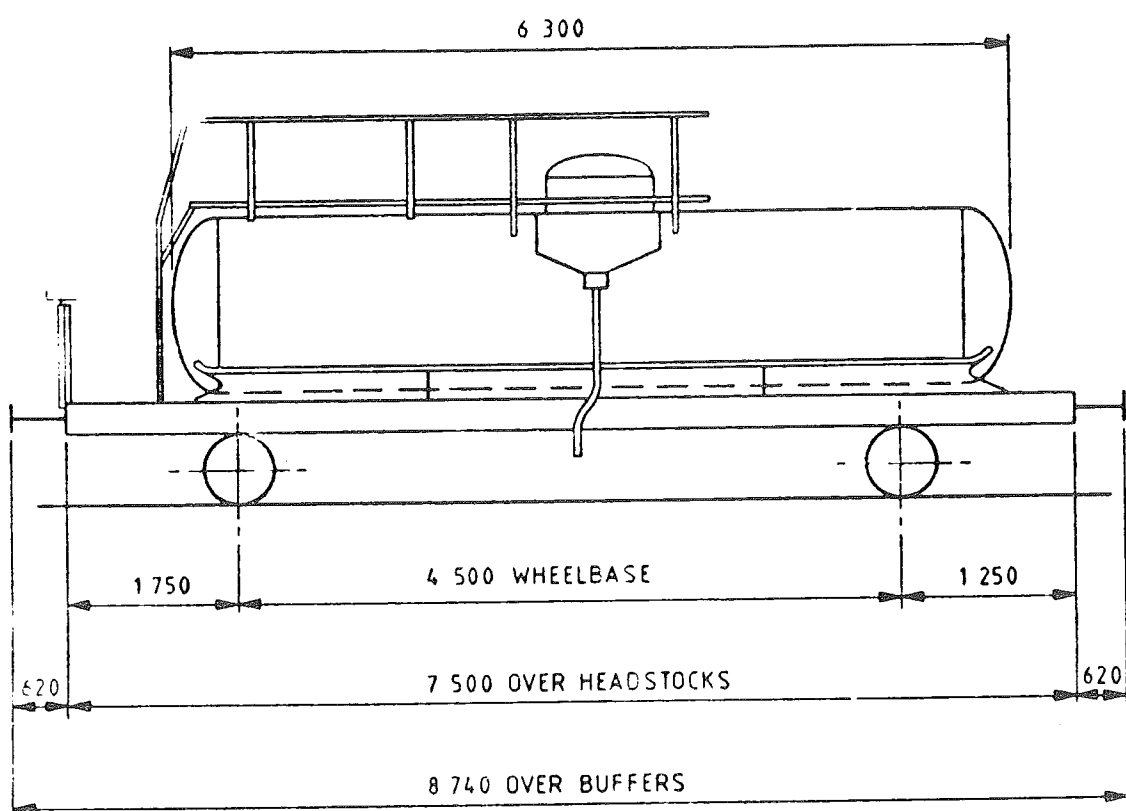
TYPE -	Zefs
WAGON No. -	23 80 7397 401
BUILDER -	B.A.S.F.
OWNER -	BADISCHE ANILIN & SODA FABRIK

ISSUE 1

40 t GLW TANK WAGON

ICE 445

					TOPS INFORMATION					
A	B	C	D		AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
17t	21t	25t				00 mile/h UP TO	11t FORCE UP TO	4	6	
5	17t	21t	25t			mile/h ABOVE 40 tonne GLW	21t FORCE ABOVE 26t GLW			
					I	C	B	B		



TARE -	15 t
CAPACITY, WEIGHT -	25 t
CAPACITY, VOLUME -	8.7 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	W 1878

BRAKE -	AIR, VACUUM THROUGH PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RING FEDER ϕ 370 HD
WHEELS -	ϕ 940
JOURNALS -	ϕ 130

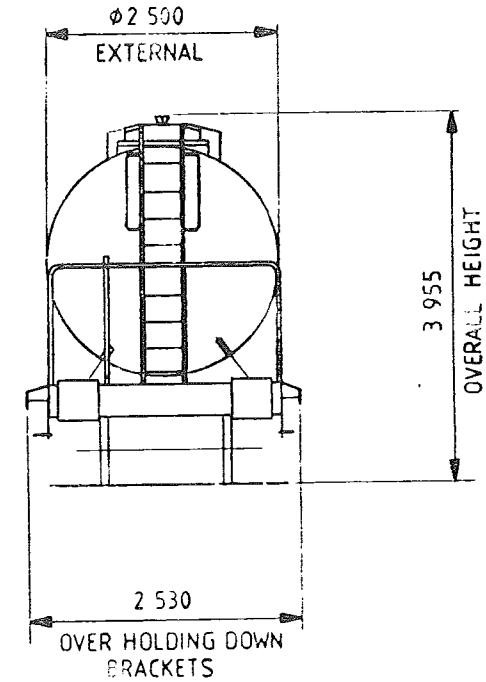
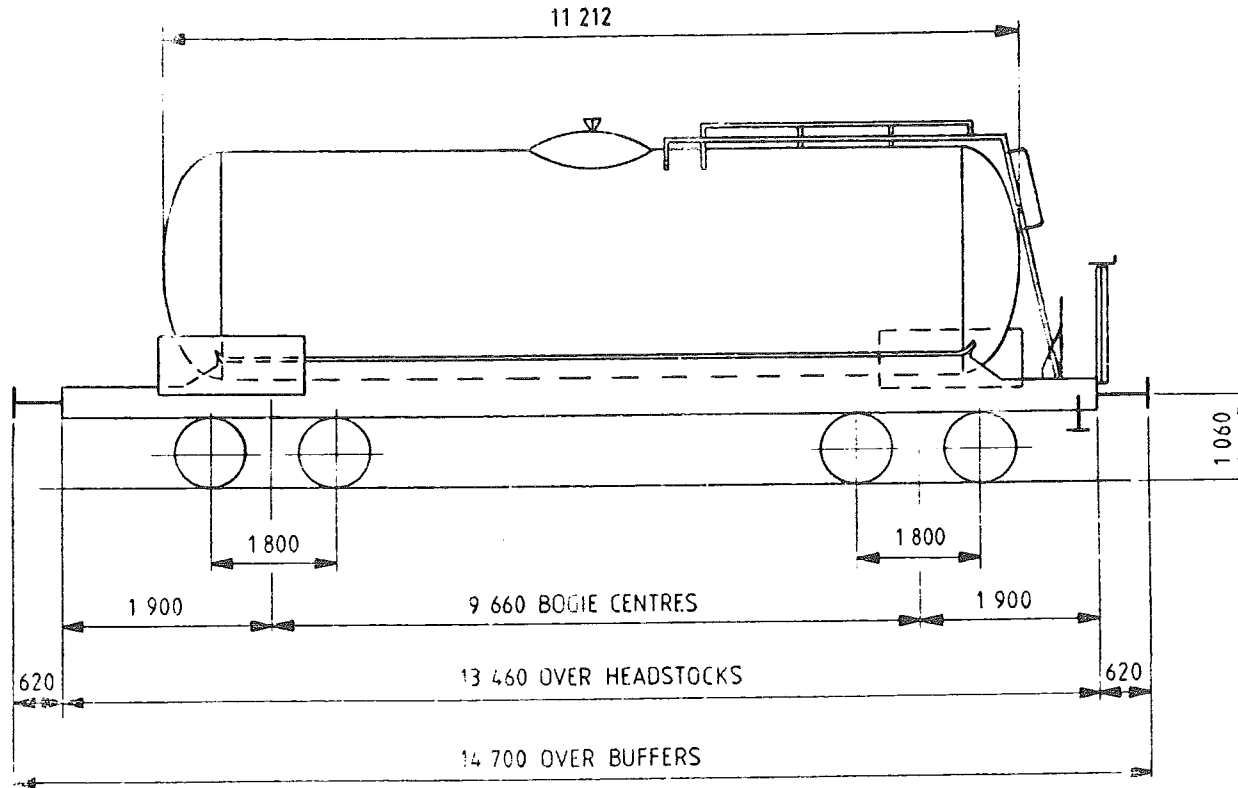
TYPE -	Zcefkks
WAGON No. -	23 70 7498 005, 008, 009 063, 064, 065
BUILDER -	FRANZ KAMINSKI
OWNER -	V.T.G.

ISSUE 1

80t GLW BOGIE TANK

ICE 446

				TOPS INFORMATION					
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
45-6t	53-6t	61-6t			60 mile/h UP TO 80 tonne GLW	12t FORCE UP TO 40t GLW 36t FORCE ABOVE	3	5	-
S	45-6t	53-6t	61-6t	CARKND					
				I C B B					



TARE -	18.4t
CAPACITY, WEIGHT-	61.6t
CAPACITY, VOLUME-	53 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	107699

BRAKE -	AIR, VACUUM THROUGH PIPE
SUSPENSION -	Y 25 CS 2 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	US HYDRAULIC 450 x 340 HD
WHEELS -	Ø 920
JOURNALS -	Ø 130

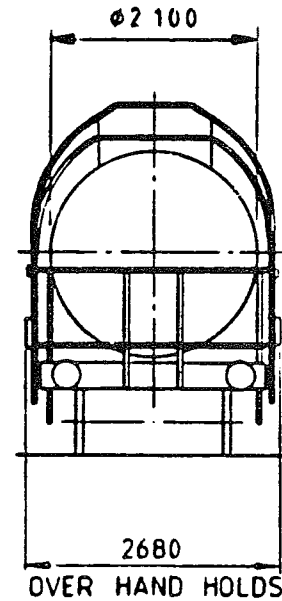
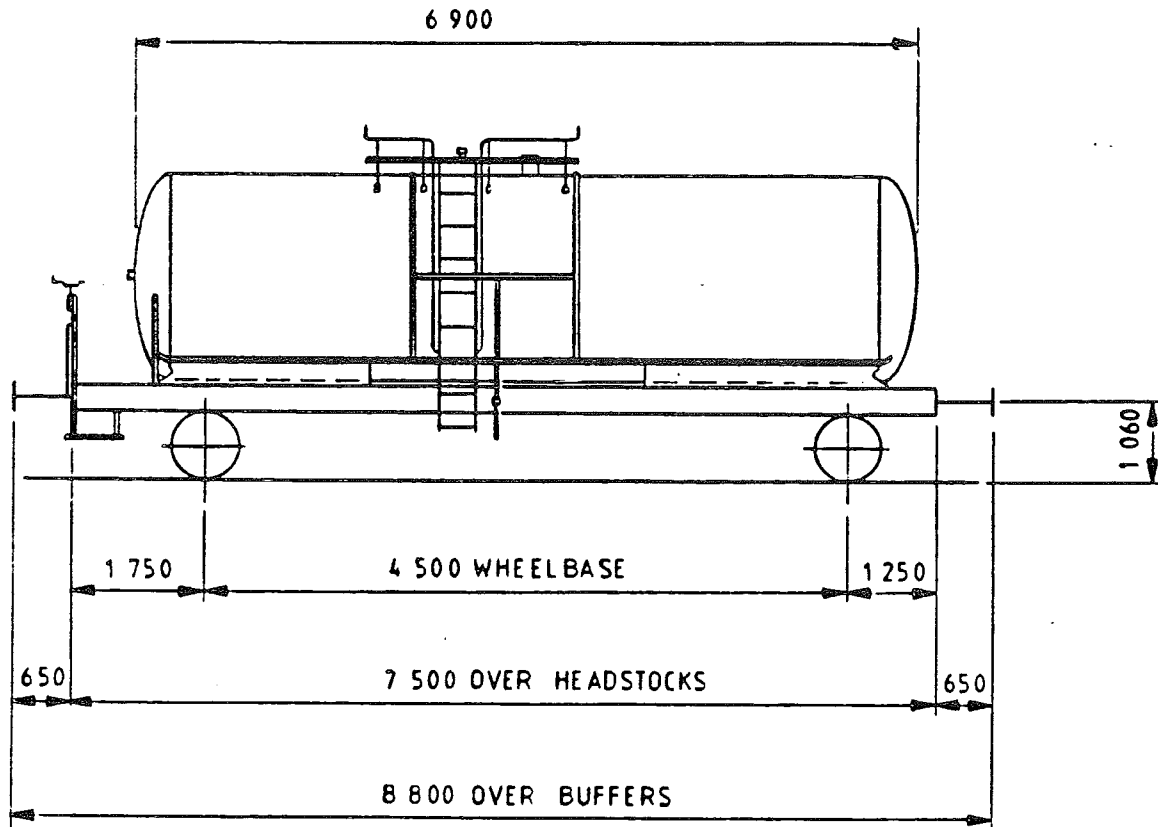
TYPE -	Zafs
WAGON No. -	33 87 7890 520-554 - ERMEWA 33 87 7890 589-598 - FERT
BUILDER -	FAUVET - GIREL
OWNER -	SEE NUMBER

ISSUE 1

40t GLW 2 AXLE TANK

ICE447

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20.9t	24.9t	28.9t		CARKND	60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW		81 FORCE UP TO 21t FORCE ABOVE 26t GLW		4	6	
S	20.9t	24.9t	24.9t		I	C	B	B				



TARE -	11.1t
CAPACITY, WEIGHT-	26.9t
CAPACITY, VOLUME-	22 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	W1882

BRAKE -	AIR; VACUUM THRO PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 940
JOURNALS -	ϕ 130

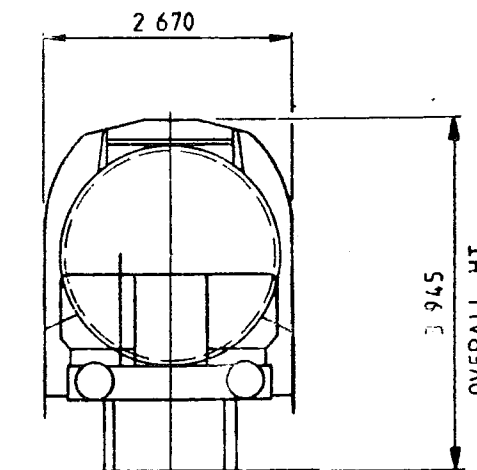
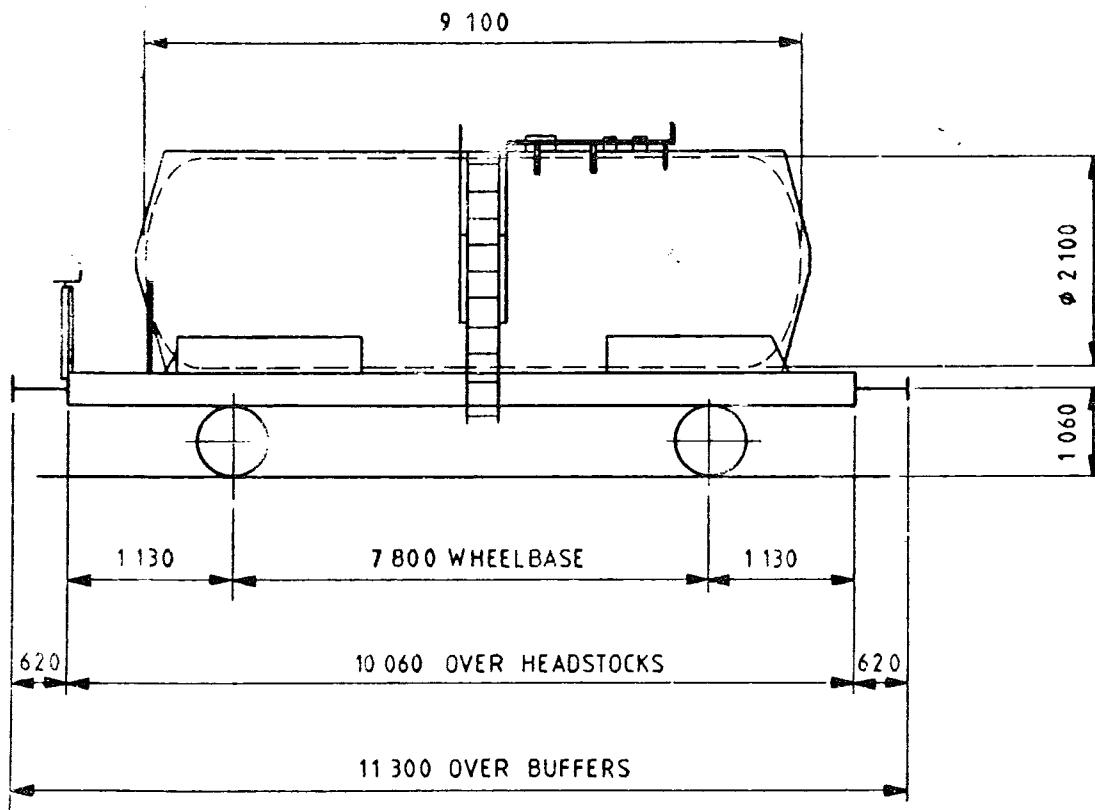
TYPE -	Z cfs
WAGON No. -	23 80 7391 047, 048
BUILDER -	KAMINSKI HAMELN
OWNER -	V T G

ISSUE 1

40t GLW TANK WAGON

ICE 451

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
18-6t	22-6t	26-6t				60 mile/h UP TO mile/h ABOVE	40 tonne GLW	9t FORCE UP TO 21t FORCE ABOVE	25t GLW	8	6	
S	18-6t	22-6t	26-6t		CARKND							
					I C B B							



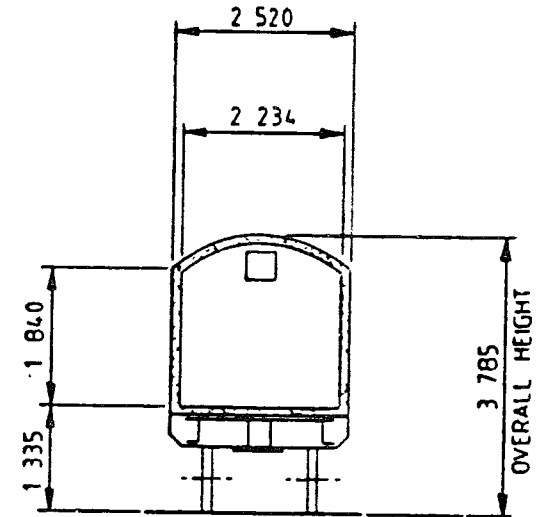
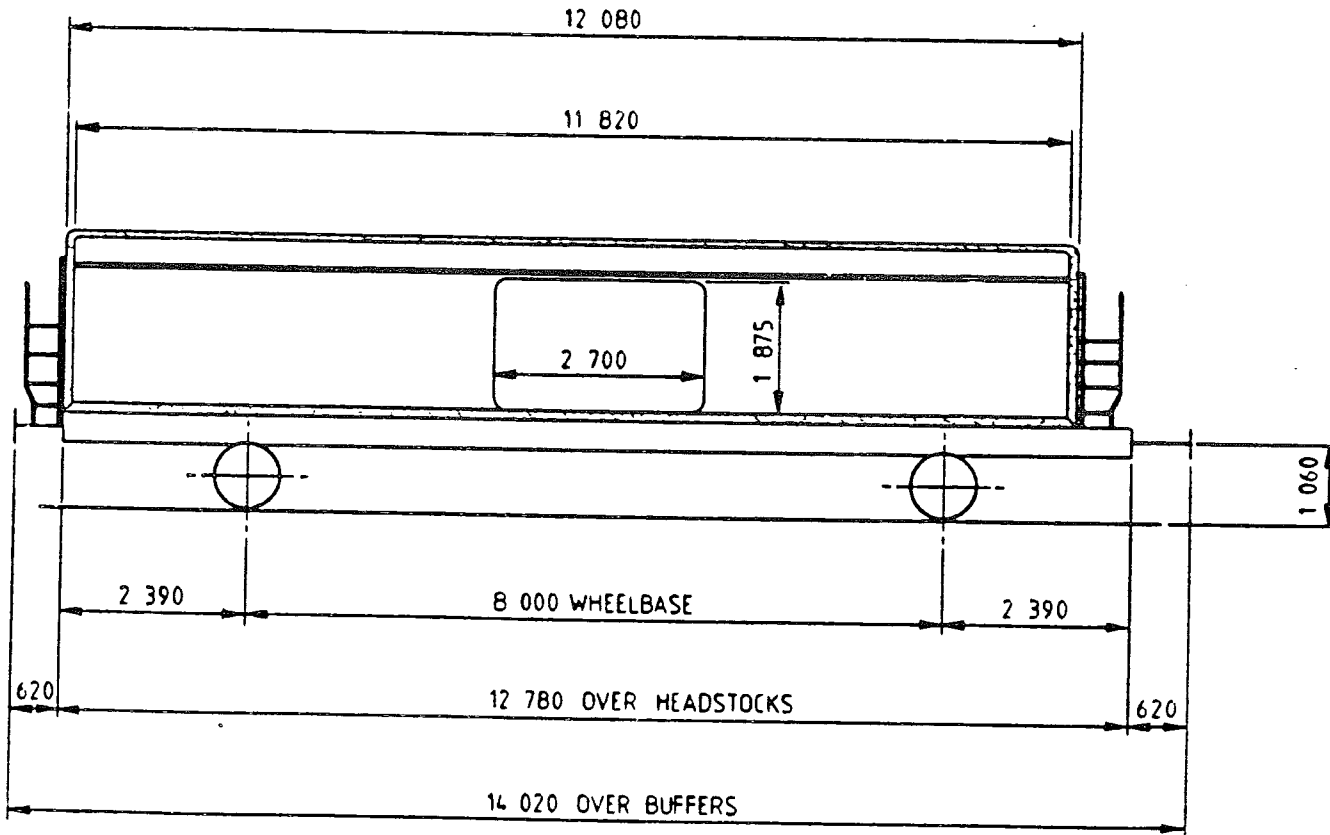
TARE -	13.4t
CAPACITY, WEIGHT-	26.6t
CAPACITY, VOLUME-	30 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRG. DRG. No.-	1.13494.0.01

BRAKE -	AIR.VACUUM THROUGH PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER ϕ 370
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

TYPE -	Z cefs
WAGON No. -	23 80 7398 027-036
BUILDER -	LINKE-HOFMANN-BUSCH
OWNER -	V.T.G

ISSUE 1

	A	B	C	D	TOPS INFORMATION							
	16t	20t	20t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	16t	20t	20t		CARKND	60 mile/h UP TO mile/h ABOVE 36 tonne GLW		8t FORCE UP TO 15t FORCE ABOVE		12	5	
					I I X L							



TARE -	16t
CAPACITY, WEIGHT-	20t
CAPACITY, VOLUME-	46m ³
FLOOR AREA -	25m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	2485

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	∅ 470 HD
WHEELS -	∅ 1 000
JOURNALS -	∅ 130

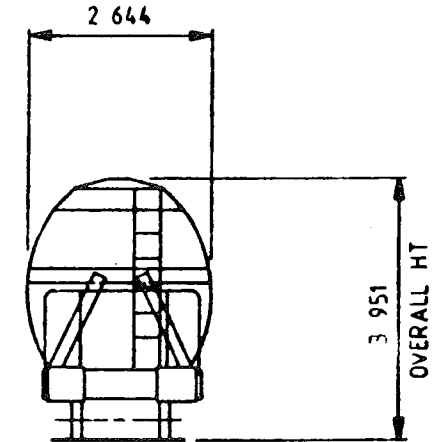
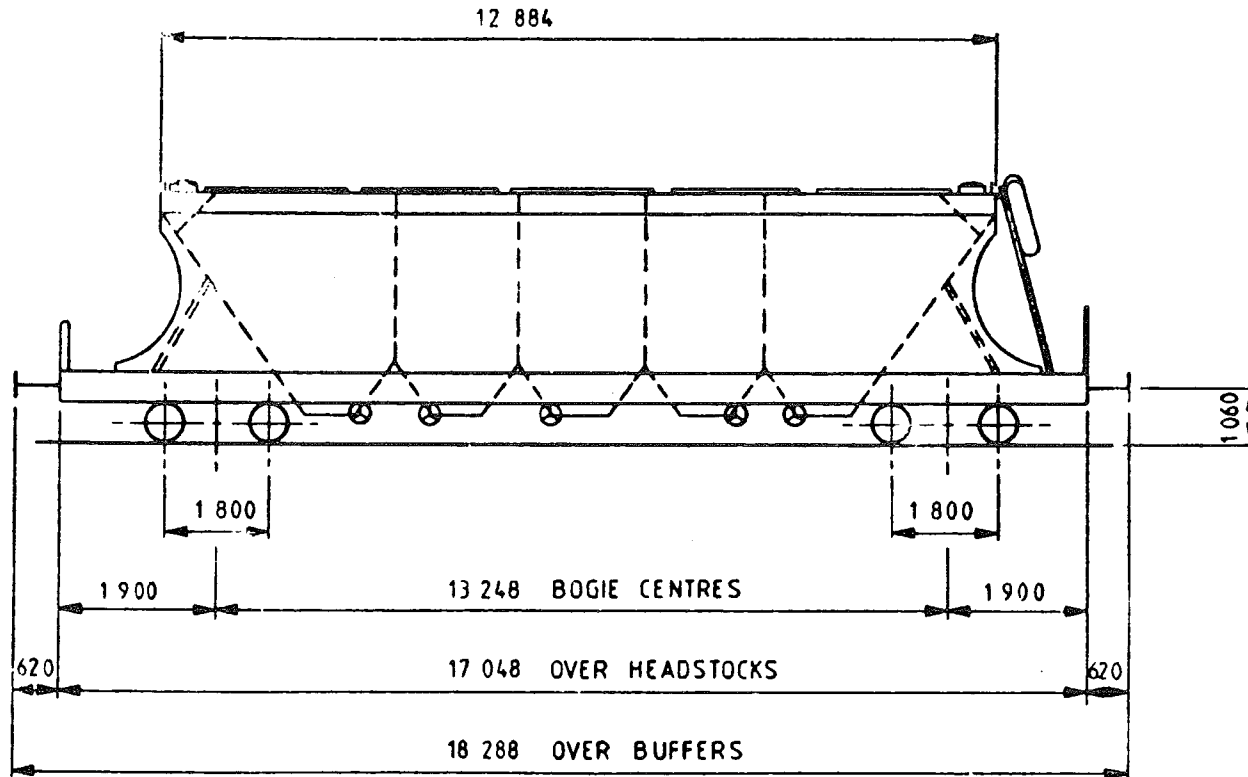
TYPE -	Ibf1ps
WAGON No. -	04 83 8091 000,001
BUILDER -	SNIA VISCOSA
OWNER -	INTERFRIGO

ISSUE 1

80t GLW BOGIE COVERED HOPPER

IPE 453

TOPS INFORMATION															
	A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET		
	40.9t	48.9t	56.9t			CARKND	60 mile/h UP TO 50 mile/h ABOVE		72 tonne GLW		15t FORCE UP TO 37t FORCE ABOVE	46t GLW	9	6	
S	40.9t	48.9t	56.9t			I P B L									



TARE -	23.1t
CAPACITY, WEIGHT -	56.9t
CAPACITY, VOLUME -	80m ³
FLOOR AREA -	
MIN. CURVE -	35m
GEN. ARRGT. DRG. No. -	108420

BRAKE -	AIR; VACUUM THROUGH PIPE
SUSPENSION -	Y25 CS2
COUPLINGS -	U.I.C
BUFFERS -	U5 HYDRAULIC 450-340HD
WHEELS -	Ø920
JOURNALS -	Ø130

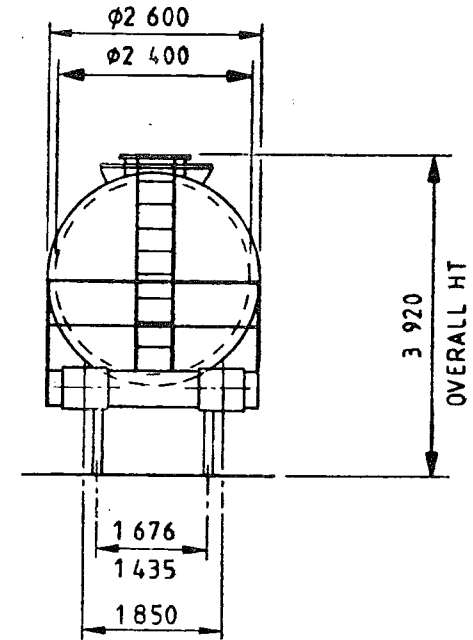
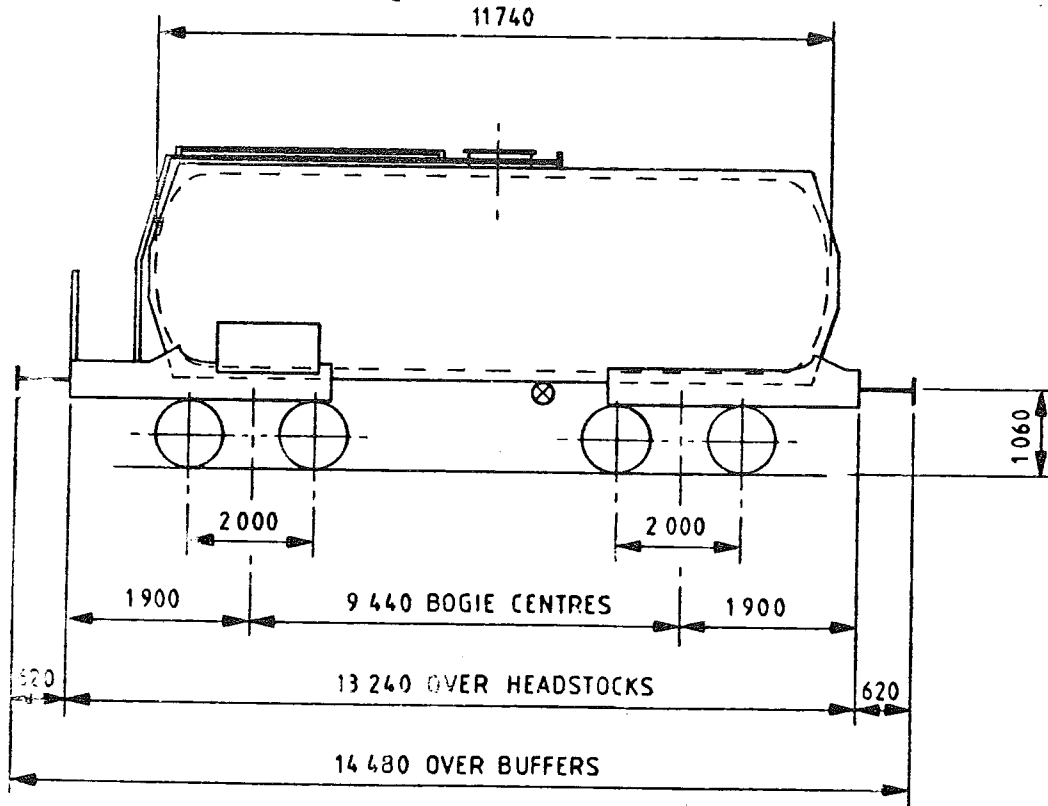
TYPE -	U a foos
WAGON No. -	33 87 9382 000-021
BUILDER -	FAUVET-GIREL
OWNER -	SOCIETE HAVRAISE DE GESTION

ISSUE 1

80 t GLW BOGIE TANK

ICE 454

TOPS INFORMATION												
90	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
S	41.7t	49.7t	57.7t		CARKND	60 mile/h UP TO mile/h ABOVE	80 tonne GLW	14t FORCE UP TO 40t FORCE ABOVE	50t GLW	3	6	
					I C X D		VACUUM BRAKE	15t FORCE UP TO 32t FORCE ABOVE	50t GLW			



NOTE:- VARIABLE GAUGE

TARE -	22.25t
CAPACITY, WEIGHT-	57.75t
CAPACITY, VOLUME-	51 m ³
FLOOR AREA -	
MIN. CURVE -	35m
GEN. ARRGT. DRG. No.-	1.4.0.666

BRAKE -	DUAL
SUSPENSION -	Y 21 C se BOGIE
COUPLINGS -	U I C
BUFFERS -	U 4 HYDRAULIC 580 x 400 HD.
WHEELS -	$\phi 920$
JOURNALS -	$\phi 130$

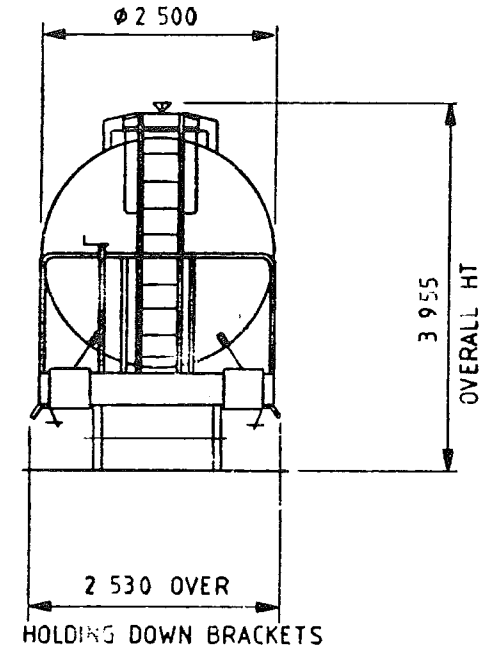
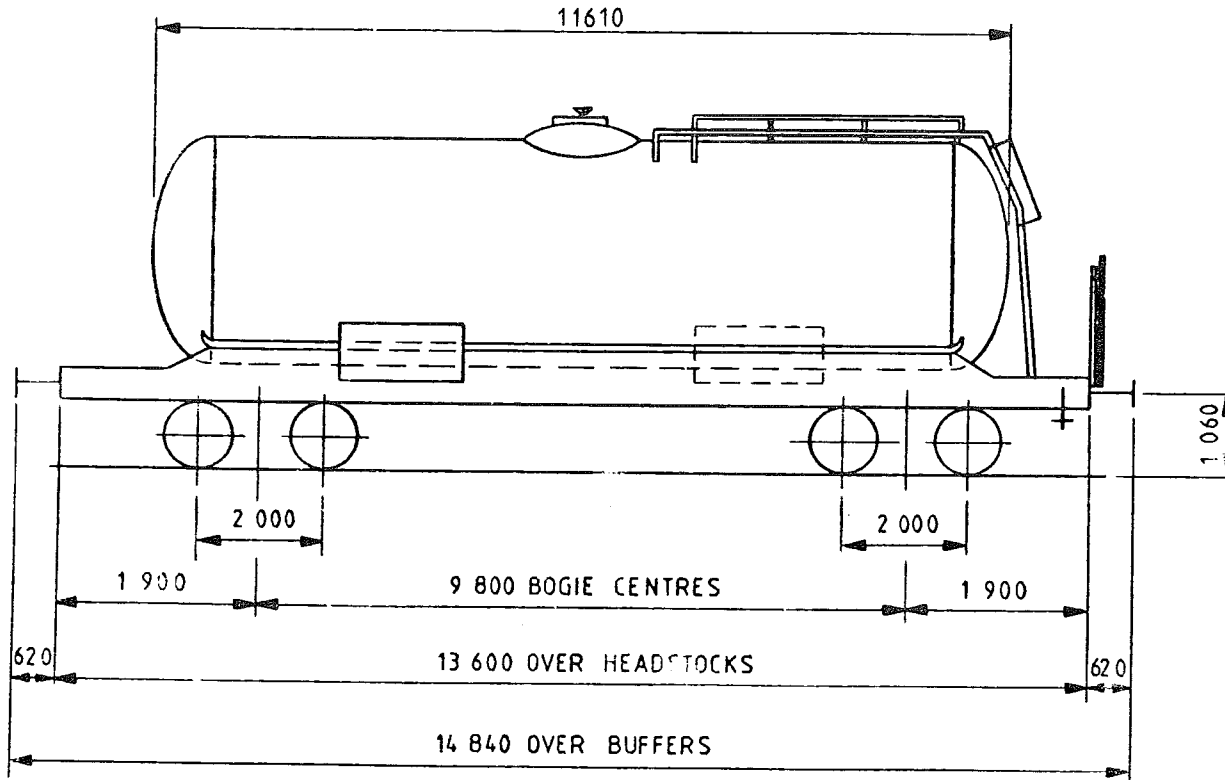
TYPE -	Zafs
WAGON No. -	34 87 7890 585 - 588
BUILDER -	C.F.M.F.
OWNER -	TRAINS - TIRAT - SETE J. IMBERT - MONTPELIER

ISSUE 1

80t GLW BOGIE TANK

ICE 456

	A	B	C	D	TOPS INFORMATION							
	41-7t	49-7t	57-3t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	41-7t	49-7t	57-3t		CARKND	60 mile/h UP TO mile/h ABOVE 80 tonne GLW		14t FORCE UP TO 40t GLW 36t FORCE ABOVE		4	6	
					I C X D			VACUUM BRAKE 11t FORCE UP TO 32t FORCE ABOVE 40t GLW				



TARE -	22.775t
CAPACITY, WEIGHT -	57.3t
CAPACITY, VOLUME -	54.5 m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	108460

BRAKE -	DUAL
SUSPENSION -	Y 21CSe
COUPLINGS -	U.I.C.
BUFFERS -	TYPE U4A. 580 x 400 HD
WHEELS -	Ø 920
JOURNALS -	Ø 130

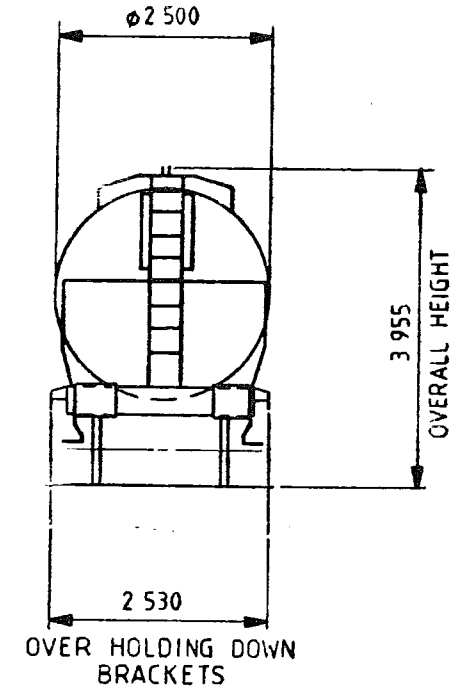
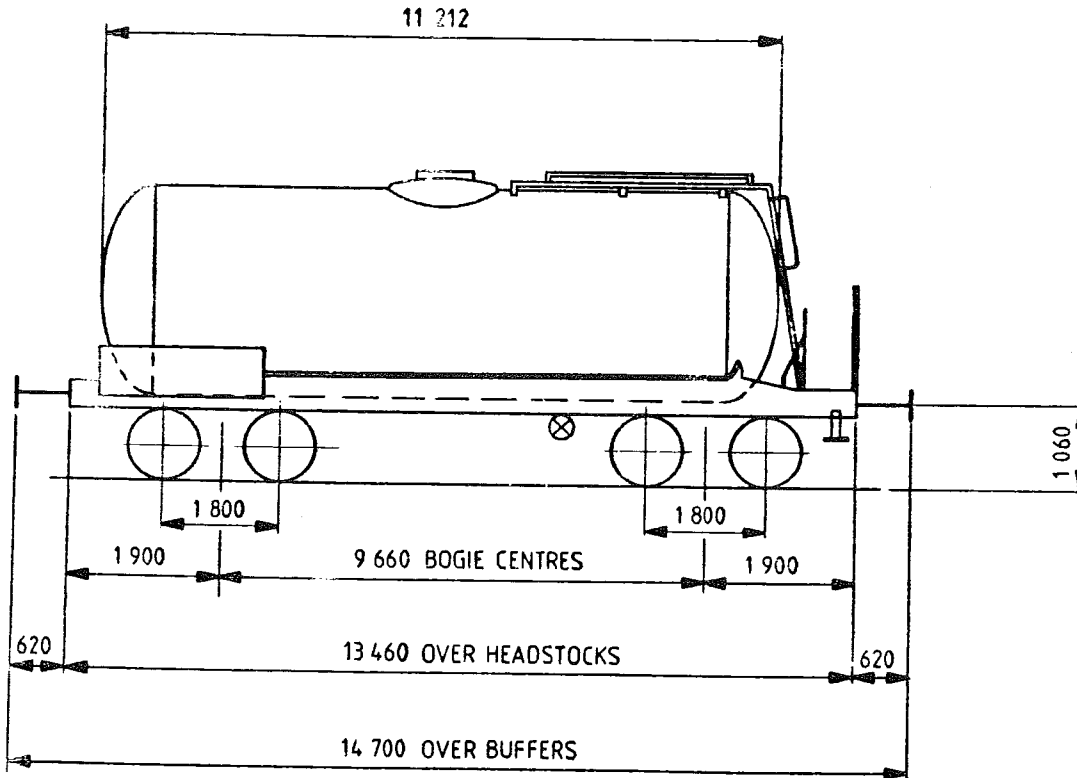
TYPE -	Zafs
WAGON No. -	515, 516, 34 87 7890 518, 519
BUILDER -	FAUVET-GIREL
OWNER -	ERMEWA

ISSUE 1

4 AXLE TANK

ICE 457

				TOPS INFORMATION									
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	45.4t	53.4t	61.4t				60 mile/h UP TO 80 tonne GLW		12t FORCE UP TO 40t GLW		3	5	
S	45.4t	53.4t	61.4t		CARKND		mile/h ABOVE		36t FORCE ABOVE				
					I	C	B	D					



TARE -	18.6t
CAPACITY, WEIGHT-	61.4t
CAPACITY, VOLUME-	53 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRG. DRG. No.-	108633

BRAKE -	AIR, VAC. THRO' PIPE
SUSPENSION -	Y25 CS 2 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 450 x 340 HD
WHEELS -	φ920
JOURNALS -	φ130

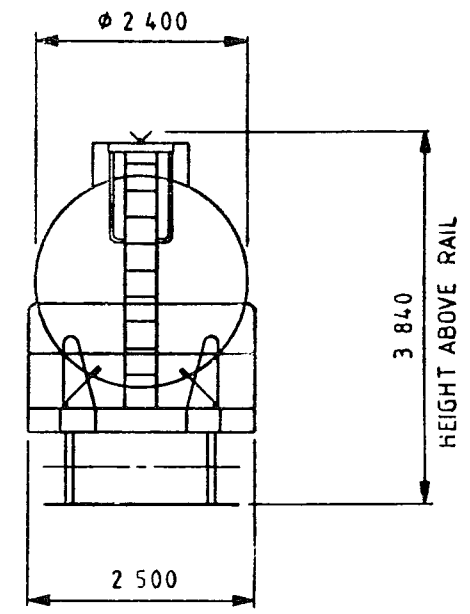
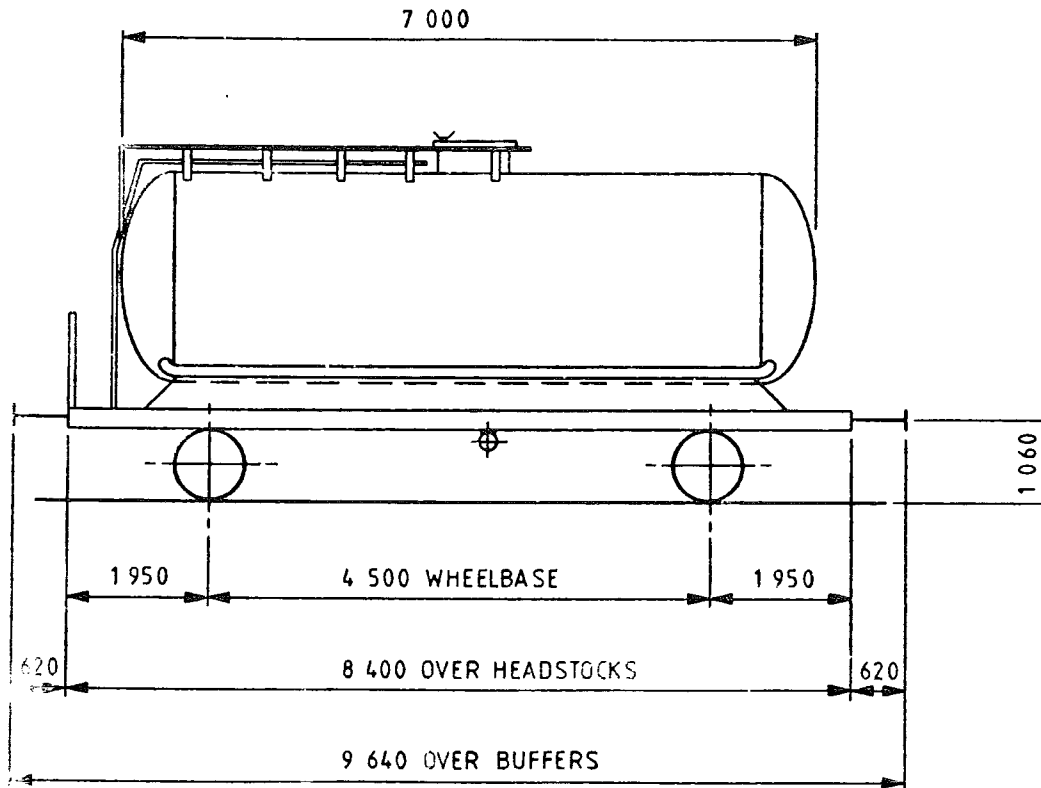
TYPE -	Zafs
WAGON No. -	33 87 7890 500-514
BUILDER -	FAUVET - GIREL
OWNER -	ERMEWA

ISSUE 1

2 AXLE TANK

ICE 460

					TOPS INFORMATION						
A	B	C	D		AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
20.5t	24.5t	28.5t				60 mile/h UP TO	6 t FORCE UP TO	23 t GLW	6	6	
S	20.5t	24.5t	24.5t		CARKND	mile/h ABOVE 40 tonne GLW	18 t FORCE ABOVE				
					I C B B						



TOTAL LOAD IN U.K. 35 ton
 CAPACITY = 24 ton (U.K.)
 TARE = 11.5 ton

TARE -	11.5 t
CAPACITY, WEIGHT-	28.5 t
CAPACITY, VOLUME-	30 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRG. DRG. No.-	10187C

BRAKE -	AIR & VAC THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 960
JOURNALS -	

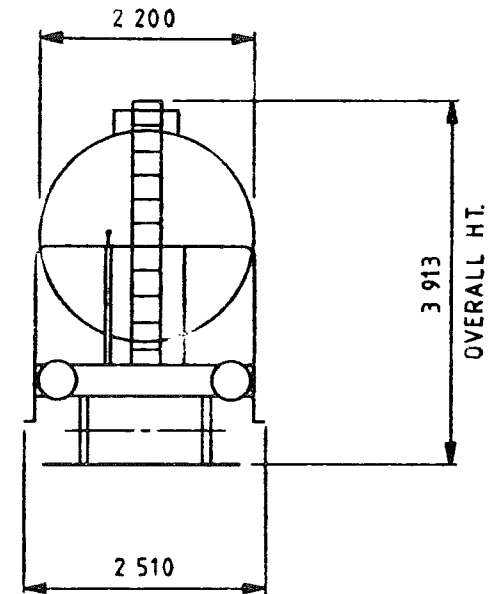
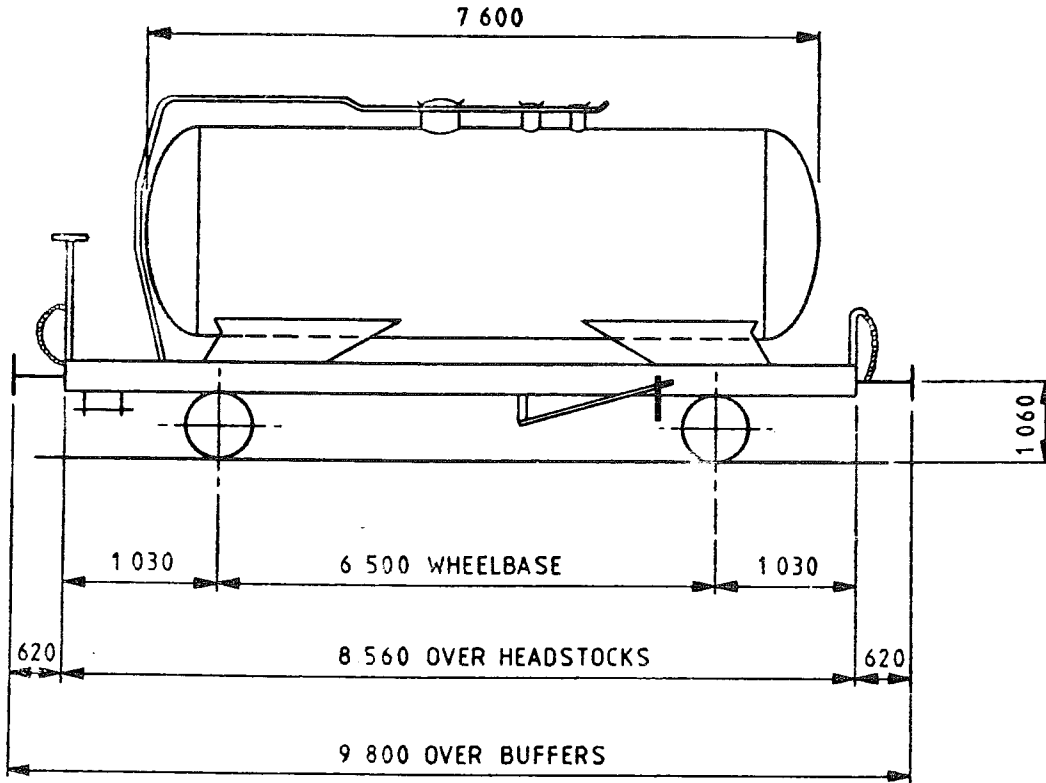
TYPE -	Zfs
WAGON No. -	23 87 7390 515,516
BUILDER -	ATELIERS d'OCCITANIE
OWNER -	TRANSCITERNE

ISSUE 1

2 AXLE 40t GLW TANK

ICE 463

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20 t	24 t	28 t			60 mile/h UP TO mile/h ABOVE 40 tonne GLW		8 t FORCE UP TO 26 t GLW 21 t FORCE ABOVE		6	6	
S	20 t	24 t	28 t		CARKND							
					I C B C							



TARE -	12 t
CAPACITY, WEIGHT -	28 t
CAPACITY, VOLUME -	27.7 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	K 421.01.00

BRAKE -	AIR; VACUUM THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RING FEDER Ø 370 HD.
WHEELS -	Ø 920
JOURNALS -	Ø 130

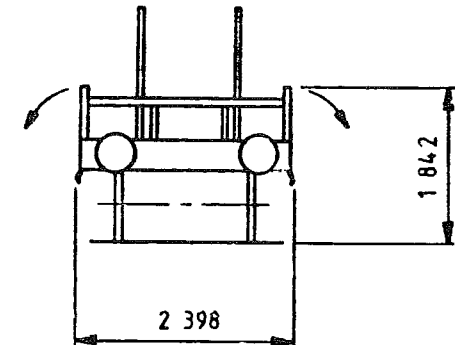
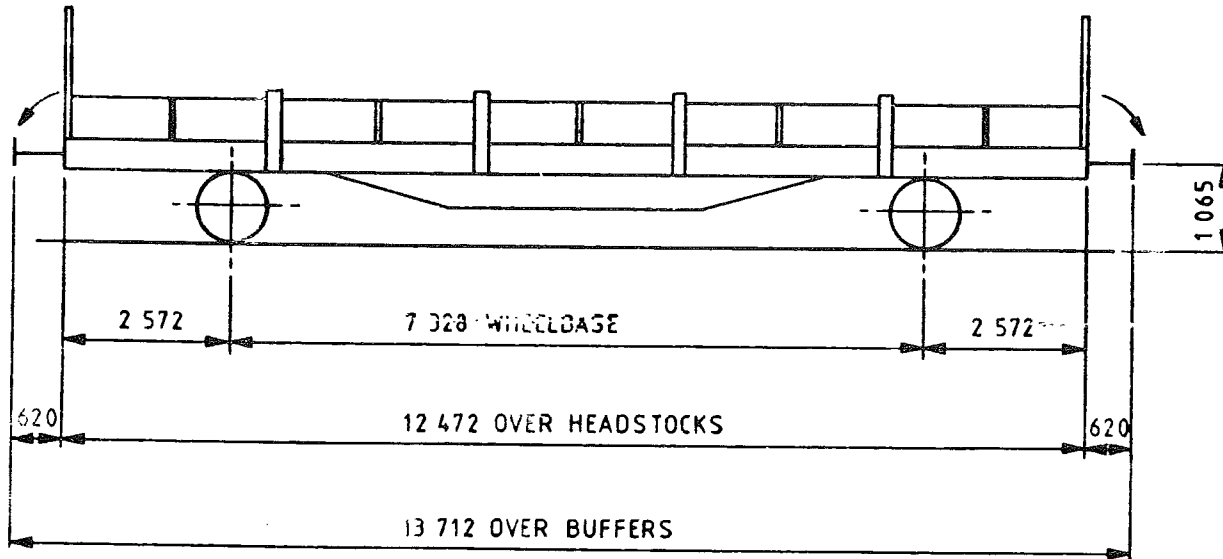
TYPE -	Zcefs
WAGON No. -	23 80 7398 037-046
BUILDER -	GRAAF
OWNER -	V. T.G.

ISSUE 1

2 AXLE 3 PLANK FLAT

IFE 464

					TOPS INFORMATION								
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
18†	22†	25†				60 mile/h UP TO 50 mile/h ABOVE		7 † FORCE UP TO 19 † FORCE ABOVE		12	6		
S	18†	22†	22†		CARKND	I	F	B	B				



TARE -	13.67 †
CAPACITY, WEIGHT -	25 †
CAPACITY, VOLUME -	
FLOOR AREA -	26.5 m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	5030

BRAKE -	AIR; VAC. THRO PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1 000
JOURNALS -	∅ 120

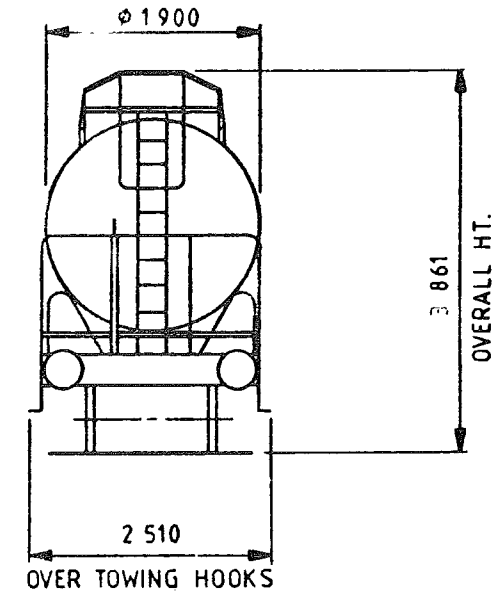
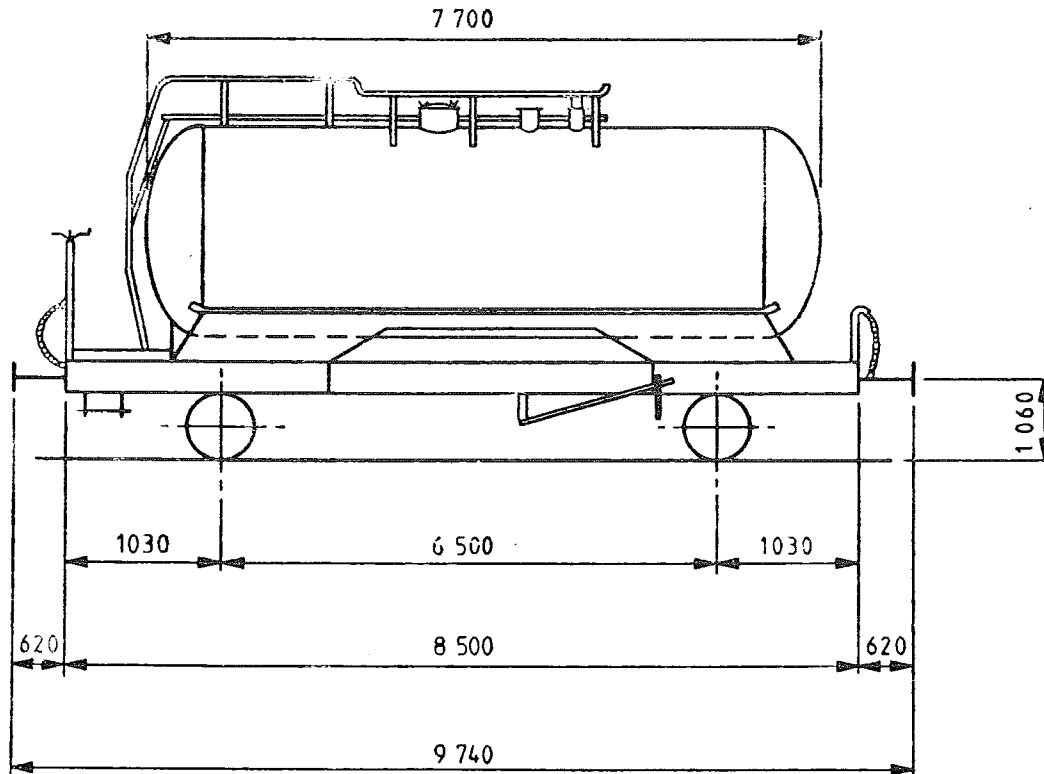
TYPE -	Lfs
WAGON No. -	21 88 4140 200 - 299
BUILDER -	CW GENTBRUGGE
OWNER -	SNCB

ISSUE 1

40 t GLW TANK

ICE 469

TOPS INFORMATION											
	A	B	C	D		AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20.5t	24.5t	28.5t				60 mile/h UP TO mile/h ABOVE 40 tonne GLW	8 t FORCE UP TO 21 t FORCE ABOVE 26 t GLW	6	6	
S	20.5t	24.5t	28.5t			CARKND					
						I C B B					



TARE -	11.5 t
CAPACITY, WEIGHT-	28.5 t
CAPACITY, VOLUME-	20 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	K.426.01-00

BRAKE -	AIR & VAC THRO' PIPE; PLATFORM SCREW & HAND LEVER
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RING FEDER. Ø 370 HD.
WHEELS -	Ø 920
JOURNALS -	Ø 130

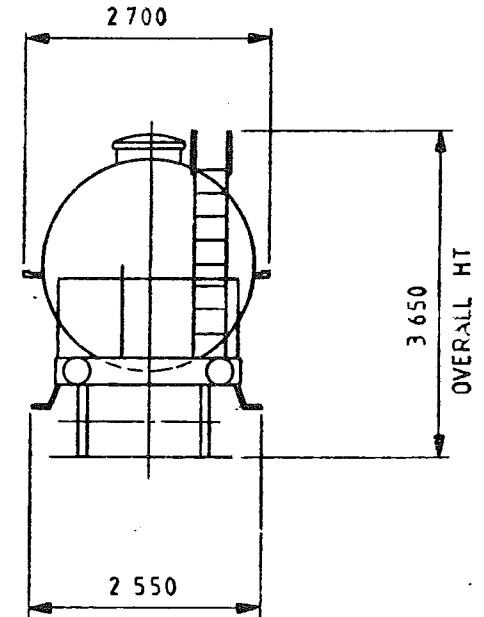
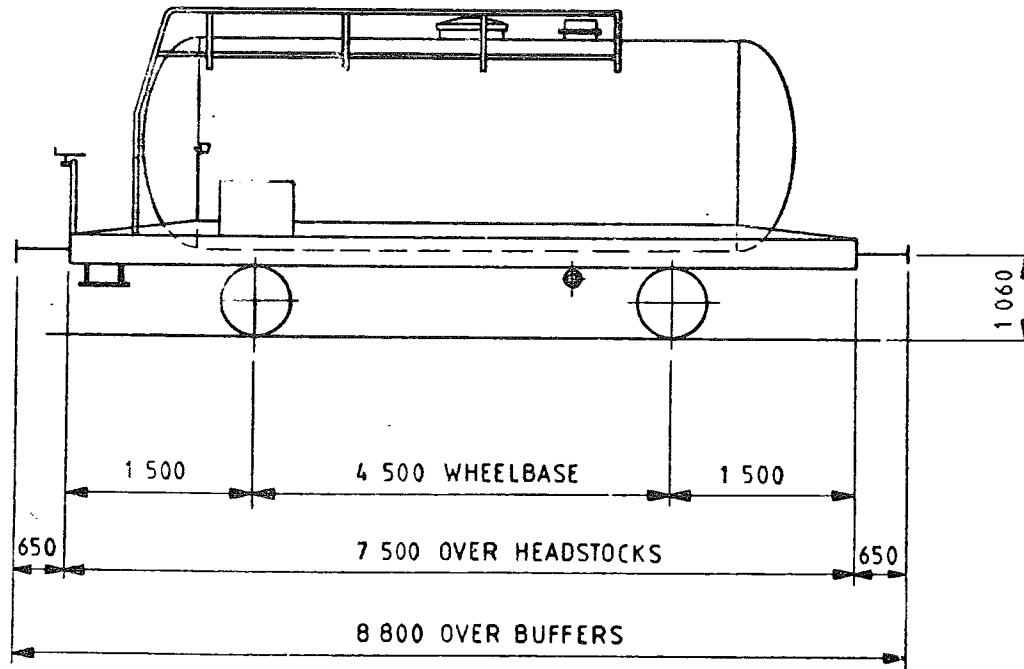
TYPE -	Zcfs
WAGON No. -	23 80 7391 052 - 056
BUILDER -	GRAAF
OWNER -	V.T.G.

ISSUE 1

40t GLW TANK

ICE 470

					TOPS INFORMATION				EXCESS LENGTH	RA (GLW)	DESIGN SHEET
A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA				
21-9t	25-9t	29-9t		CARKND	45 mile/h UP TO	40 tonne GLW	7t FORCE UP TO	21t GLW	4	5	
				I C B I	mile/h ABOVE		17t FORCE ABOVE				



TARE -	10-1t
CAPACITY, WEIGHT-	29.9t
CAPACITY, VOLUME-	24 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	677

BRAKE -	AIR & VAC. THRO PIPE; PLATFORM SCREW & SIDE LEVER
SUSPENSION -	SINGLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	∅920
JOURNALS -	∅130

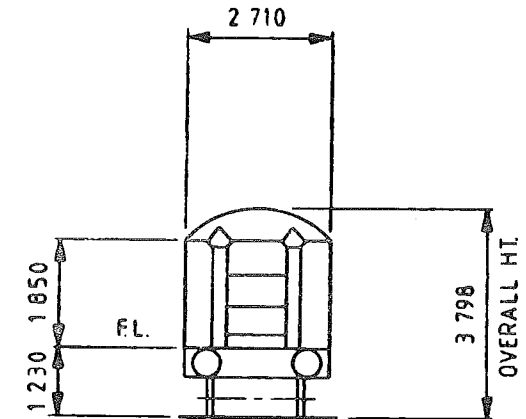
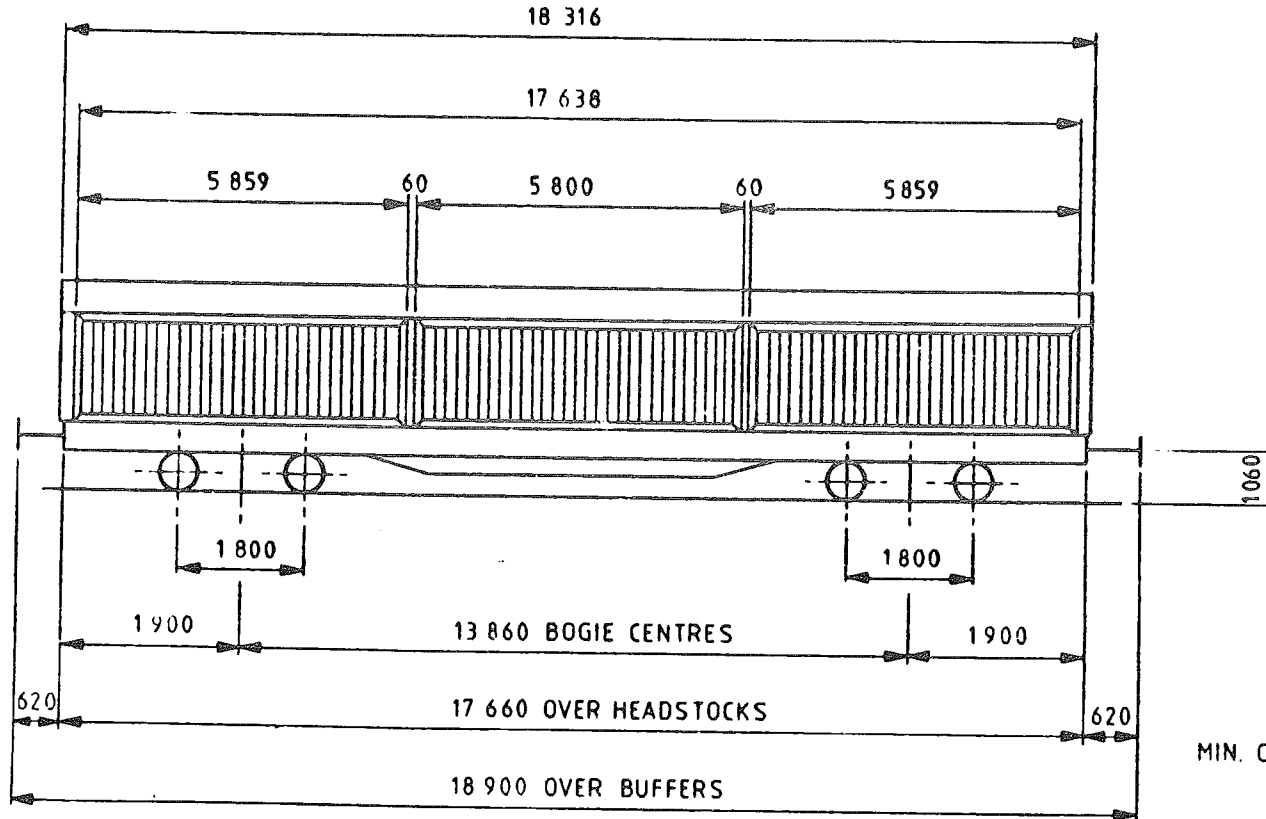
TYPE -	Z 1
WAGON No. -	23 83 7190 008-031
BUILDER -	JOIGNY
OWNER -	ETRA

ISSUE 1

80 t GLW BOGIE VAN (MARK 1)

IPE 471

	A	B	C	D	TOPS INFORMATION								
	39†	47†	55†		AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 10	RA (GLW) 6	DESIGN SHEET
S	39†	47†	55†		CARKND		60 mile/h UP TO mile/h ABOVE 80 tonne GLW		19 † FORCE UP TO 43 † FORCE ABOVE 51 † GLW				
					I	P	B	B					



MIN. CURVE:- 33 80 2796 000 - 009 - 60 m
33 80 2796 010 - 139 - 35 m

TARE -	24 400 Kg
CAPACITY, WEIGHT-	54 t
CAPACITY, VOLUME-	90 m ³
FLOOR AREA -	44 m ²
MIN. CURVE -	SEE ABOVE
GEN. ARRGT. ORG. No.-	913 535.0.01

BRAKE -	AIR & VAC THRO PIPE; SIDE SCREW
SUSPENSION -	LHB 74
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC Ø 480
WHEELS -	Ø 920
JOURNALS -	Ø 130

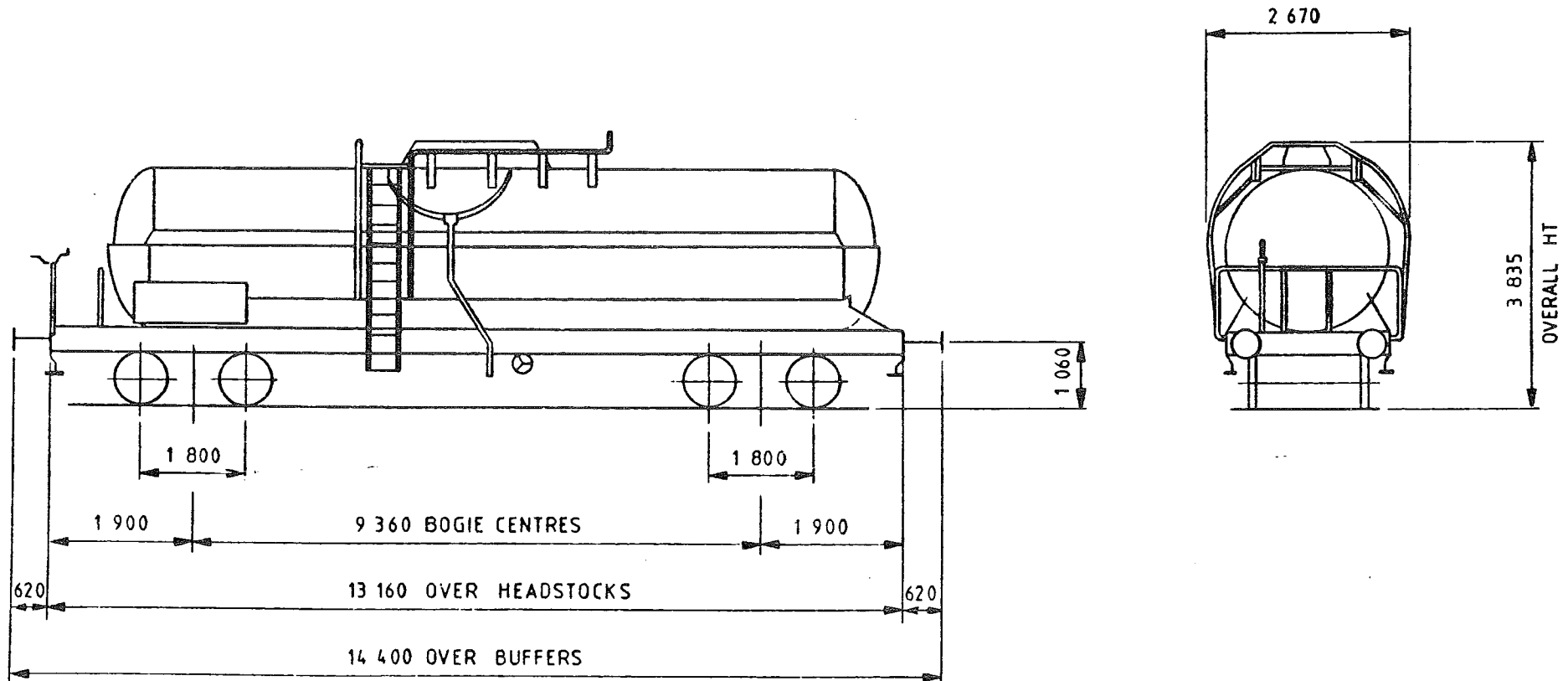
TYPE -	Hafis
WAGON No. -	33 80 2796 000 - 139
BUILDER -	LINKE - HOFMANN - BUSCH
OWNER -	V.T.G.

ISSUE 1

80t GLW BOGIE TANK

ICE 472

TOPS INFORMATION										
	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	59.4t	47.4t	55.4t			60 mile/h UP TO mile/h ABOVE	17t FORCE UP TO 43t FORCE ABOVE	3	6	
S	39.4t	47.4t	55.4t		CARKND	80 tonne GLW	54t GLW			
					I C B D					



TARE -	24.6t
CAPACITY, WEIGHT -	55.4t
CAPACITY, VOLUME -	34 m ³
FLOOR AREA -	
MIN. CURVE -	35m
GEN. ARRGT. DRG. No. -	0.52287.0.01

BRAKE -	AIR & VAC THRO PIPE, PLATFORM & SIDE SCREW
SUSPENSION -	D B BOGIE
COUPLINGS -	UIC
BUFFERS -	
WHEELS -	∅920
JOURNALS -	∅130

TYPE -	Z acefs
WAGON No. -	33 80 7995 001 002
BUILDER -	LINKE-HOFMANN-BUSCH
OWNER -	VTG

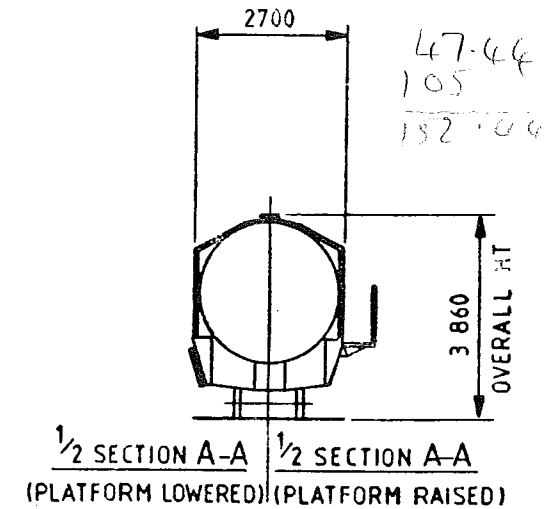
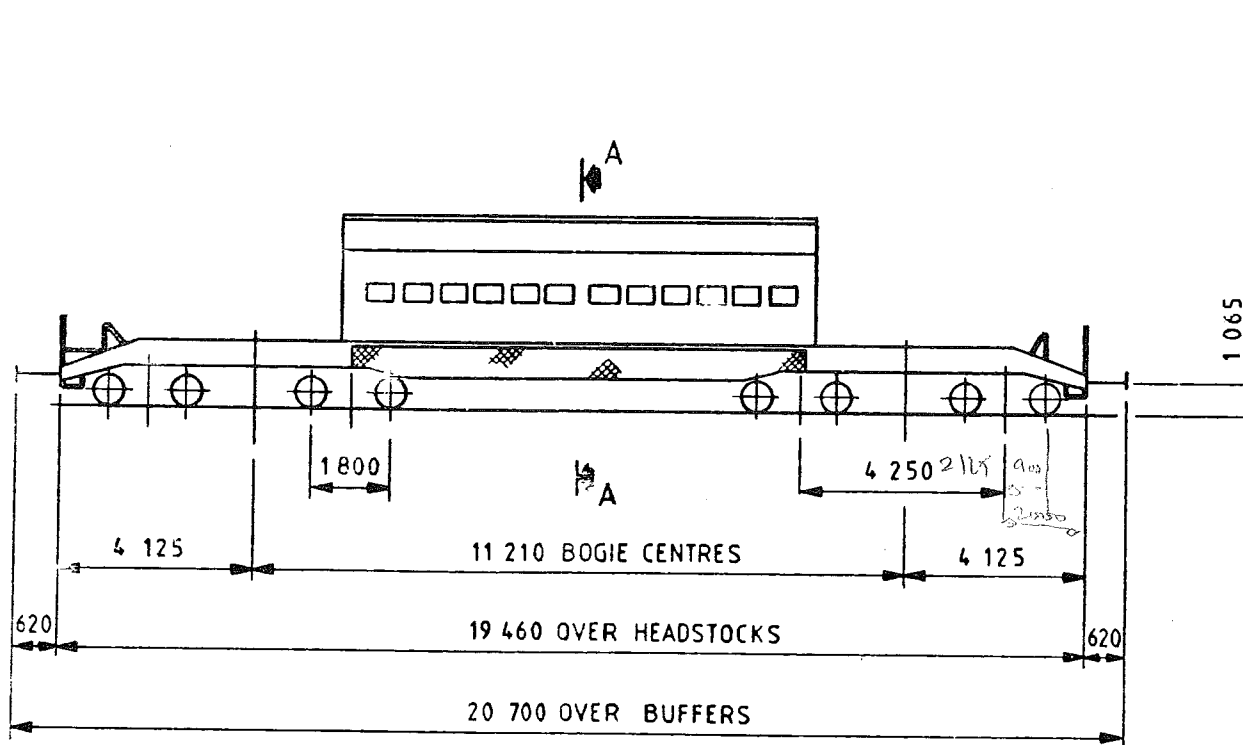
ISSUE 1

ATOMIC FLASK WAGON

IPE 475

TOPS INFORMATION													
	A	B1	B2	C2	C3	C4	AARKND		OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	52.8t	57t	81.5t	85.9t	97.5t								
S	52.8t	57t	81.5t	85.9t	97.5t		CARKND		60 mile/h UP TO	30t FORCE UP TO	13	8	
						I	P	B	C	mile/h ABOVE			

FLASKS OF 80, 97 & 105t MAY BE CARRIED



TARE -	47.44t
CAPACITY, WEIGHT -	-
CAPACITY, VOLUME -	-
FLOOR AREA -	-
MIN. CURVE -	50m UNCOUPLED
GEN. ARRGT. DRG. No. -	101714

BRAKE -	AIR VAC THRO PIPE; PLATFORM & SIDE SCREW
SUSPENSION -	Y11M
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	φ920
JOURNALS -	φ130

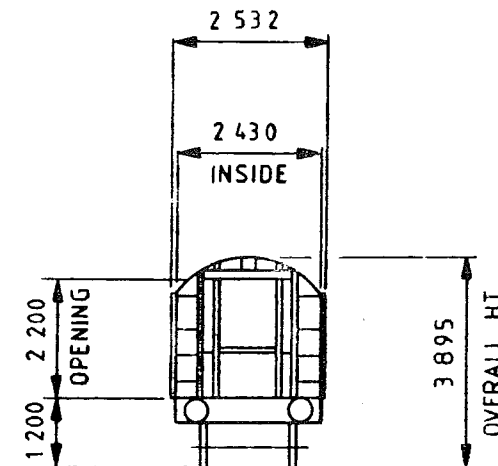
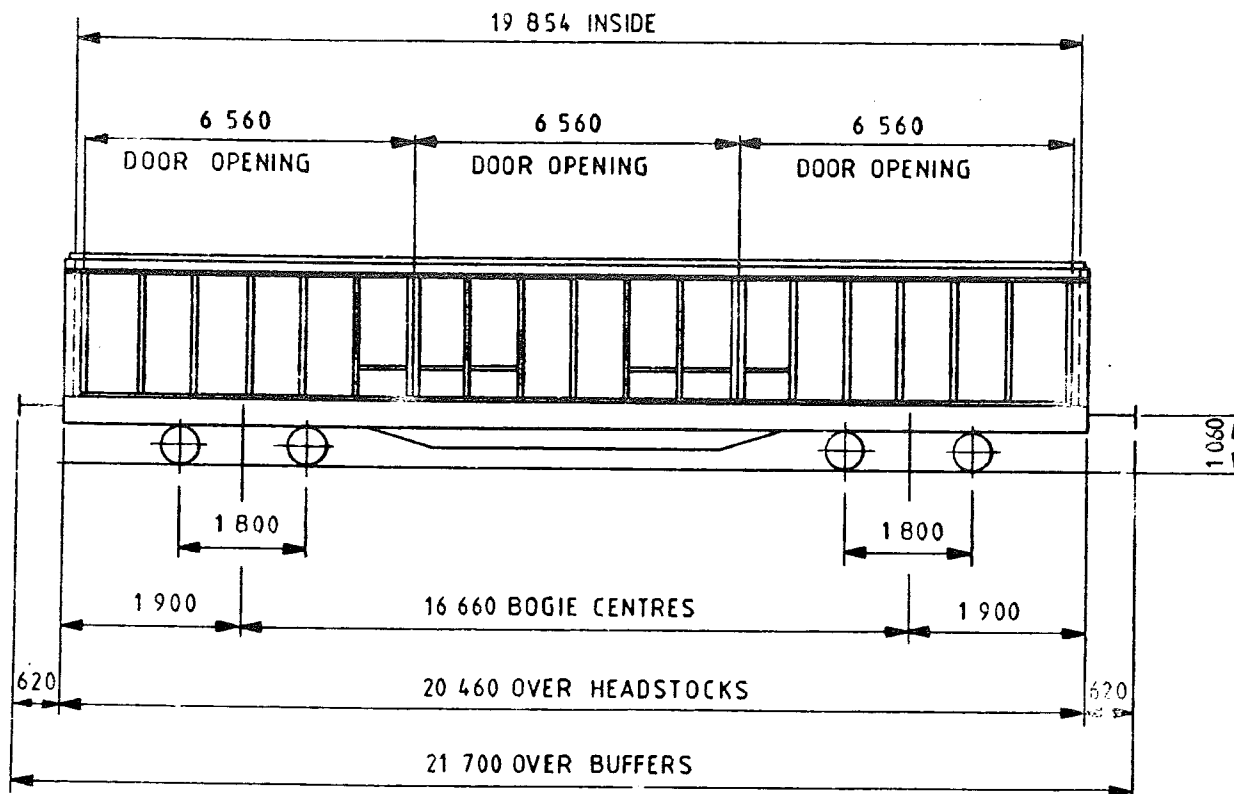
TYPE -	Uaafis
WAGON No. -	33 87 9985 000-007
BUILDER -	FAUVET GIREL
OWNER -	NUCLEAR TRANSPORT LTD

ISSUE 1

80t GLW BOGIE VAN

IPE 476

		A	B	C	D	TOPS INFORMATION								
		37.7t	45.7t	53.7t		AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 14	RA (GLW) 6	DESIGN SHEET
S		37.7t	45.7t	53.7t		CARKND		60 mile/h UP TO mile/h ABOVE 80 tonne GLW		19t FORCE UP TO 44t FORCE ABOVE 51t GLW				
						I	P	B	B					



TARE -	26.23t
CAPACITY, WEIGHT-	53.7t
CAPACITY, VOLUME-	114 m ³
FLOOR AREA -	48 m ²
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	A2089 011

BRAKE -	AIR & VAC. THRO' PIPE; SIDE SCREW
SUSPENSION -	DB BOGIE (TALBOT)
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC ϕ 450 HD
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

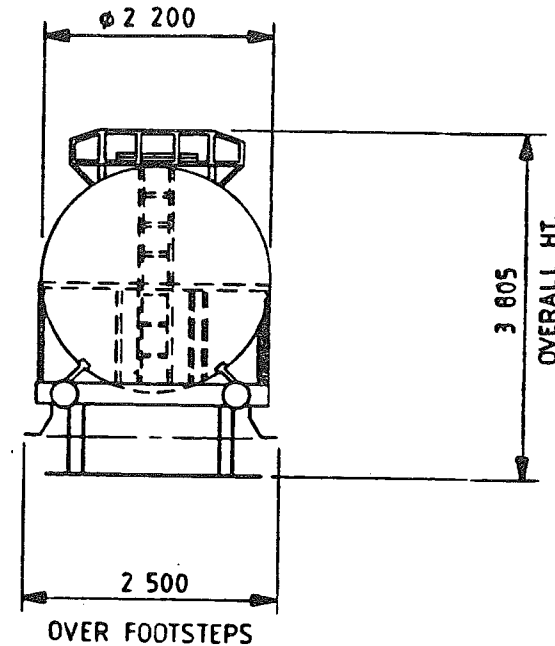
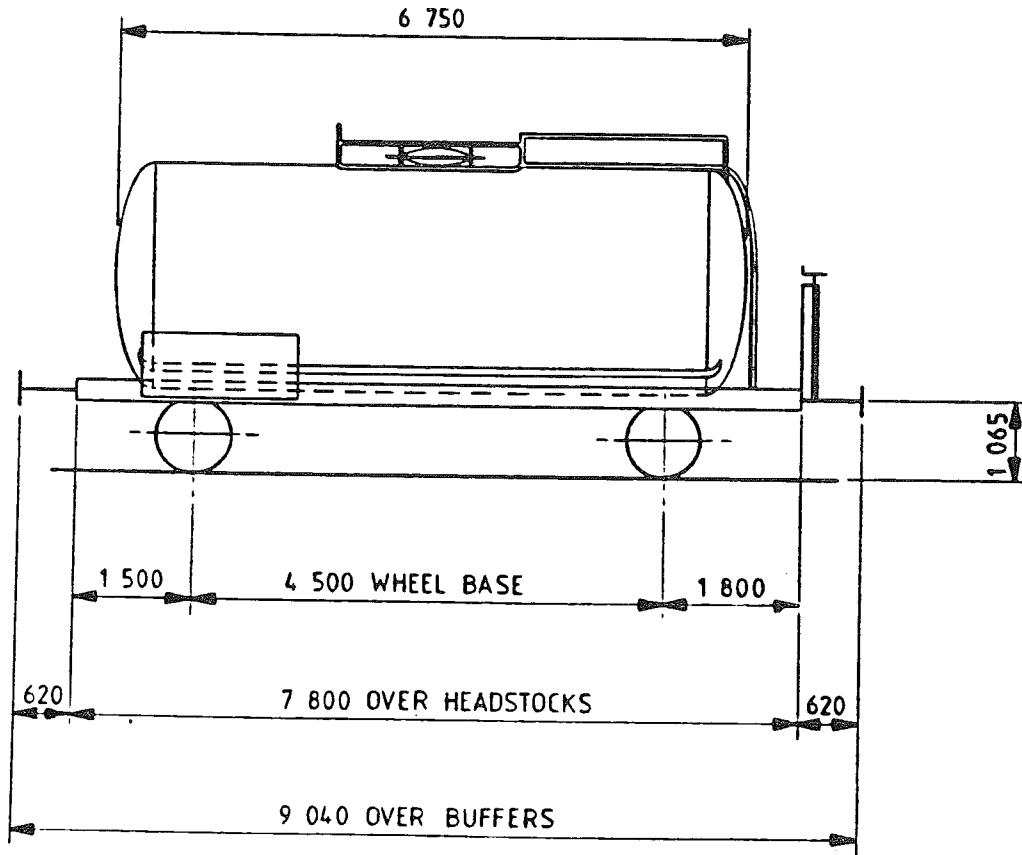
TYPE -	Habfis
WAGON No. -	33 80 2797 500-579
BUILDER -	WAGGONFABRIK UERDINGEN
OWNER -	EVA

ISSUE 1

40t GLW 2 AXLE TANK

ICE 477

				TOPS INFORMATION									
A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	EA (GLW)	DESIGN SHEET	
20.5t	24.5t	28.5t		CARKND		50 mile/h UP TO		5t FORCE UP TO					
				I	C	B	C	mile/h ABOVE 40 tonne GLW		13t FORCE ABOVE	13t. GLW	5	6



TARE -	11.5t
CAPACITY, WEIGHT-	28.5t
CAPACITY, VOLUME-	24m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRG. DRG. No.-	285

BRAKE -	AIR & VAC. THRO' PIPE . PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ1m
JOURNALS -	φ130

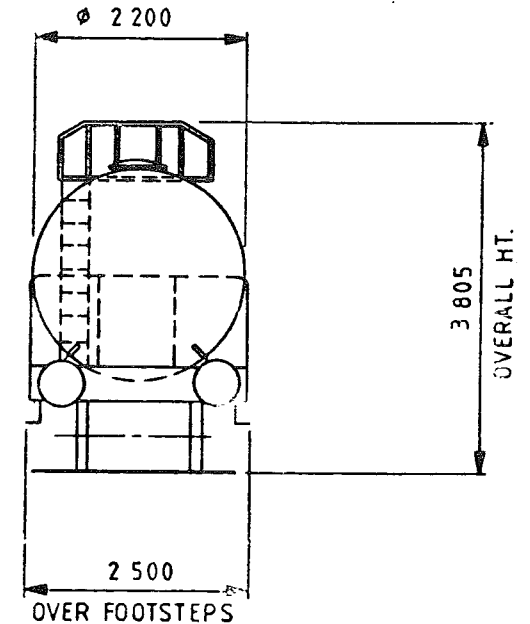
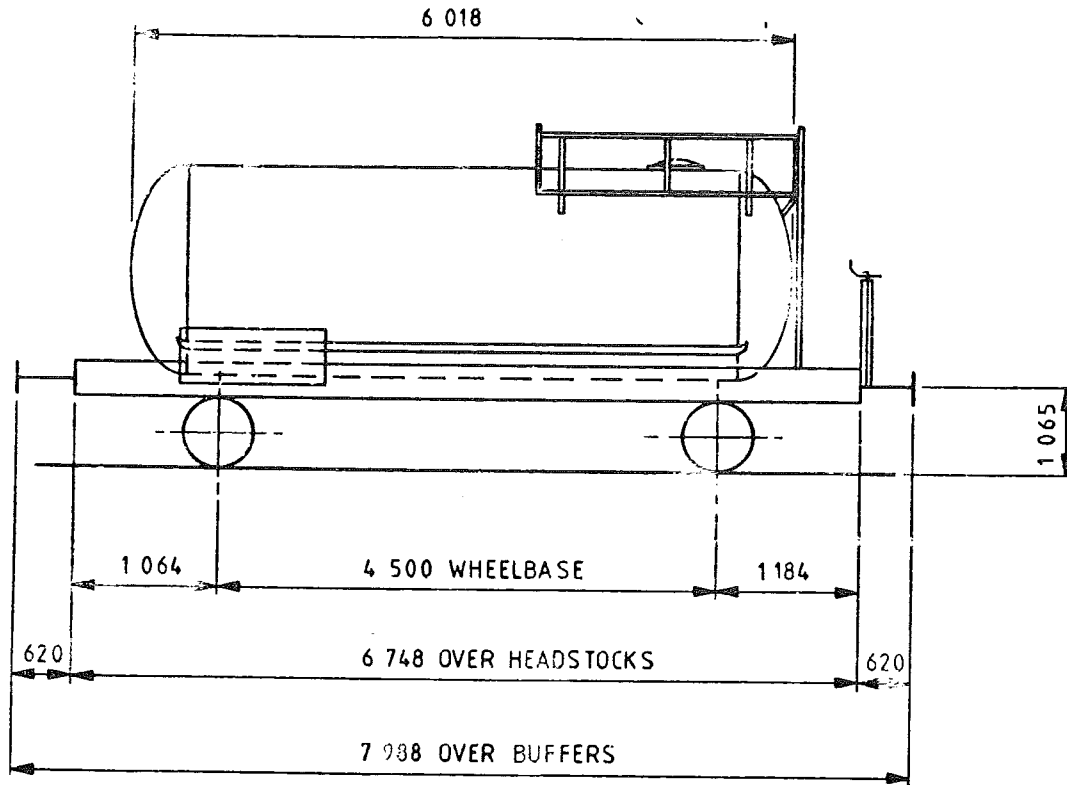
TYPE -	Zcf
WAGON No. -	23 87 7191 028 - 034
BUILDER -	ATELIERS DE PROVENCE A MIRAMAS
OWNER -	EUROP - RAIL

ISSUE 1

40 t GLW 2 AXLE TANK

ICE 478

				TOPS INFORMATION								
A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
21.5t	25.5t	29.5t				50 mile/h UP TO mile/h ABOVE 40 tonne GLW		5 t FORCE UP TO 11 t FORCE ABOVE 13 t GLW		3	5	
				CARKND								
				I	C	B	B					



TARE -	10.5 t
CAPACITY, WEIGHT-	29.5 t
CAPACITY, VOLUME-	21 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	281

BRAKE -	AIR & VAC THRO PIPE; PLATFORM SCREW, SIDE LEVER
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ1 000
JOURNALS -	φ130

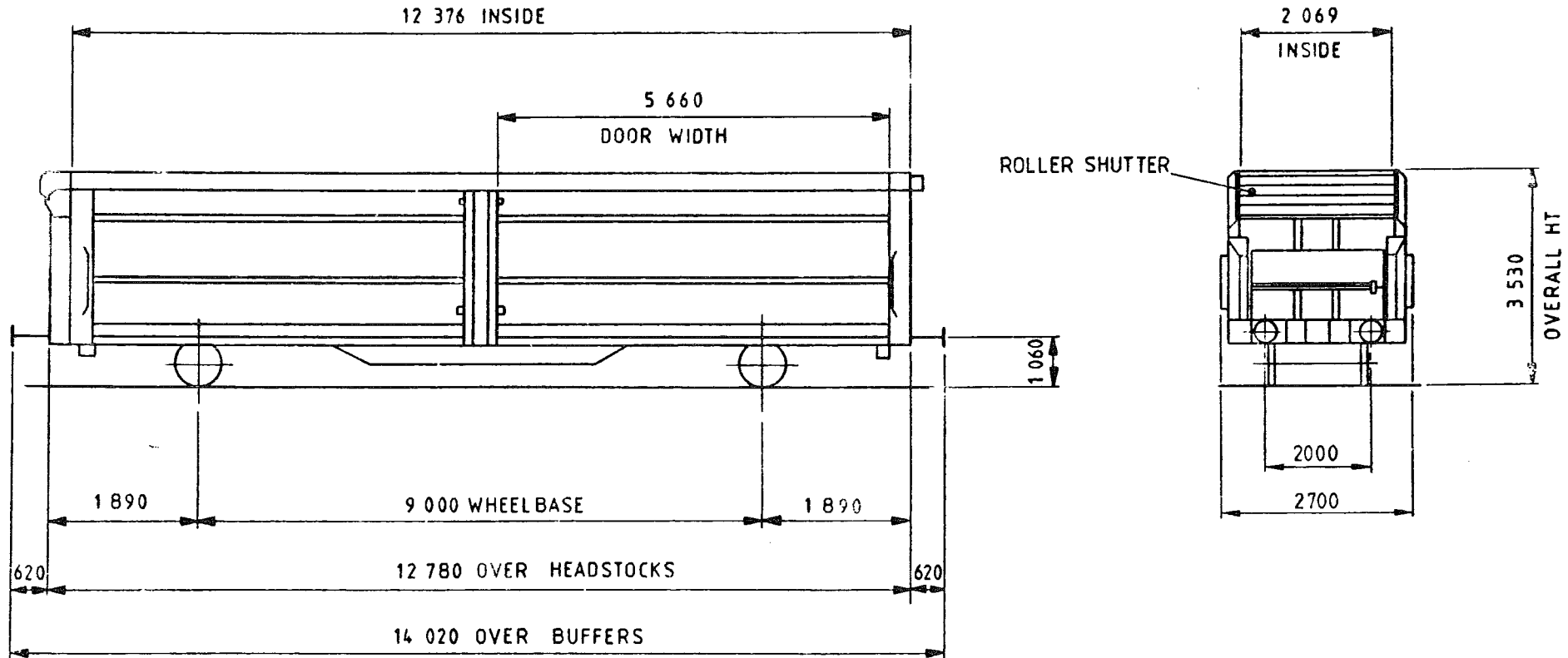
TYPE -	Zcf
WAGON No. -	23 87 7191 025 - 027
BUILDER -	ATELIERS DE PROVENCE A MIRAMAS
OWNER -	EUROP - RAIL

ISSUE 1

40t GLW 2 AXLE VAN

ILE 479

					TOPS INFORMATION						
A	B	C	D		AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
17-5t	21-5t	25-5t				60 mile/h UP TO	6t FORCE UP TO	23t GLW	12	6	
S	17-5t	21-5t	25-5t		CARKND	mile/h ABOVE	18t FORCE ABOVE				
					I L B L	40 tonne GLW					



TARE -	14.5t
CAPACITY, WEIGHT-	25.5t
CAPACITY, VOLUME-	61 m ³
FLOOR AREA -	27 m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	895-0-002M

BRAKE -	AIR & VAC THRO PIPE; SIDE SCREW
SUSPENSION -	DOUBLE LINK
COUPLING -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 920
JOURNALS -	φ 130

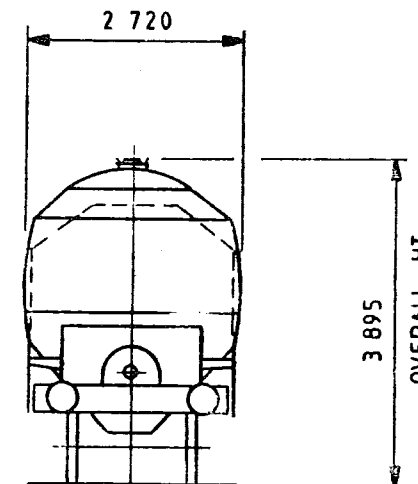
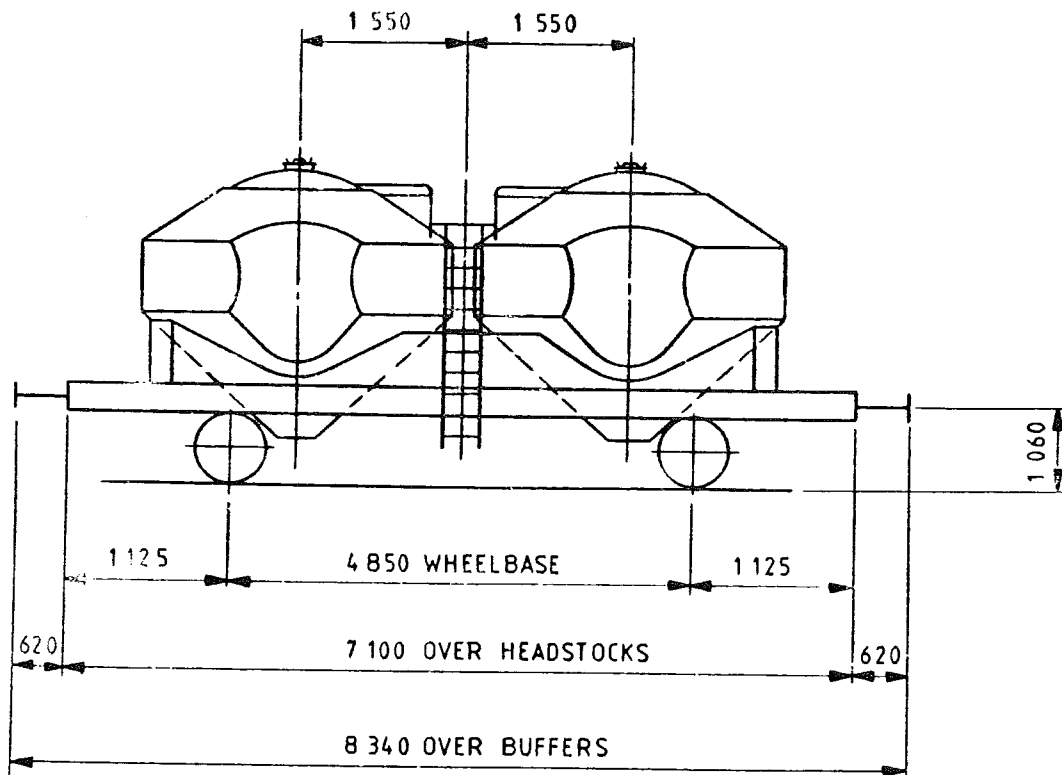
TYPE -	Tbtis
WAGON No. -	21 88 5799 000-049
BUILDER -	
OWNER -	SNCB

ISSUE 1

40t GLW TWIN HOPPER

IPE 480

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	21t	25t	29t		CARKND	60 mile/h UP TO	25 tonne GLW	5t FORCE UP TO	20t GLW	4	6	
S	21t	25t	25t		I H B A	50 mile/h ABOVE		15t FORCE ABOVE				



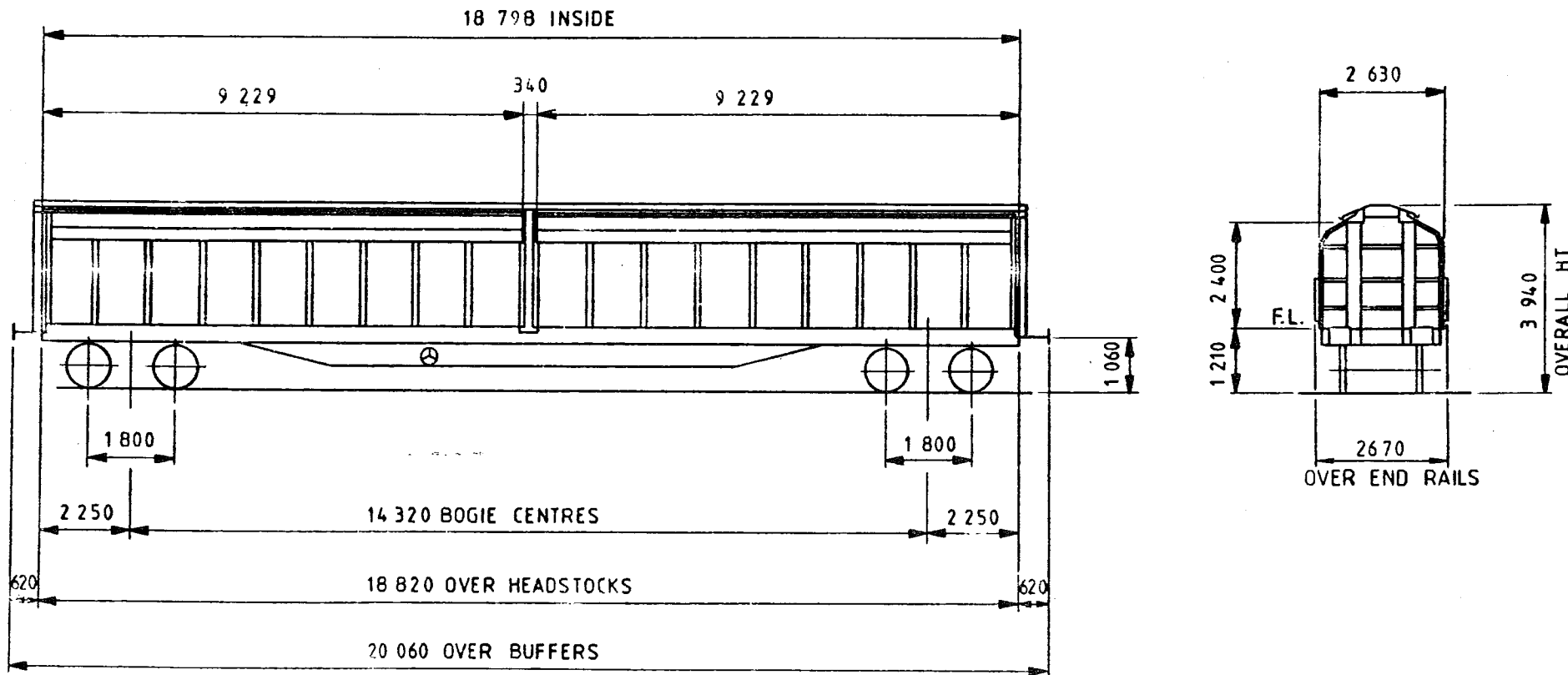
TARE -	11t
CAPACITY, WEIGHT-	29t
CAPACITY, VOLUME-	27m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRG. DRG. No.-	2763

BRAKE -	AIR & VAC THRO PIPE;SIDE LEVER
SUSPENSION -	SINGLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	Ø1000
JOURNALS -	Ø130

TYPE -	Ucfs
WAGON No. -	23 87 9192 001
BUILDER -	SIMOTCA
OWNER -	STS

ISSUE 1

					TOPS INFORMATION						
90	A 38t	B 46t	C 54t	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	38t	46t	54t		CARKND	60 mile/h UP TO mile/h ABOVE	80 tonne GLW	19t FORCE UP TO 43t FORCE ABOVE	10	6	
					I P B B			52t GLW			



TARE -	26t
CAPACITY, WEIGHT-	54t
CAPACITY, VOLUME-	118m ³
FLOOR AREA -	47 m ²
MIN. CURVE -	35 m
GEN. ARRG. DRG. No.-	9 13543 0 01

BRAKE -	AIR & VAC. THRO' PIPE; SIDE SCREW
SUSPENSION -	DB BOGIE (TALBOT)
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 920
JOURNALS -	φ 130

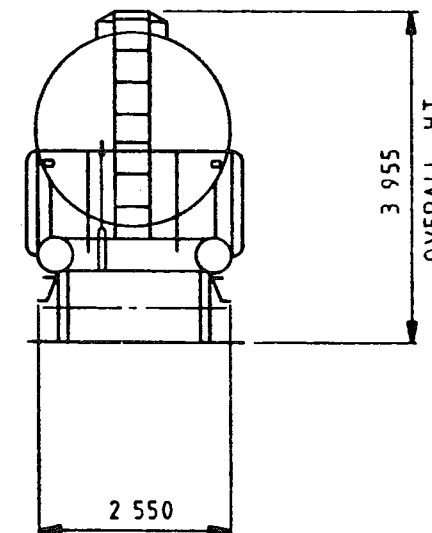
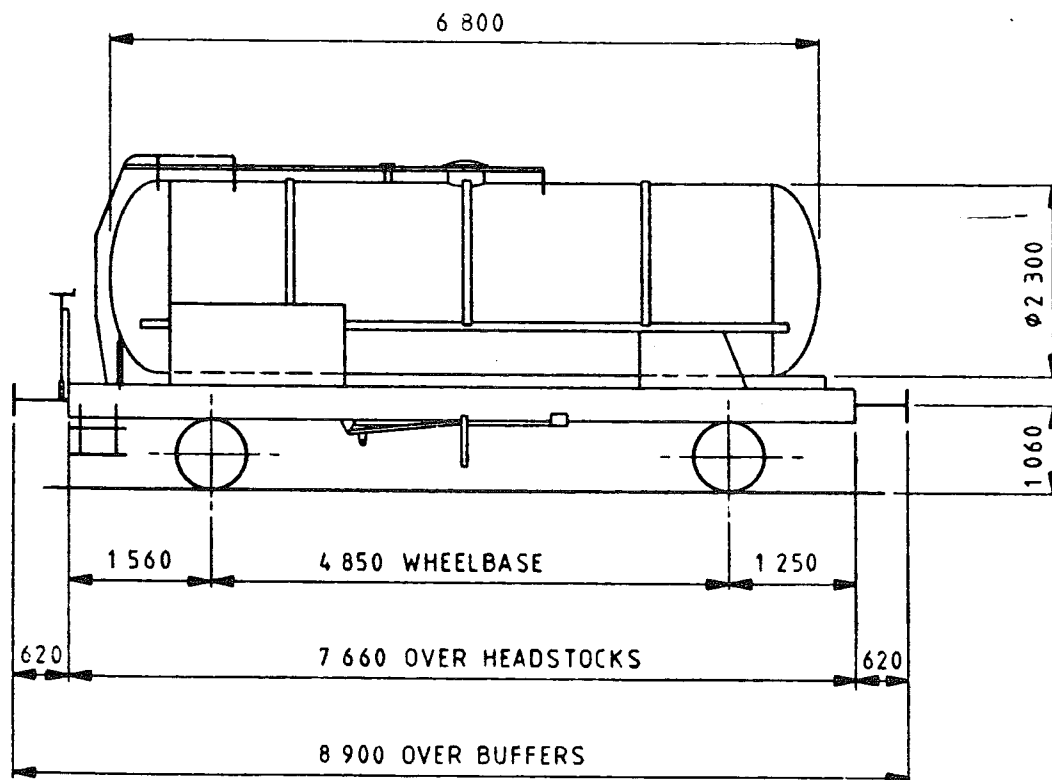
TYPE -	Habfis
WAGON No. -	33 80 2797 000-009, 011-160 83 80 2797 161-170, 172-209
BUILDER -	LINKEHOFMANN BUSCH
OWNER -	V T G

ISSUE 1

40 t GLW TANK WAGON

ICE 488

				TOPS INFORMATION									
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20 t	24 t	28 t				60 mile/h UP TO 30 tonne GLW		14 t FORCE UP TO 28 t GLW		4	6	
S	20 t	24 t	24 t		CARKND		50 mile/h ABOVE		27 t FORCE ABOVE				
					I	C	B	C					



TARE -	12 t
CAPACITY, WEIGHT-	28 t
CAPACITY, VOLUME-	27 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	8-115443

BRAKE -	AIR & VAC THRO PIPE, PLATFORM SCREW & SIDE LEVER
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC Ø 390
WHEELS -	Ø 1 000
JOURNALS -	Ø 130

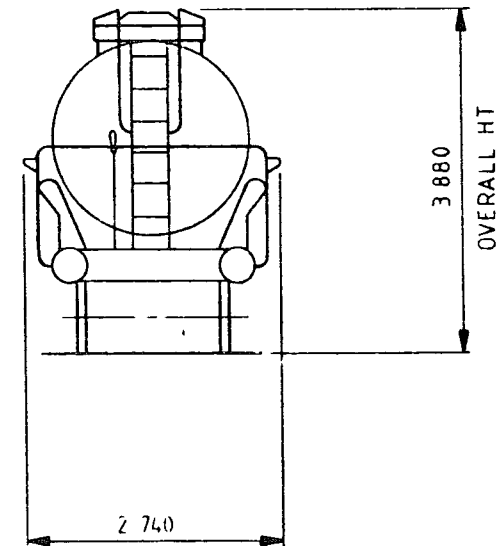
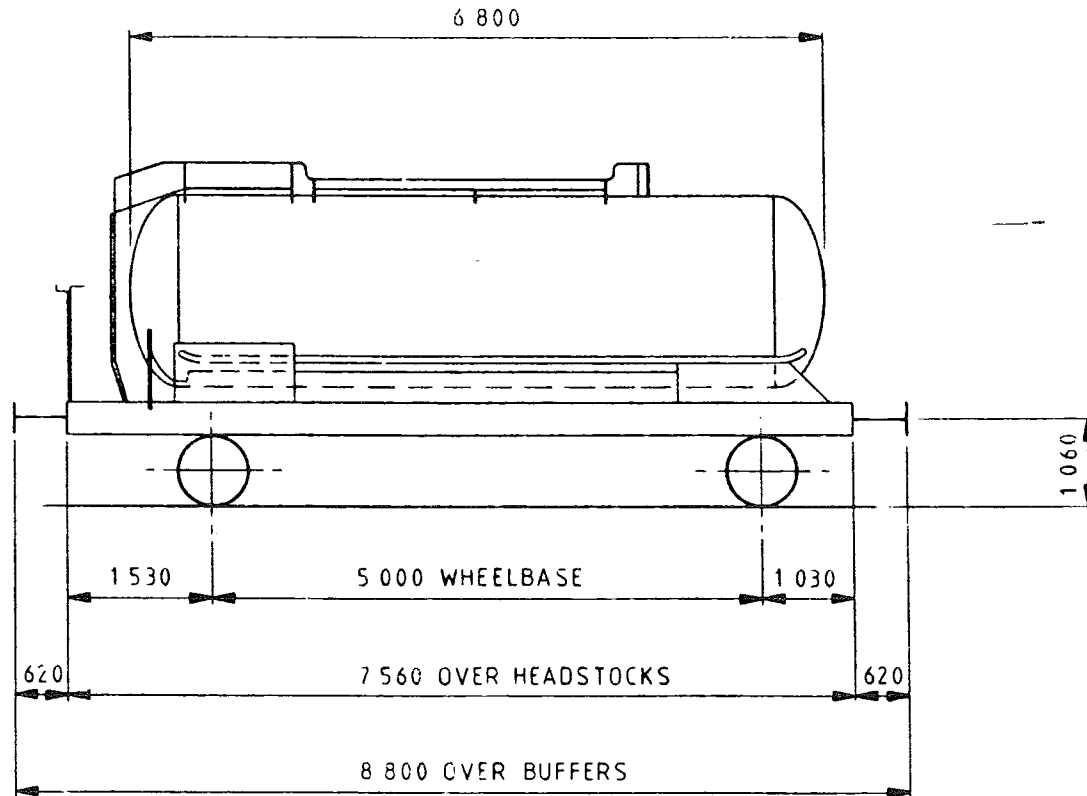
TYPE -	Zefs
WAGON No. -	23 85 7397 750 & 751
BUILDER -	JOSEF MEYER
OWNER -	SBB / CFF

ISSUE 1

40 t GLW TANK WAGON

ICE 489

				TOPS INFORMATION							
A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	21.3t	25.3t	29.3t			60 mile/h UP TO		8 t FORCE UP TO			
S	21.3t	25.3t	29.3t		CARKND	50 mile/h ABOVE	36 tonne GLW	21 t FORCE ABOVE	24 t GLW	4	6
					I C B C						



TARE -	10.7 t
CAPACITY, WEIGHT -	29.3 t
CAPACITY, VOLUME -	22 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GFN. ARRGT. DRG. No. -	152320 0 11

BRAKE -	AIR & VAC THRO PIPE, PLATFORM & SIDE LEVER
SUSPENSION -	SINGLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC ϕ 460
WHEELS -	ϕ 1000
JOURNALS -	ϕ 130

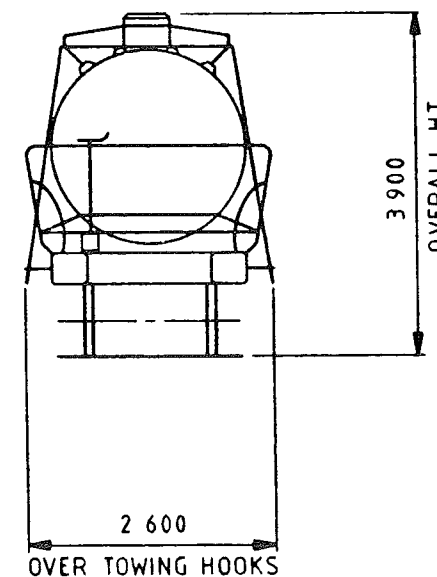
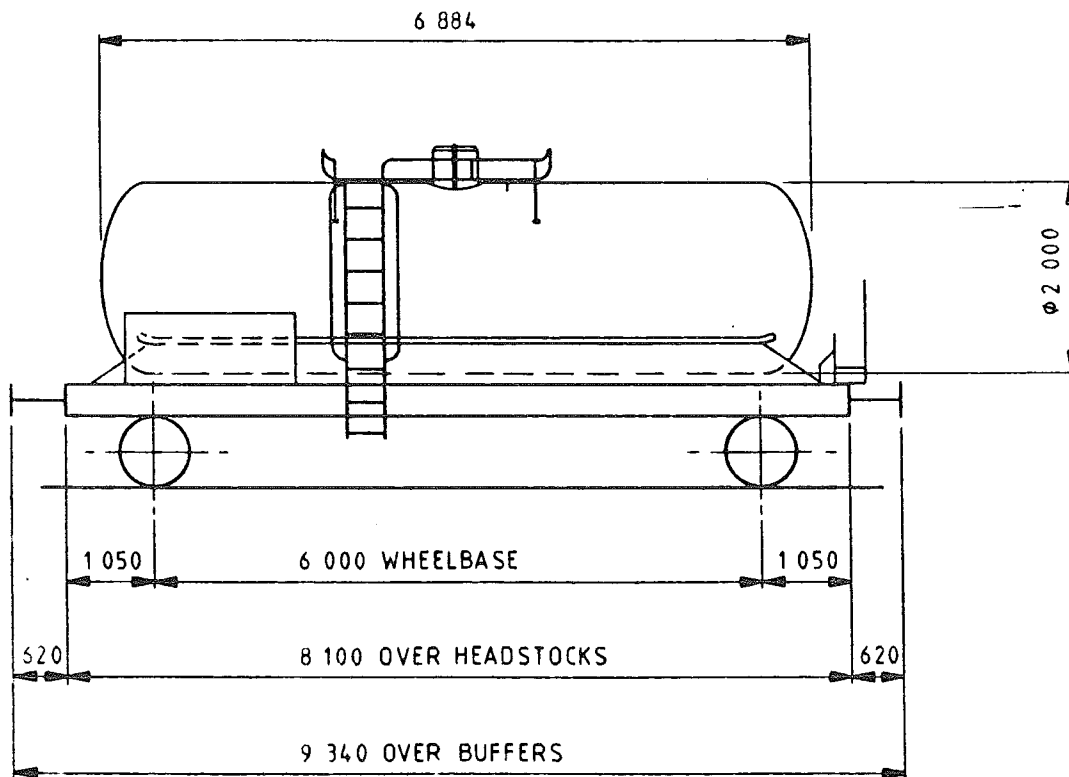
TYPE -	Zcfs
WAGON No. -	23 80 7391 057
BUILDER -	LINKE-HOFMANN-BUSCH
OWNER -	VTG.

ISSUE 1

40 t GLW TANK WAGON

ICE 492

					TOPS INFORMATION					
A	B	C	D		AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	18 t	22 t	26 t			60 mile/h UP TO mile/h ABOVE 40 tonne GLW	7 t FORCE UP TO 18 t FORCE ABOVE 20 t GLW	5	6	
S	18 t	22 t	26 t		CARKND					
					I C B B					



TARE -	14 t
CAPACITY, WEIGHT -	26 t
CAPACITY, VOLUME -	20 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	113580

BRAKE -	AIR & VAC THRO PIPE, PLATFORM & SIDE SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 440 x 330
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

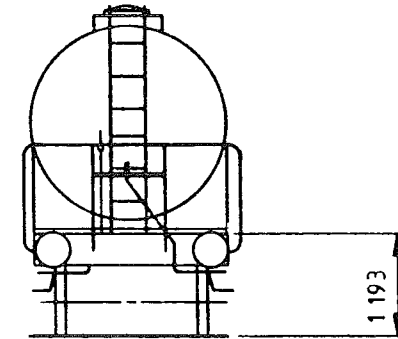
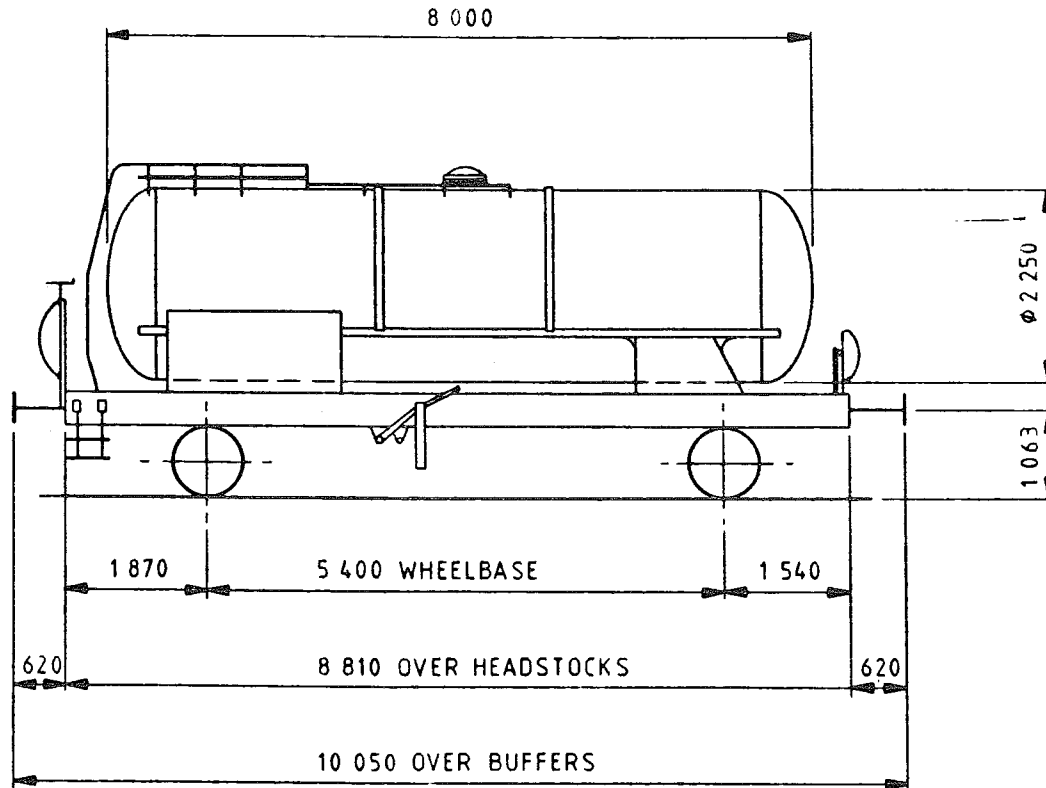
TYPE -	Zcfkks
WAGON No. -	23 87 7491 000
BUILDER -	FAUVET-GIREL
OWNER -	LOGEMAFER, PARIS

ISSUE 1

40 t GLW TANK WAGON

ICE 493

				TOPS INFORMATION								
A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
20†	24†	28†		CARKND		60 mile/h UP TO mile/h ABOVE 40 tonne GLW		12 † FORCE UP TO 28 † FORCE ABOVE 27 † GLW		6	6	
S	20†	24†	28†	I	C	B	C					



TARE -	12 †
CAPACITY, WEIGHT-	28 †
CAPACITY, VOLUME-	30 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	3-115967

BRAKE -	AIR & VAC THRO PIPE, PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 400 HD.
WHEELS -	φ 1000
JOURNALS -	φ 130

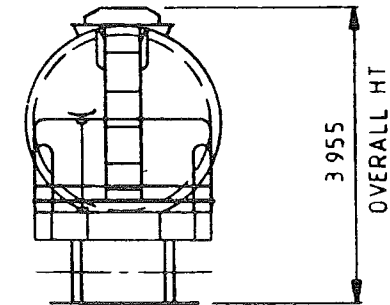
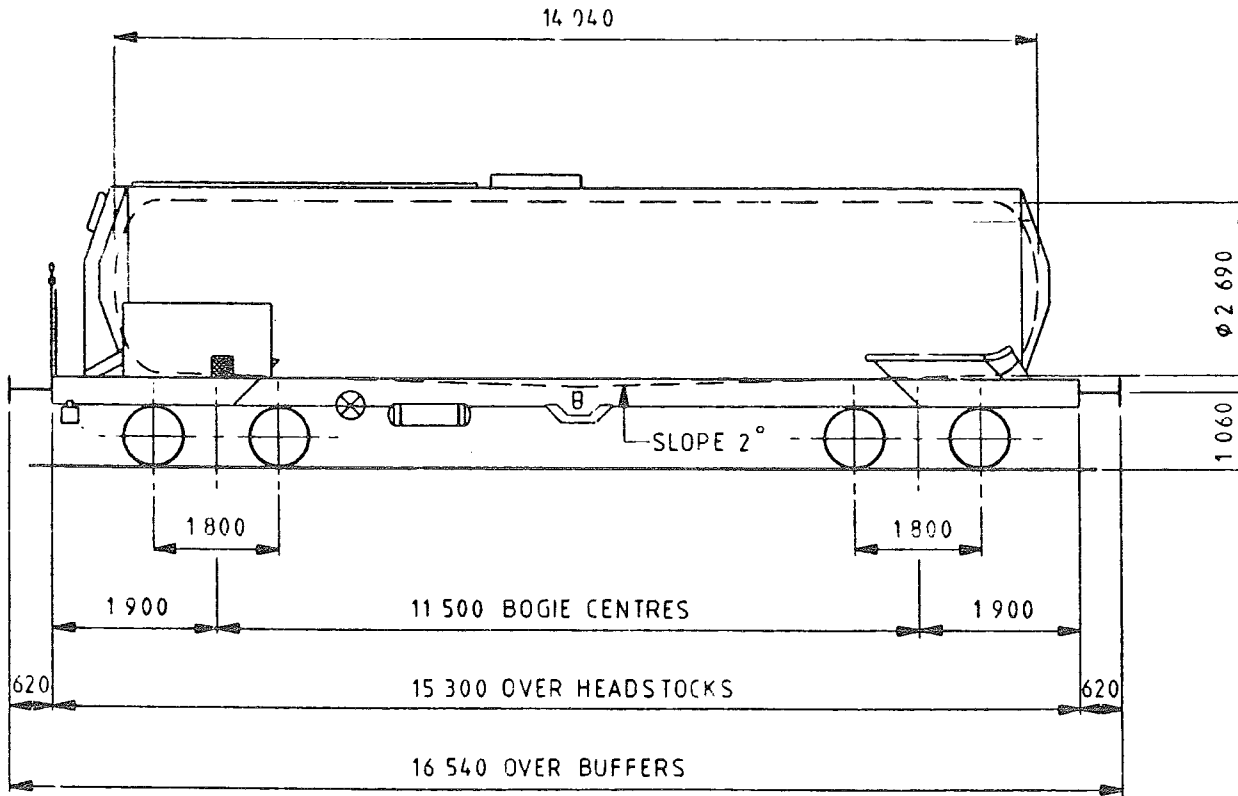
TYPE -	Zcefs
WAGON No. -	23 85 7398 500 -521
BUILDER -	Josef Meyer
OWNER -	ETRA

ISSUE 1

80 t GLW BOGIE TANK

ICE 496

				TOPS INFORMATION						
	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	423t	503t	58.3t			60 mile/h UP TO mile/h ABOVE 90 tonne GLW	14 t FORCE UP TO 36 t FORCE ABOVE 40 t GLW	6	6	-
S	423t	503t	58.3t		CARKND					
120		000t			I C A D					



TARE -	21.7 t
CAPACITY, WEIGHT-	58.3 t
CAPACITY, VOLUME-	61 m ³
FLOOR AREA -	
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	1.4.0.854

BRAKE -	AIR, PLATFORM & SIDE SCREW
SUSPENSION -	Y 25 CS 2
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 450 x 340
WHEELS -	φ 920
JOURNALS -	φ 130

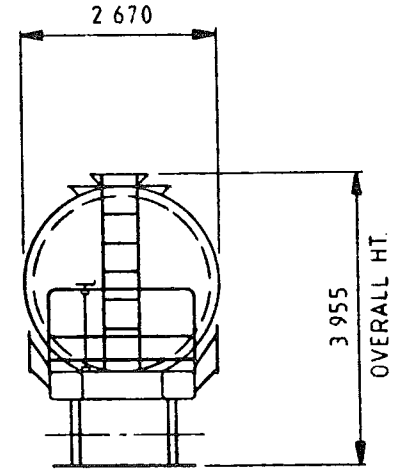
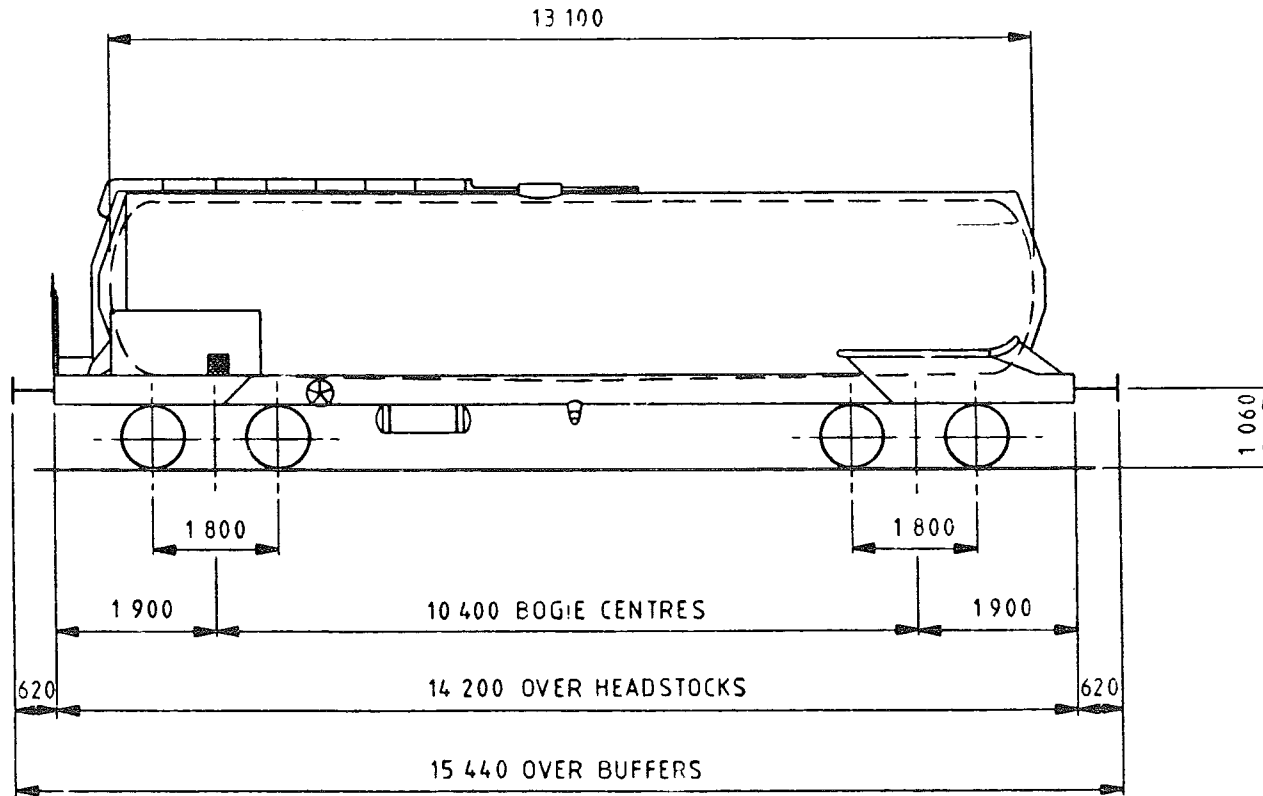
TYPE -	Zaefs
WAGON No. -	33 87 7992 000 - 015
BUILDER -	C.F.M.F.
OWNER -	NACCO, PARIS

ISSUE 1

80 t GLW BOGIE TANK

ICE 498

				TOPS INFORMATION					
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
437†	517†	597†			60 mile/h UP TO mile/h ABOVE 80 tonne GLW	13 † FORCE UP TO 40 † FORCE ABOVE 38 † GLW	5	6	-
S	437†	517†	597†	CARKND					
120	00-0†			I C A D					



TARE -	20.3 t
CAPACITY, WEIGHT-	59.7 t
CAPACITY, VOLUME-	60 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	2.4.0.639

BRAKE -	AIR; PLATFORM & SIDE SCREW
SUSPENSION -	Y25Cs2
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 450 x 340 HD.
WHEELS -	φ920
JOURNALS -	φ130

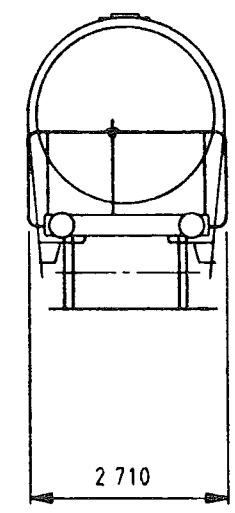
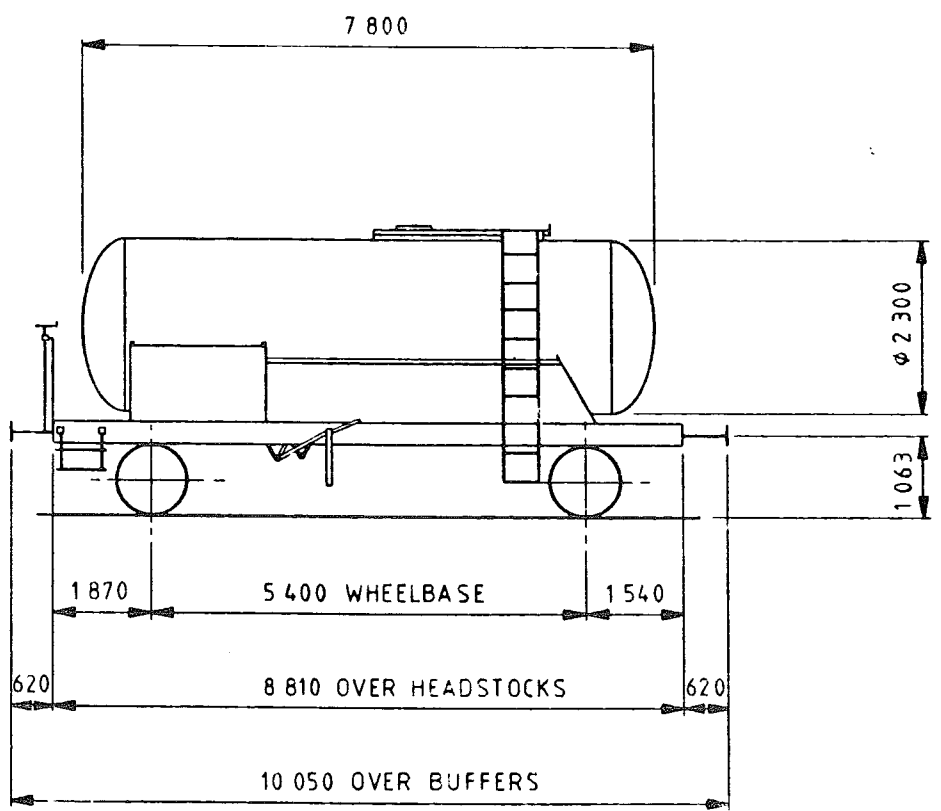
TYPE -	Zacefs
WAGON No. -	33 87 7995 000.001.002
BUILDER -	C.E.M.F.
OWNER -	C.F.P.M PARIS

ISSUE 1

40 t GLW TANK WAGON

ICE 499

TOPS INFORMATION												
	A	B	C	D		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20 t	24 t	28 t			60 mile/h UP TO 40 tonne GLW		12 t FORCE UP TO 28 t FORCE ABOVE 33 t GLW		6	6	-
S	20 t	24 t	28 t			mile/h ABOVE						



TARE -	12.6 t
CAPACITY, WEIGHT -	28 t
CAPACITY, VOLUME -	30 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	3-116267

BRAKE -	AIR VVA - THIRD FIFE PLATE - RM SCREWS - LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	
JOURNALS -	

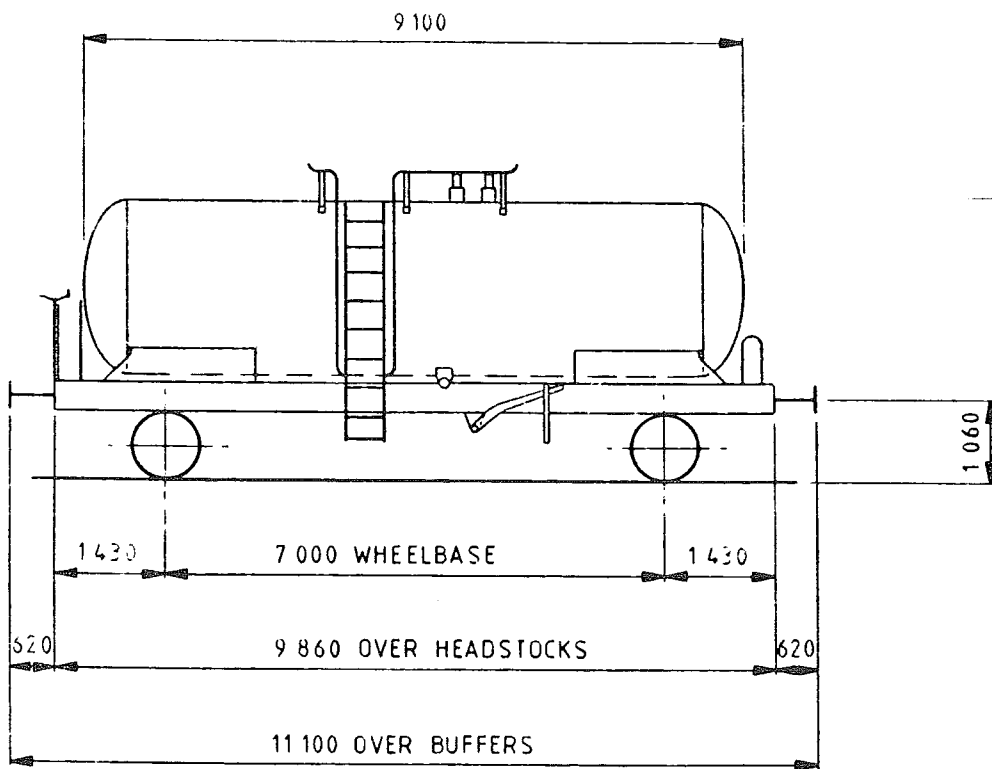
TYPE -	Z1s
WAGON No. -	23 85 7390 500-567
BUILDER -	J MEYER, RHEINFELDEN
OWNER -	ETRA AG ZURICH

ISSUE 1

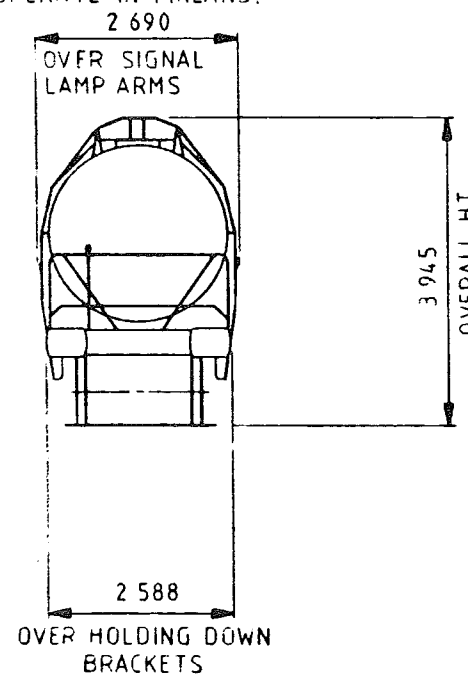
40 t GLW TANK WAGON

ICE 500

				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19 †	23 †	27 †			60	mile/h UP TO	9 † FORCE UP TO	26 † GLW	8	6	-
S	19 †	23 †	27 †		CARKND	40 tonne GLW		21 † FORCE ABOVE				
					I C B C							



NOTE - WAGON No 23 80 7398 062 IS ABLE TO OPERATE IN FINLAND.



TARE -	13 t
CAPACITY, WEIGHT -	27 t
CAPACITY, VOLUME -	30 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	K467.01.00

BRAKE -	AIR & VAC THRU DIFF. FLATIRON SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RING FEDER 450 x 340 HD
WHEELS -	∅ 920
JOURNALS -	∅ 130

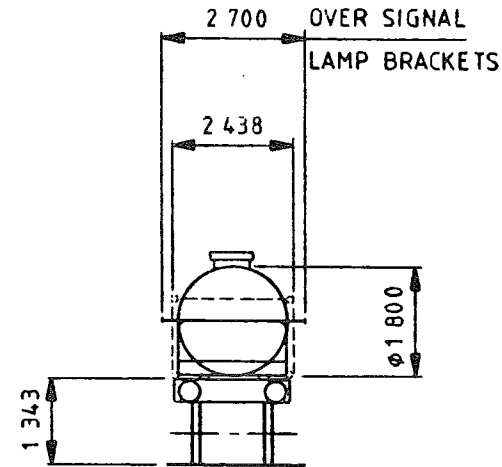
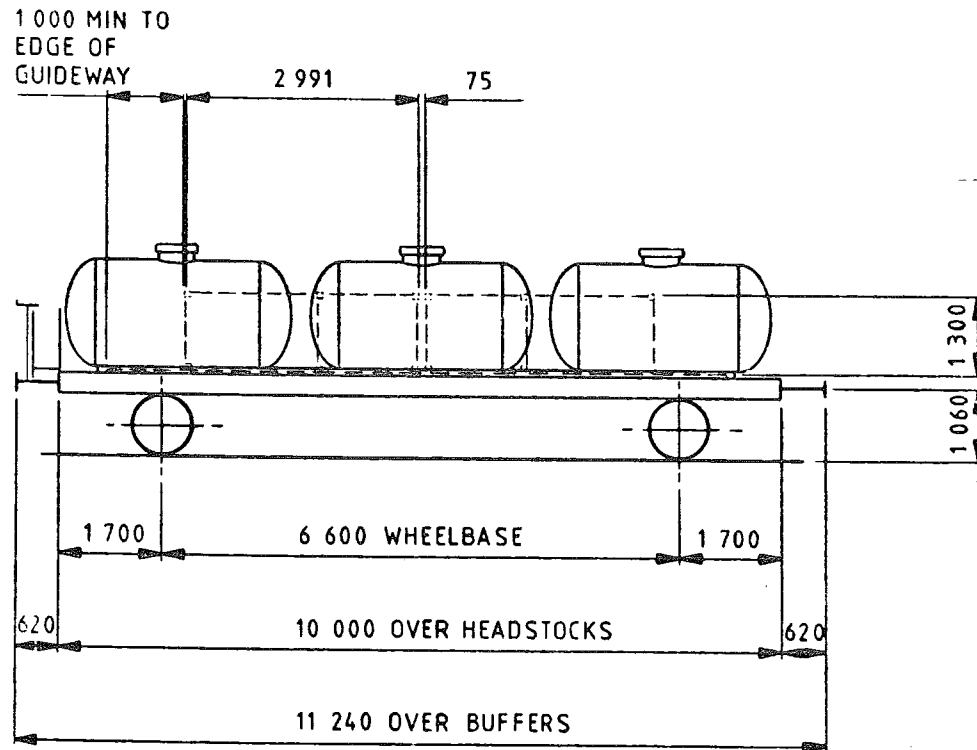
TYPE -	Zcfs
WAGON No. -	23 80 7398 053 - 062
BUILDER -	GRAAFF
OWNER -	VTG

ISSUE 1

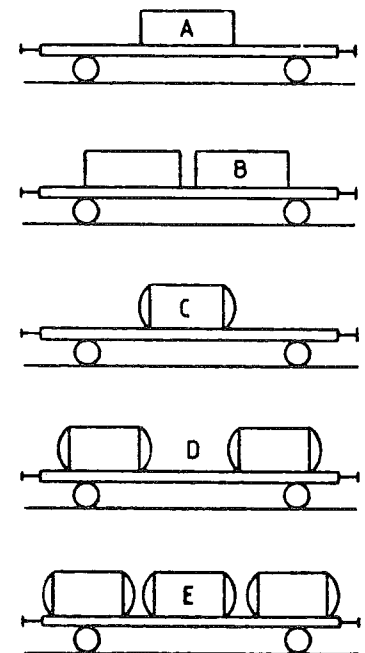
40 t GLW CONTAINER CARRYING WAGON

IPE 501

				TOPS INFORMATION									
	A	B	C	D	AARKND	OPERATING SPEED			BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20.5t	24.5t	28.5t			60 mile/h UP TO mile/h ABOVE 40 tonne GLW			8 t FORCE UP TO 26 t GLW		8	6	-
S	20.5t	24.5t	28.5t		CARKND				21 t FORCE ABOVE				
					I	P	B	F					



POSSIBLE LOADING CONDITIONS



TARE -	11.5 t
CAPACITY, WEIGHT-	28.5 t
CAPACITY, VOLUME-	22.5 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	W1971

BRAKE -	AIR, VAC. THRO' PIPE; PLATFORM SCREW & LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RING FEDER
WHEELS -	φ 920
JOURNALS -	φ 130

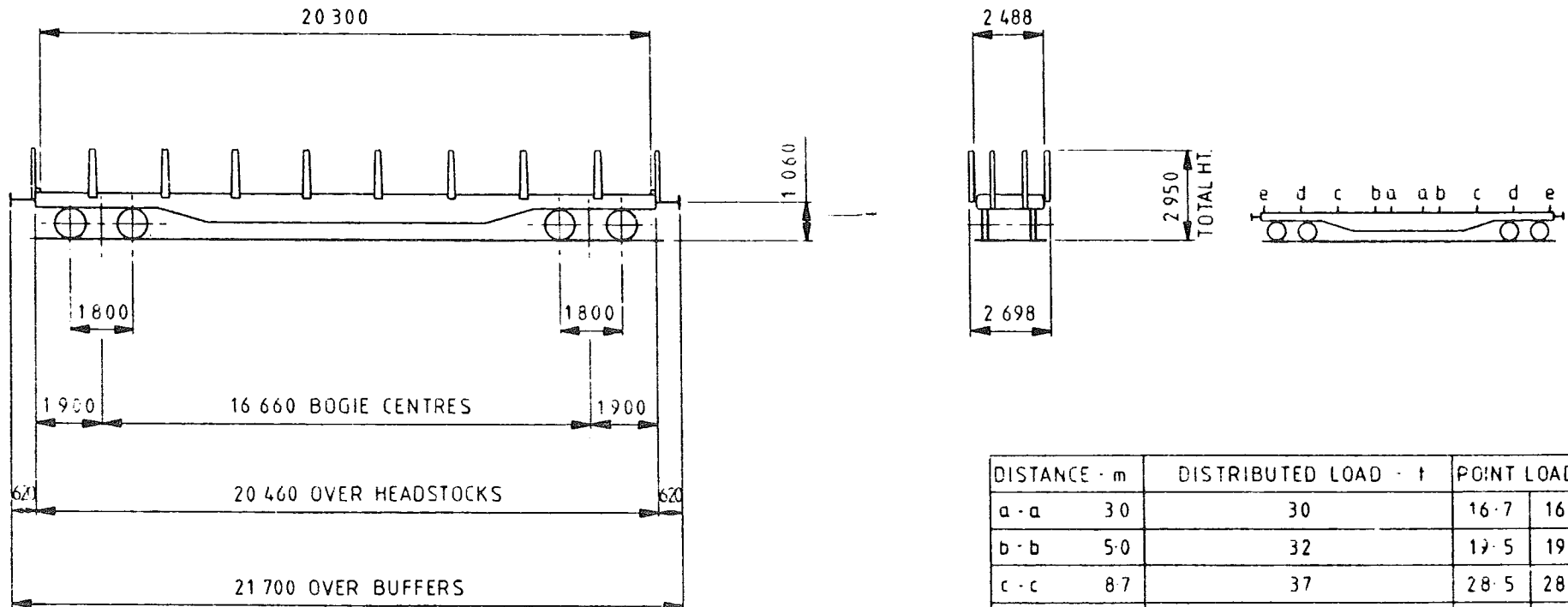
TYPE -	Lfs
WAGON No. -	43 80 4141 500 - 502
BUILDER -	FRANZ KAMINSKI
OWNER -	SCHERING

ISSUE 1

80 t GLW BOGIE FLAT

IPE 502

				TOPS INFORMATION									
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 13	RA (GLW) 6	DESIGN SHEET
	41 t	49 t	57 t				60 mile/h UP TO mile/h ABOVE 80 tonne GLW		16 t FORCE UP TO 44 t FORCE ABOVE 45 t GLW				
S	41 t	49 t	57 t		CARKND								
					I	P	B	D					



DISTANCE - m	DISTRIBUTED LOAD - t	POINT LOAD - t	
a - a	30	16.7	16.7
b - b	5.0	17.5	19.5
c - c	8.7	28.5	28.5
d - d	15.0	28.5	28.5
e - e	20.3	28.5	28.5

TARE -	23 t
CAPACITY, WEIGHT -	57 t
CAPACITY, VOLUME -	-
FLOOR AREA -	50 m ²
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No. -	9AZ 251 0029

BRAKE -	AIR, VAC THRO PIPE, SIDE SCREW
SUSPENSION -	TALBOT BOGIE
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC 450 x 340 HD
WHEELS -	∅ 920
JOURNALS -	∅ 130

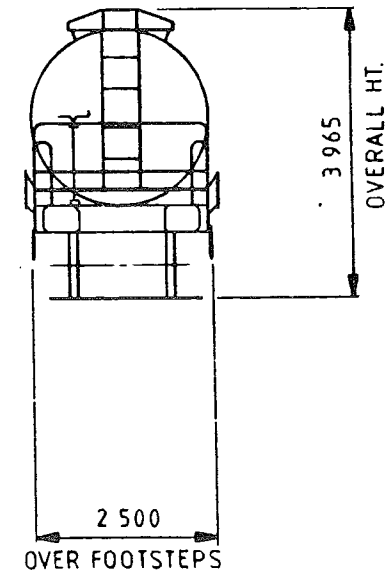
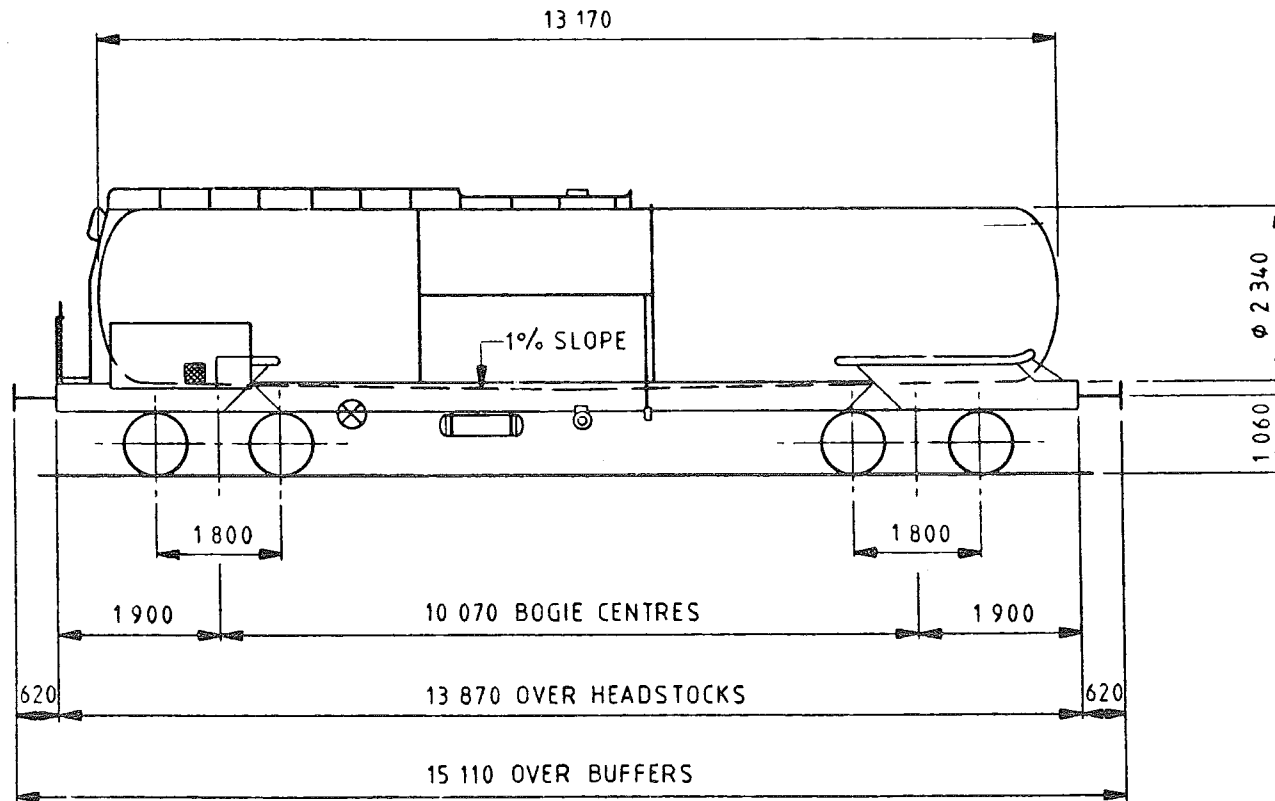
TYPE -	Sfs
WAGON No. -	26 80 0498 000-049
BUILDER -	WAGGON UNION
OWNER -	EVA

ISSUE 1

80 t GLW BOGIE TANK

ICE 507

TOPS INFORMATION												
				AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	A	B	C	D			60 mile/h UP TO	80 tonne GLW	14 t FORCE UP TO			
	42.7t	50.7t	58.7t				mile/h ABOVE		36 t FORCE ABOVE			
S	42.7t	50.7t	58.7t		CARKND							
120		00.0t			I C A D							



TARE -	21.3 t
CAPACITY, WEIGHT-	58.7 t
CAPACITY, VOLUME-	54 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	0.4 16 842

BRAKE -	AIR, PLATFORM & SIDE SCREW.
SUSPENSION -	Y25 Cs2
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC 450 x 340 HD.
WHEELS -	φ 920
JOURNALS -	φ 130

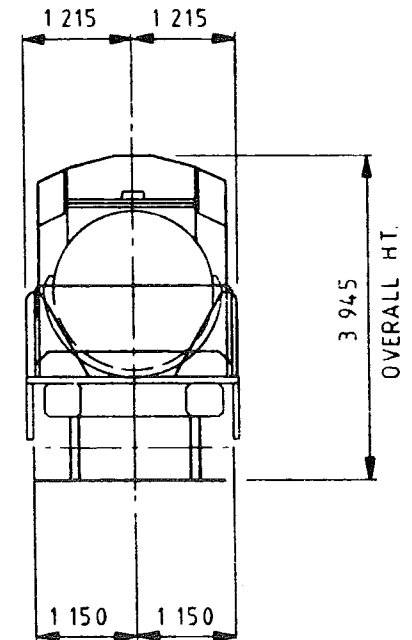
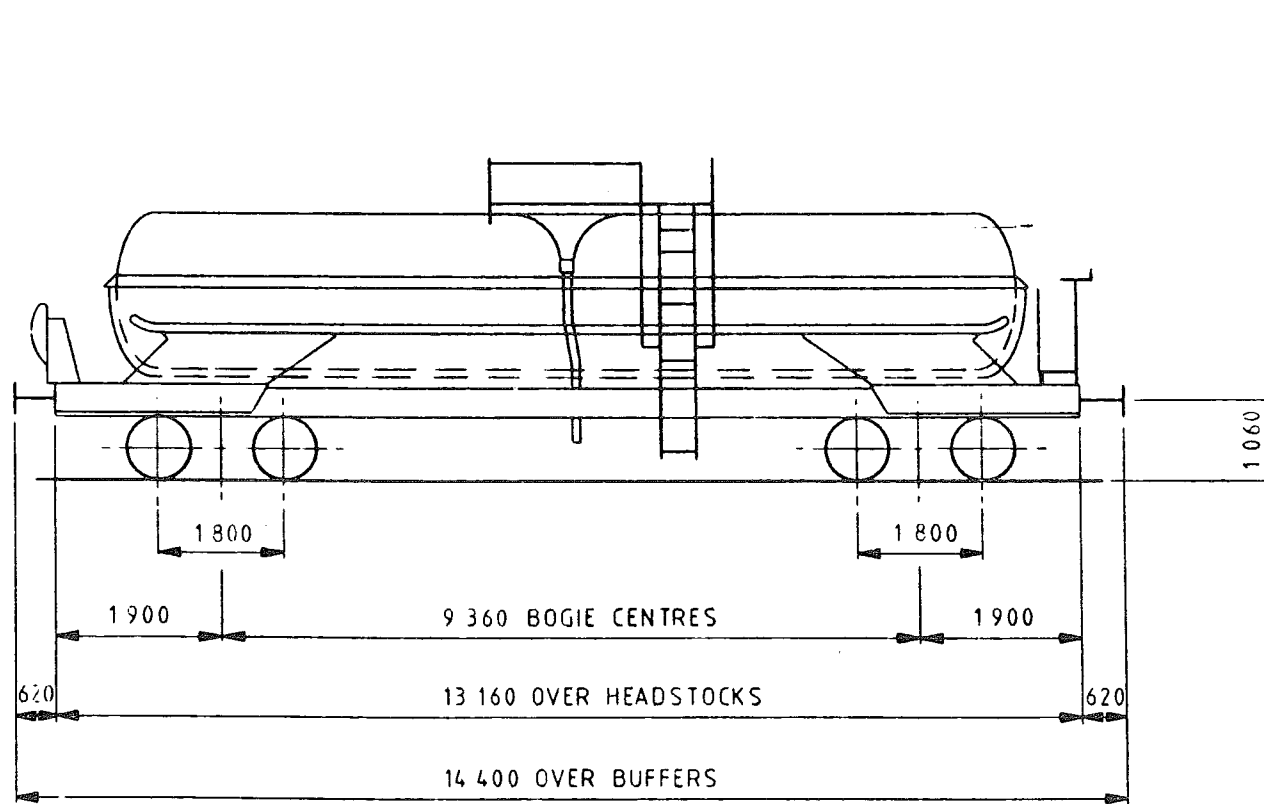
TYPE -	Zacfs
WAGON No. -	33 87 7896 000
BUILDER -	C.F.M.F
OWNER -	SIMOTRA

ISSUE 1

80 t GLW BOGIE TANK

ICE 508

				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	383t	463t	543t			60 mile/h UP TO mile/h ABOVE 80 tonne GLW		18 t FORCE UP TO 45 t GLW 43 t FORCE ABOVE		3	6	
S	383t	463t	543t		CARKND	I	C	B	D			



TARE -	27.5 t
CAPACITY, WEIGHT -	54.3 t
CAPACITY, VOLUME -	27 m ³
FLOOR AREA -	
MIN. CURVE -	16 m
GEN. ARRGT. ORG. No. -	112080.0.01

BRAKE -	AIR, VAC. THRO' PIPE, PLATFORM & SIDE SCREW
SUSPENSION -	LHB 77 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	54 x 45 x 110
WHEELS -	φ 920
JOURNALS -	φ 130

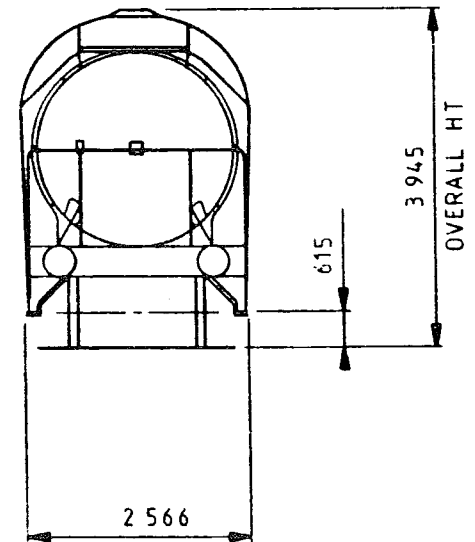
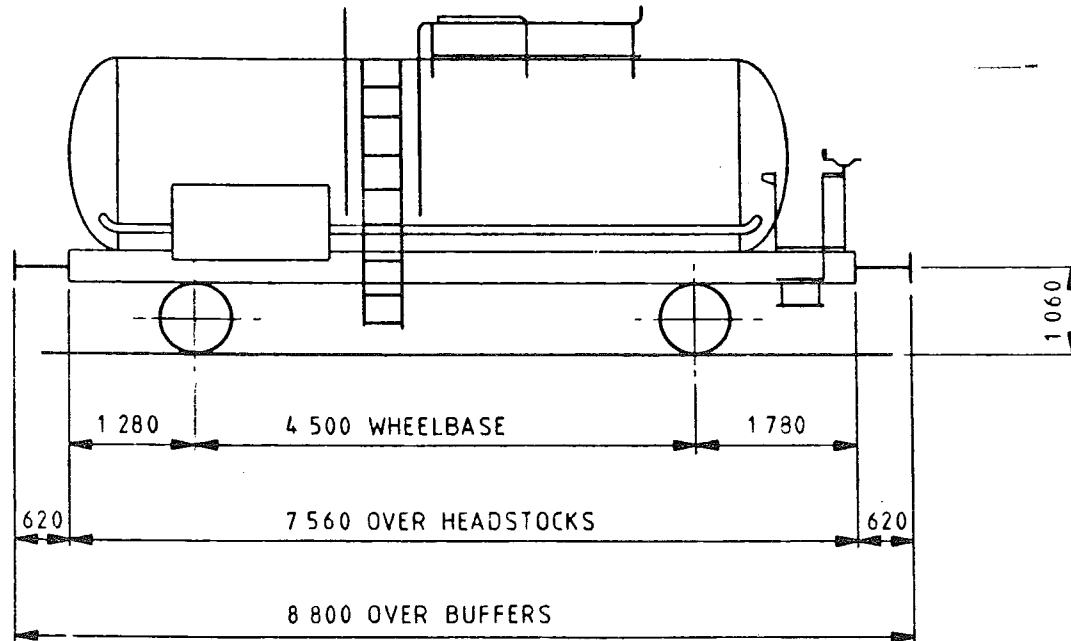
TYPE -	Zacfs
WAGON No. -	33 80 7895 010 · 012
BUILDER -	LINKE · HOFFMAN · BUSCH
OWNER -	VTG

ISSUE 1

40 t GLW TANK WAGON

ICE 509

				TOPS INFORMATION							
A	B	C	D	AARKND		OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
19.7t	23.7t	27.7t				60 mile/h UP TO mile/h ABOVE 40 tonne GLW	8 t FORCE UP TO 24 t GLW		4	6	-
S 19.7t	23.7t	27.7t		CARKND			21 t FORCE ABOVE				
				I	C	B	C				



TARE -	12.3 t
CAPACITY, WEIGHT -	27.7 t
CAPACITY, VOLUME -	22 m ³
FLOOR AREA -	
MIN. CURVE -	50 m
GEN. ARRG. DRG. No. -	152333.0 01

BRAKE -	AIR, VAC THRO' PIPE; PLATFORM & LEVER.
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U I C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1000
JOURNALS -	ϕ 130

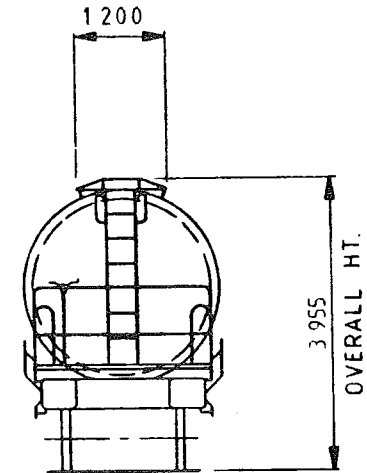
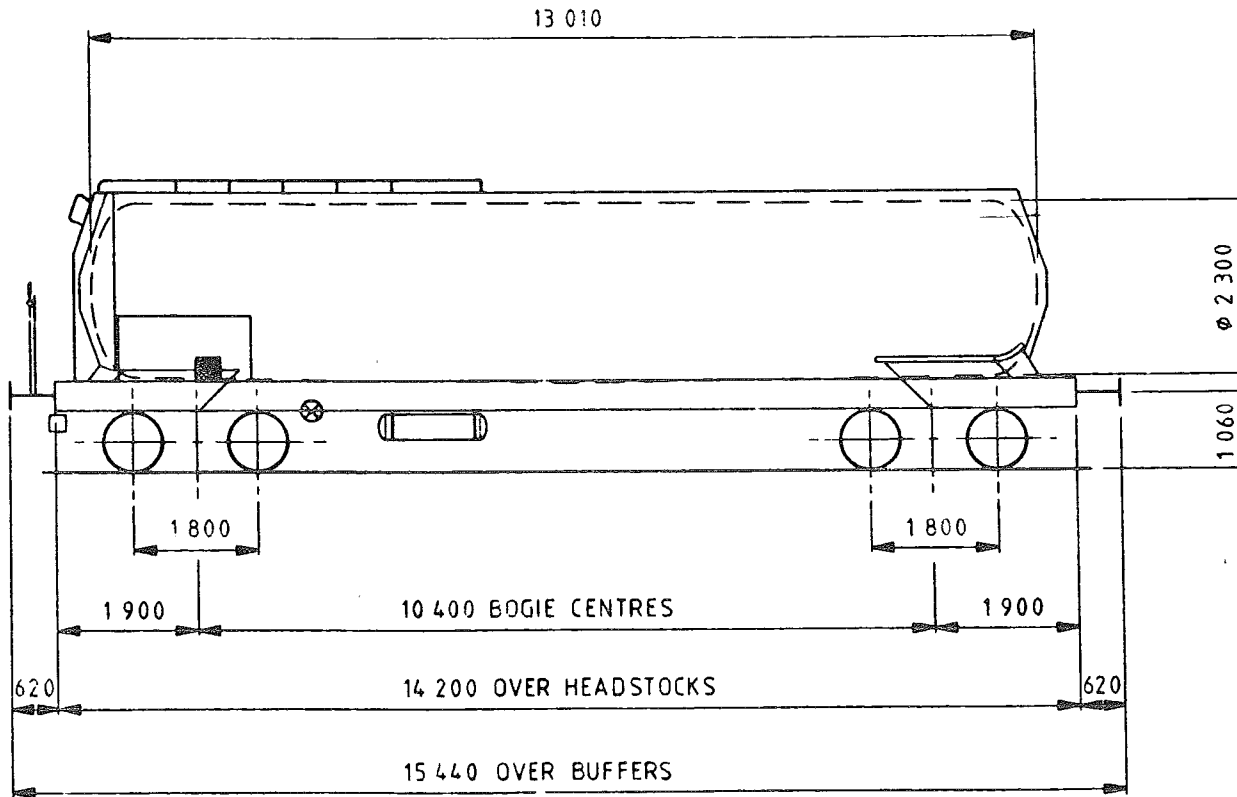
TYPE -	Zfgs
WAGON No. -	2380 7394 010 -019
BUILDER -	LINKE-HOFMANN-BUSCH
OWNER -	VTG

ISSUE 1

80 t GLW TANK WAGON

ICE 510

				TOPS INFORMATION						
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
425†	505†	585†			60 mile/h UP TO mile/h ABOVE 80 tonne GLW	14 t FORCE UP TO 40 t GLW		5	6	
S	425†	505†	585†	CARKND		36 t FORCE ABOVE				
120	00-0†			I C A D						



TARE -	21,500 kg
CAPACITY, WEIGHT-	58.5 t
CAPACITY, VOLUME-	52 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	2-4-0-937

BRAKE -	AIR, PLATFORM & SIDE SCREW
SUSPENSION -	Y25 CS2 BOGIE
COUPLINGS -	U.I.C
BUFFERS -	HYDRAULIC 450 x 340
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

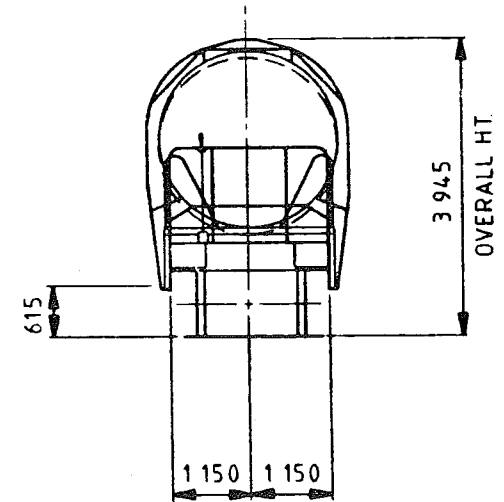
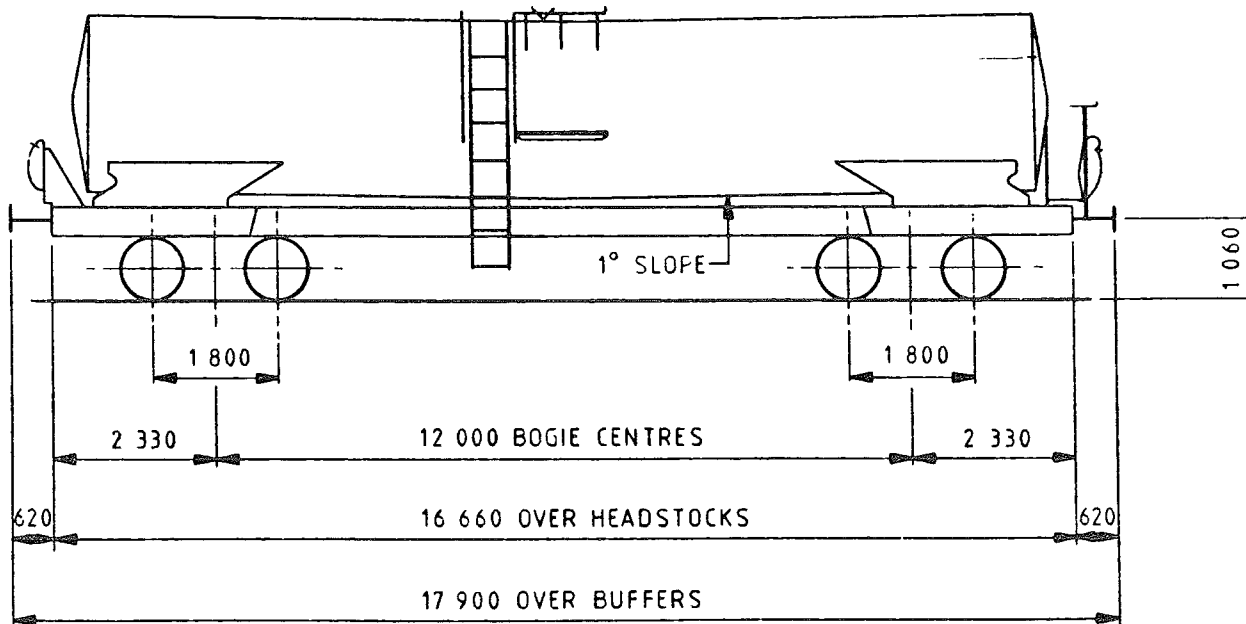
TYPE -	Zacefs (3)
WAGON No. -	33 87 7996 000 - 007
BUILDER -	CFME
OWNER -	2-4-0-937

ISSUE 1

80 t GLW TANK WAGON

ICE 511

				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	403†	483†	563†			60	mile/h UP TO	80	tonne GLW	16 † FORCE UP TO		
S	403†	483†	563†		CARKND	mile/h ABOVE		43 † FORCE ABOVE		8	6	
					I C B D							



TARE -	23.7 t
CAPACITY, WEIGHT-	56.3 t
CAPACITY, VOLUME-	50 m ³
FLOOR AREA -	
MIN. CURVE -	
GEN. ARRGT. DRG. No. -	712081.0.01

BRAKE -	AIR & VAC. THRO' PIPE SIDE SCREW
SUSPENSION -	DB BOGIE LHB 77
COUPLINGS -	U.I.C.
BUFFERS -	450 x 340 HD
WHEELS -	∅ 920
JOURNALS -	∅ 130

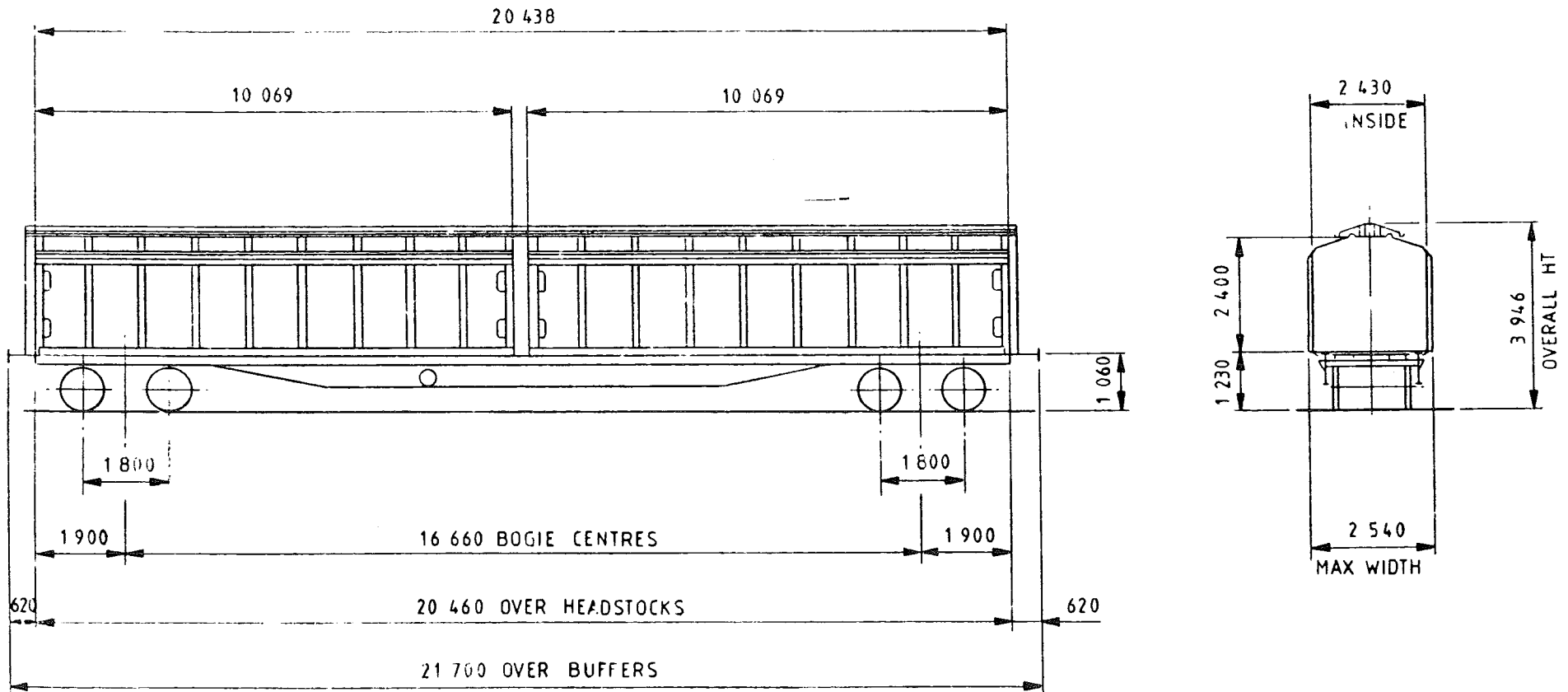
TYPE -	Zacefs
WAGON No. -	33 80 7995 003 - 012
BUILDER -	LINKE-HOFMANN-BUSCH
OWNER -	V.T.G.

ISSUE 1

80t GLW TWO DOOR VAN

IPE 512

TOPS INFORMATION												
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	37t	45t	53t			60 mile/h UP TO 80 tonne GLW		19t FORCE UP TO 51t GLW		13	6	-
S	37t	45t	53t		CARKND							
					I P B B							



TARE -	27t
CAPACITY, WEIGHT -	53t
CAPACITY, VOLUME -	114 m ³
FLOOR AREA -	49.66 m ²
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No. -	A2094.01.1

BRAKE -	AIR & VAC. THRO' PIPE; SCREW
SUSPENSION -	TALBOT BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	
WHEELS -	ø920
JOURNALS -	ø130

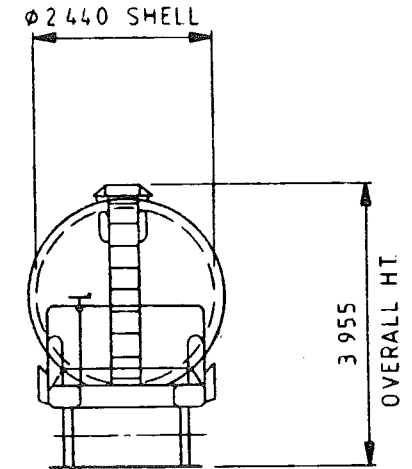
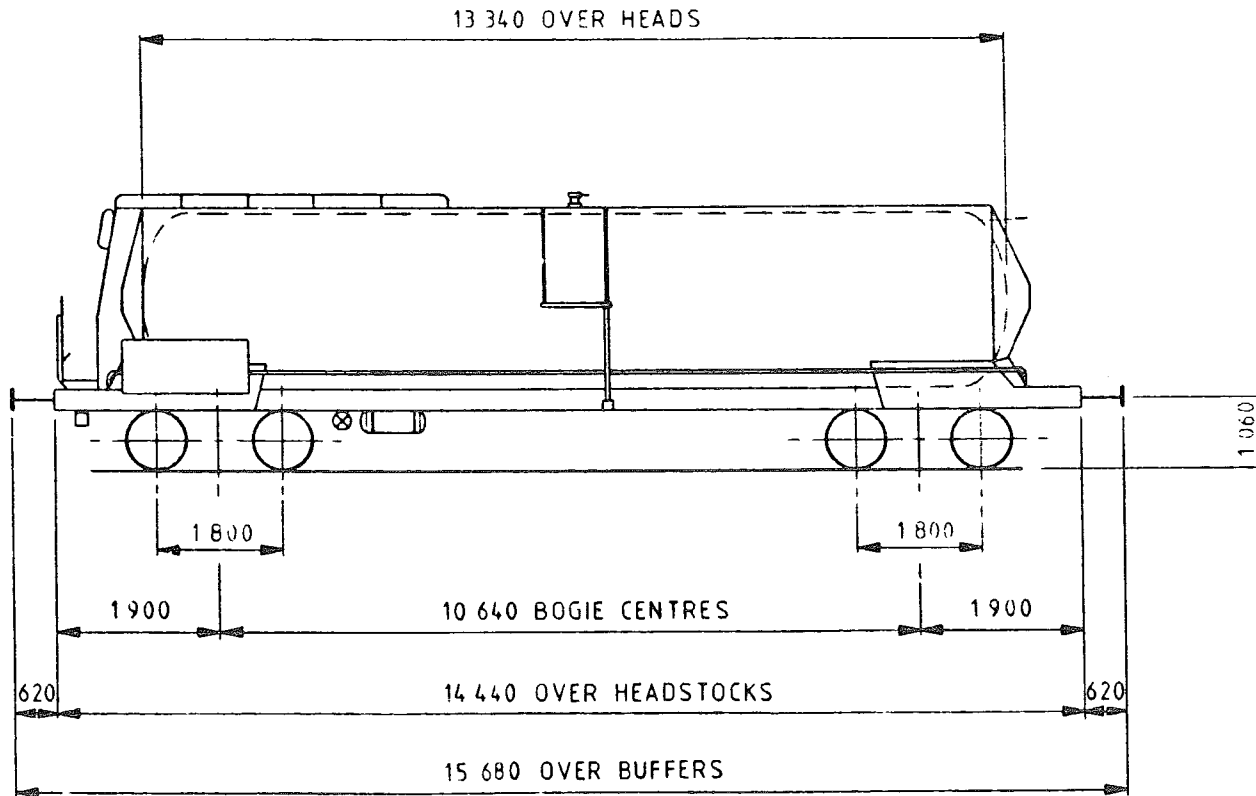
TYPE -	H3bfis
WAGON No. -	83 80 2797650-699
BUILDER -	WAGGONFABRIK VERDINGEN
OWNER -	EVA. DUSSELDORF

ISSUE 1

80 t GLW BOGIE TANK

ICE 513

TOPS INFORMATION													
	A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	43t	51t	59t			CARKND	60 mile/h UP TO		14t FORCE UP TO		5	6	
S	43t	51t	59t			I C B D	mile/h ABOVE 80 tonne GLW		36t FORCE ABOVE 40 t GLW				
120	00-0t												



TARE -	21 t
CAPACITY, WEIGHT -	59 t
CAPACITY, VOLUME -	60 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	2 4 0 929

BRAKE -	AIR,VAC. THRO' PIPE PLATFORM & SIDE SCREW
SUSPENSION -	Y25 CS2 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 470 x 340 HD
WHEELS -	Ø 920
JOURNALS -	Ø 130

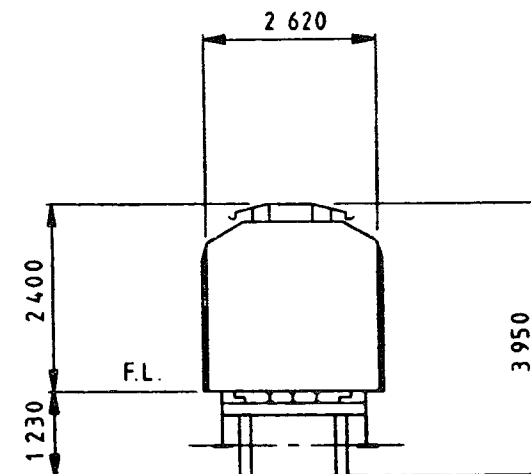
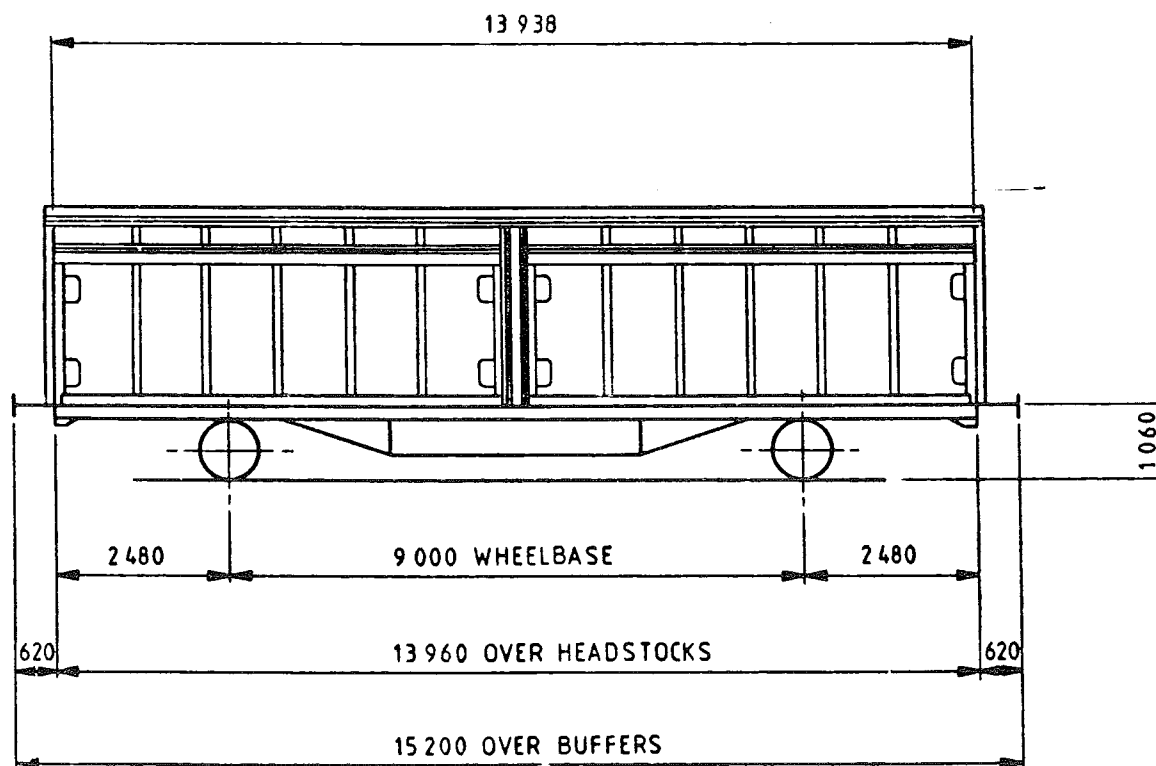
TYPE -	Zacefs(3)
WAGON No. -	33 87 7996 008-014
BUILDER -	CEMF
OWNER -	SIMOTRA

ISSUE 1

45 t GLW HIGH CAPACITY SLIDING WALL VAN

IPE 514

					TOPS INFORMATION								
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
	15.2t	19.2t	23.2t	28.2t			60 mile/h UP TO mile/h ABOVE	45 tonne GLW	10 t FORCE UP TO 21 t FORCE ABOVE	27 t GLW	15	6	W 955
S	15.2t	19.2t	23.2t	28.2t	CARKND								
					I P A L								



NOTE:-
 1 WAGON, 43 80 2385 000
 HAS LOCKABLE SLIDING PARTITIONS, Hbfikks (4)
 LOADING / UNLOADING BY FORK LIFT TRUCK.
 MAXIMUM WHEEL PRESSURE ON FLOOR IS 5 000 Kg.

TARE -	16.8 t
CAPACITY, WEIGHT-	28.2 t
CAPACITY, VOLUME-	84.7 m ³
FLOOR AREA -	36.4 m ²
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	A2100.01 002

BRAKE -	AIR; SIDE SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RING FEDER 340 x 450 HD.
WHEELS -	∅920
JOURNALS -	∅130

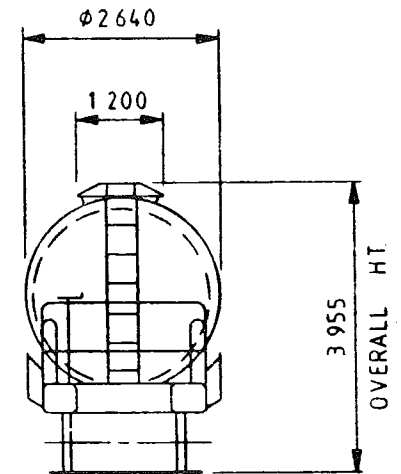
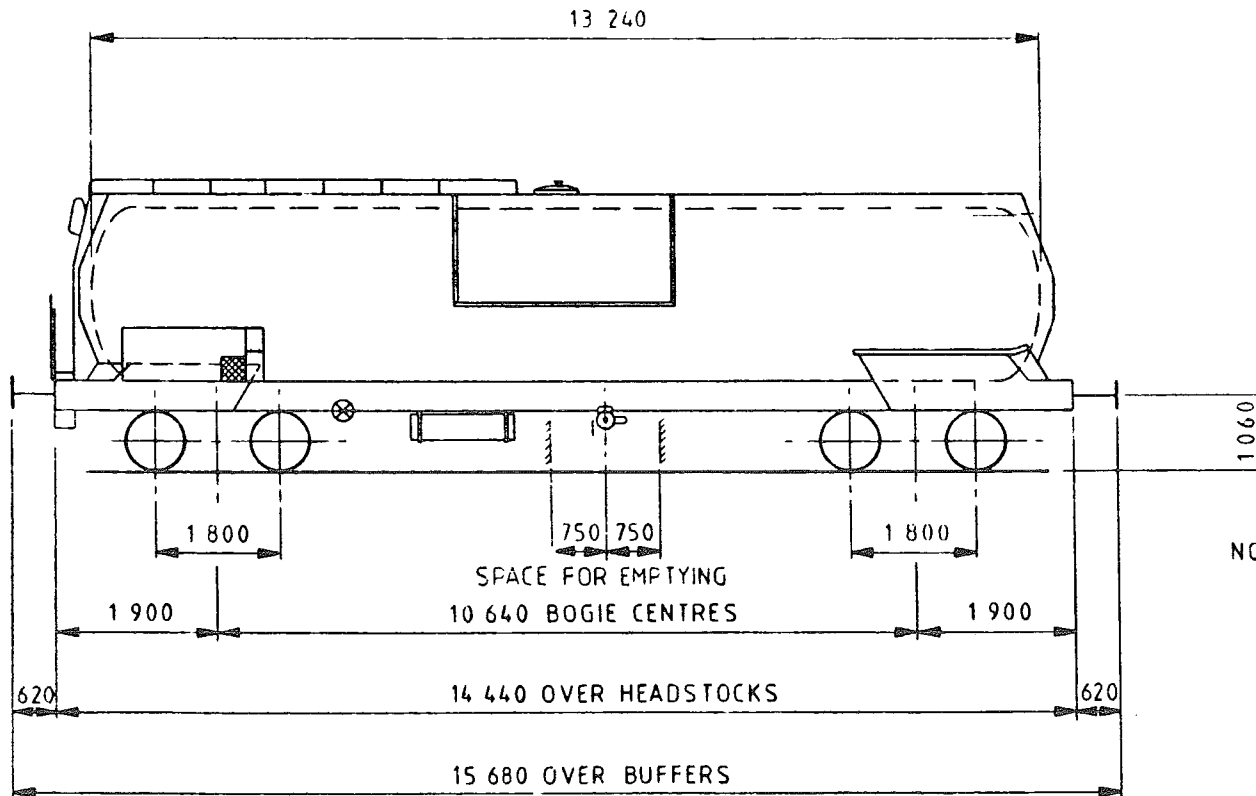
TYPE -	Hbfikks; Hbfikks (4)
WAGON No. -	43 80 2384 000 -120 43 80 2385 000
BUILDER -	DUEWAG KREFELD
OWNER -	E.V.A.

ISSUE 1

80 t GLW BOGIE TANK

ICE 516

TOPS INFORMATION												
	A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	42.8t	50.8t	58.8t			CARKND	60 mile/h UP TO 80 tonne GLW		14 t FORCE UP TO 44 t GLW	5	6	W 748
S	42.8t	50.8t	58.8t			I C B D	mile/h ABOVE		40 t FORCE ABOVE			
120		00.0t										



NOTE:
CURVE RADIUS WITH 10°
BOGIE INCLINATION = 30.7 m

TARE -	21.2 t
CAPACITY, WEIGHT-	58.8 t
CAPACITY, VOLUME-	60 m ³
FLOOR AREA -	
MIN. CURVE -	60 m (INDIVIDUALLY OR LOOSE COUPLED)
GEN. ARRGT. DRG. No.-	2-4-0-1003

BRAKE -	AIR & VAC. THRO PIPE, PLATFORM & SIDE SCREW.
SUSPENSION -	Y25 CS2 BOGIE
CCOUPINGS -	U.I.C.
BUFFERS -	RUBBER SPRING 460 x 340 HD.
WHEELS -	φ 920
JOURNALS -	φ 130

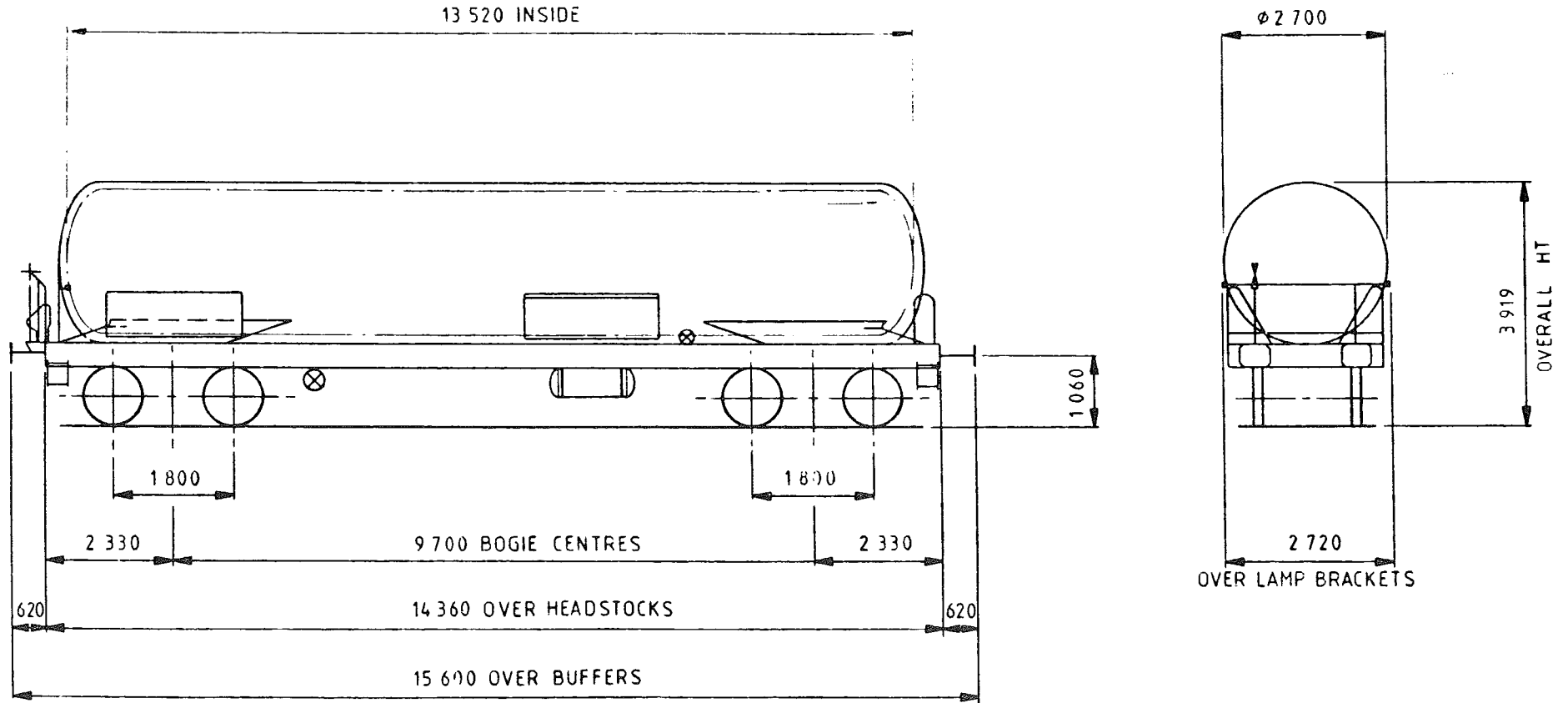
TYPE -	Zacets
WAGON No. -	33 87 7996 030-039
BUILDER -	C.F.M.F.
OWNER -	SIMOTRA

ISSUE 1

80 t GLW BOGIE TANK

ICE 517

				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	372t	452t	532t			60 mile/h UP TO mile/h ABOVE 80 tonne GLW		19 t FORCE UP TO 43 t FORCE ABOVE 52 t GLW		5	6	W 742
S	372t	452t	532t		CARKND							
					I	C	B	D				



TARE -	26 8 t
CAPACITY, WEIGHT-	53 2 t
CAPACITY, VOLUME-	53 m ³
FLOOR AREA -	—
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	220 01.00

BRAKE -	AIR, VAC THRO' PIPE, PLATFORM & SIDE SCREW
SUSPENSION -	TALBOT BOGIE BA 661 1
COUPLINGS -	U.I.C.
BUFFERS -	RING FEDER
WHEELS -	∅ 920
JOURNALS -	∅ 130

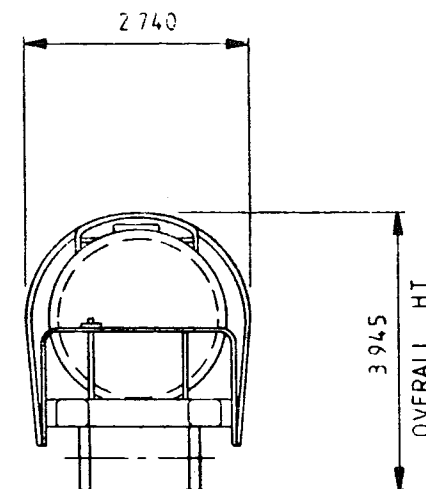
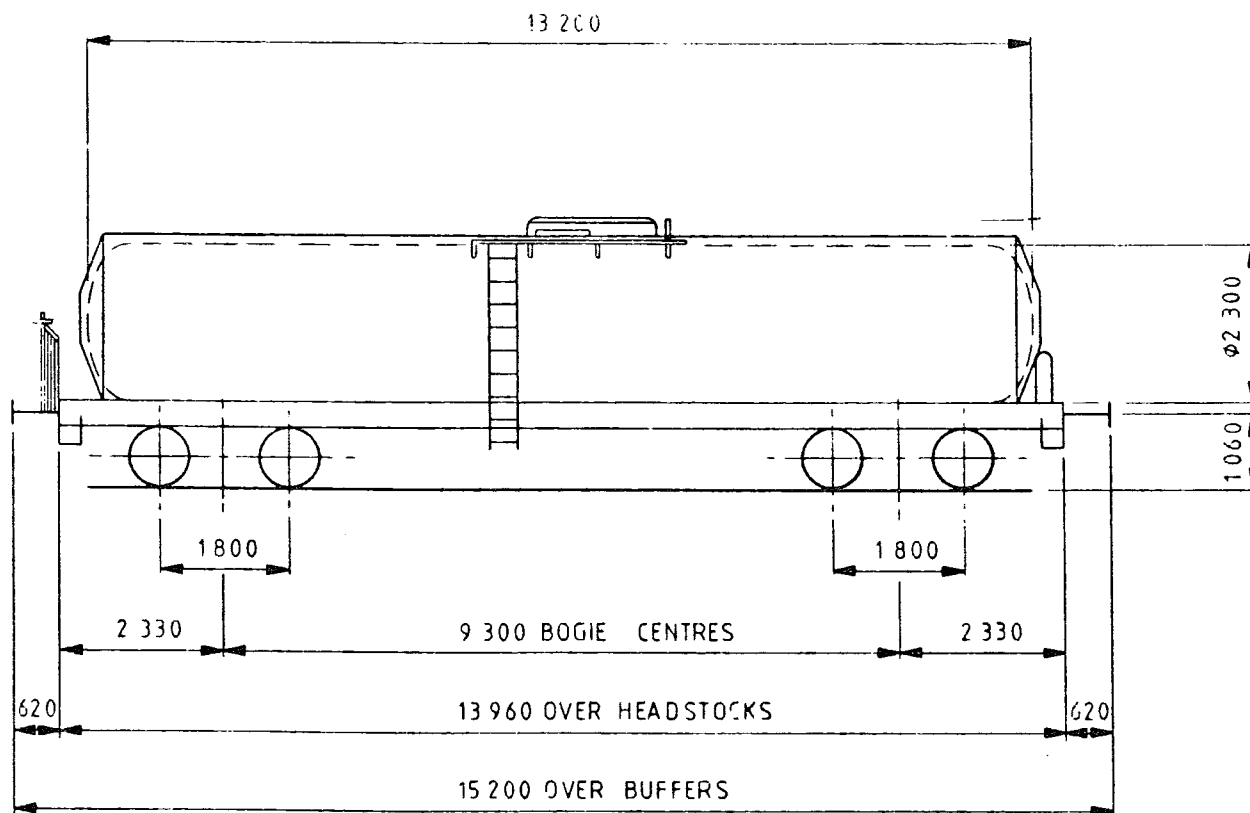
TYPE -	Zact's
WAGON No. -	33 80 7895 400.401
BUILDER -	STALWERKE BRUNINGHAUS
OWNER -	AB

ISSUE 1

80 t GLW BOGIE TANK

ICE 519

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	325t	405t	485t			60 mile/h UP TO mile/h ABOVE 80 tonne GLW		22 t FORCE UP TO 42 t FORCE ABOVE 16 t GLW		4	6	W 741
S	325t	405t	485t		CARKND							
					I C B D							



TARE -	3' 5 t
CAPACITY, WEIGHT -	485 t
CAPACITY, VOLUME -	52 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	

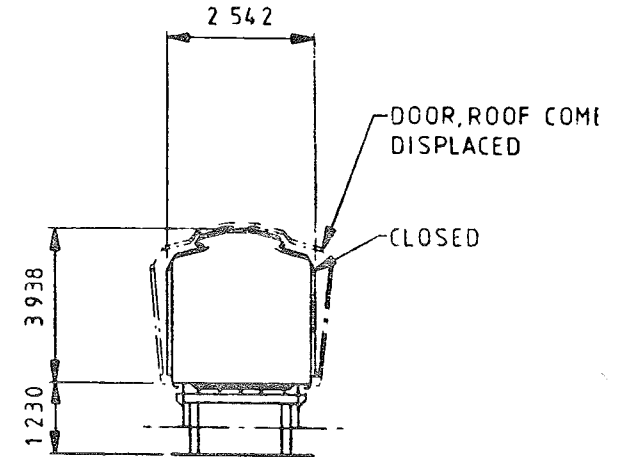
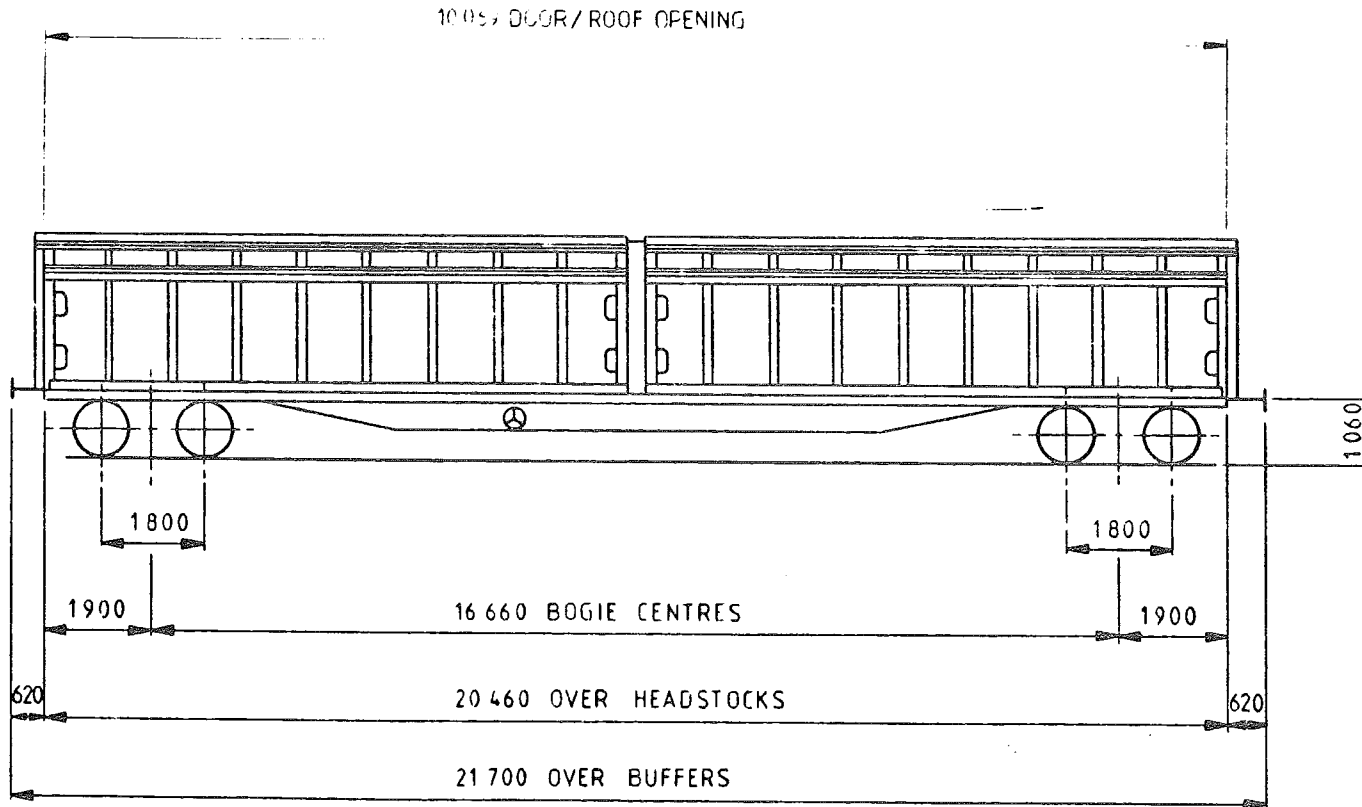
BRAKE -	AIR, VAC THRO' PIPE, PLATFORM & SIDE SCREW
SUSPENSION -	DB BOGIE
CCUPLINGS -	U.T.C.
BUFFERS -	RING FEDER 460 x 340 HD.
WHEELS -	φ920
JOURNALS -	φ130

TYPE -	Zacefkks (3)
WAGON No. -	33 90 7993 000 - 004
BUILDER -	WAGON UNION
OWNER -	EVA

80 t GLW BOGIE ALL DOOR VAN

IPE 521

				TOPS INFORMATION						
	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	37†	45†	53†			60 mile/h UP TO mile/h ABOVE	17 † FORCE UP TO 43 † FORCE ABOVE	13	6	W 725
S	37†	45†	53†		CARKND	80 tonne GLW	47 † GLW			
					I P B B					



TARE -	27 t
CAPACITY, WEIGHT-	53 t
CAPACITY, VOLUME-	114 m ³
FLOOR AREA -	50 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	A 2094.013

BRAKE -	AIR & VAC, THRO' PIPE; SIDE SCREW
SUSPENSION -	TALBOT STANDARD BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	RING FEDER
WHEELS -	∅ 920
JOURNALS -	∅ 130

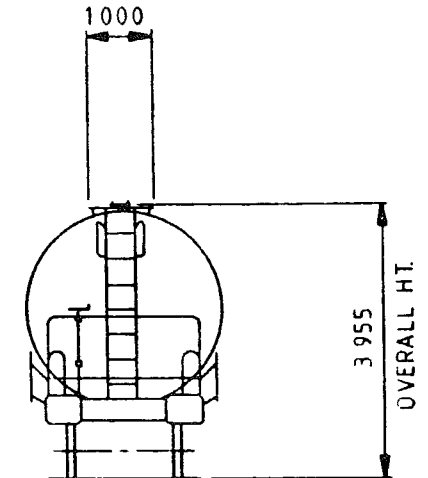
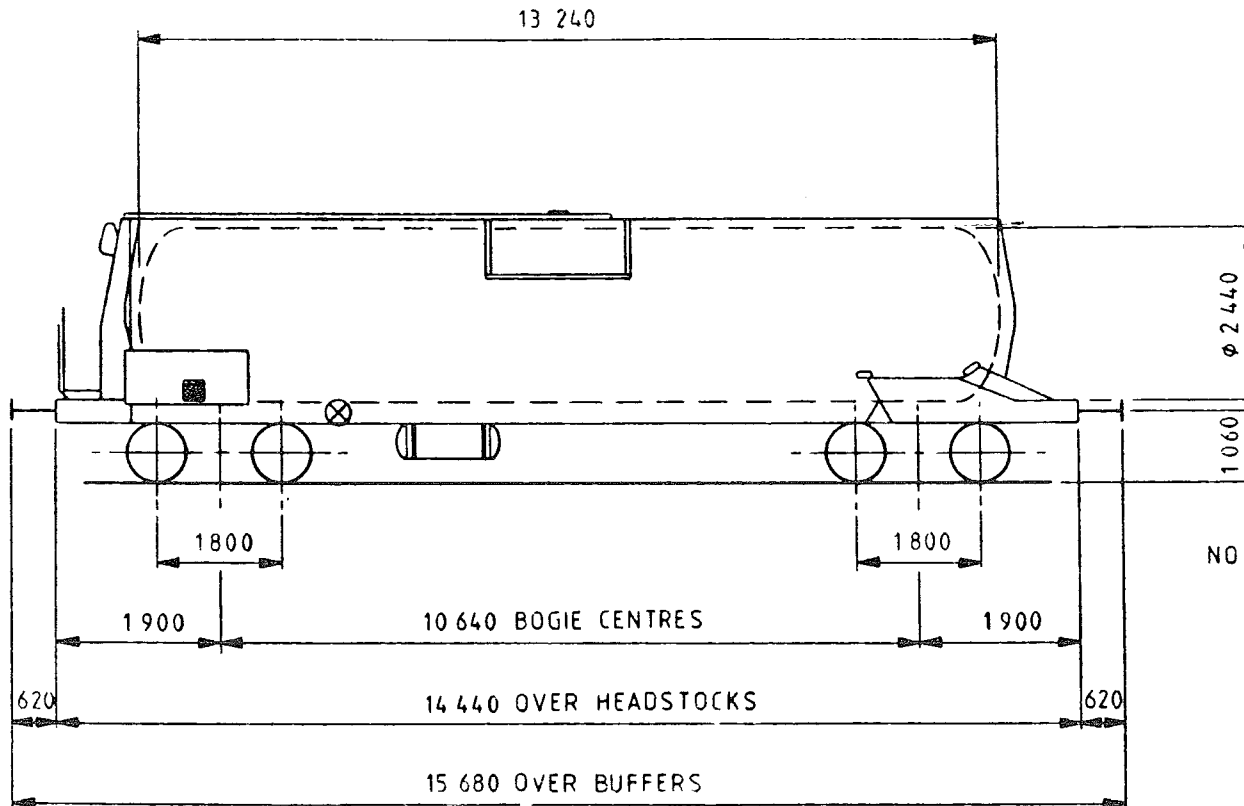
TYPE -	Sfis
WAGON No. -	83 80 4743 000
BUILDER -	WAGON UNION
OWNER -	EVA

ISSUE 1

80 t GLW BOGIE TANK

ICE 522

TOPS INFORMATION														
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET		
	47t	497t	577t			60	mile/h UP TO	80	tonne GLW	14 t FORCE UP TO	437 t GLW	5	6	W722
S	47t	497t	577t		CARKND	mile/h ABOVE				36 t FORCE ABOVE				
120	00 0t				I C B D									



NOTE:
 WORKING PRESSURE: 4 bar
 TEMPERATURE: WITH PRESSURE LIMIT $\leq 150^{\circ}\text{C}$
 WITHOUT PRESSURE LIMIT $\geq 20^{\circ}\text{C} \leq 200^{\circ}\text{C}$

TARE -	22.3 t
CAPACITY, WEIGHT-	57.7 t
CAPACITY, VOLUME-	60 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	2.4.0.991

BRAKE -	AIR & VAC THRO' PIPE, PLATFORM & SIDE SCREW.
SUSPENSION -	Y25 CS2
COUPLINGS -	U.I.C
BUFFERS -	RUBBER SPRUNG 460 x 340 HD.
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

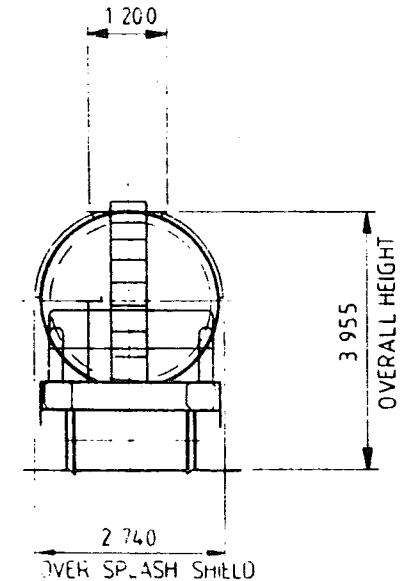
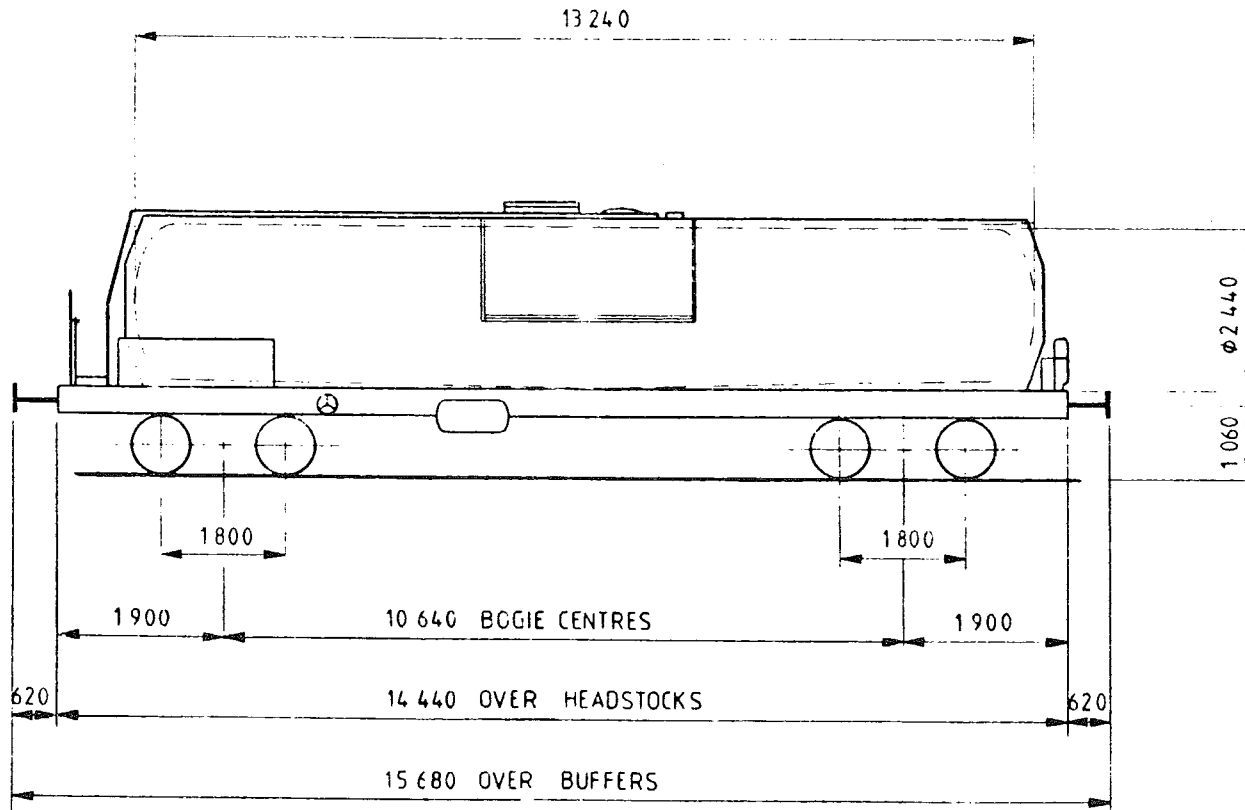
TYPE -	Zacefs (3)
WAGON No. -	33 87 7996 015 - 029
BUILDER -	C.F.M.F.
OWNER -	RHONE - POULENC

ISSUE 1

80 t GLW BOGIE TANK

ICE 524

TOPS INFORMATION													
	A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	41.9t	49.9t	57.9t				60 mile/h UP TO	80 tonne GLW	15 t FORCE UP TO	45 t GLW	5	6	W723
S	41.9t	49.9t	57.9t			CARKND	mile/h ABOVE		44 t FORCE ABOVE				
120	00.0t					I C B D							



NOTE:- BARREL TEMPERATURE $\leq 200^{\circ}\text{C}$.
WORKING PRESSURE 3 BAR.

TARE -	22.1 t
CAPACITY, WEIGHT-	57.9 t
CAPACITY, VOLUME-	60 m ³
FLOOR AREA -	—
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	2-4-0-967

BRAKE -	AIR&VAC. THRO PIPE PLATFORM&SIDE SCREW
SUSPENSION -	TALBOT BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER+OLEO
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

TYPE -	Zacefs
WAGON No. -	33 80 7995 500-515
BUILDER -	C.F.M.F.
OWNER -	TRANSGAZ

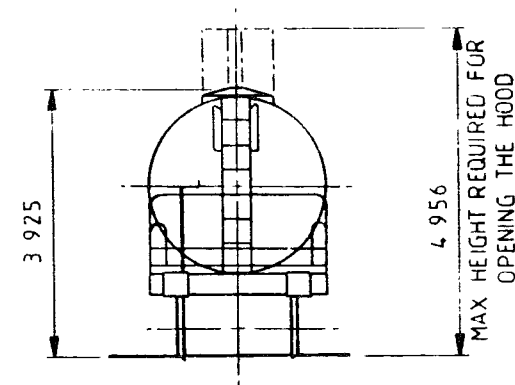
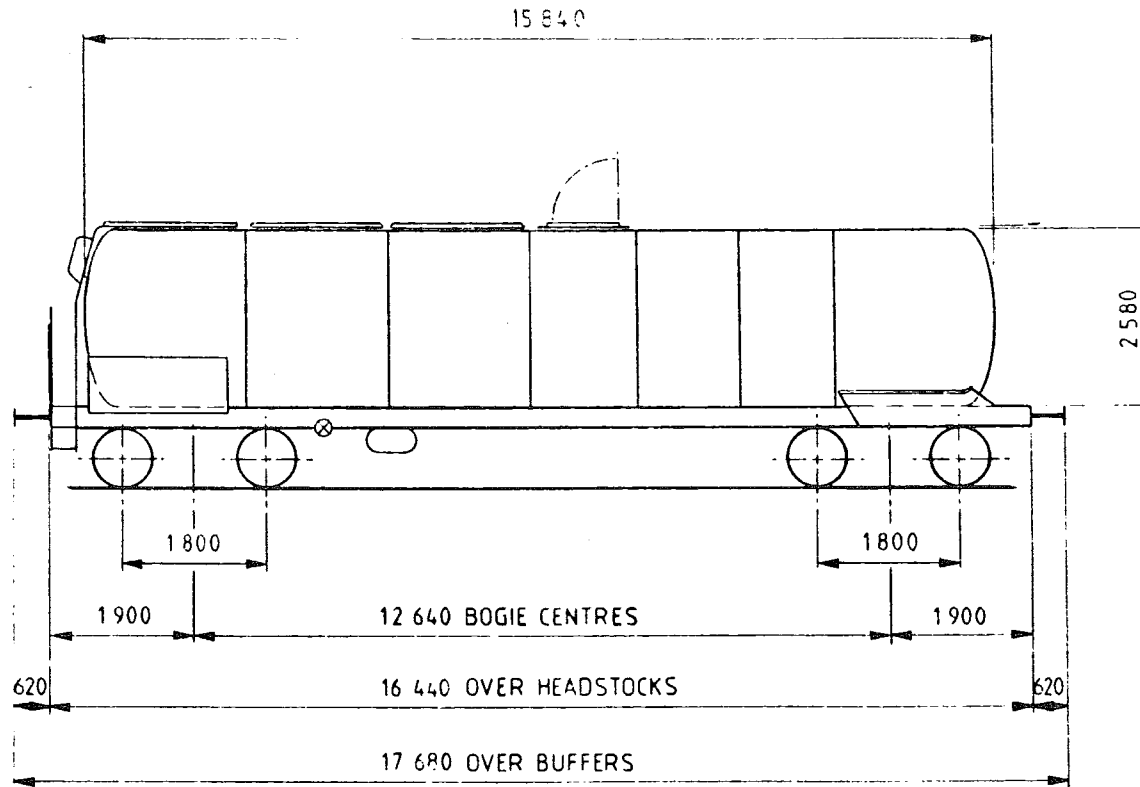
ISSUE 1

80t GLW BOGIE TANK

ICE 525

TOPS INFORMATION												
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	41.7t	49.7t	57.7t			60 mile/h UP TO mile/h ABOVE		14 t FORCE UP TO 44 t GLW		8	6	W 724
S	41.7t	49.7t	57.7t		CARKND							
120		00.0t			I C B D							

NOTE:- TEMPERATURE RANGE -20°C TO 70°C.



TARE -	22.3 t
CAPACITY, WEIGHT-	57.7 t
CAPACITY, VOLUME-	80 m ³
FLOOR AREA -	—
MIN. CURVE -	37m
GEN. ARRGT. DRG. No.-	2-4-C-197

BRAKE -	AIR, VAC, THRO' PIPE; PLATFORM & SIDE SCREW
SUSPENSION -	Y25 Cs2
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 450x340 HD
WHEELS -	∅ 920
JOURNALS -	∅ 130

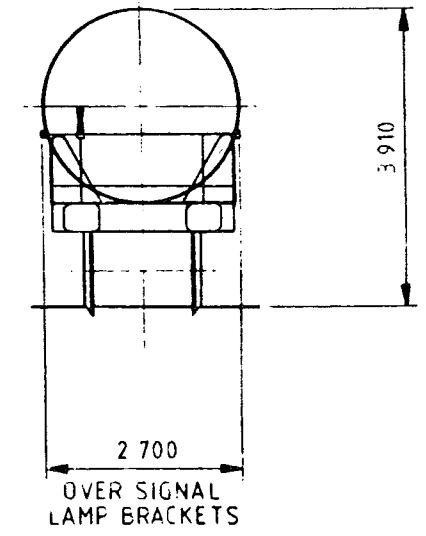
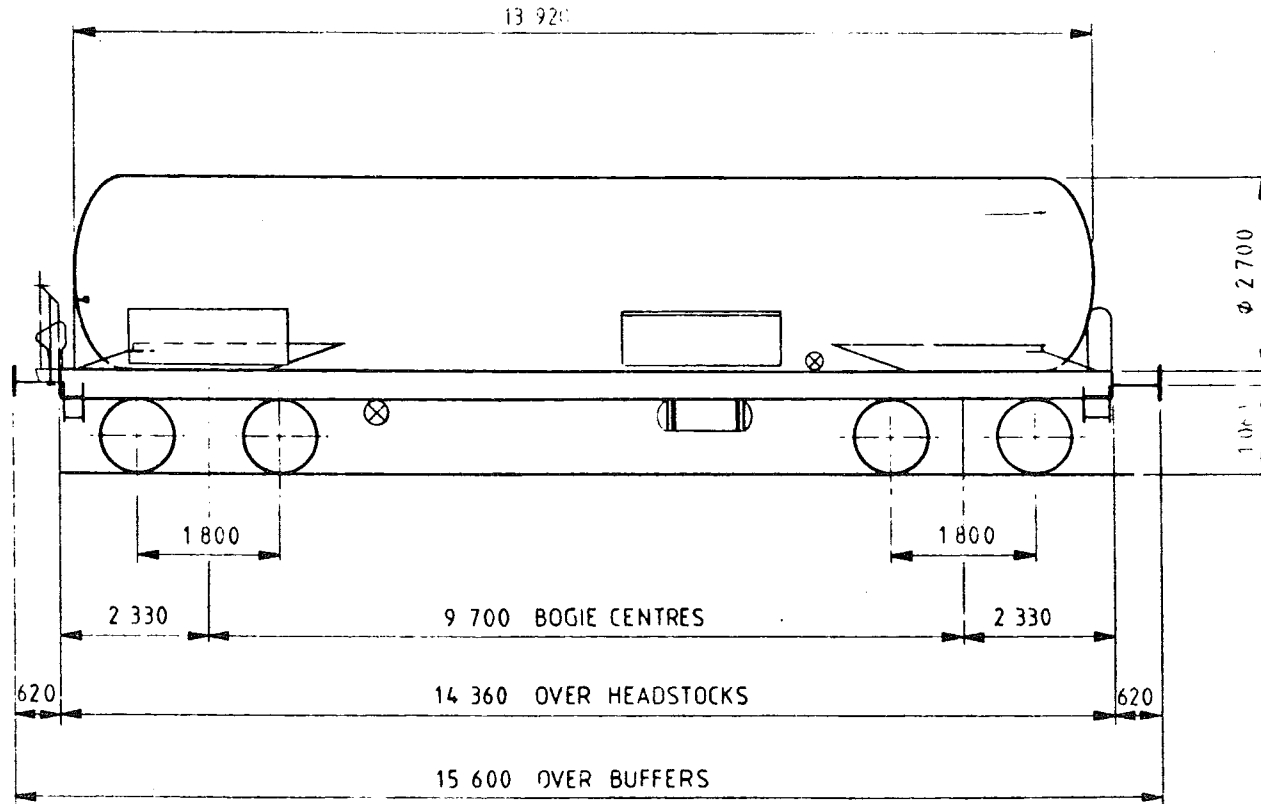
TYPE -	Zacts (3).
WAGON No. -	33 87 7896 001-007
BUILDER -	C.F.M.F.
OWNER -	SIMOTRA

ISSUE 1

80t GLW BOGIE TANK

ICE 527

TOPS INFORMATION													
	A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	36.7t	44.7t	52.7t				60 mile/h UP TO	80 tonne GLW	20 t FORCE UP TO	52 t GLW.	5	6	W743
S	36.7t	44.7t	52.7t			CARKND	mile/h ABOVE		43 t FORCE ABOVE				
						I C B D							



TARE -	27.3t
CAPACITY, WEIGHT -	52.7t
CAPACITY, VOLUME -	53 m ³
FLOOR AREA -	—
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No. -	220.01.00

BRAKE -	AIR, VAC THRO' PIPE; PLATFORM & SIDE SCREW
SUSPENSION -	DB BOGIE BA 661.1
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 460 x 340
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

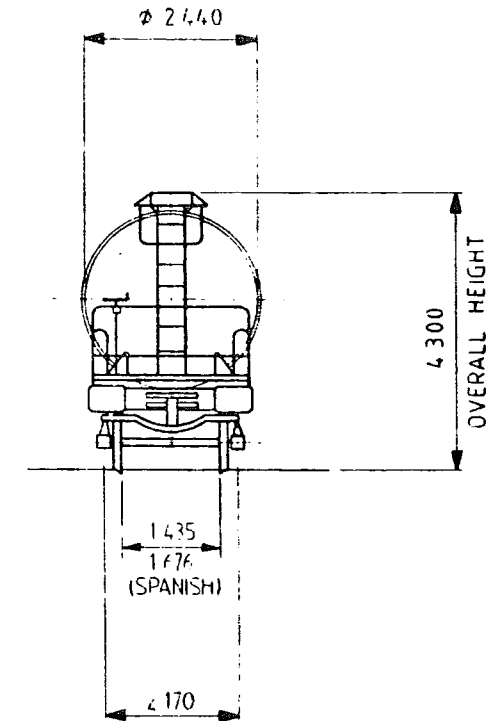
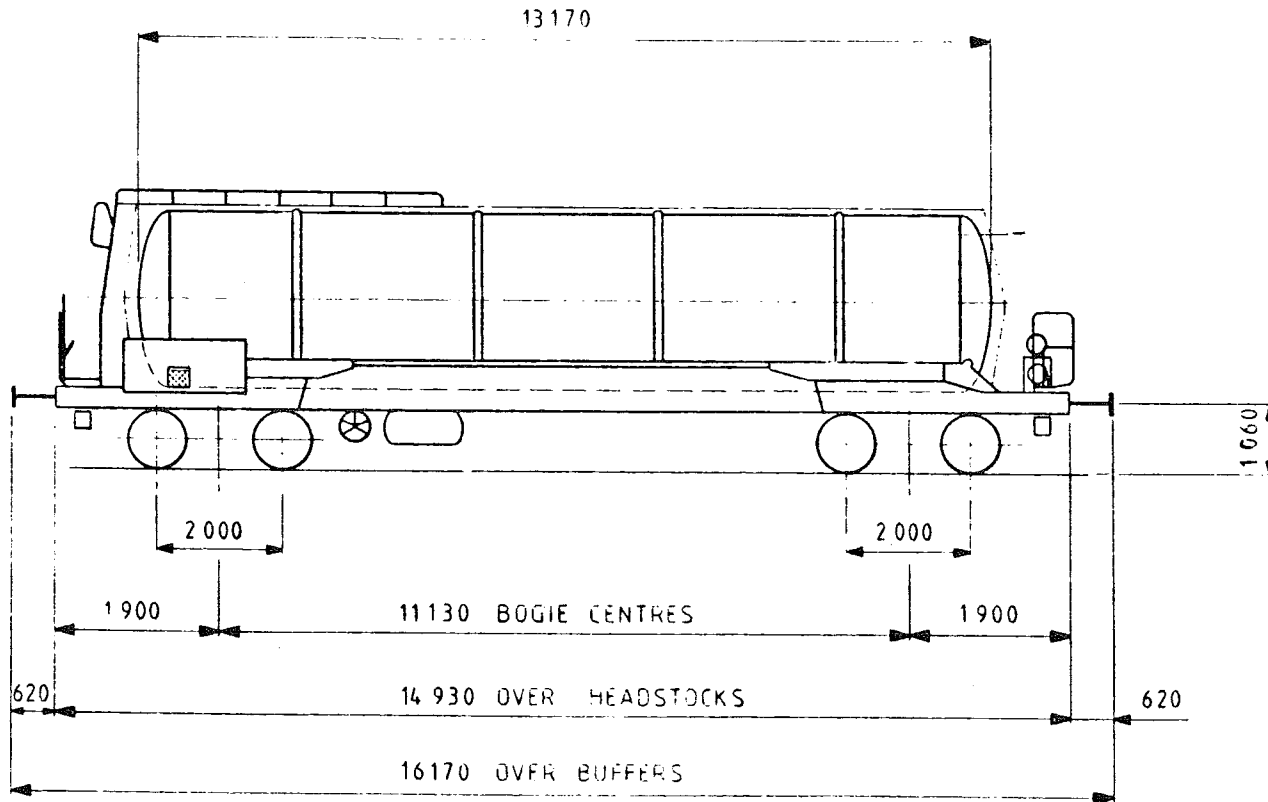
TYPE -	Zafgs
WAGON No. -	33 80 7891 002-003
BUILDER -	WAGON UNION
OWNER -	EVA

ISSUE 1

80t GLW BOGIE TANK

ICE 530

				TOPS INFORMATION									
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
	42.8t	50.8t	58.8t			60	mile/h UP TO	80	tonne GLW	} 43t GLW	6	6	W920
S	42.8t	50.8t	58.8t		CARKND	mile/h ABOVE							
12C		00	0t		I C X D								
										VB 21t FORCE UP TO			
										AB 16t " " "			
										VB 44t FORCE ABOVE			
										AB 41t " "			



TARE -	21.2 t
CAPACITY, WEIGHT-	58.8 t
CAPACITY, VOLUME-	59 m ³
FLOOR AREA -	—
MIN. CURVE -	45 m
GEN. ARRG. DRG. No.-	ONF 182443

BRAKE -	DUAL PLATFORM & SIDE SCREW
SUSPENSION -	Y21 CSe
COUPLINGS -	U.I.C
BUFFERS -	HYDRAULIC 560 x 370
WHEELS -	Ø 920
JOURNALS -	Ø 130

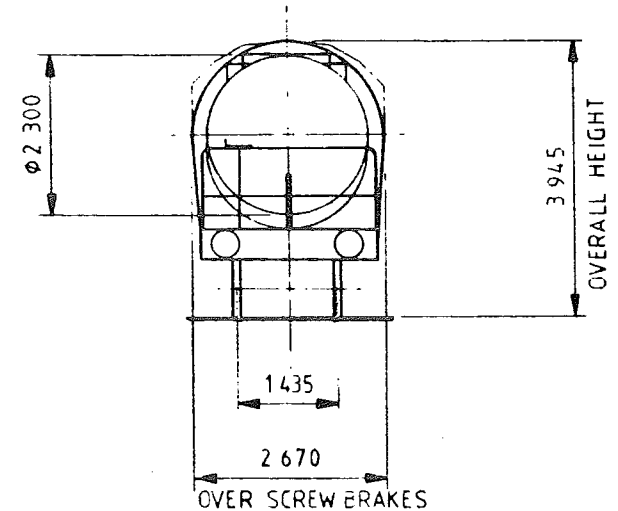
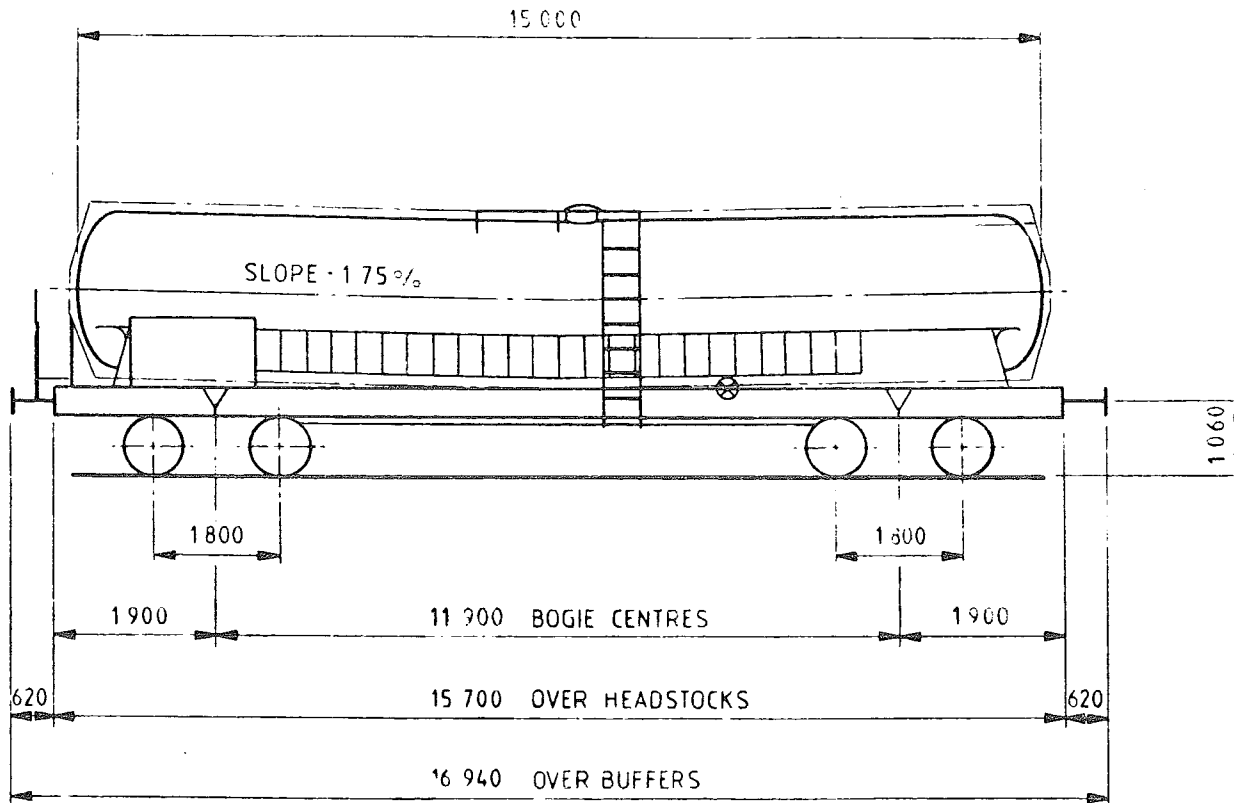
TYPE -	Zaefts -
WAGON No. -	3487 7899 000
BUILDER -	CFMF
OWNER -	R ARMSTRONG Ltd LIVERPOOL

ISSUE 1

80t GLW BOGIE TANK

ICE 532

				TOPS INFORMATION							
A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
40 t	48 t	56 t			60 mile/h UP TO		14 t	FORCE UP TO	7	6	W889
S	40 t	48 t	56 t	CARKND	mile/h ABOVE 80 tonne GLW		45 t	FORCE ABOVE 44 t GLW			
				I	C	B	D				



TARE -	24 t
CAPACITY, WEIGHT-	56 t
CAPACITY, VOLUME-	60 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	5-117 229

BRAKE -	AIR & VAC. THRO' PIPE PLATFORM & SIDE SCREW
SUSPENSION -	S B B BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 450 x 340
WHEELS -	$\phi 1000$
JOURNALS -	$\phi 130$

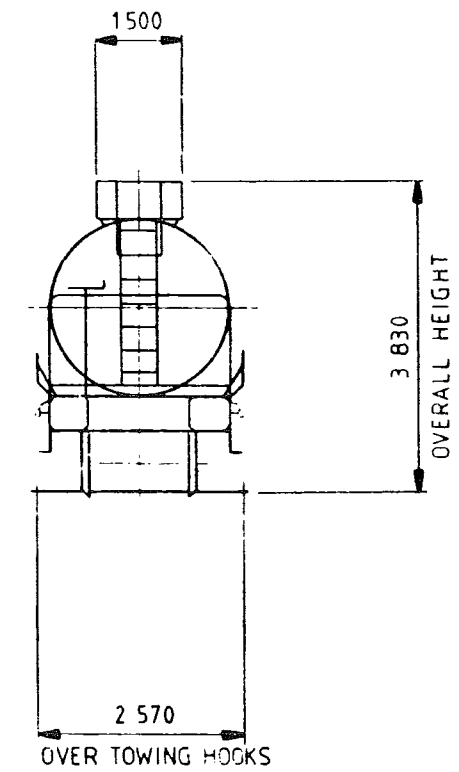
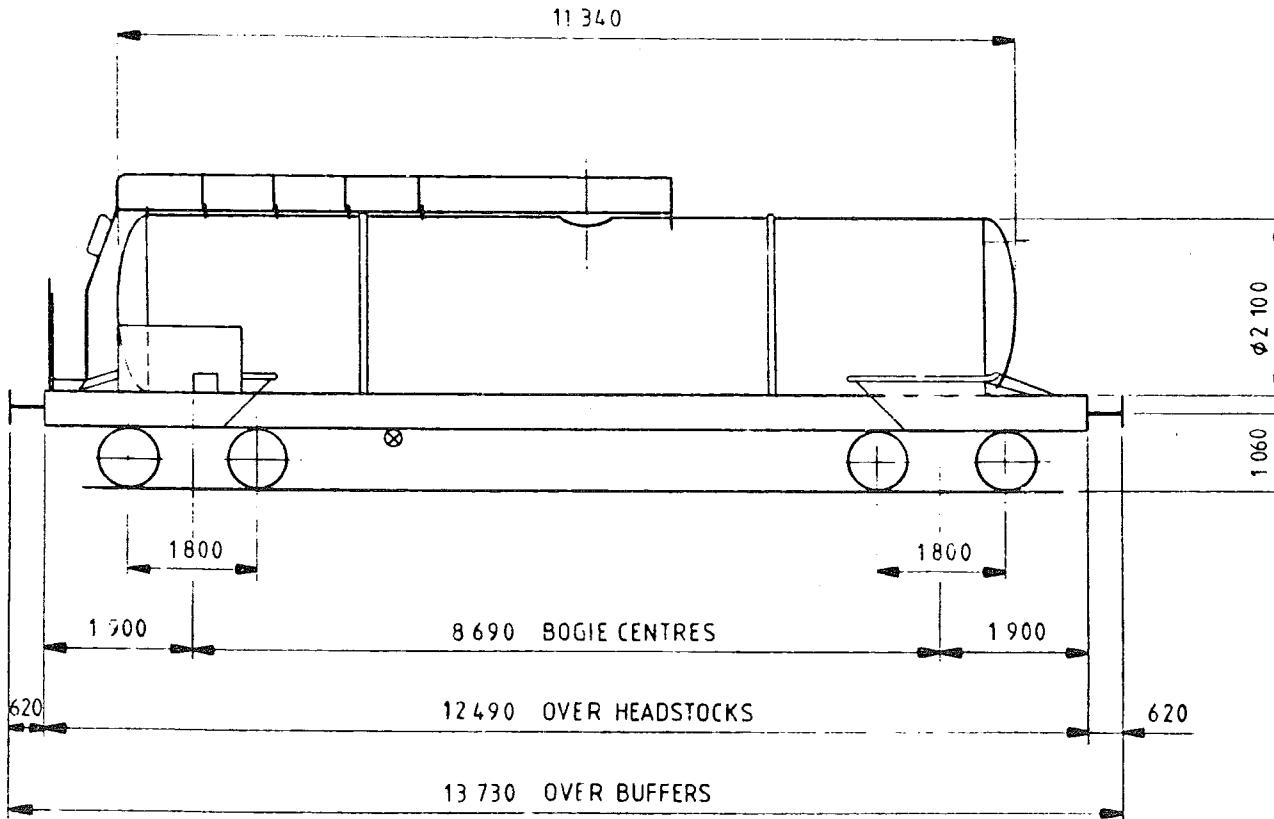
TYPE -	Zacefs
WAGON No. -	33 65 7995 500-505
BUILDER -	J. MEYER, RHEINFELDEN
OWNER -	ETRA, ZURICH

ISSUE 1

80 t G.L.W. BOGIE TANK

ICE 533

					TOPS INFORMATION								
	A	B1	B2	C	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
	44.1t	49.1t	52.1t	60.1t		60 mile/h UP TO mile/h ABOVE 80 tonne GLW		14 t FORCE UP TO 36 t FORCE ABOVE 40 t GLW					
S	44.1t	49.1t	52.1t	60.1t	CARKND					2	6	W940	
SS	00.0				I	C	A	D					



TARE -	19.9 t
CAPACITY, WEIGHT-	60.1 t
CAPACITY, VOLUME-	37 m ³
FLOOR AREA -	—
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	3315

BRAKE -	AIR; PLATFORM & SIDE SCREW
SUSPENSION -	Y25 Cs2
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 450x340
WHEELS -	φ 920
JOURNALS -	φ 130

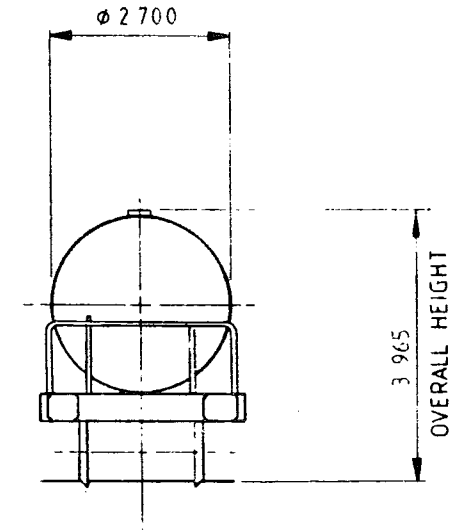
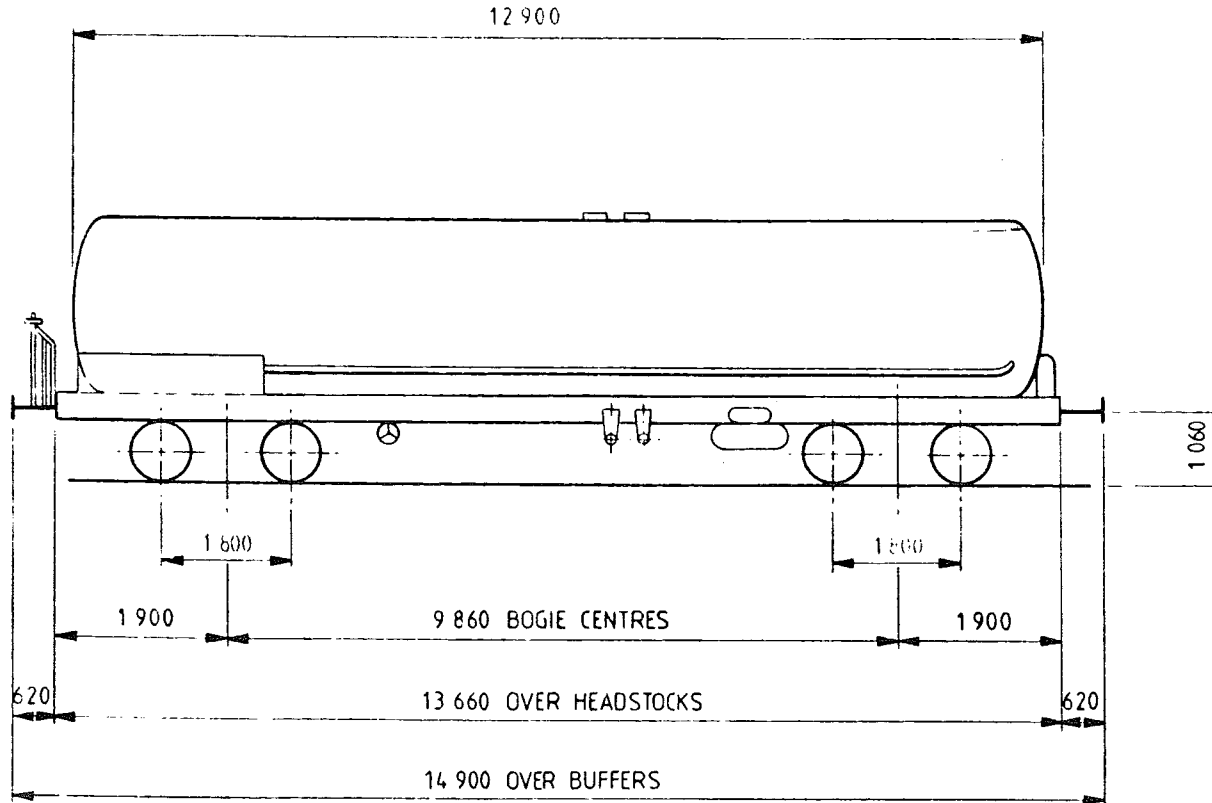
TYPE -	Zacfs (3)
WAGON No. -	3387 7896 008-011
BUILDER -	C.F.M.F.
OWNER -	SIMOTRA

ISSUE 1

80t GLW BOGIE TANK

ICE.534

TOPS INFORMATION												
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	38.5t	46.5t	54.5t		CARKND	60	mile/h UP TO	18 t FORCE UP TO	48 t GLW	4	6	W932
S	38.5t	46.5t	54.5t		I	C	B	D	43 t FORCE ABOVE			
120	00:0t						80 tonne GLW					



TARE -	25.5 t
CAPACITY, WEIGHT -	54.5 t
CAPACITY, VOLUME -	70 m ³
FLOOR AREA -	-
MIN. CURVE -	36 m
GEN. ARRGT. DRG. No. -	0-335.01.0050

BRAKE -	AIR.VAC THRO PIPE; PLATFORM&SIDE SCREW
SUSPENSION -	DB BOGIE-WAGON UNION
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 450x340 HD.
WHEELS -	$\phi 920$
JOURNALS -	$\phi 130$

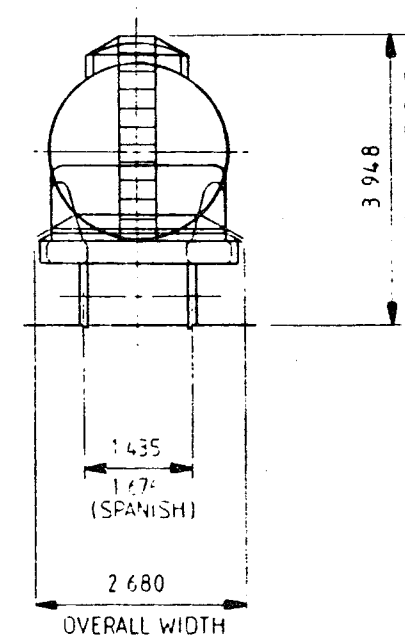
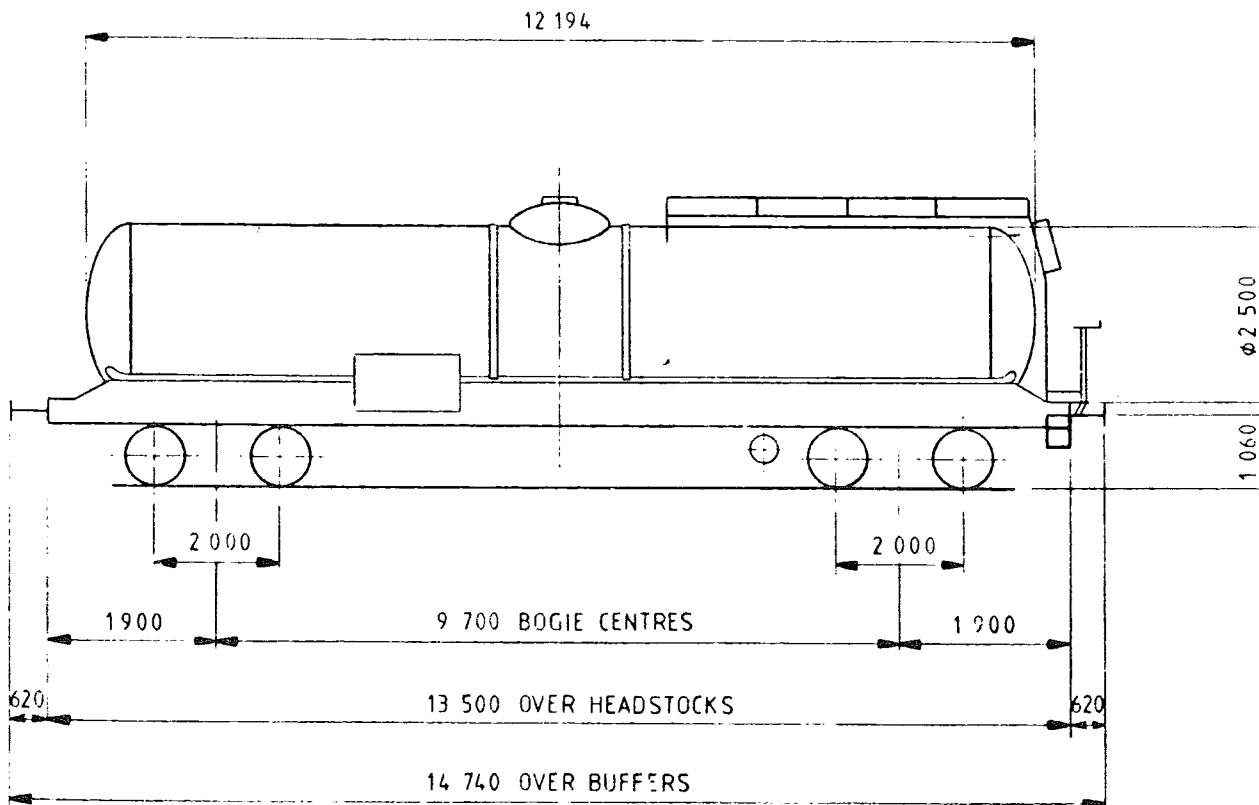
TYPE -	Zafgs (3)
WAGON No. -	33 80 7794 000-004
BUILDER -	WAGON UNION
OWNER -	V.T.G.

ISSUE 1

80 t G.L.W. BOGIE TANK

ICE 536

TOPS INFORMATION												
	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA			EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	41.5t	49.5t	57.7t		CARKND	60 mile/h UP TO mile/h ABOVE	80 tonne GLW	AB 16t FORCE UP TO VB 21t " " " "	43t GLW	4	6	W 929
120	00.0				I C X D			AB 41t FORCE ABOVE VB 44t " " " "				



TARE -	22.5 t
CAPACITY, WEIGHT-	57.5 t
CAPACITY, VOLUME-	58 m ³
FLOOR AREA -	—
MIN. CURVE -	35m
GEN. ARRG. DRG. No.-	102956

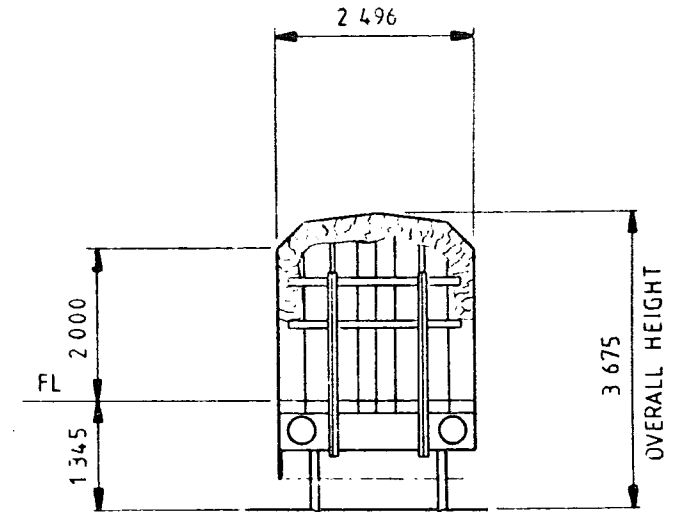
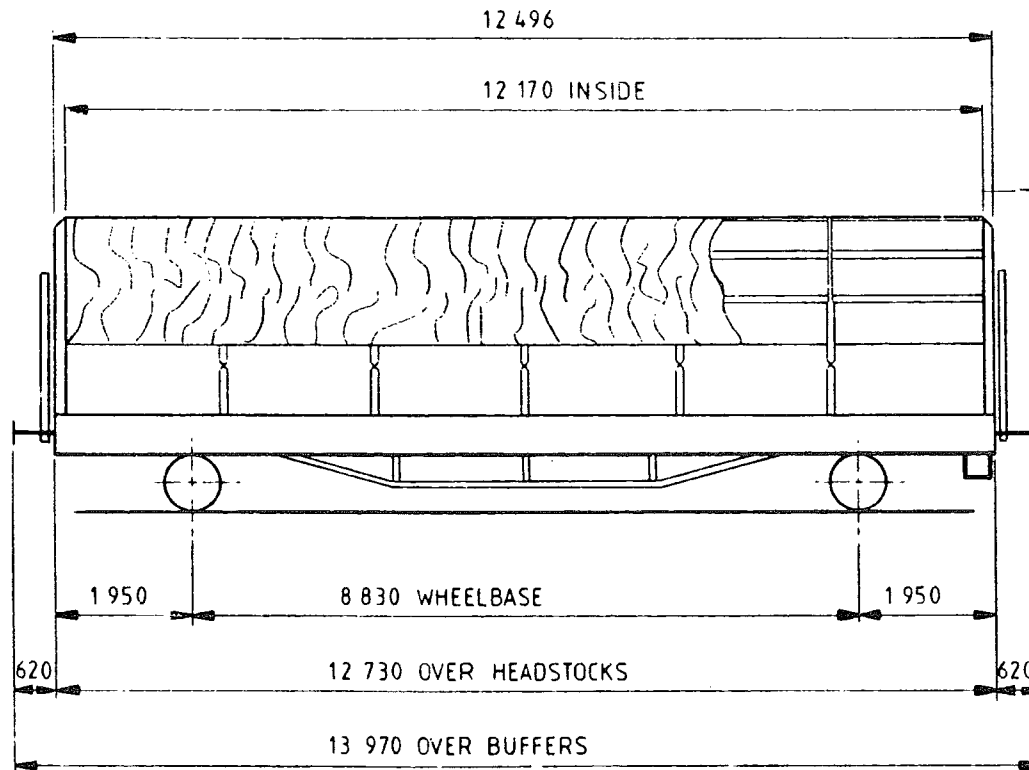
BRAKE -	DUAL, PLATFORM & SIDE SCREW
SUSPENSION -	Y21 CSE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 590 x 340 HD
WHEELS -	φ920
JOURNALS -	φ130

TYPE -	Zaefs
WAGON No. -	34 87 7899 010-014
BUILDER -	FAUVET-GIREL
OWNER -	ERMEWA

40t GLW CAISSE MOBILE (SWAP BODY) FLAT

ITE 537

				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	16.5t	20.5t	24.5t			60 mile/h UP TO		AB 10t FORCE UP TO	24 t GLW	12		W 921
S	16.5t	20.5t	24.5t		CARKND	mile/h ABOVE		VB 11t " " "				
					I T X P	40 tonne GLW		AB 18t FORCE ABOVE				
								VB 19t " " "				



NOTE:- PROTOTYPE, EX DESIGN CODE ITE 407, DOMESTIC TRAFFIC ONLY.

TARE -	15.5 t
CAPACITY, WEIGHT-	24.5 t
CAPACITY, VOLUME-	59 m ³
FLOOR AREA -	29.45 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	465

BRAKE -	DUAL; SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDAULIC
WHEELS -	∅ 1000
JOURNALS -	∅ 130

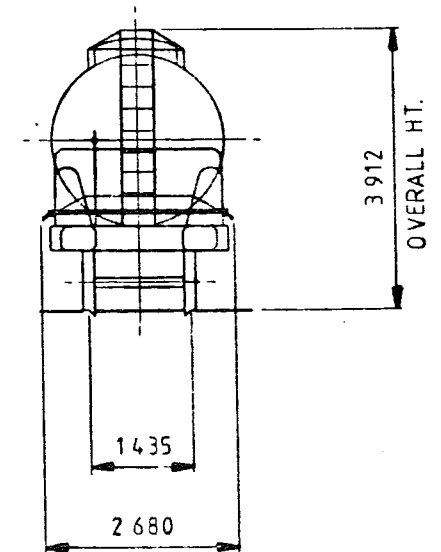
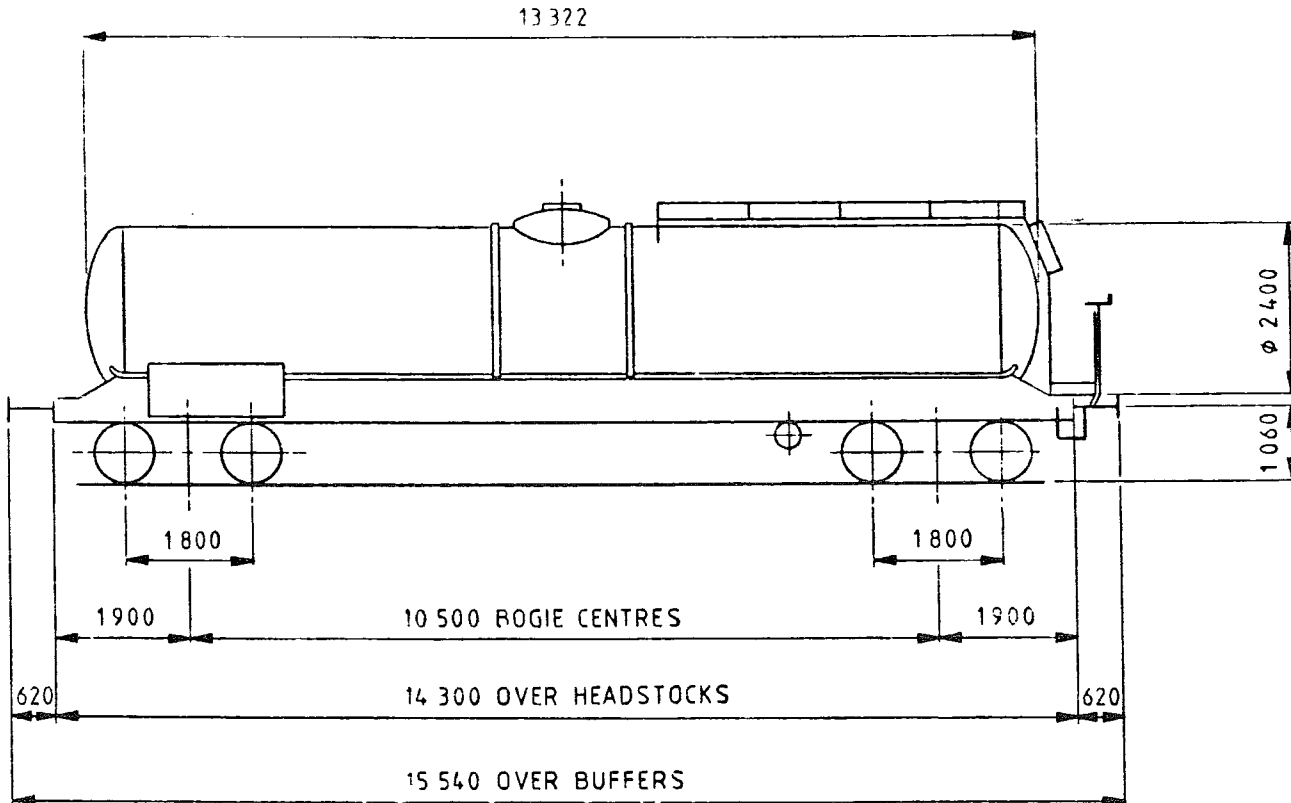
TYPE -	Ufs
WAGON No. -	44 87 9195 000
BUILDER -	ATELIER BRETON
OWNER -	TRANSFESA-FRANCE

ISSUE 1

80 t GLW. BOGIE TANK

ICE 539

				TOPS INFORMATION									
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	41.8t	49.8t	57.8t				60 mile/h UP TO mile/h ABOVE		AB 16 t FORCE UP TO VB 21 t " " " " " "		5	6	W 930
S	41.8t	49.8t	57.8t		CARKND		80 tonne GLW		AB 41 t FORCE ABOVE VB 44 t " " " " " "				
120	00.0t				I	C	X	D					



TARE -	22.15 t
CAPACITY, WEIGHT-	57.85 t
CAPACITY, VOLUME-	58 m ³
FLOOR AREA -	
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	102 709

BRAKE -	DUAL; PLATFORM & SIDE SCREW.
SUSPENSION -	Y25 CS2
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 590 x 340 HD.
WHEELS -	
JOURNALS -	

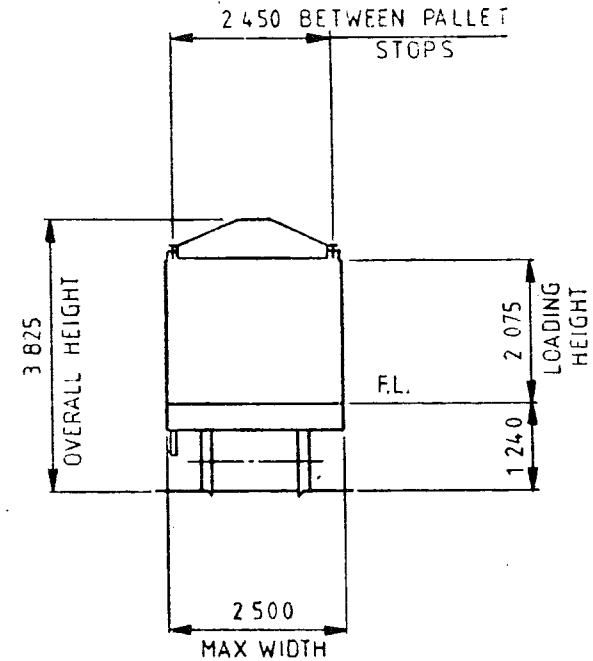
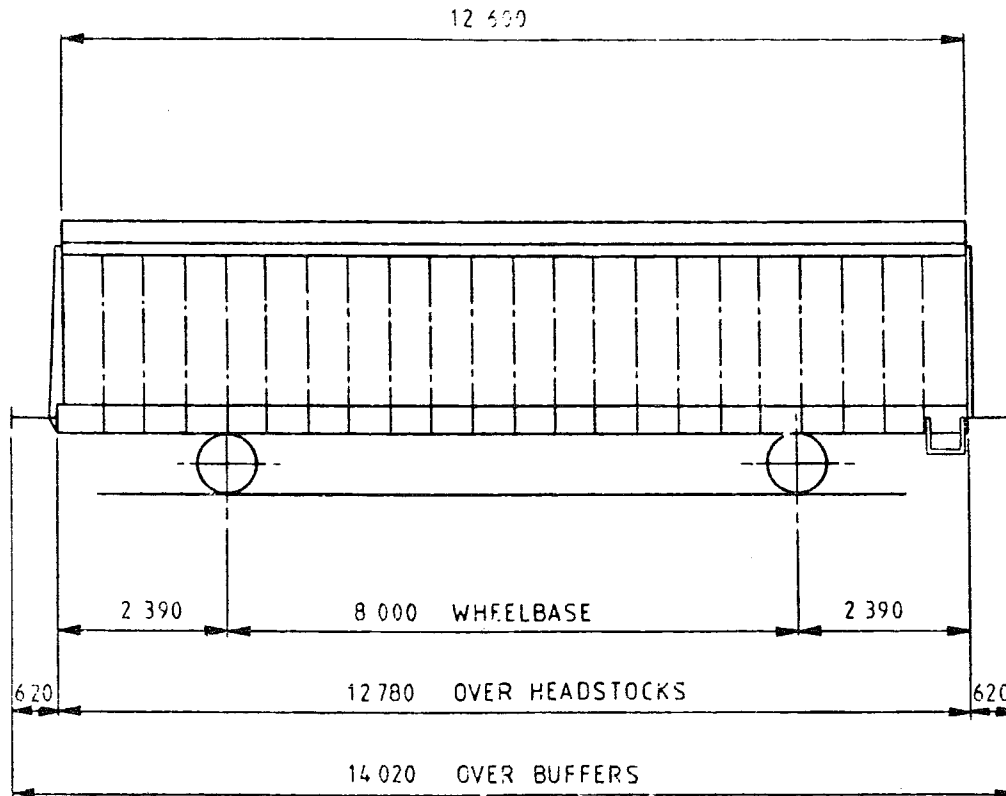
TYPE -	Zats (3)
WAGON No. -	33 87 7899 003-009
BUILDER -	FAUVET GIREL
OWNER -	ERMEWA

ISSUE 1

40t GLW CURTAIN-SIDED (TAUTLINER)

IPE 540

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	18-2t	22-2t	26-2t			60 mile/h UP TO mile/h ABOVE 40 tonne GLW		AB 7t FORCE UP TO		12	6	W1208
S	18-2t	22-2t	26-2t		CARKND			VB 5t " " "	22 t GL.W.			
					I P X P			AE 20t FORCE ABOVE				
								VE 5t " " "				



PALLET LOADS - MAXIMUM 24 PALLET
21 STRAPS ON EACH CURTAIN SIDE

TARE -	13.8t
CAPACITY, WEIGHT-	26.2t
CAPACITY, VOLUME-	59 m ³
FLOOR AREA -	29.45m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	465

BRAKE -	AIR, VACUUM; SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 1000
JOURNALS -	φ 130

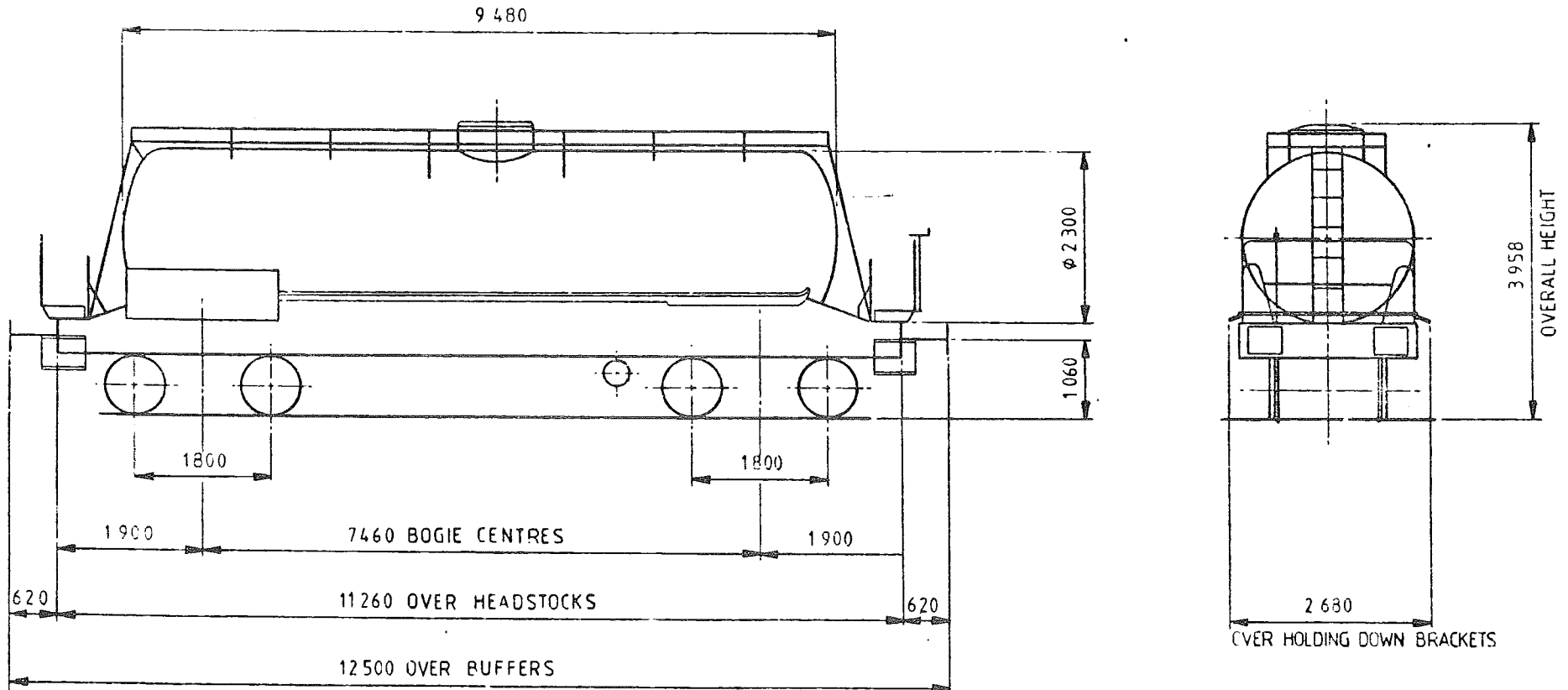
TYPE -	Hbfis
WAGON No. -	43 87 2396 001-005
BUILDER -	INGE TRANS
OWNER -	E.V.S. PARIS

ISSUE 1

80t GLW BOGIE TANK

ICE 541

				TOPS INFORMATION									
	A	B1	B2	C	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	40-2t	42-7t	52-2t	60-2t			60 mile/h UP TO mile/h ABOVE		13 t FORCE UP TO 41 t FORCE ABOVE		0	6	W1045
S	40-2t	42-7t	52-2t	60-2t	CARKND		80 tonne GLW		44 t GLW				
120			00-0		I	C	A	D					



TARE -	17.8t
CAPACITY, WEIGHT -	60.2t
CAPACITY, VOLUME -	37.5m ³
FLOOR AREA -	
MIN. CURVE -	35m
GEN. ARRGT. DRG. No. -	103020

BRAKE -	AIR; SIDE & PLATFORM SCREW
SUSPENSION -	Y25 Cs2 or Y25 CsT
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 450 x 340 HD
WHEELS -	$\phi 920$
JOURNALS -	$\phi 130$

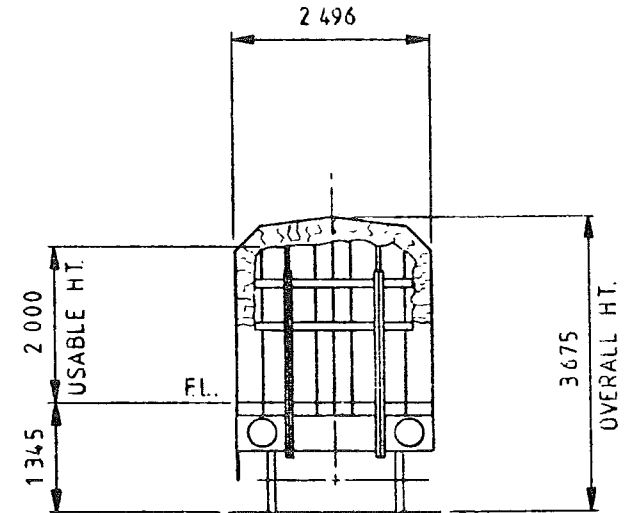
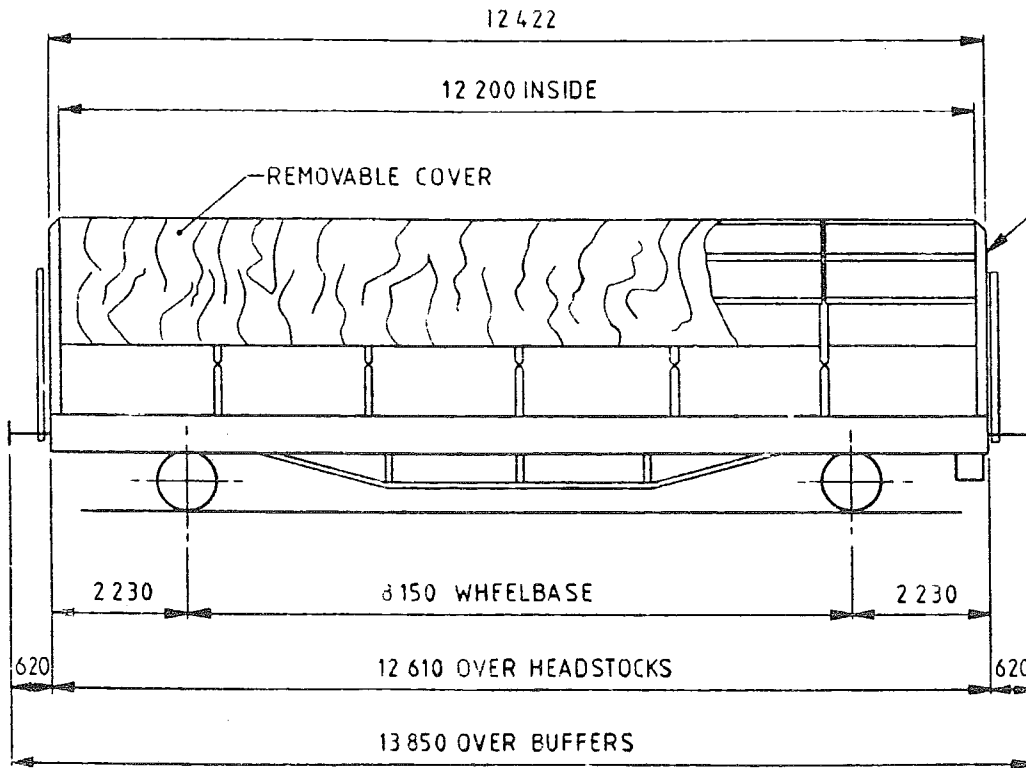
TYPE -	Zacfs (3)
WAGON No. -	33 87 7896 012-016
BUILDER -	FAUVET-GIREL
OWNER -	LOCATRANSPORTS

ISSUE 1

40 t GLW CAISSE MOBILE (SWAP BODY) FLAT

ITE 542

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	17-1†	21-1†	25-1†			75 mile/h UP TO 40 tonne GLW		VB 11 † FORCE UP TO 24 † GLW		12	6	W997
S	17-1†	25-1†	25-1†		CARKND	mile/h ABOVE		19 † FORCE ABOVE				
SS	211†				I T X P			VARIABLE AIR BRAKE -- -10.76 * (1-269 * †)				



TARE -	14.9 t
CAPACITY, WEIGHT -	25.1 t
CAPACITY, VOLUME -	59.28 m ³
FLOOR AREA -	29.64 m ²
MIN. CURVE -	50 m
GEN. ARRGT. DRG. No. -	646

BRAKE -	AIR VACUUM; SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	φ 1 000
JOURNALS -	φ 130

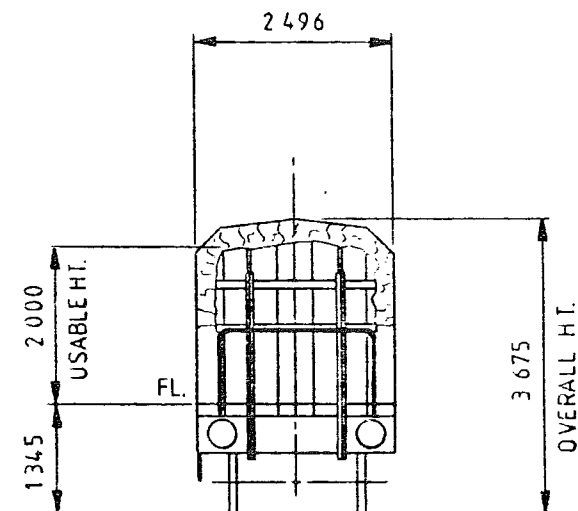
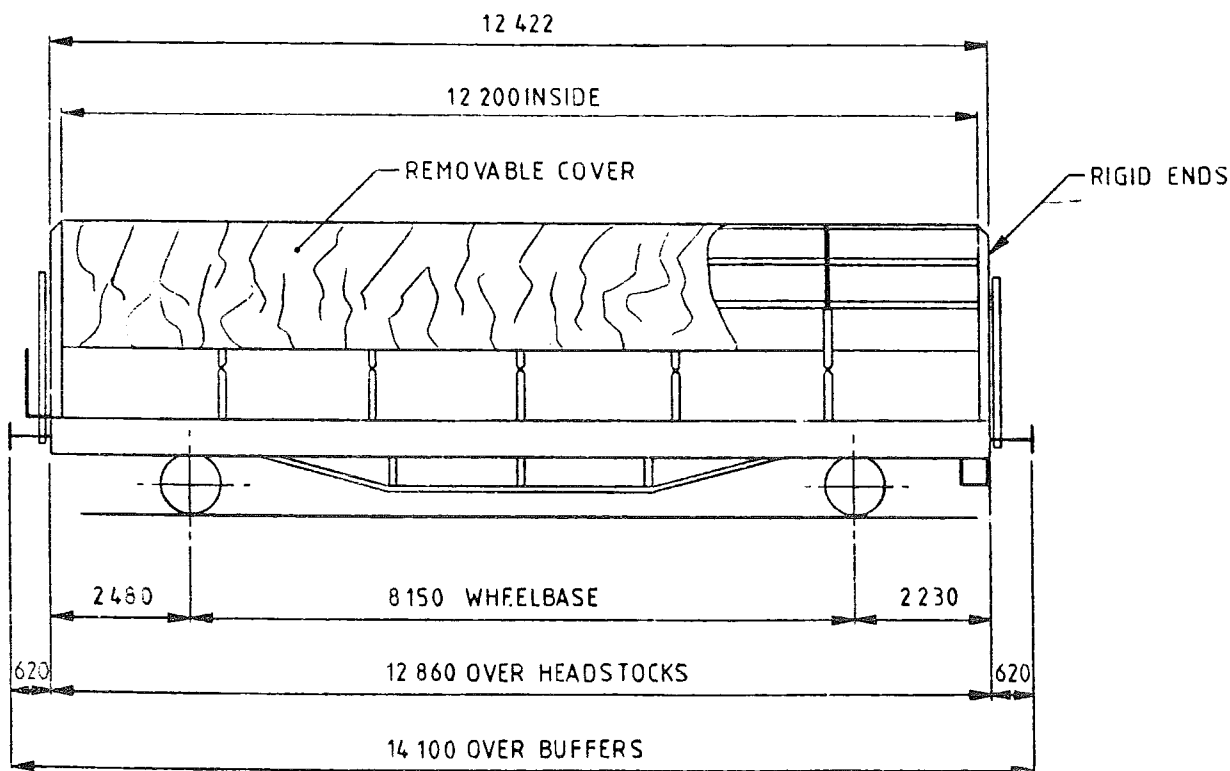
TYPE -	Ufss
WAGON No. -	43 87 9196 000 - 019
BUILDER -	ATELIER BRETON
OWNER -	TRANSFESA - FRANCE

ISSUE 1

40 t GLW. CAISSE MOBILE (SWAP BODY) FLAT

ITE 543

					TOPS INFORMATION							
	A	B	C	D	AARKND		OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	16-9t	20-9t	24-9t		CARKND		75 mile/h UP TO mile/h ABOVE 40 tonne GLW	VB. 11 t FORCE UP TO 19 t FORCE ABOVE 24 t GLW. VARIABLE AIR BRAKE:- -10 74 + (1-26) + t)		13	6	W 998
SS	20 9t				I	T	X	P				



TARE -	15.1 t
CAPACITY, WEIGHT-	24.9 t
CAPACITY, VOLUME-	29.64 m ³
FLOOR AREA -	59.28 m ²
MIN. CURVE -	60 m
GEN. ARRG. DRG. No.-	649

BRAKE -	AIR, VACUUM; PLATFORM SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 1000
JOURNALS -	φ 130

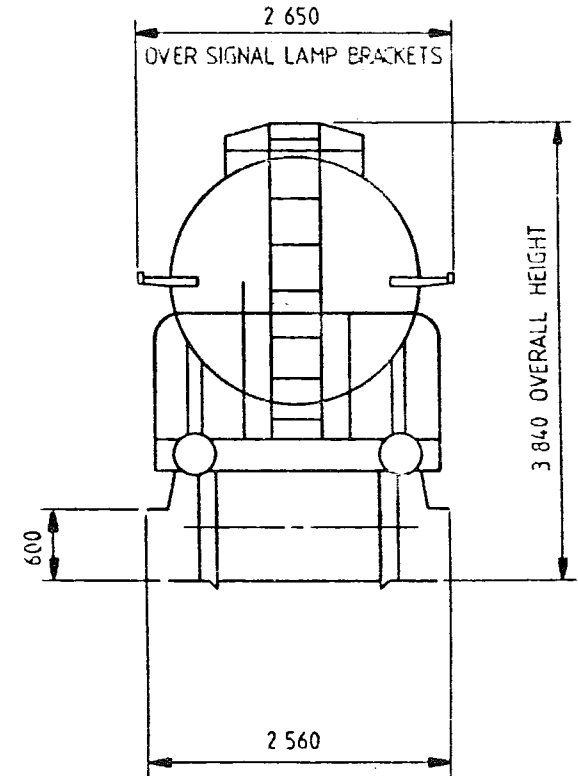
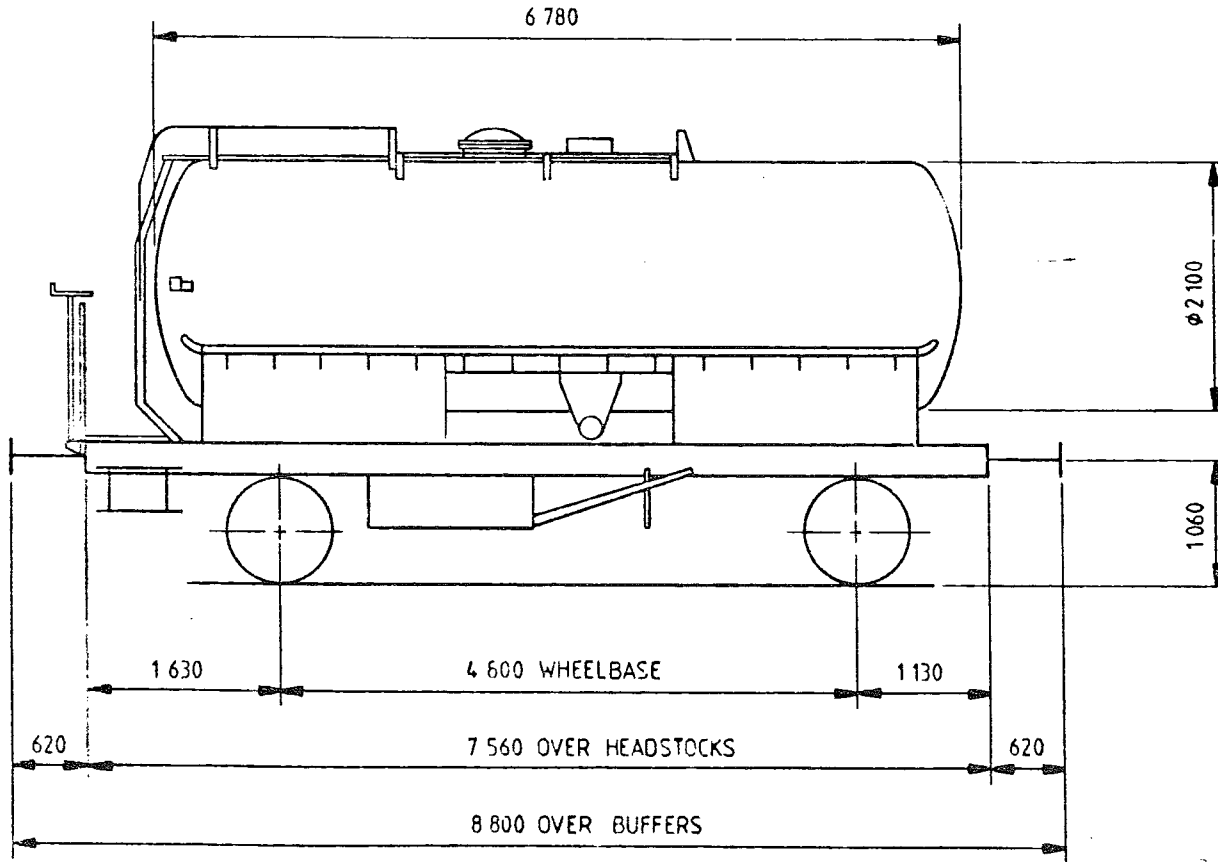
TYPE -	Ufss
WAGON No. -	43 87 9196 020 - 024
BUILDER -	ATELIER BRETON
OWNER -	TRANSFESA - FRANCE

ISSUE 1

40t GLW TANK WAGON

ICE 544

				TOPS INFORMATION					
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
20t	24t	28t			50 mile/h UP TO mile/h ABOVE 40 tonne GLW	NIL	4	6	
				CARKND					
				I C R B					



TARE -	12t
CAPACITY, WEIGHT-	28t
CAPACITY, VOLUME-	20m ³ ; 200 hl
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	G1594.01.00

BRAKE -	PIPED (DUAL) ; SCREW & SIDE LEVER
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYRAULIC
WHEELS -	∅ 1000
JOURNALS -	

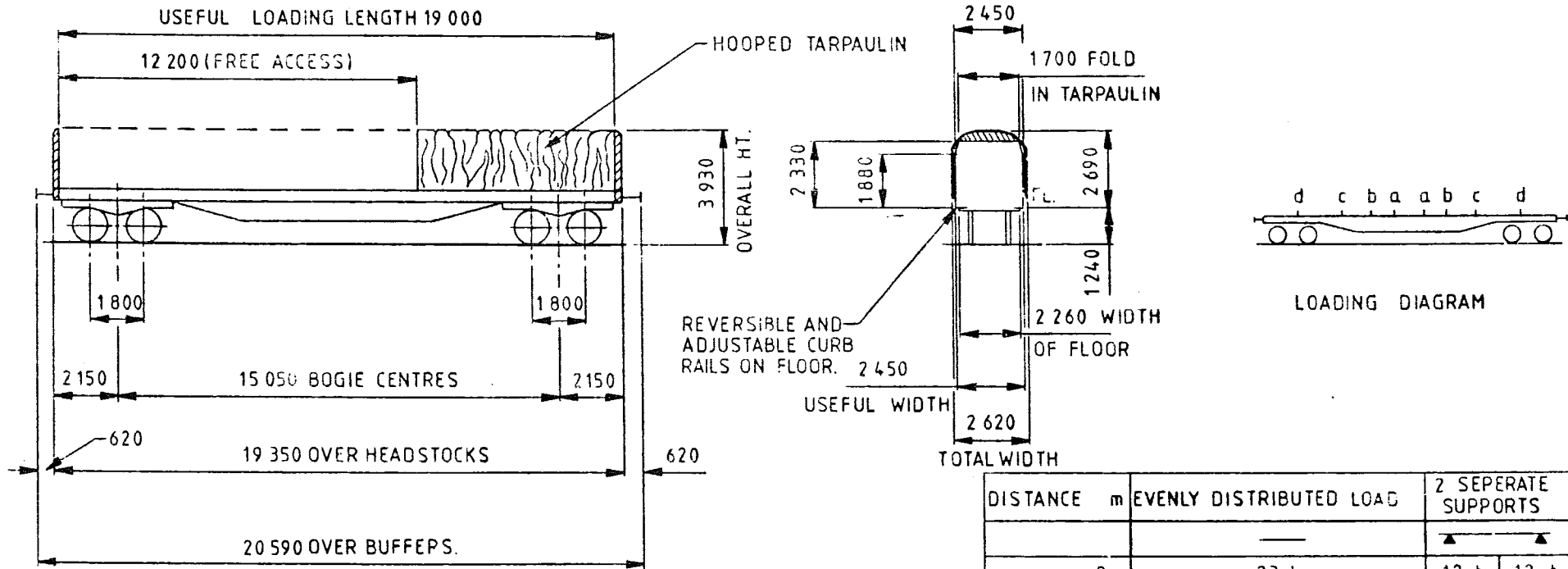
TYPE -	Zef
WAGON No. -	21 80 7197 019-028
BUILDER -	LINKE, HOFMANN, BUSCH
OWNER -	V.T.G.

ISSUE 1

80 t GLW "DEBACH VIT" CURTAIN-SIDED WAGON

IPE 545

					TOPS INFORMATION								
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 13	RA (GLW) 6	DESIGN SHEET -
	40t	48t	56t				75 mile/h UP TO mile/h ABOVE 80 tonne GLW		VARIABLE :- -18-12 + (1-214 * t)				
S	40t	48t	56t		CARKND								
SS	40t	48t	56t		I	P	B	N					



* DEPENDS ON TYPE OF PACKING

DISTANCE	m	EVENLY DISTRIBUTED LOAD	2 SEPERATE SUPPORTS	
a - a	2	23 t	12 t	12 t
b - b	5	26 t	14 t	14 t
c - c	9	30 t	16.5 t	16.5 t
d - d	15	43 t	28 t	28 t

BEARING WIDTH ≥ 2m

TARE -	24 t
CAPACITY, WEIGHT -	56 t
CAPACITY, VOLUME -	112 m ³ *
FLOOR AREA -	46.5 m ²
MIN. CURVE -	60 m
GEN. ARRG. DRG. No. -	FG - 117 451A

BRAKE - AIR DOUBLE BLOCKS & VAC. THRO' PIPE; SIDE SCREW
SUSPENSION - Y25 CSS BOGIE
COUPLINGS - U.I.C.
BUFFERS - HYDRAULIC 450 x 330 HD
WHEELS - φ 920
JOURNALS - φ 130

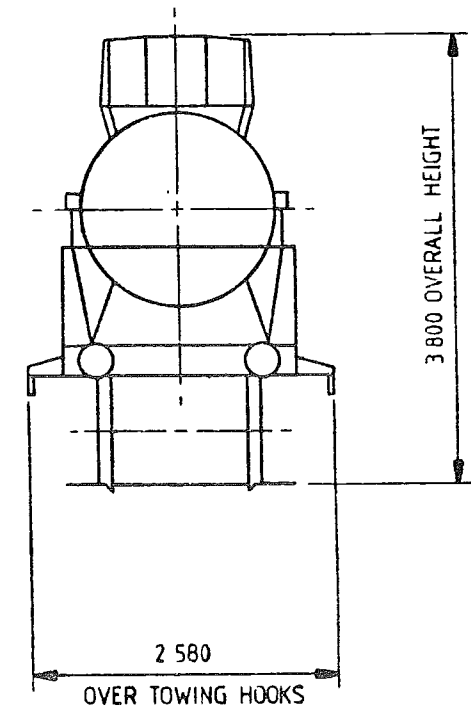
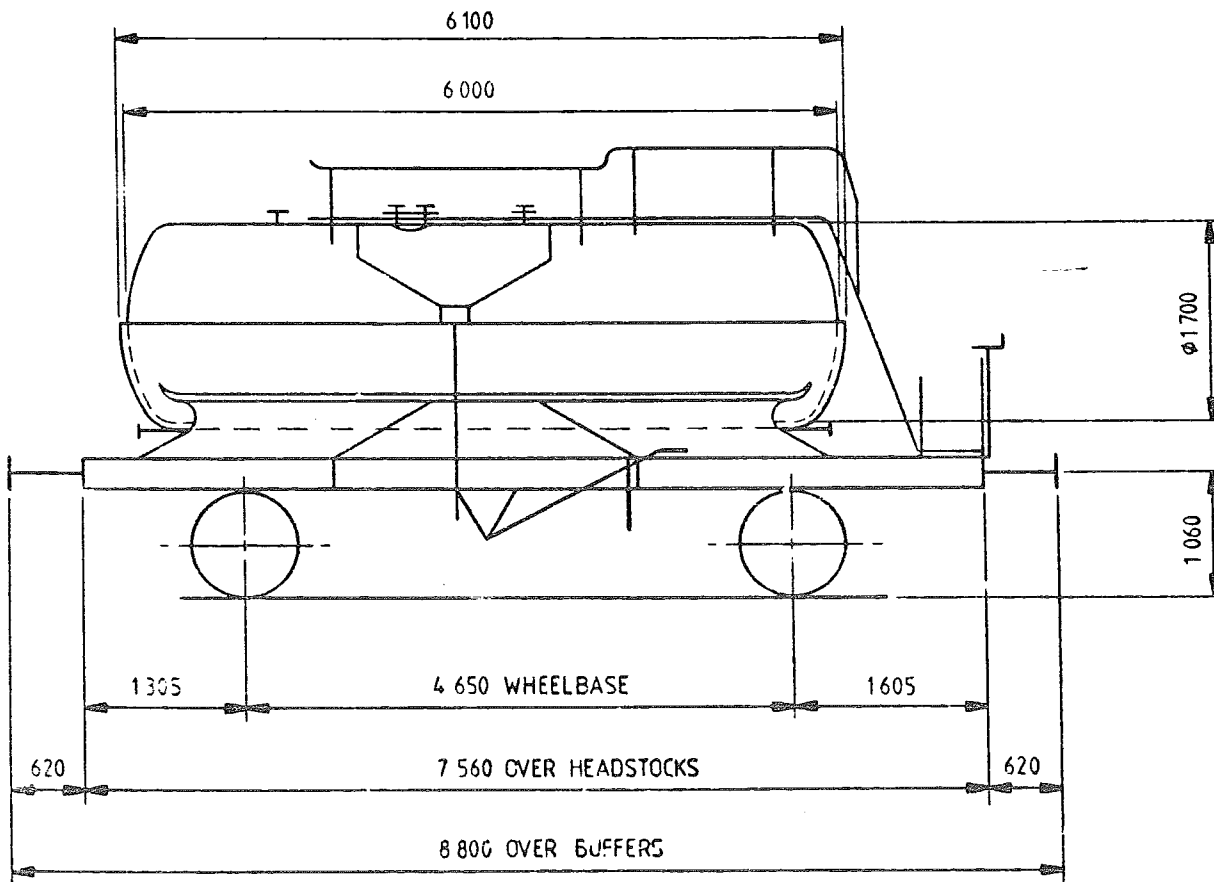
TYPE -	Stfiss
WAGON No. -	83 87 4739 000 - 034
BUILDER -	FAUVET - GIREL
OWNER -	E.V.S

ISSUE 1

40t GLW TANK

ICE 547

					TOPS INFORMATION									
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET		
18†	22†	26†				60 mile/h UP TO mile/h ABOVE		40 tonne GLW		11† FORCE UP TO 20† FORCE ABOVE	26† GLW	4	6	W1142
S	18†	22†	26†		CARKND									
					I C A C									



TARE -	14 t
CAPACITY, WEIGHT-	26t
CAPACITY, VOLUME-	13m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	152397.0.01

BRAKE -	AIR ; PLATFORM & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	OLEO
WHEELS -	φ 920
JOURNALS -	φ 130

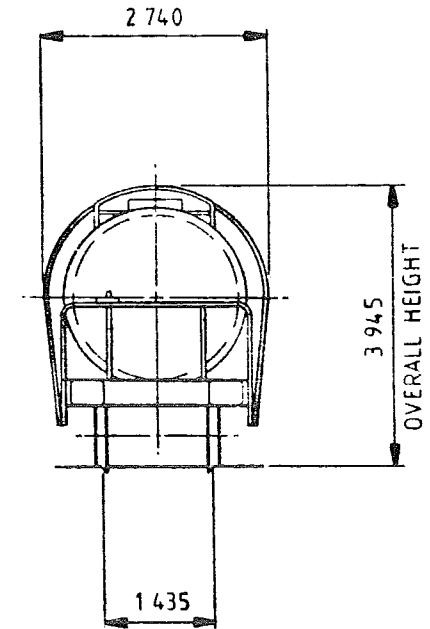
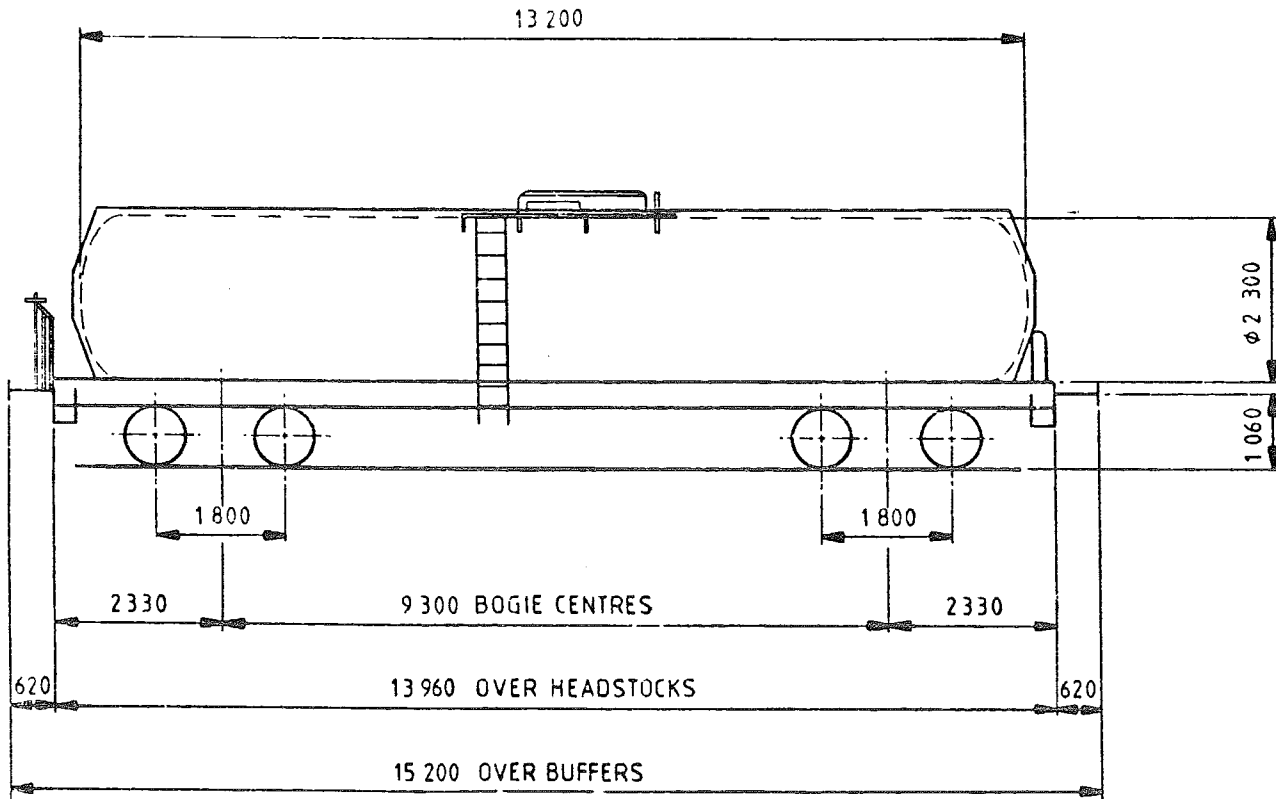
TYPE -	Zcefs
WAGON No. -	23 80 7398 066
BUILDER -	LINKE - HOFMANN - BUSCH
CWNER -	V.T.G.

ISSUE 1

80 GLW BOGIE TANK

ICE 548

				TOPS INFORMATION									
A	B	C	D	AARKND			OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
32.5t	40.5t	48.5t					60 mile/h UP TO mile/h ABOVE	80 tonne GLW	22 t FORCE UP TO 42 t FORCE ABOVE	46 t GLW	4	6	W1041
S	32.5t	40.5t	48.5t	CARKND									
120	00.0t			I	C	A	D						



TARE -	31.5 t
CAPACITY, WEIGHT-	48.5 t
CAPACITY, VOLUME-	52 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	0-333.01.0012

BRAKE -	AIR; PLATFORM & SIDE SCREW
SUSPENSION -	DB BOGIE BA 661.1
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 460 x 340
WHEELS -	φ 920
JOURNALS -	φ 130

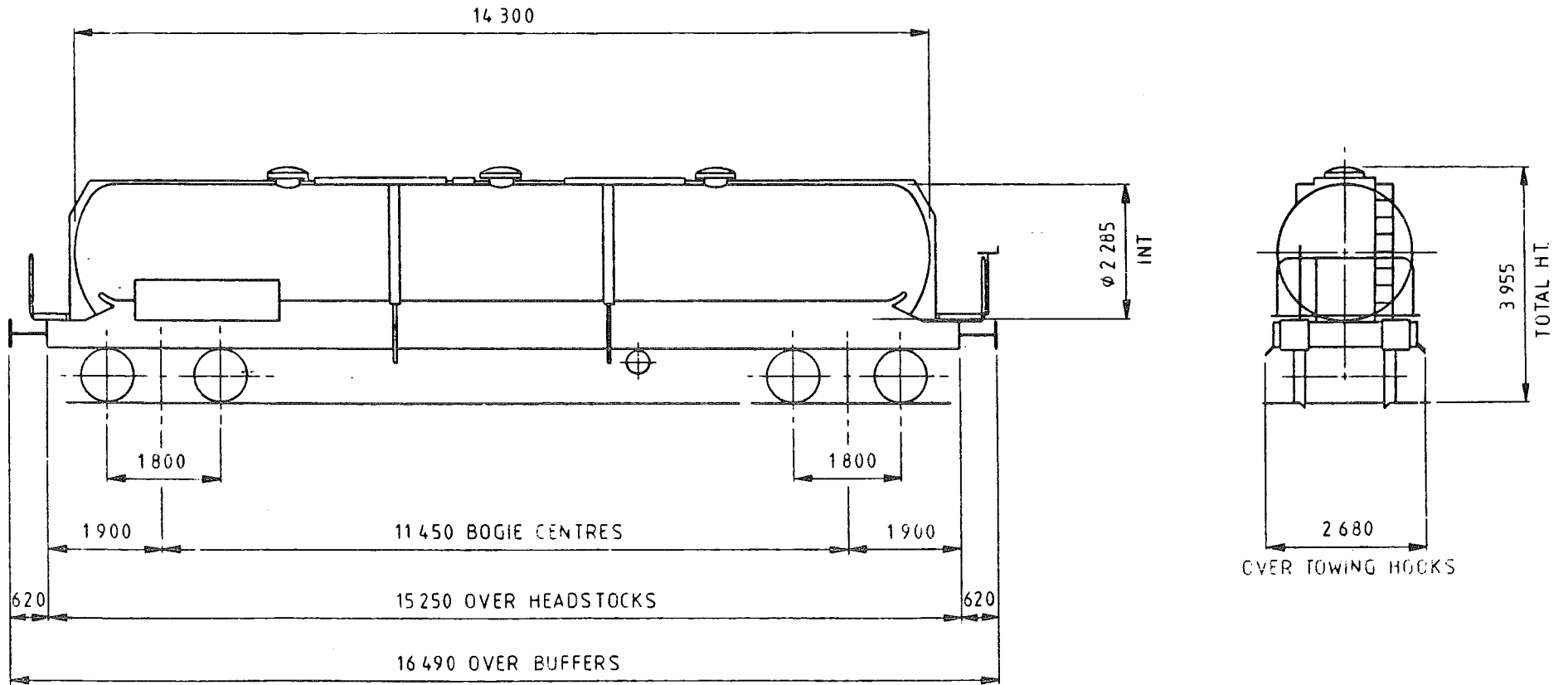
TYPE -	Zacefkhs (3)
WAGON No. -	33 80 7998 000-004
BUILDER -	WAGGON UNION
OWNER -	E.V.A.

ISSUE 1

80 t GLW. BOGIE TANK WAGON

ICE 549

				TOPS INFORMATION									
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	34.9t	42.9t	50.9t		CARKND		60 mile/h UP TO 80 tonne GLW		21 t FORCE UP TO 41 t FORCE ABOVE 44 t GLW		6	6	W1019
S	34.9t	42.9t	50.9t		I	C	B	D					
120	00 0t												



TARE -	29 t
CAPACITY, WEIGHT-	51 t
CAPACITY, VOLUME-	57 m ³
FLOOR AREA -	
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	102880

BRAKE -	AIR & VAC. THRO PIPE, PLATFORM & SIDE SCREW
SUSPENSION -	Y25 CS2
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 920
JOURNALS -	φ 130

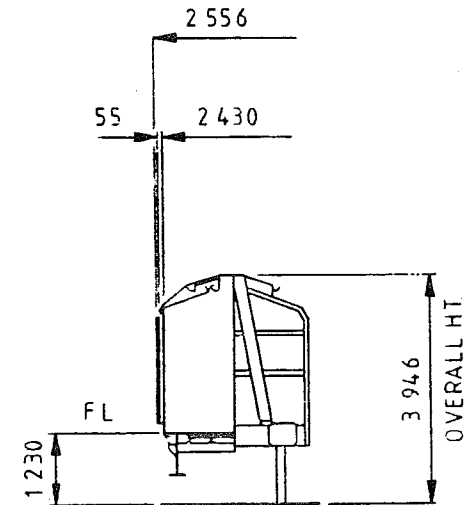
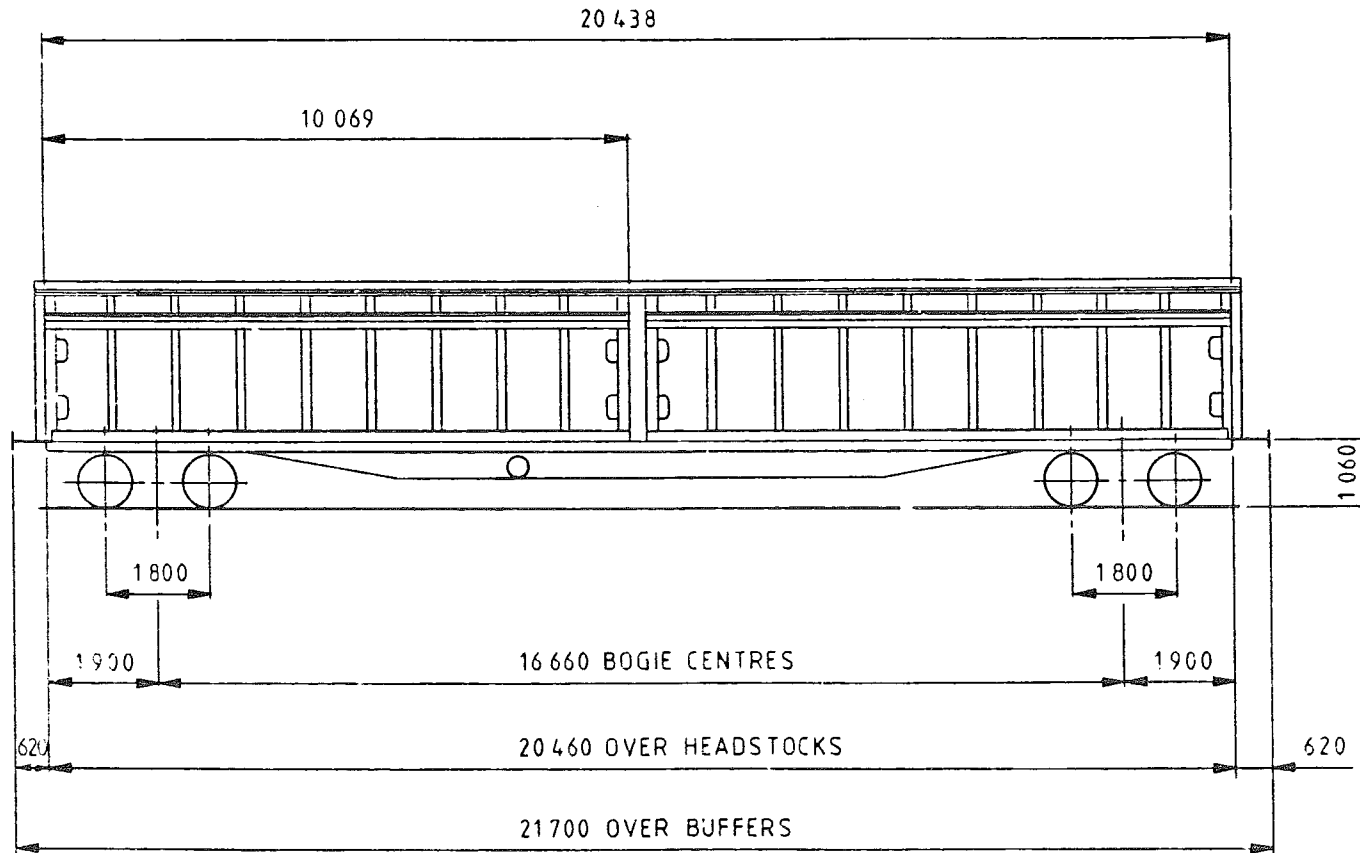
TYPE -	Zacefs (3)
WAGON No. -	33 87 7996 040-045
BUILDER -	FAUVET-GIREL
OWNER -	METAUX-SPECIAUX S.A.

ISSUE 1

80 t GLW BOGIE VAN

IPE 551

TOPS INFORMATION												
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	38 t	46 t	53 t		CARKND	60 mile/h UP TO -mile/h ABOVE 80 tonne GLW		19 t FORCE UP TO 43 t FORCE ABOVE 51 t GLW		13	6	W1056
120	00-01				I P A B							



NOTE: NUMBERS 000 - 014 HAVE LOCKABLE SLIDING PARTITIONS CAPABLE OF BEING TEMPORARILY REMOVED.

TARE -	27 t
CAPACITY, WEIGHT-	53 t
CAPACITY, VOLUME-	119 m ³
FLOOR AREA -	50 m ²
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	A 2102.01.001

BRAKE -	AIR; SIDE SCREW
SUSPENSION -	TALBOT BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 600 x 370
WHEELS -	ø 920
JOURNALS -	ø 130

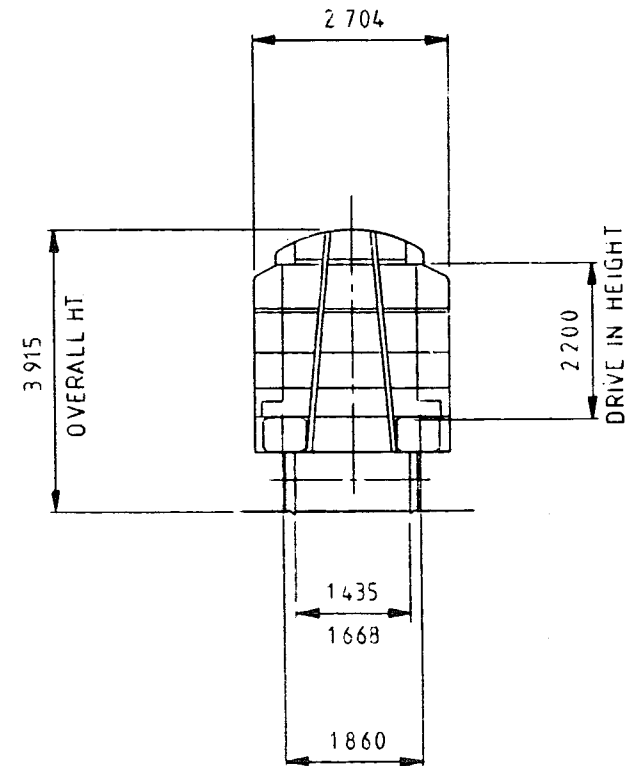
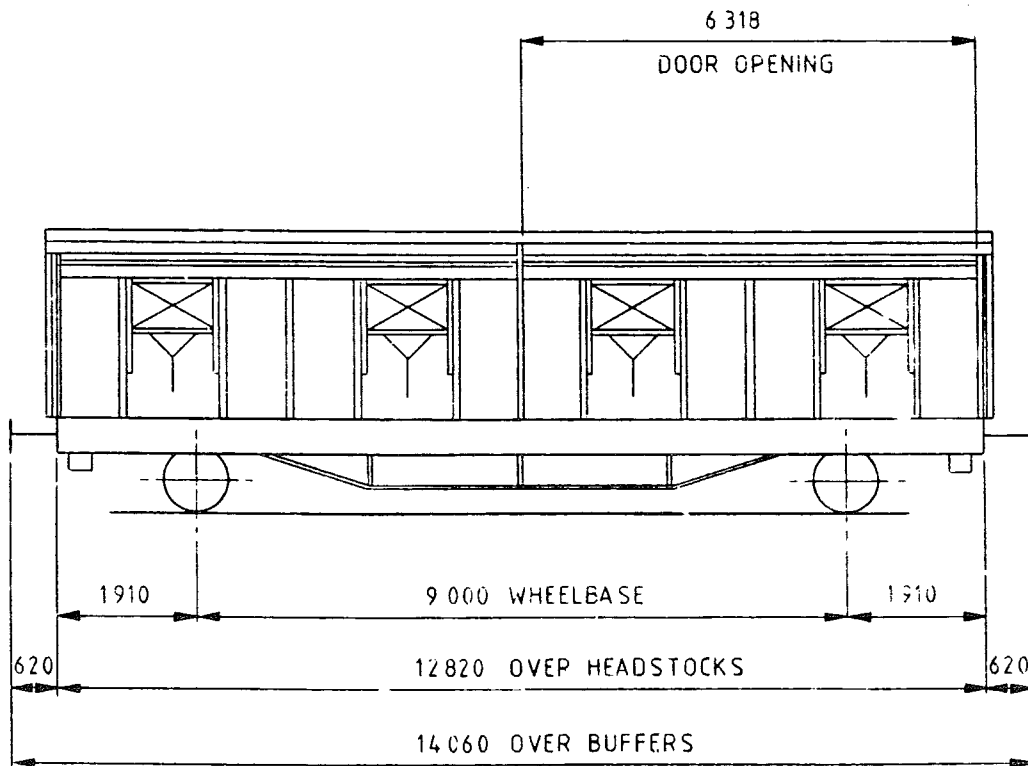
TYPE -	Habfis; Habfis (4)
WAGON No. -	83 80 2797 700-734 83 80 2798 000-014
BUILDER -	WAGGON-UNION
OWNER -	CARGO WAGGON

ISSUE 1

40 t GLW VAN

ITE 552

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19t	23t	27t			75 mile/h UP TO	13 tonne GLW	27 t GLW	}	12	6	W 1129
S	19t	23t	27t		CARKND	50 mile/h ABOVE						
120	00 0t				I T X M							



TARE -	13 t
CAPACITY, WEIGHT -	27 t
CAPACITY, VOLUME -	73 m ³
FLOOR AREA -	33 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	1.125.01.00.27

BRAKE -	DUAL; SIDE SCREW
SUSPENSION -	DOUBLE LINK, 2 STAGE
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	φ 1000
JOURNALS -	φ 130

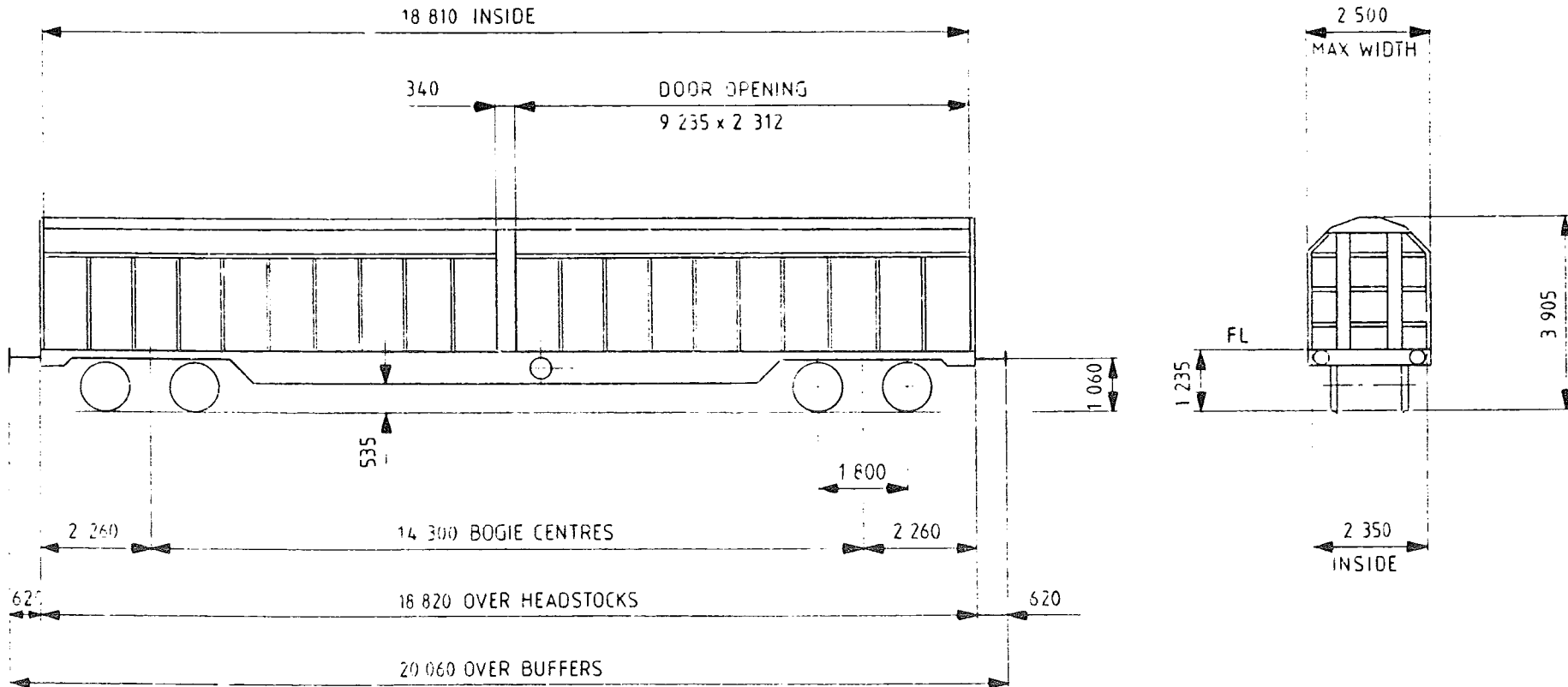
TYPE -	Hbfis
WAGON No. -	43 80 2396 002 - 101
BUILDER -	WAGGON UNION
OWNER -	TRANSFESA

ISSUE 1

80t GLW BOGIE VAN

ILE 553

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	38t	46t	54t			60 mile/h UP TO mile/h ABOVE 80 tonne GLW		16t FORCE UP TO 40t FORCE ABOVE 44 tonne GLW		12	6	W888
S	38t	46t	54t		CARKND							
120	00.0t				I L A B							



TARE -	26t
CAPACITY, WEIGHT -	54t
CAPACITY, VOLUME -	90.5m ³ (UTILISED)
FLOOR AREA -	47m ²
MIN. CURVE -	50m
GEN. ARRGT. DRG. No. -	59 807

BRAKE -	AIR ; SIDE SCREW
SUSPENSION -	Y25 CS2 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	ø920
JOURNALS -	ø130

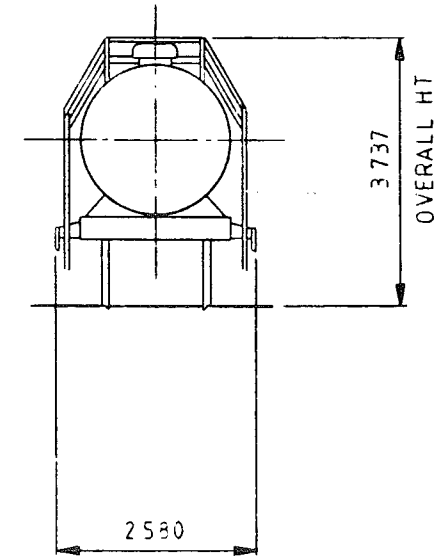
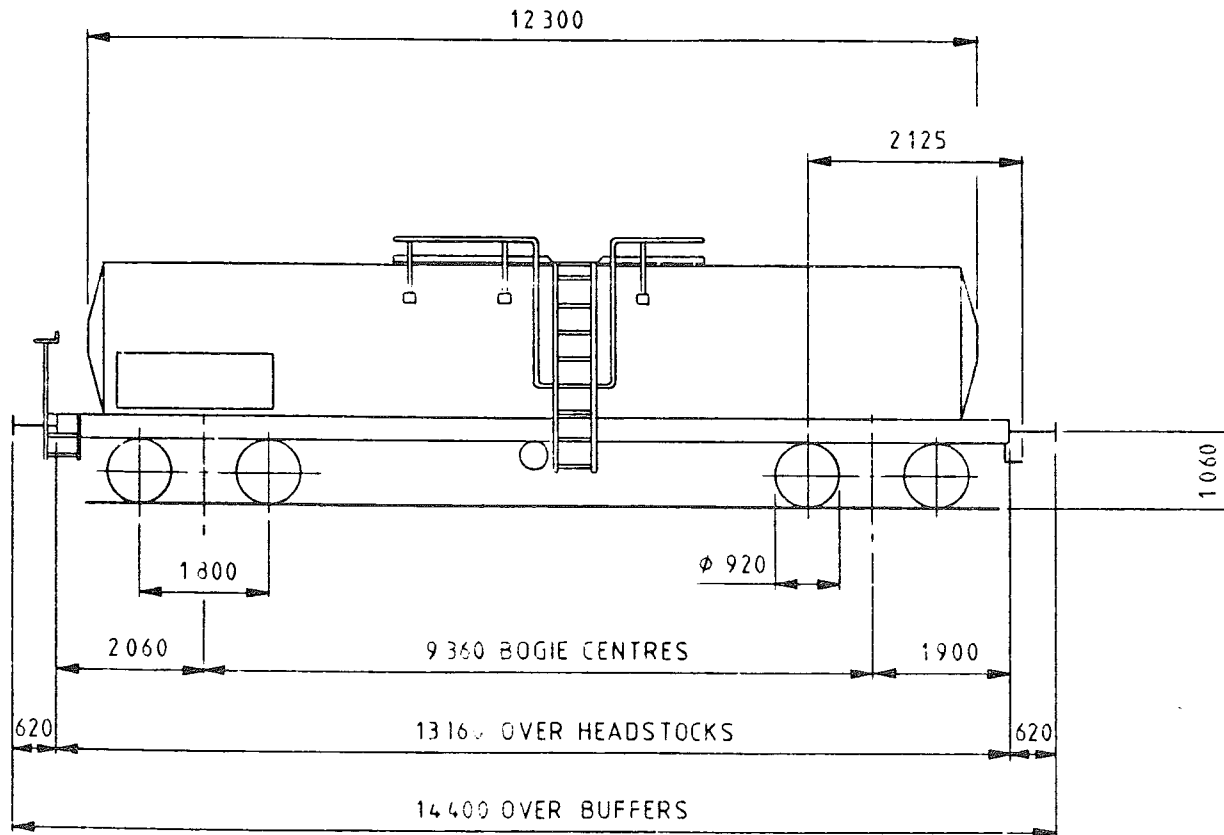
TYPE -	Habfis
WAGON No. -	31 83 2797 000 - 159
BUILDER -	—
OWNER -	FS

ISSUE 1

80 t GLW BOGIE TANK WAGON

ICE 554

				TOPS INFORMATION						
	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	422t	502t	582t							
S	422t	502t	582t		CARKND	60 mile/h UP TO mile/h ABOVE 80 tonne GLW	14 t FORCE UP TO 41 t FORCE ABOVE 44 t GLW	3	6	W1228
					I C A D					



TARE -	21.8 t
CAPACITY, WEIGHT-	58.2 t
CAPACITY, VOLUME-	37 m ³
FLOOR AREA -	
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	052413/0/01

BRAKE -	AIR; PLATFORM & SIDE SCREW
SUSPENSION -	DB BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 920
JOURNALS -	φ 130

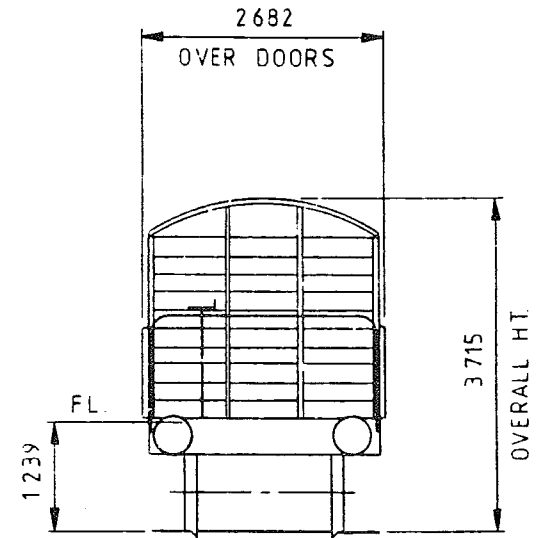
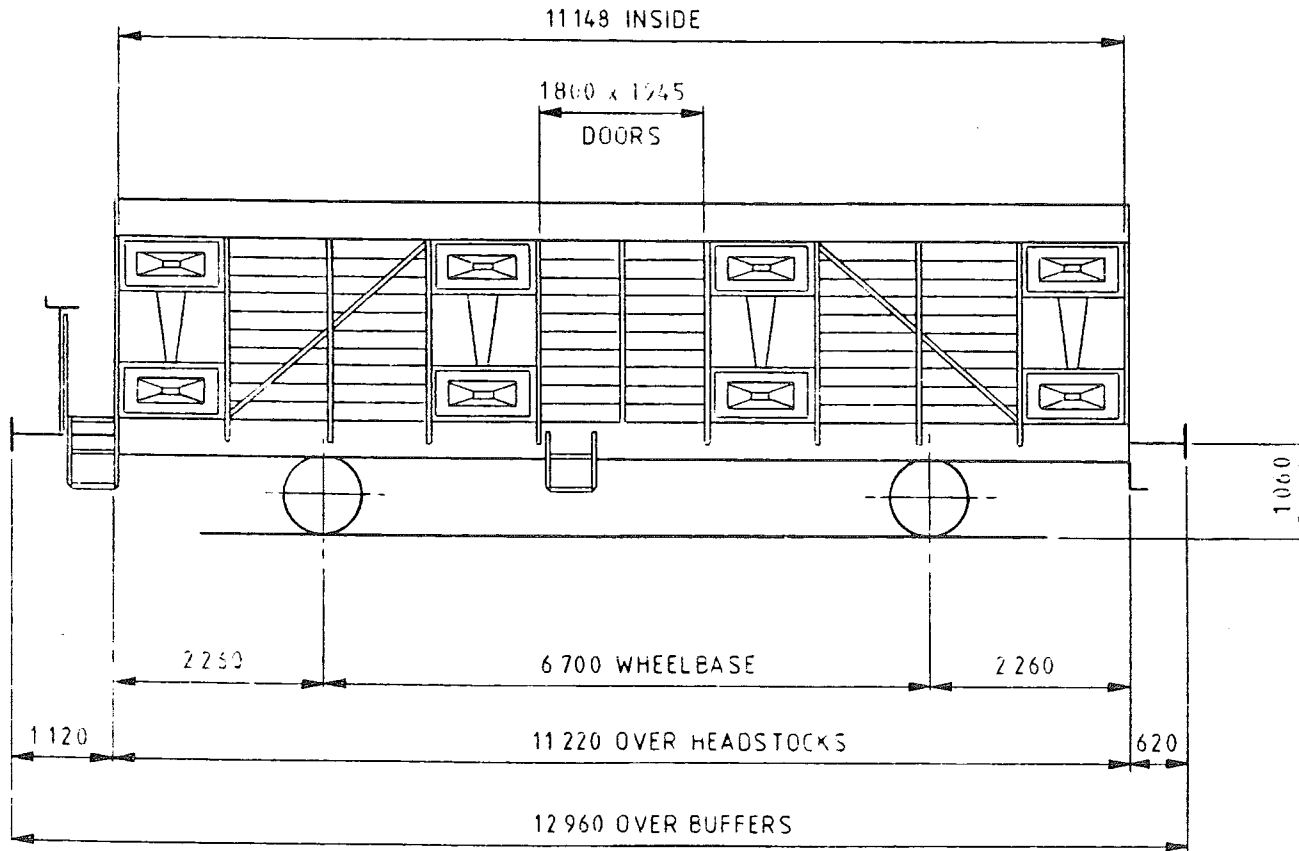
TYPE -	Zafgkks (3)
WAGON No. -	33 70 7895 150 · 154
BUILDER -	LINKE, HOFMANN, BUSCH
OWNER -	VTG.

ISSUE 1

40 t GLW VAN

ITE 555

				TOPS INFORMATION						
	A	B	C		AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	185t	225t	265t			60 mile/h UP TO - mile/h ABOVE	AB 11t FORCE UP TO VB 13t " " " " " " AB 18t FORCE ABOVE VB 21t " " " " " "	11	6	-
S	185t	225t	265t		CARKND					
					I T X M					



TARE -	13 1t
CAPACITY, WEIGHT-	26 5t
CAPACITY, VOLUME-	(UTILISED) 53.5 m ³
FLOOR AREA -	26 m ²
MIN. CURVE -	60m
GEN. ARRG. DRG. No. -	04

BRAKE -	DUAL; LEVER & PLATFORM SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1000
JOURNALS -	∅ 130

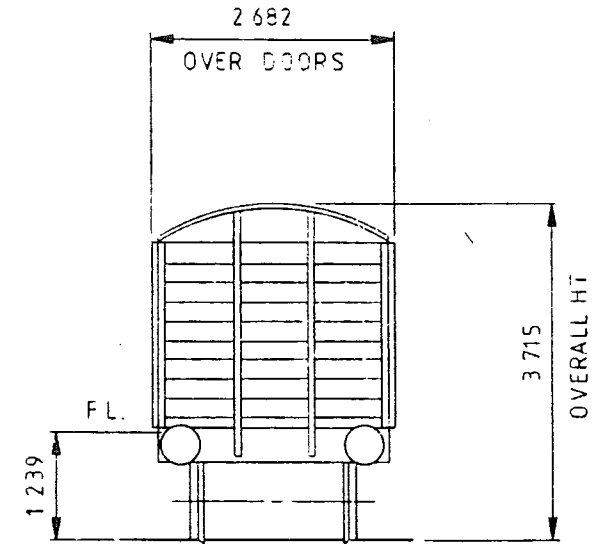
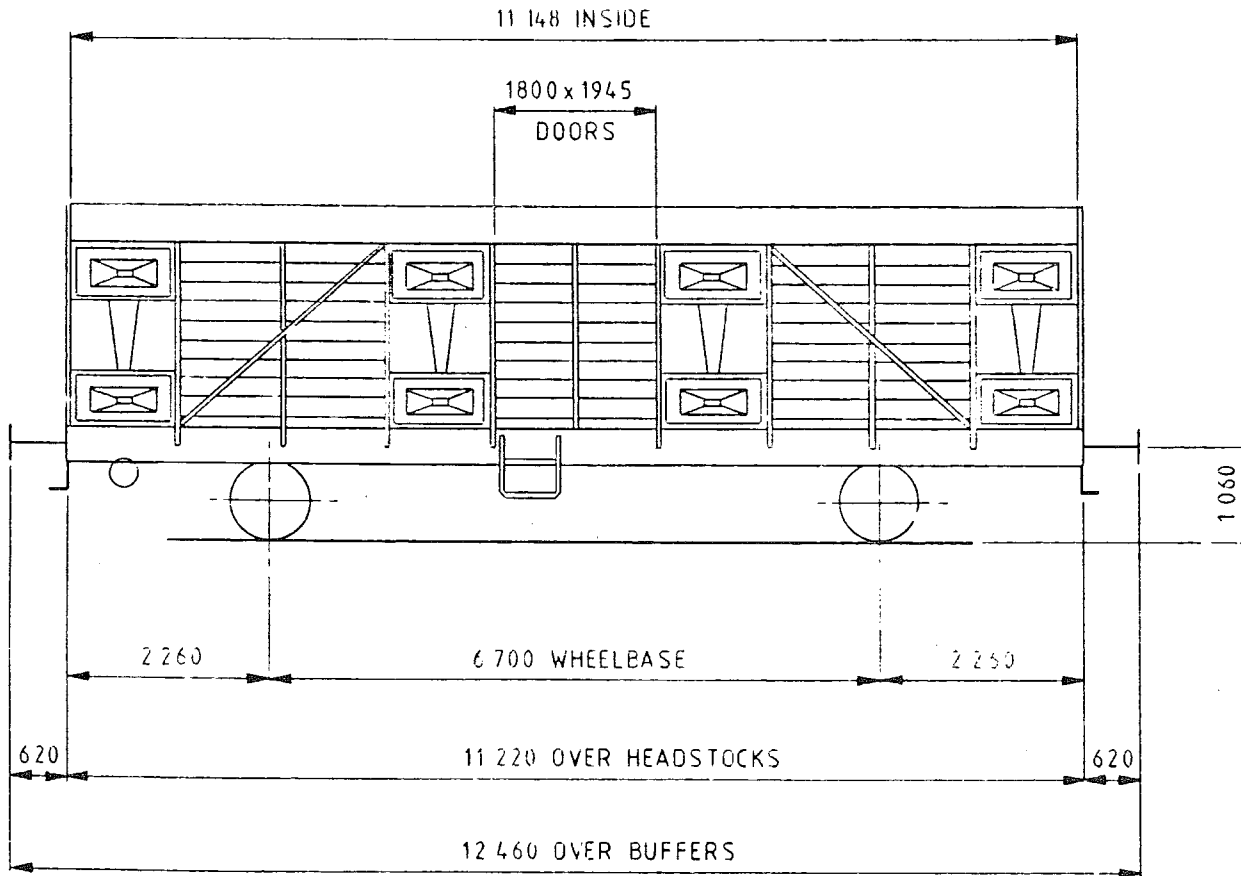
TYPE -	Hfhs
WAGON No. -	24 71 2148 496 - 594
BUILDER -	LINKE, HOFMANN, BUSCH
OWNER -	TRANSFESA

ISSUE 1

40 t GLW VAN

ITE 556

				TOPS INFORMATION						
	A	B	C	U	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19†	23†	27†			60 mile/h UP TO mile/h ABOVE	AB 6 † FORCE UP TO AB 5 † " " " " " " AB 15 † FORCE ABOVE AB 5 † " " " " " "	19 † GLW	10	6
S	19†	23†	27†		CARKND					
					I T X M					



TARE -	12 350 t
CAPACITY, WEIGHT-	27 t
CAPACITY, VOLUME-	(U.T. SEQ) 53.5 m ³
FLOOR AREA -	26 m ²
MIN. CURVE -	60 m
GEN. ARRG. DRG. No.-	04 ^A , 06 ^B

BRAKE -	DUAL, LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	Ø 1000
JOURNALS -	Ø 130

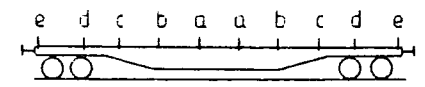
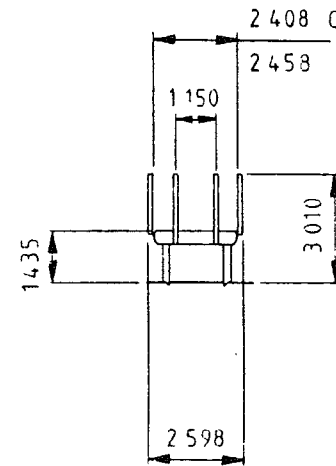
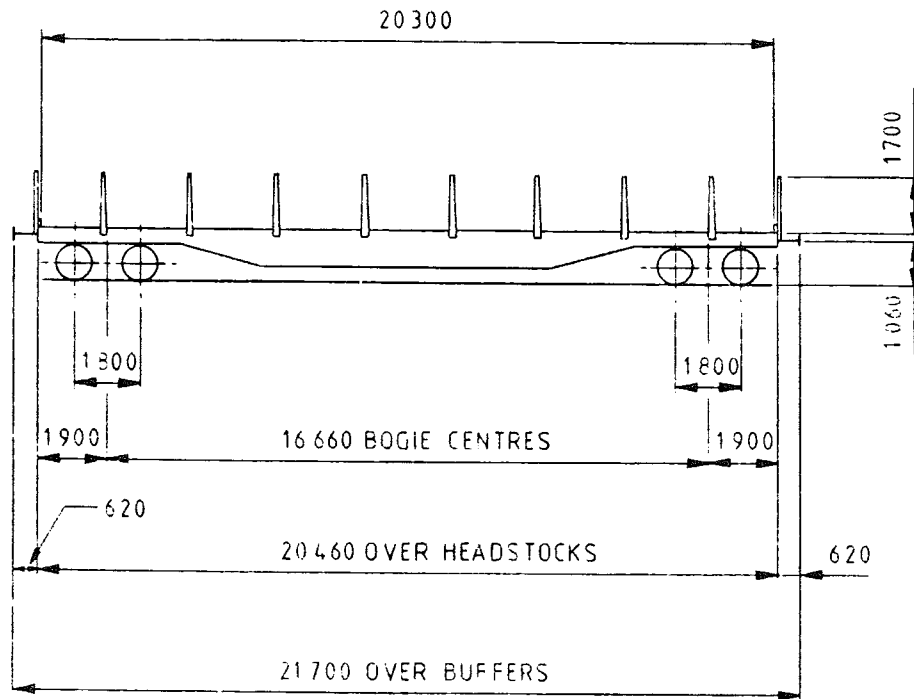
TYPE -	Hfbs
WAGON No. -	24 71 2148 486-495 595-692
BUILDER -	LINKE-HOFMANN-BUSCH
OWNER -	TRANSFESA

ISSUE 1

90 t GLW FLAT WAGON

IPE 557

	A	B	C	D	TOPS INFORMATION								
	40t	48t	56t		AARKND	OPERATING SPEED			BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	40t	48t	56t		CARKND	75 mile/h UP TO	23 tonne GLW	16t FORCE UP TO	44 t GLW	13	8	W1202	
120	00 0t				I P A D	60 mile/h ABOVE		42t FORCE ABOVE					



LOADING DIAGRAM

DISTANCE m	DISTRIBUTED LOAD t	POINT LOAD t	POINT LOAD t
a-a	23	32.0	18, 18
b-b	6.7	38.0	22, 22
c-c	11.0	45.0	27.5, 27.5
d-d	15.3	50.0	33.5, 33.5
e-e	19.6	67.0	33.5, 33.5
e-c	4.3	33.5	-, -

TARE -	23.94 t
CAPACITY, WEIGHT-	66 t
CAPACITY, VOLUME-	
FLOOR AREA -	4.65 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	0-25101.002

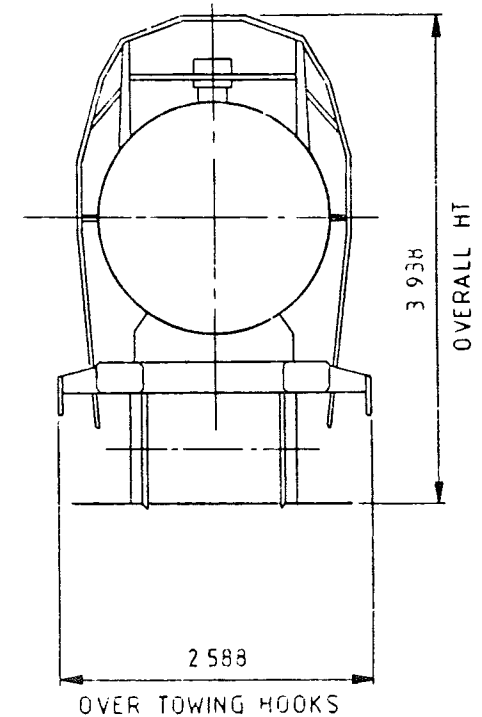
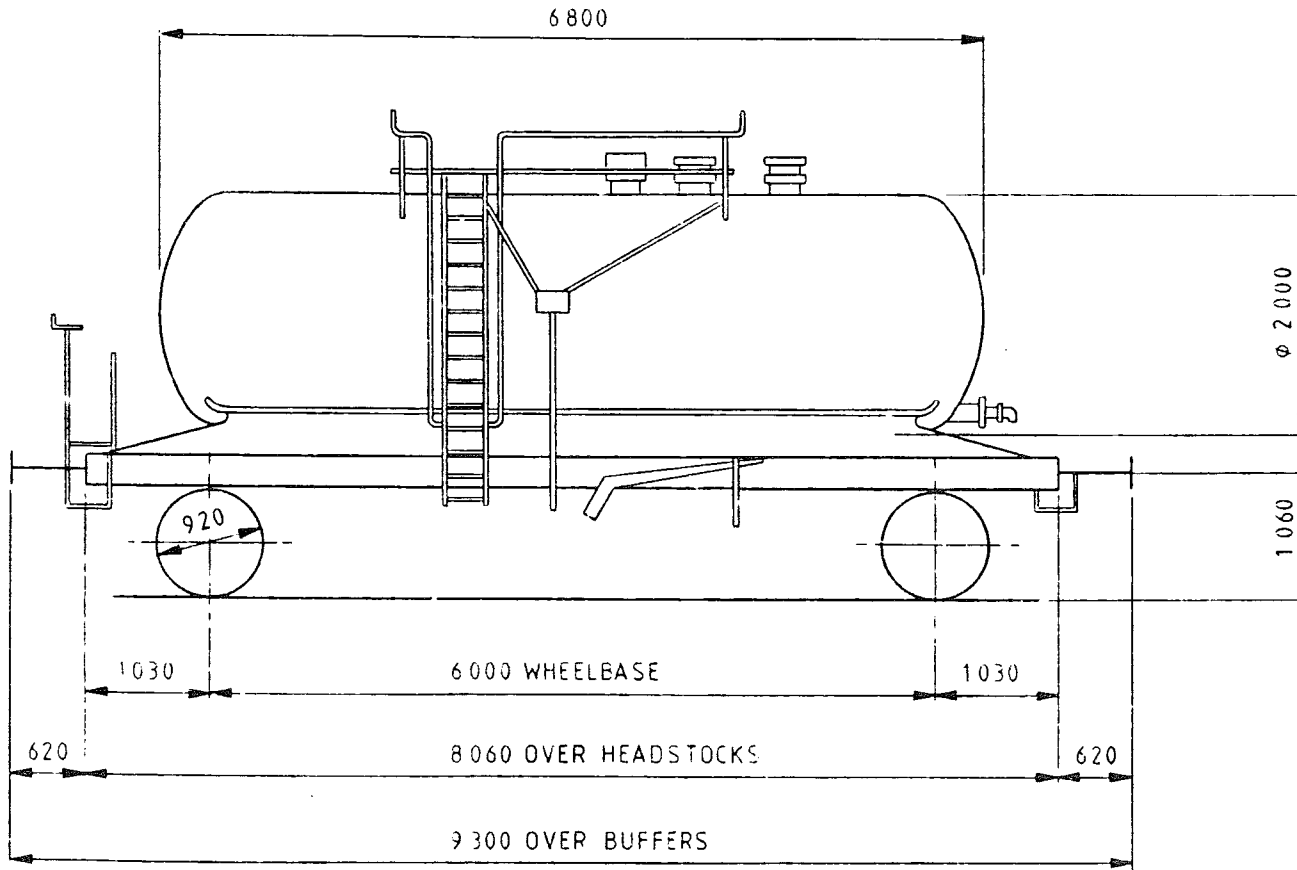
BRAKE -	AIR; SIDE SCREW
SUSPENSION -	DB BOGIE 665/WU 83
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 350 x 600
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

TYPE -	Sfs (1)
WAGON No. -	33 80 4747000 - 049
BUILDER -	WAGON UNION
OWNER -	CARGO WAGON

40 t GLW TANK WAGON

ICE 558

				TOPS INFORMATION				EXCESS LENGTH	RA (GLW)	DESIGN SHEET
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA				
	19 t	23 t	27 t			75 mile/h UP TO	9 t FORCE UP TO	5	6	W1128
S	19 t	23 t	27 t			60 mile/h ABOVE	20 t FORCE ABOVE			
120	00 0 t					13 tonne GLW	25 t GLW			
				I	C	A	C			



TARE -	13 t
CAPACITY, WEIGHT-	27 t
CAPACITY, VOLUME-	20 m ³
FLOOR AREA -	
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	K512 07.00

BRAKE -	AIR, LEVER & PLATFORM SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 920
JOURNALS -	φ 130

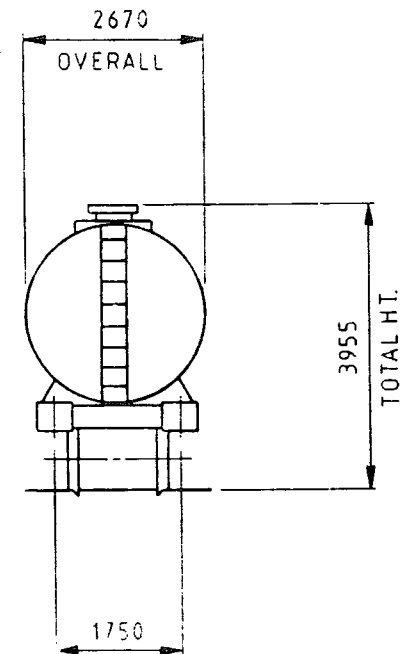
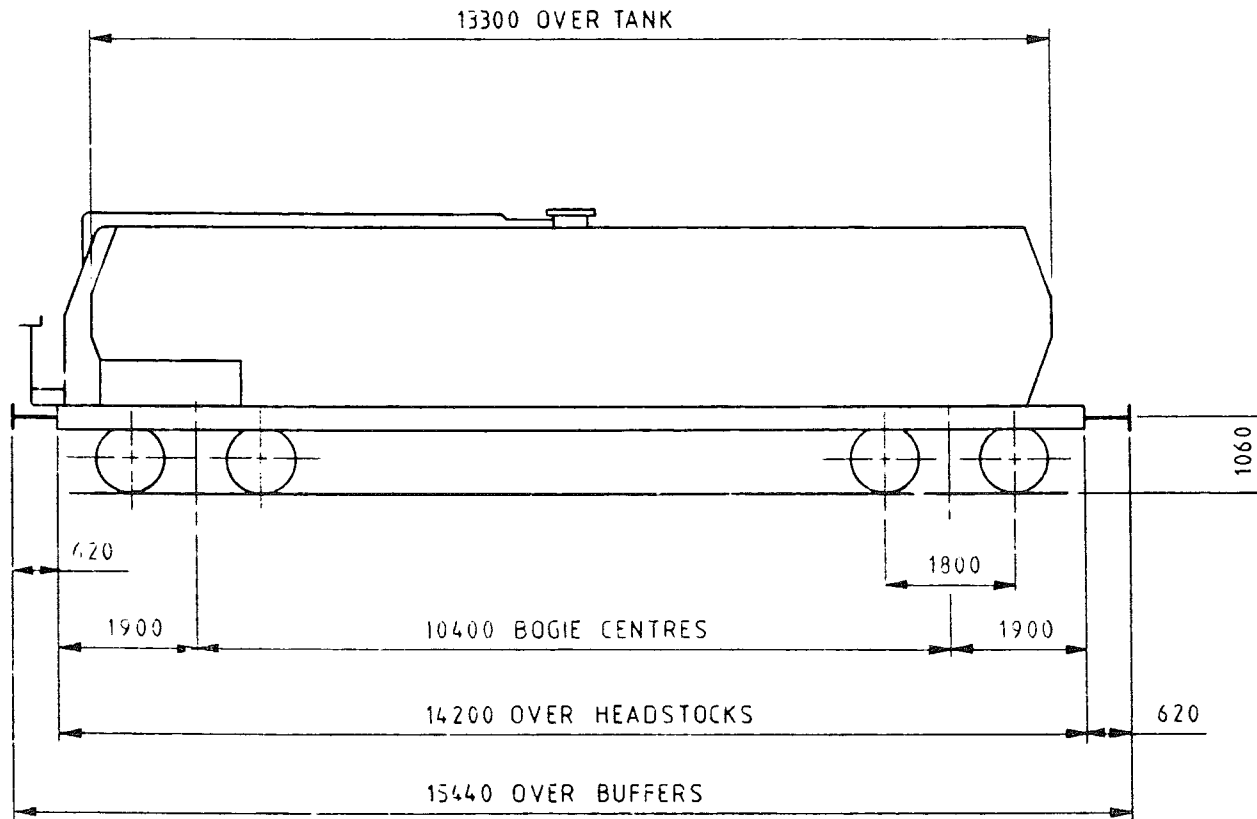
TYPE -	Zcefs (3)
WAGON No. -	24 80 7497 000 - 009
BUILDER -	GRAAF ELZE / LEINE
OWNER -	VTG

ISSUE 1

80 t GLW BOGIE TANK WAGON

ICE 560

				TOPS INFORMATION				EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA				
43.9t	51.9t	59.9t		CARKND	75 mile/h UP TO	20.3 tonne GLW	14t FORCE UP TO		5	6	W1130
43.9t	51.9t	59.9t		I C A D	60 mile/h ABOVE		36t FORCE ABOVE	40t G.L.W.			
120		00.0t									



TARE -	20.3t
CAPACITY, WEIGHT -	59.9t
CAPACITY, VOLUME -	60m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No -	3521

BRAKE -	AIR; PLATFORM & SIDE SCREW.
SUSPENSION -	Y25 CS2
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 450 x 340 HD.
WHEELS -	φ920
JOURNALS -	φ130

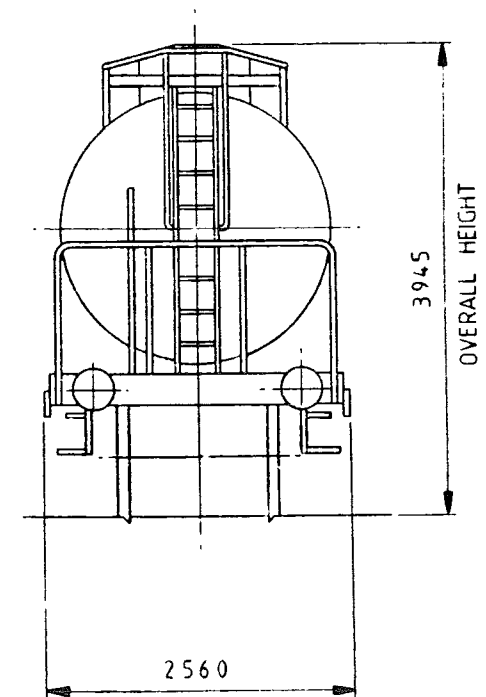
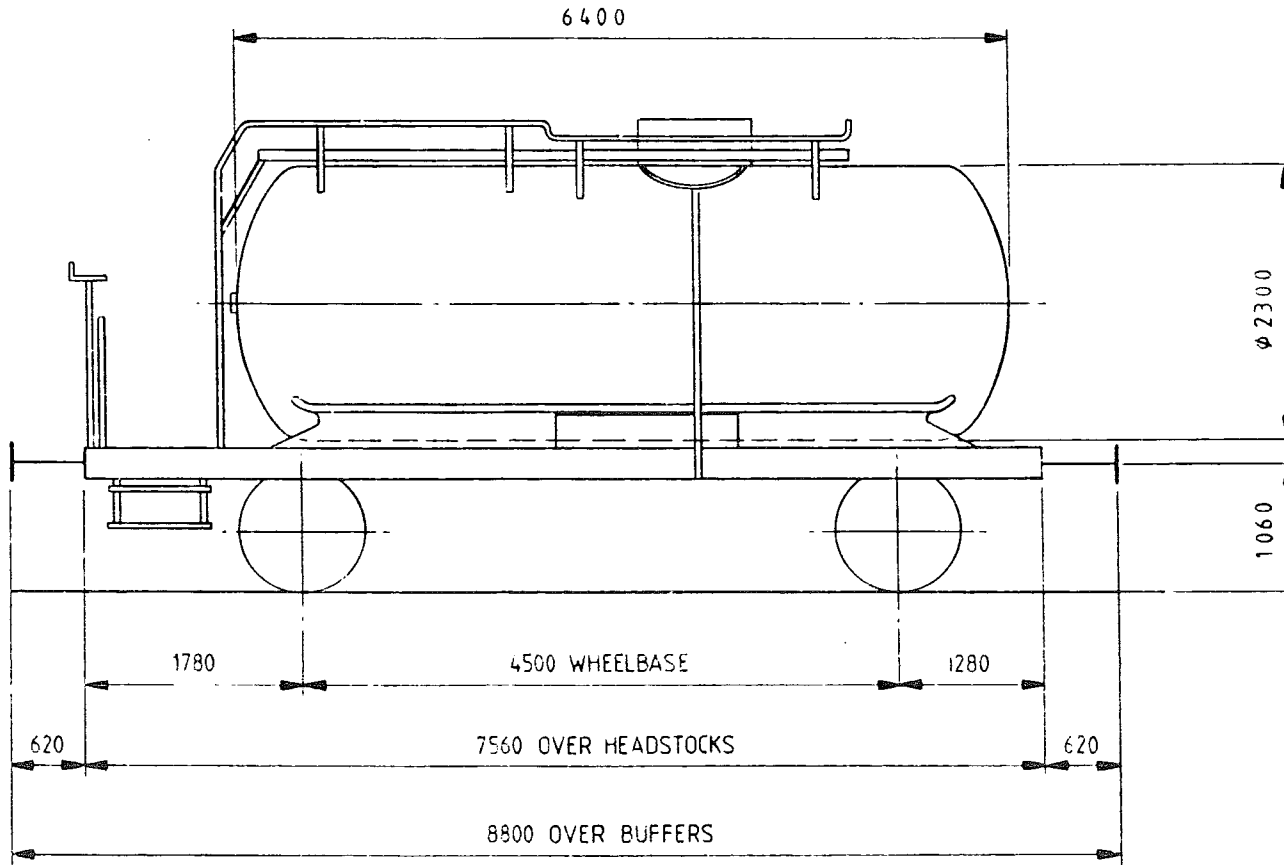
TYPE -	Zacefs
WAGON No. -	33 87 7996 046 & 047
BUILDER -	SIMOTRA
OWNER -	SIMOTRA

ISSUE 1

2 AXLE 40t GLW TANK WAGON

ICE 563

TOPS INFORMATION												
	A	B	C	D		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	18t	22t	26t		AARKND	60 mile/h UP TO 40 tonne GLW		10t FORCE UP TO 22t GLW		4	6	W1155
S	18t	22t	26t		CARKND							
					I C A C							



TARE -	14t
CAPACITY, WEIGHT-	26t
CAPACITY, VOLUME-	24m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	W2018

BRAKE -	AIR:PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370
WHEELS -	ϕ 1000
JOURNALS -	ϕ 130

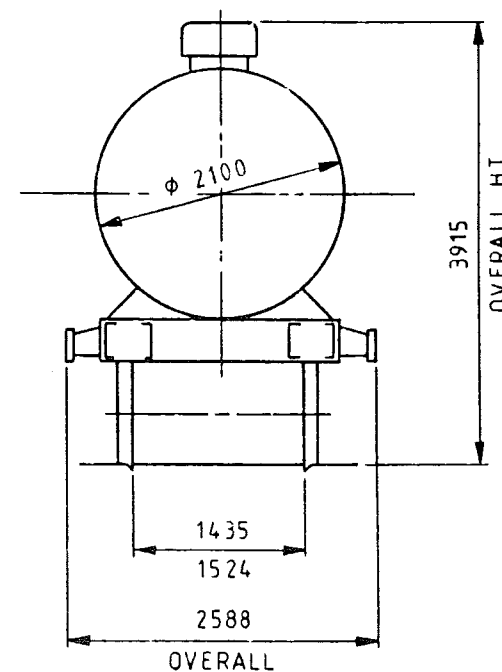
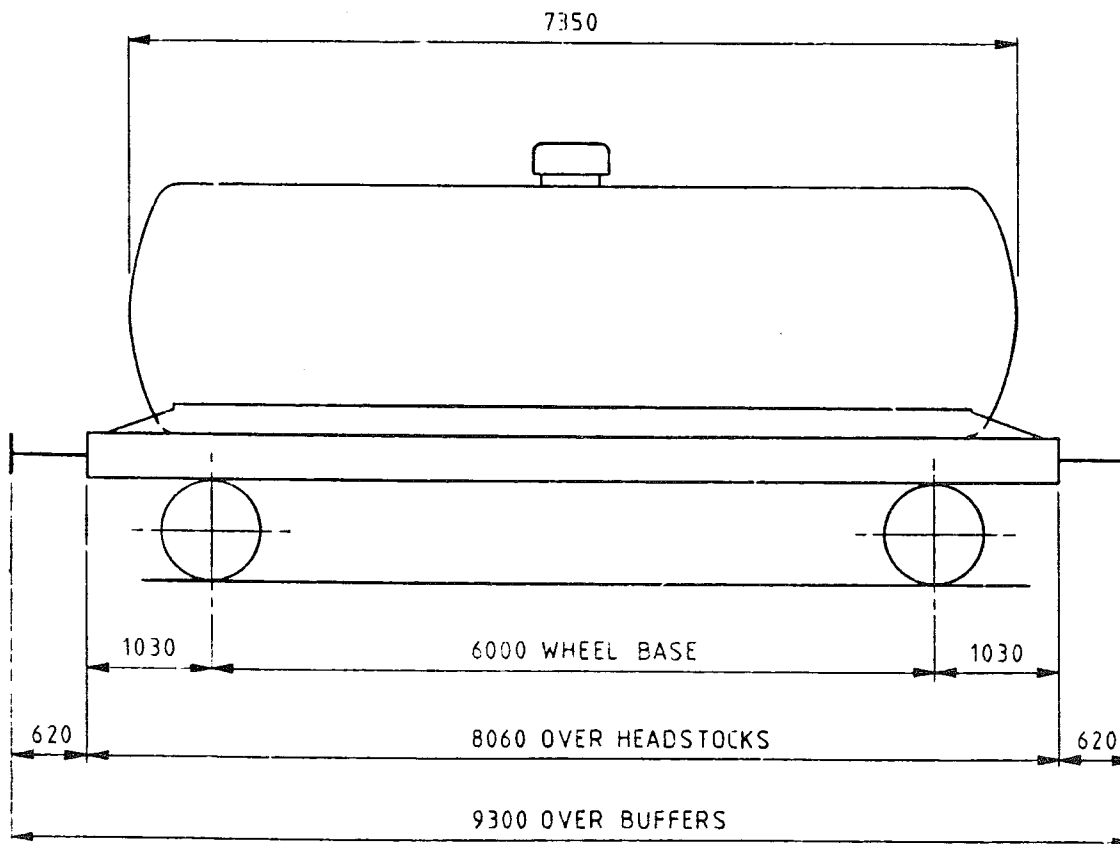
TYPE -	Zcfs
WAGON No. -	2380 7391 058 & 059
BUILDER -	FRANZ KAMINSKI
OWNER -	V T G

ISSUE 1

2 AXLE 40 t GLW TANK WAGON

ICE 564

		TOPS INFORMATION			
	A	B	C	D	
	20t	24t	28t		
S	20t	24t	28t		
120	00:0t				
		AARKND	OPERATING SPEED		BRAKE FORCE DATA
		CARKND	75 mile/h UP TO 12 tonne GLW		9 t FORCE UP TO 25 t GLW
		I C A C	60 mile/h ABOVE		20 t FORCE ABOVE
					EXCESS LENGTH 5
					RA (GLW) 6
					DESIGN SHEET W1173



TARE -	12t
CAPACITY, WEIGHT-	28t
CAPACITY, VOLUME-	24m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	3513 83

BRAKE -	AIR, BLOCK; LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

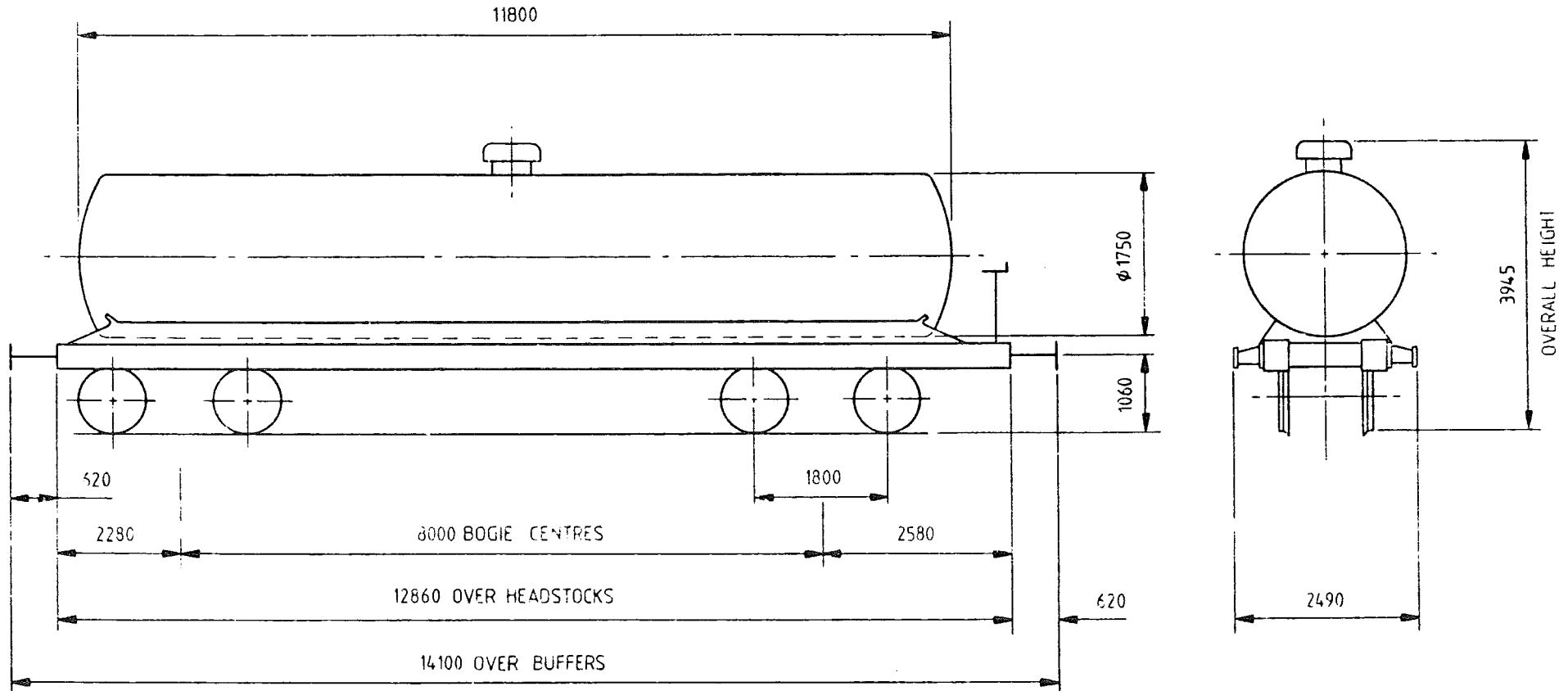
TYPE -	Zefs (3)
WAGON No. -	24 80 7495 000-009
BUILDER -	GRAFF ELZE / LEINE
OWNER -	VTG.

ISSUE 1

80t GLW BOGIE TANK WAGON

ICE565

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	39.8t	47.8t	55.8t			75 mile/h UP TO	24.2 tonne GLW	17t FORCE UP TO	44 tonne GLW	3		W1177
S	39.8t	47.8t	55.8t		CARKND	60 mile/h ABOVE		42t FORCE ABOVE				
120	00.0t				I C A D							



TARE -	24.2t
CAPACITY, WEIGHT -	55.8t
CAPACITY, VOLUME -	27 m ³
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	4630.81

BRAKE -	AIR, BLOCK ; PLATFORM & SIDE SCREW
SUSPENSION -	
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 920
JOURNALS -	φ 130

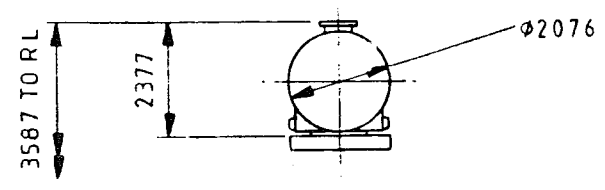
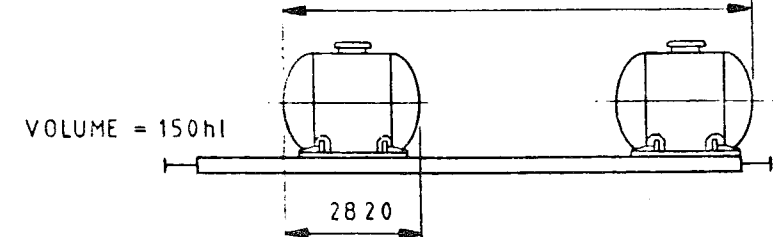
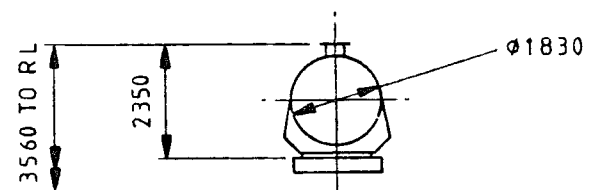
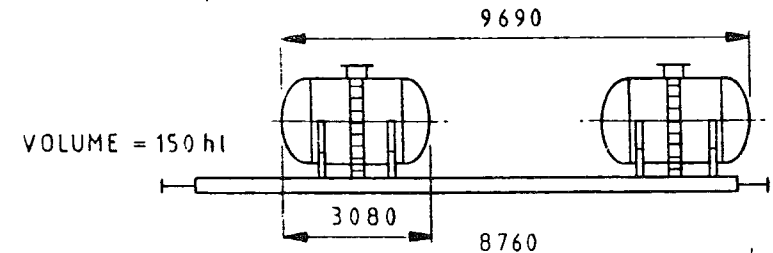
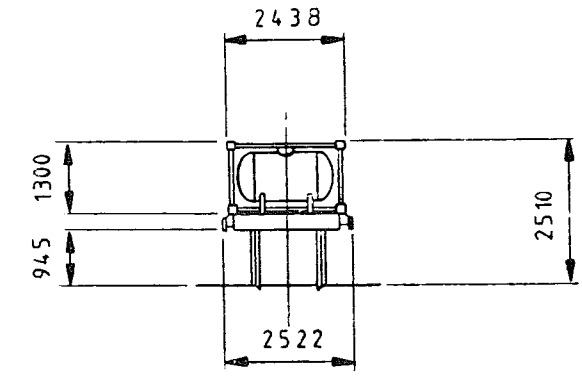
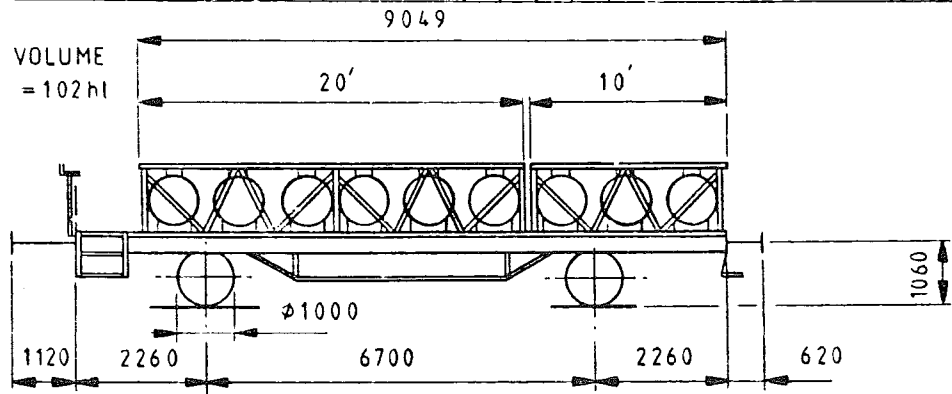
TYPE -	Zacefs
WAGON No. -	33 80 7996 000
BUILDER -	LINKE - HOFMANN - BUSCH
OWNER -	V.T.G.

ISSUE 1

2 AXLE CONTAINER FLAT

IPE 566

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
20t	24t	28t				60 mile/h UP TO mile/h ABOVE		39 tonne GLW		11	6	W1213
S	20t	24t	28t		CARKND			FORCE UP TO 20t GLW				
					I P X E			FORCE ABOVE				



TARE -	11t
CAPACITY, WEIGHT -	28t
CAPACITY, VOLUME -	SEE ABOVE
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	67 03 100

BRAKE -	DUAL SIDE LEVER & PLATFORM SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC $\phi 460$
WHEELS -	$\phi 1000$
JOURNALS -	$\phi 130$

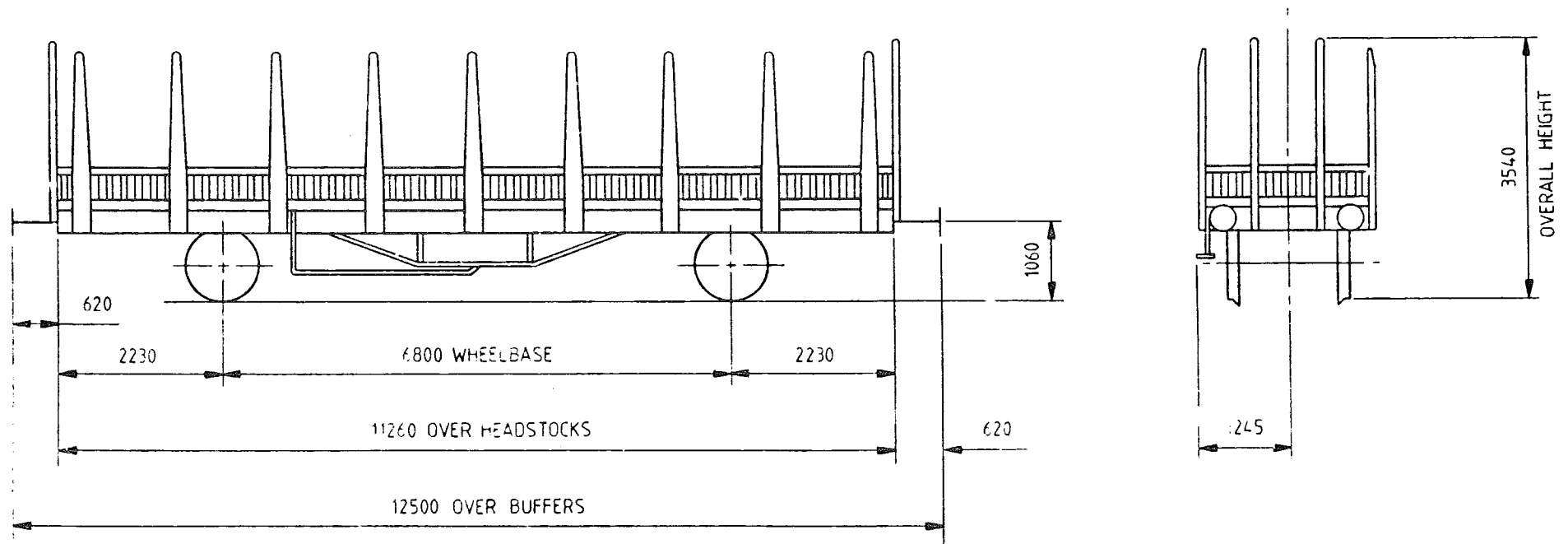
TYPE -	Ufs
WAGON No. -	43 80 9195 000 & 001
BUILDER -	
OWNER -	SCHERING AG

ISSUE 1

2 AXLE 40t GLW LOWSIDED OPEN

IFE 568

				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19.5t	23.5t	27.5t			60 mile/h UP TO 40 tonne GLW		5t FORCE UP TO 18t FORCE ABOVE 23tonne GLW		10	6	
S	19.5t	23.5t	27.5t		CARKND							
					I	F	B	A				



TARE -	12t
CAPACITY, WEIGHT-	27.5t
CAPACITY, VOLUME-	
FLOOR AREA -	26.85m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	2018.01.1

BRAKE -	AIR, VAC THRO' PIPE ; SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1000
JOURNALS -	∅ 130

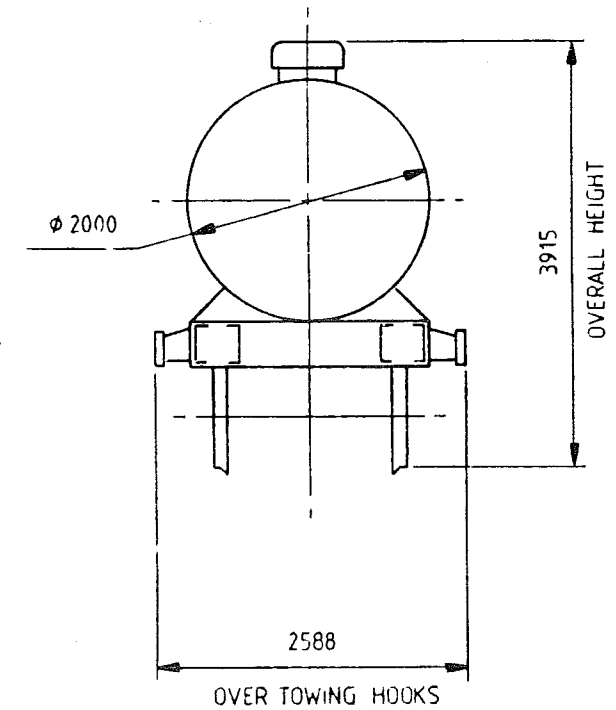
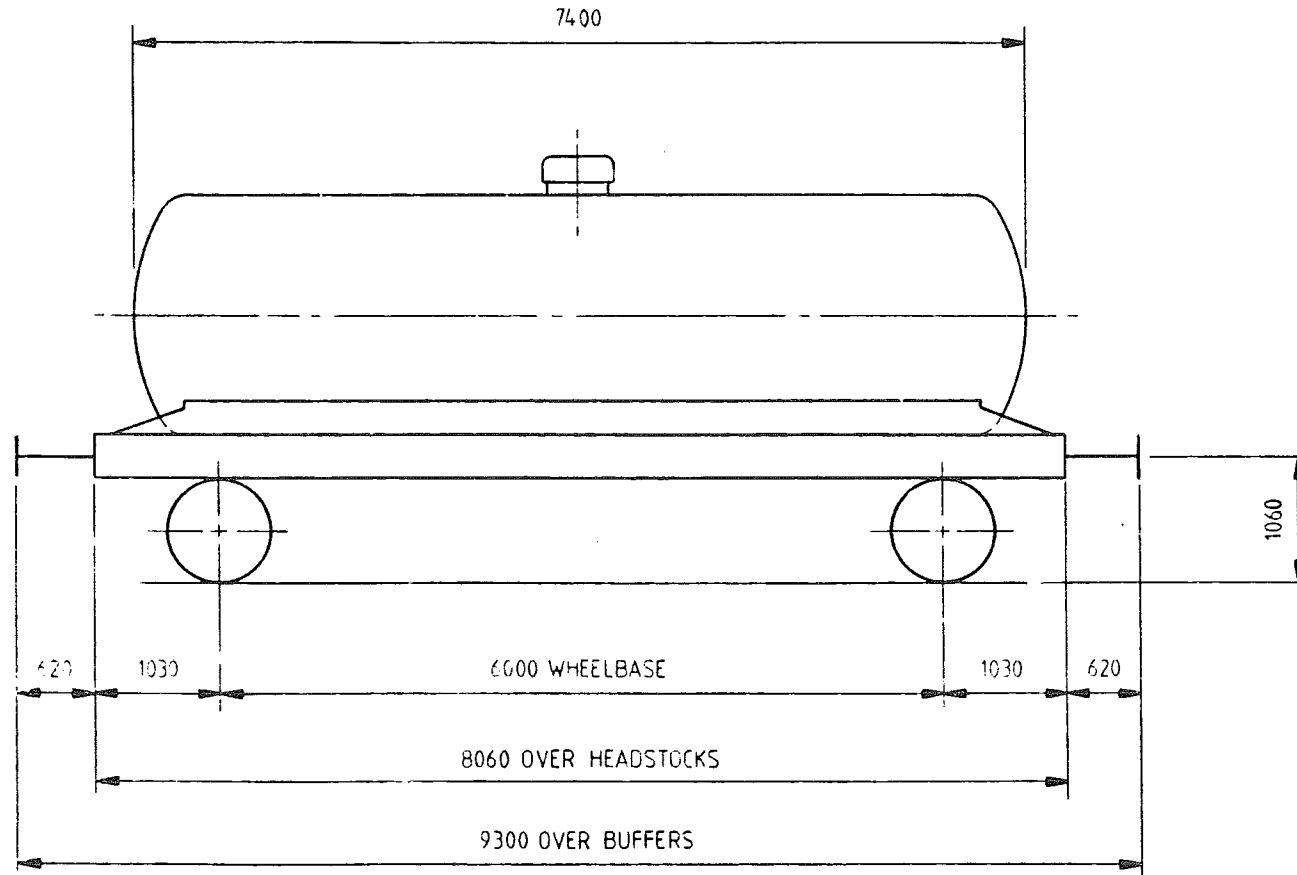
TYPE -	Lfms
WAGON No. -	21 80 4142000 - 024
BUILDER -	
OWNER -	DB

ISSUE 1

2 AXLE 40t GLW TANK

ICE 571

				TOPS INFORMATION								
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19.5t	23.5t	27.5t			75 mile/h UP TO	12.5 tonne GLW	8t FORCE UP TO	25t GLW	5	6	W1227
S	19.5t	23.5t	27.5t		CARKND	70 mile/h ABOVE						
120		00:0			I C A C							



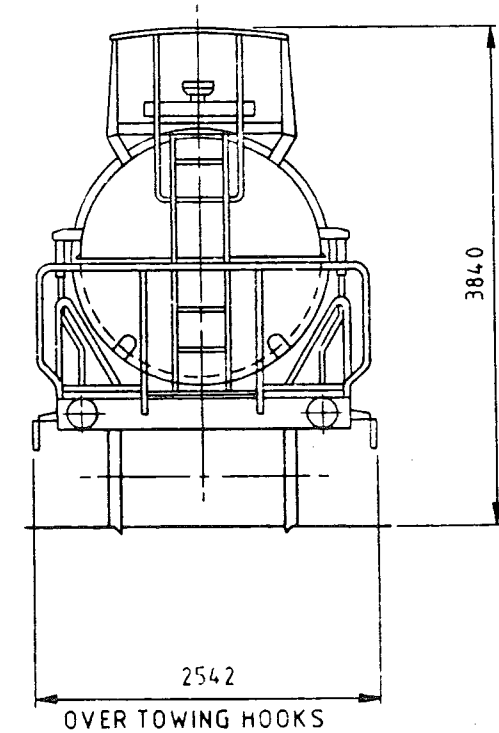
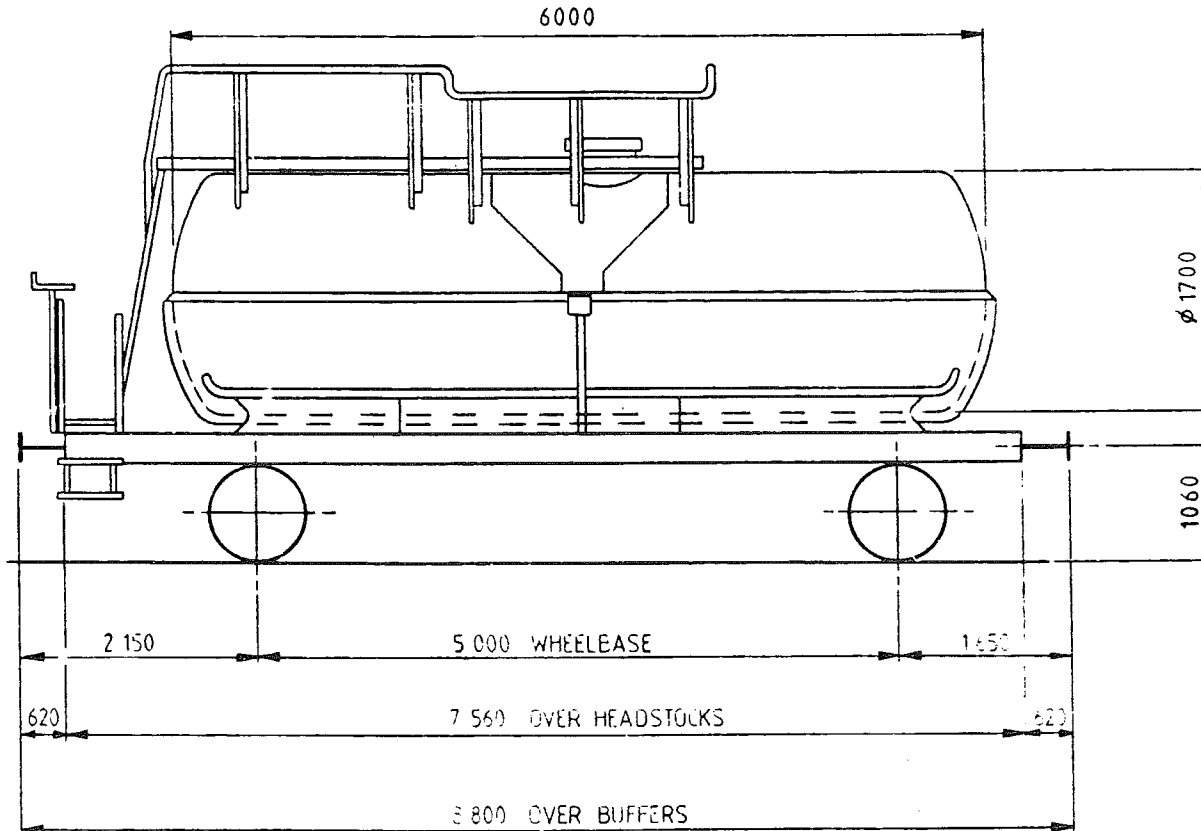
TARE -	12.5t
CAPACITY, WEIGHT-	27.5t
CAPACITY, VOLUME-	22m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	7011.84

BRAKE -	AIR, BLOCK ; LEVER & SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	OLEO
WHEELS -	φ 920
JOURNALS -	φ 130

TYPE -	Zfgs (3)
WAGON No. -	24 80 7393 000-009
BUILDER -	GRAAF
OWNER -	V.T.G.

ISSUE 1

				TOPS INFORMATION									
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 4	RA (GLW) 6	DESIGN SHEET W.1178
	19†	23†	27†				60 mile/h UP TO mile/h ABOVE 40 tonne GLW		9† FORCE UP TO 20† FORCE ABOVE 22† G.L.W.				
S	19†	23†	27†		CARKND								
					I	C	A	C					



TARE -	13†
CAPACITY, WEIGHT-	27†
CAPACITY, VOLUME-	13m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	W2024

BRAKE -	AIR BLOCK; PLATFORM & SIDE LEVER
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRALLIC ϕ 370 HEAD
WHEELS -	ϕ 920
JOURNALS -	ϕ 130

TYPE -	Zcfs
WAGON No. -	23 80 7398 077
BUILDER -	FRANZ KAMINSKI
OWNER -	V.T.G.

ISSUE 1

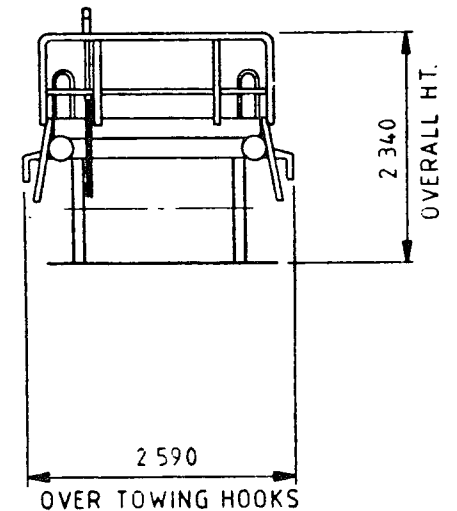
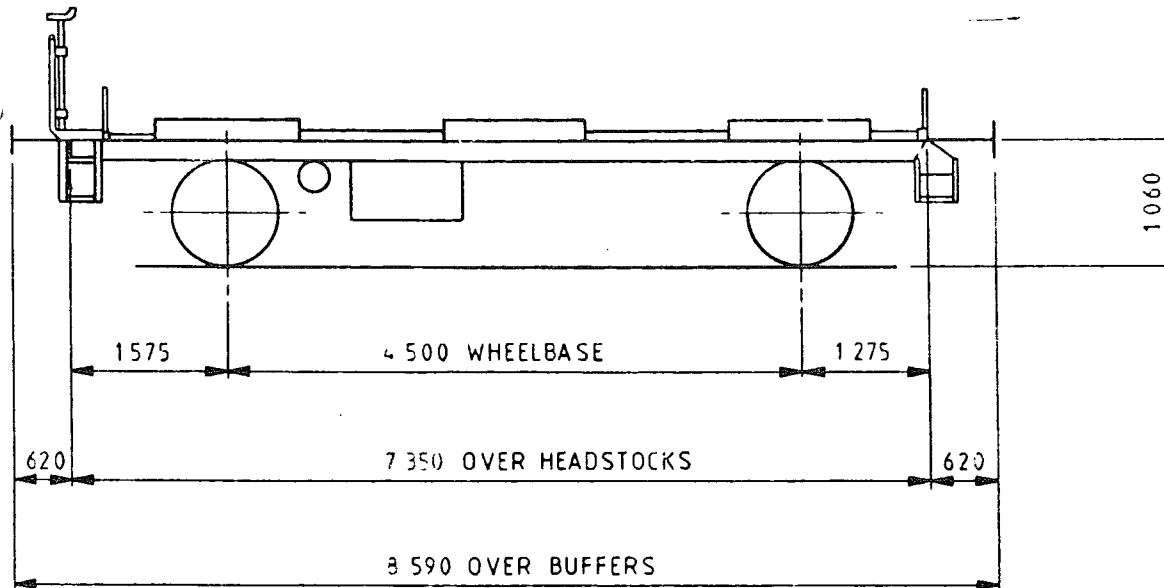
30 t GLW CONTAINER FLAT

IPE 573

										TOPS INFORMATION				
	A	B	C	D		AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20 t	20 t	20 t			CARKND		60	mile/h UP TO	8 t FORCE UP TO	18 t GLW	4	2	W1356
S	20 t	20 t	20 t			I	P	B	F	30				

NOTE

FOR THE CONVEYANCE OF ALUMINIUM ALKYL
 IN 2 CONTAINERS OF 9 300 Kg EACH
 OR 6 CONTAINERS OF 2 300 Kg EACH
 OR 6 CONTAINERS OF 1 300 Kg EACH



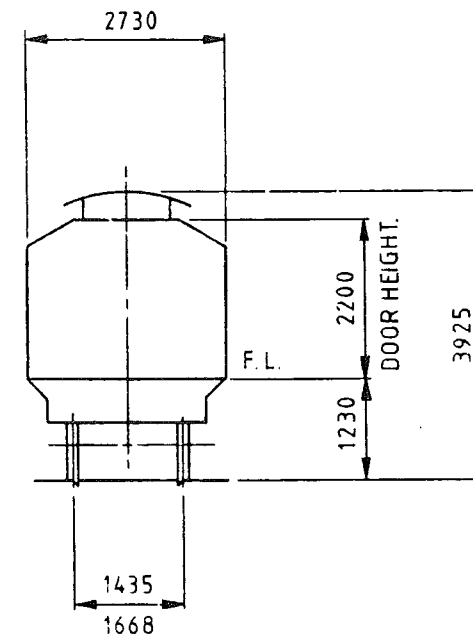
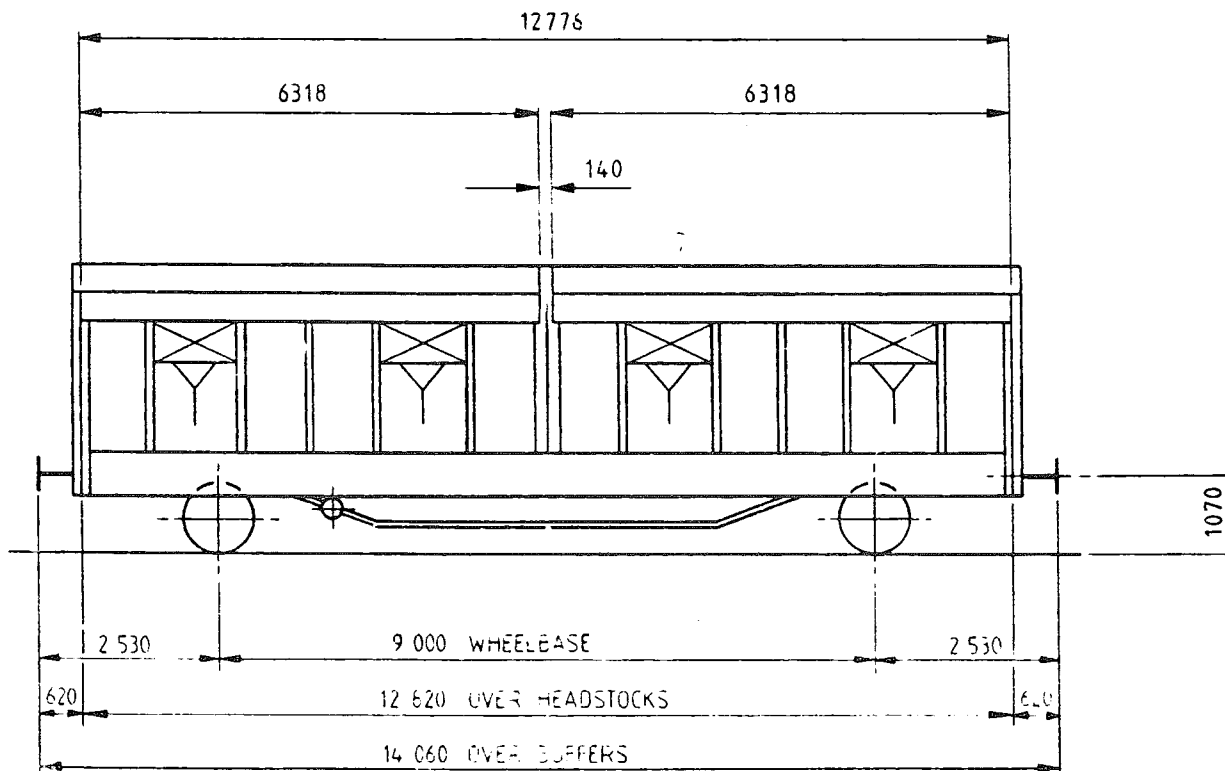
TARE -	10 t
CAPACITY, WEIGHT -	20 t
CAPACITY, VOLUME -	
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	12.0 '097

BRAKE -	AIR, BLOCK, VAC THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 400 HD.
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

TYPE -	Lfgkkms
WAGON No. -	23874420 000
BUILDER -	FAUVET - GIREL
OWNER -	LA SOCIETE ETHYL

ISSUE 1

				TOPS INFORMATION									
	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET			
	18-4t	22-4t	26-4t			75 mile/h UP TO 60 mile/h ABOVE	14 tonne GLW	YB 7t AB 9t XB 15t XB 21t	FORCE UP TO FORCE ABOVE	24 t G.L.W.	12	6	W1234
S	18-4t	22-4t	26-4t		CARKND								
120		00.0			1 T X M								



TARE -	13.6t
CAPACITY, WEIGHT-	26.4t
CAPACITY, VOLUME-	74.4 m ³
FLOOR AREA -	33.47 m ²
MIN. CURVE -	60m
GEN. ARRG. DRG. No.-	

BRAKE -	AIR VACUUM; SIDE SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1000
JOURNALS -	∅ 130

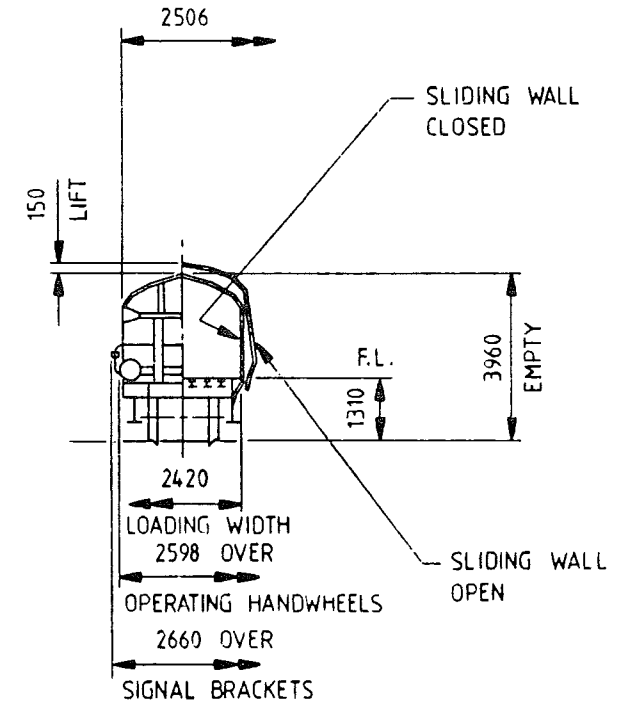
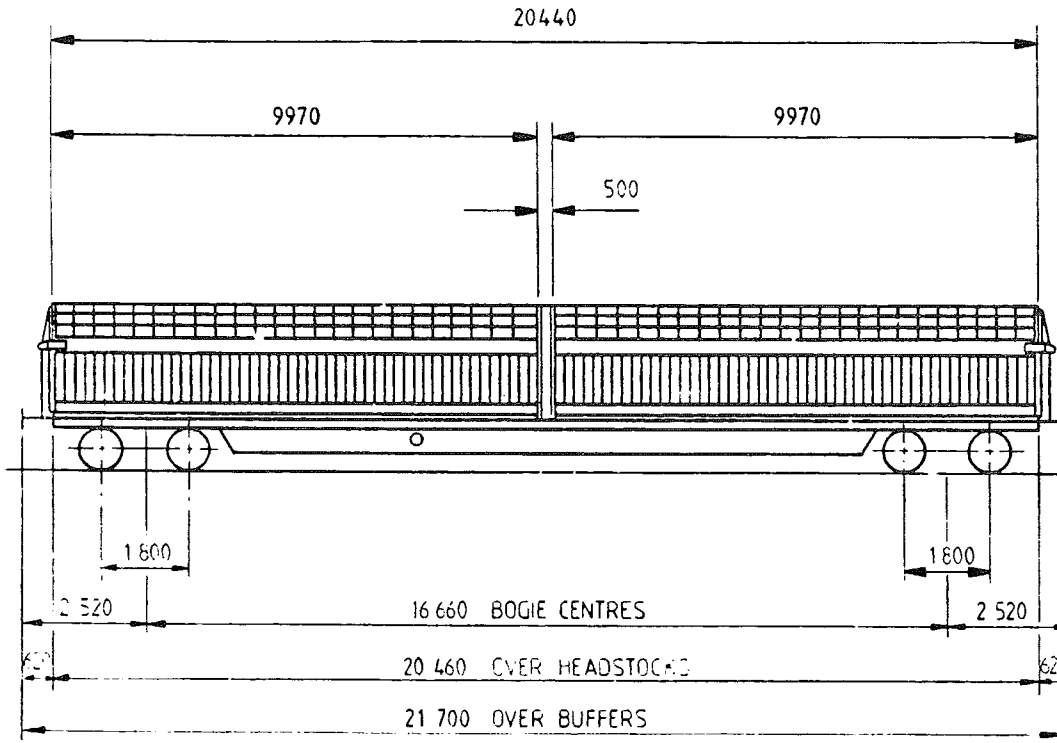
TYPE -	Hbfis
WAGON No. -	24 71 2396 000 199
BUILDER -	TAFESA SOCIEDAD ANONIMA
OWNER -	TRANSFESA

ISSUE 1

4 AXLE SLIDING WALL VAN

IPE 576

TOPS INFORMATION													
	A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	38 t	46 t	54 t			CARKND	60 mile/h UP TO	80 tonne GLW	20 t FORCE UP TO	53 tonne GLW	13	6	W1235
S	38 t	46 t	54 t			I P A B			42 t FORCE ABOVE				
120	00.0												



TARE -	28.5t
CAPACITY, WEIGHT-	51.5t
CAPACITY, VOLUME-	100m ³
FLOOR AREA -	49.27m ²
MIN. CURVE -	35m
GEN. ARRGT. DRG. No.-	9AZ - 135.0141

BRAKE -	AIR BLOCK ; SIDE SCREW
SUSPENSION -	WU 83.1 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 560 x 340 H.D.
WHEELS -	φ 920
JOURNALS -	φ 130

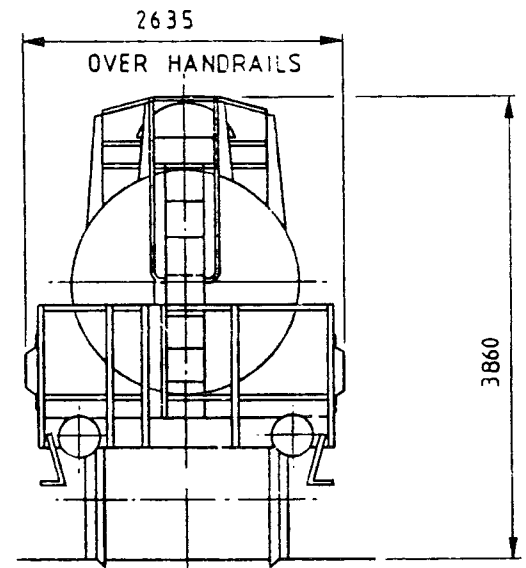
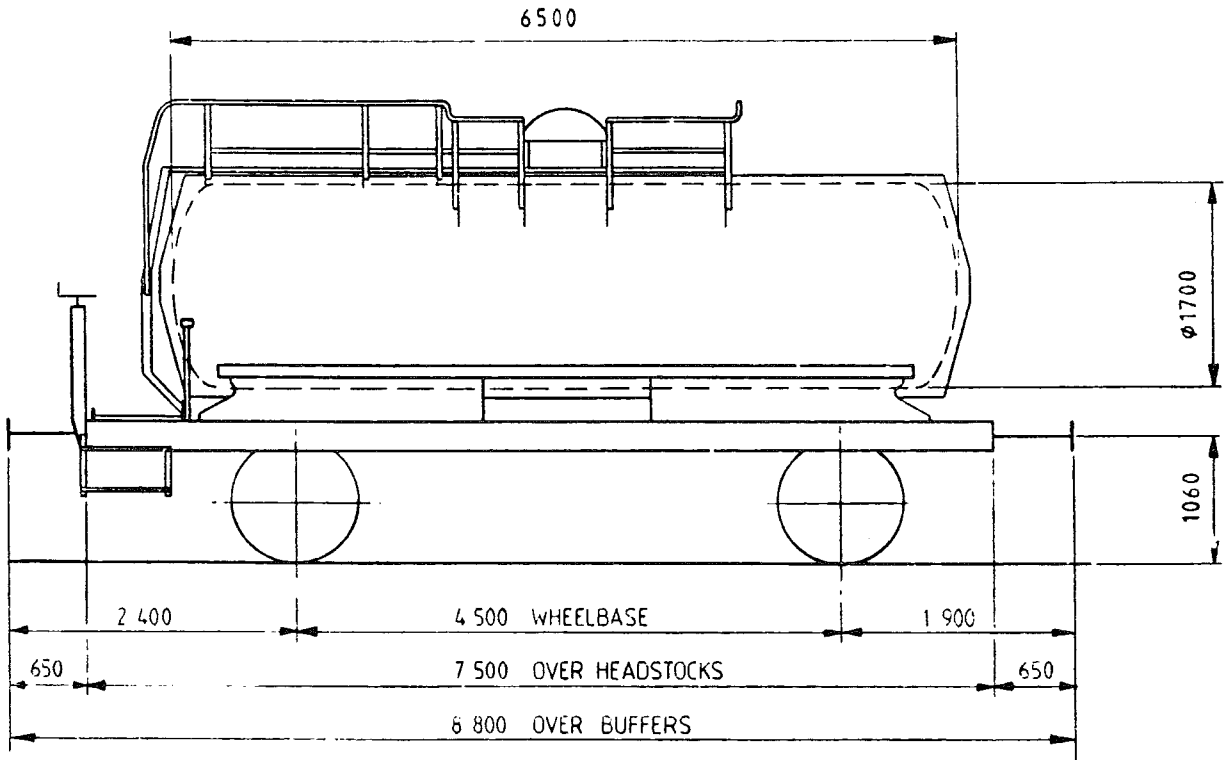
TYPE -	Sifs
WAGON No. -	83 80 4746 000
BUILDER -	WAGGON UNION
OWNER -	E.V.A.

ISSUE 1

2 AXLE 40t GLW TANK WAGON

ICE 577

TOPS INFORMATION												
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	16.3t	20.3t	24.3t			60 mile/h UP TO 40 tonne GLW		11t FORCE UP TO 20t FORCE ABOVE 25t G.L.W.		4	6	W1240
S	16.3t	20.3t	24.3t		CARKND							
					I C A C							



TARE -	15.7t
CAPACITY, WEIGHT -	24.3t
CAPACITY, VOLUME -	13.4 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	W

BRAKE -	AIR BLOCK; LEVER & PLATFORM SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ1000
JOURNALS -	φ130

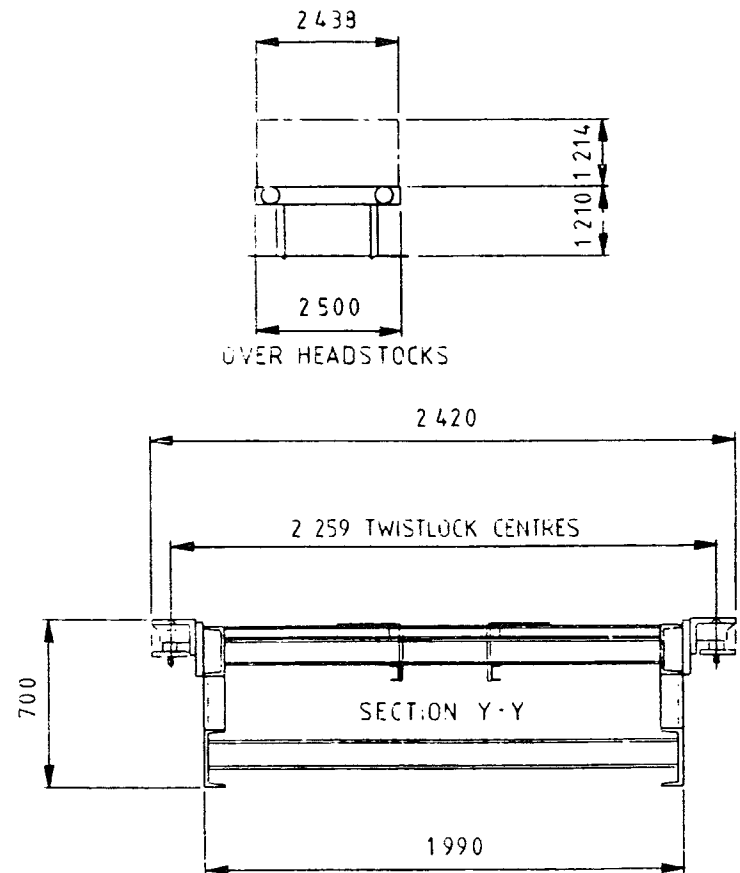
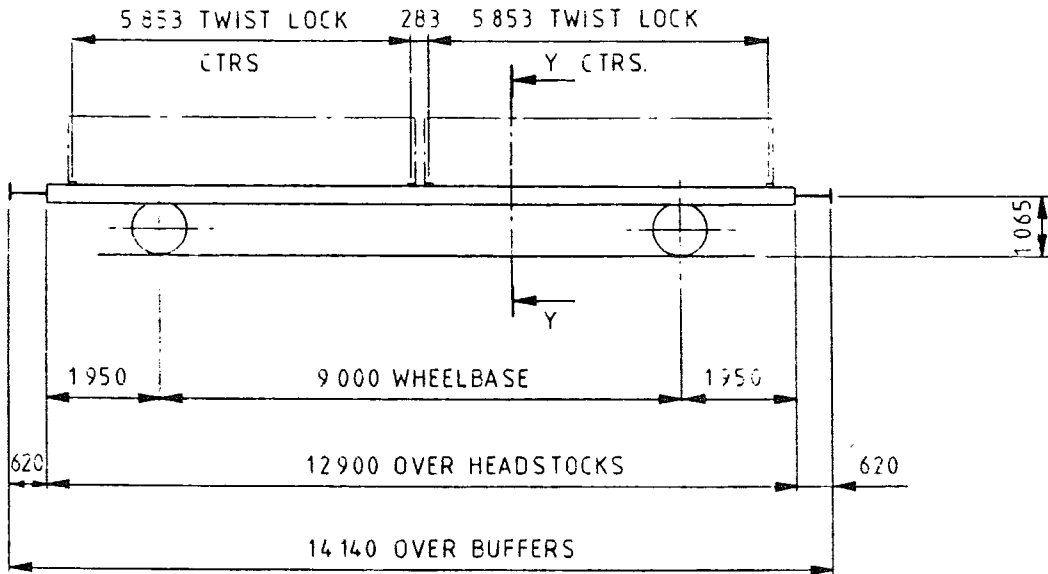
TYPE -	Zcfkks.
WAGON No. -	2380 7491 013-017
BUILDER -	FRANZ KAMINSKI
OWNER -	VTG HAMBURG

ISSUE 1

40 t GLW CONTAINER FLAT

IPE 578

				TOPS INFORMATION					
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
195t	235t	275t			40 mile/h UP TO 40 tonne GLW	7 t FORCE UP TO 2 t GLW	13	6	W 1299
S	195t	235t	275t	CARKND		17 t FORCE ABOVE			
				P I A D					



NOTE... TO CARRY 1 CONTAINER 12192 x 2438
OR 2 CONTAINERS 6053 x 2438

TARE -	12.5 t
CAPACITY, WEIGHT -	27.5 t
CAPACITY, VOLUME -	
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	3563

BRAKE -	AIR; SIDE SCREW
SUSPENSION -	BRUNINGHAUS DOUBLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	φ 1000
JOURNALS -	φ 130

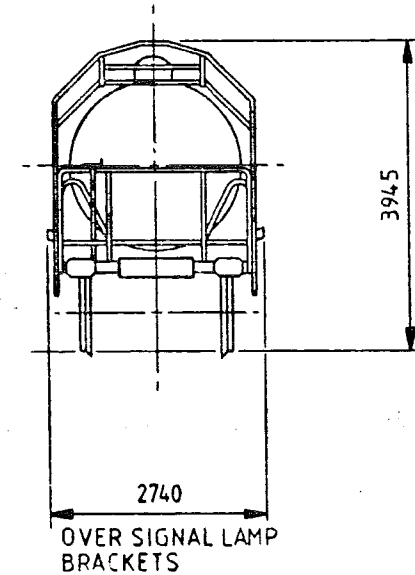
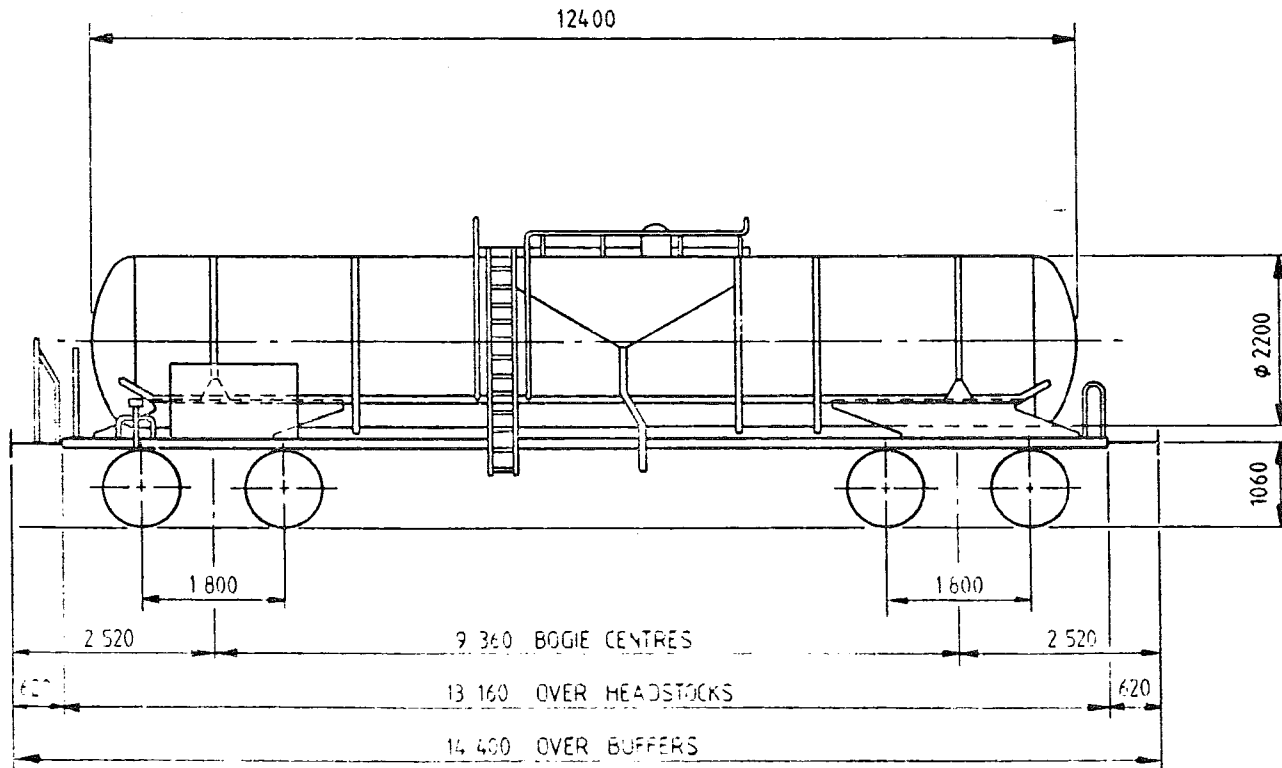
TYPE -	Lfgs
WAGON No. -	23 70 4424 001-005
BUILDER -	ATELIERS DE JOIGNY
OWNER -	STS.

ISSUE 1

90t. GLW BOGIE TANK WAGON

ICE 579

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
90	41.8†	49.8†	57.8†	67.8†		75 mile/h UP TO 60 mile/h ABOVE		16† FORCE UP TO 43† FORCE ABOVE		3	10	W1287
S	41.8†	49.8†	57.8†	57.8†	CARKND	22.2 tonne GLW		54 tonne GLW				
120	0.00				I C A D							



TARE -	22.2†
CAPACITY, WEIGHT-	67.8†
CAPACITY, VOLUME-	45m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	1 12103.0.01

BRAKE -	AIR BLOCK ; SCREW
SUSPENSION -	L.H.B. 78 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 340 x 450
WHEELS -	φ 920
JOURNALS -	φ 130

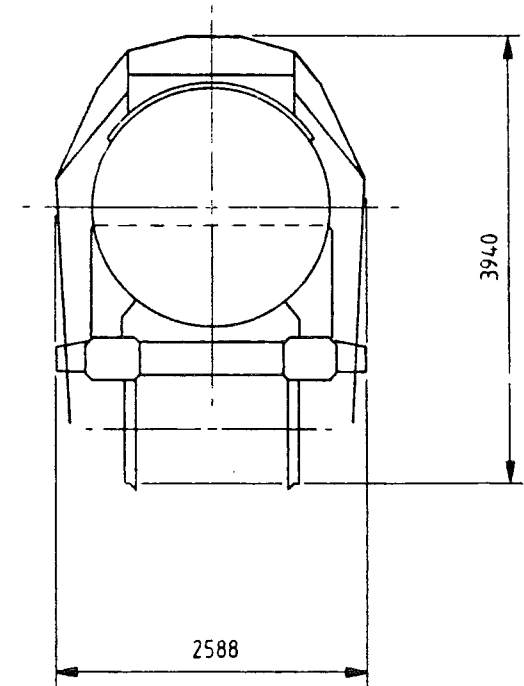
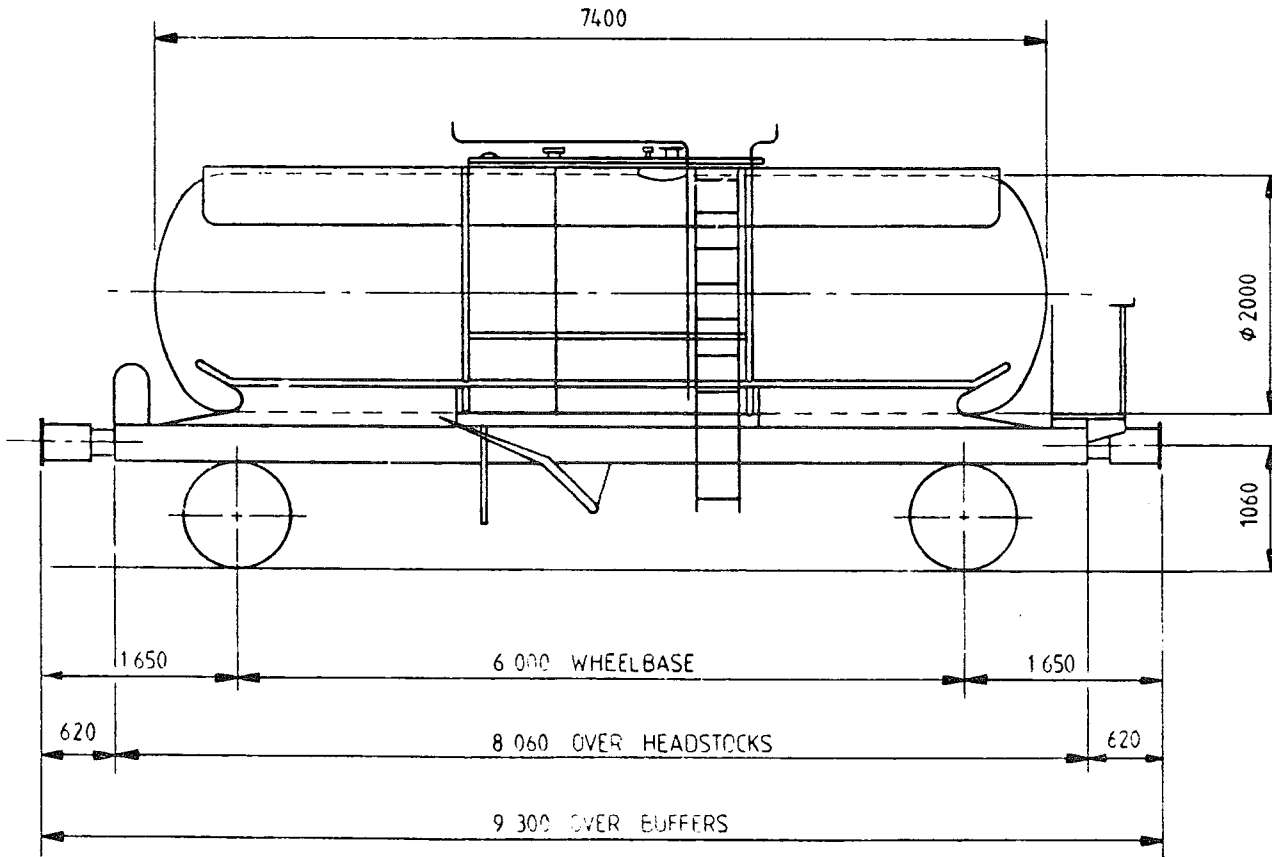
TYPE -	Zacfs (3)
WAGON No. -	34 80 7896 000-019
BUILDER -	LINKE - HOFMANN - BUSCH
OWNER -	V.T.G.

ISSUE 1.

2 AXLE 40 t GLW TANK WAGON

ICE 580

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	20.7t	24.7t	28.7t			75 mile/h UP TO 60 mile/h ABOVE	12 tonne GLW	8 t FORCE UP TO 22 t FORCE ABOVE	27 tonne GLW	5	6	W1286
S	20.7t	24.7t	28.7t		CARKND							
120	0.00				I C A C							



TARE -	11.3 t
CAPACITY, WEIGHT-	28.5 t
CAPACITY, VOLUME-	22 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	5911.84

BRAKE -	AIR BLOCK ; LEVER & SIDESCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ 920
JOURNALS -	φ 130

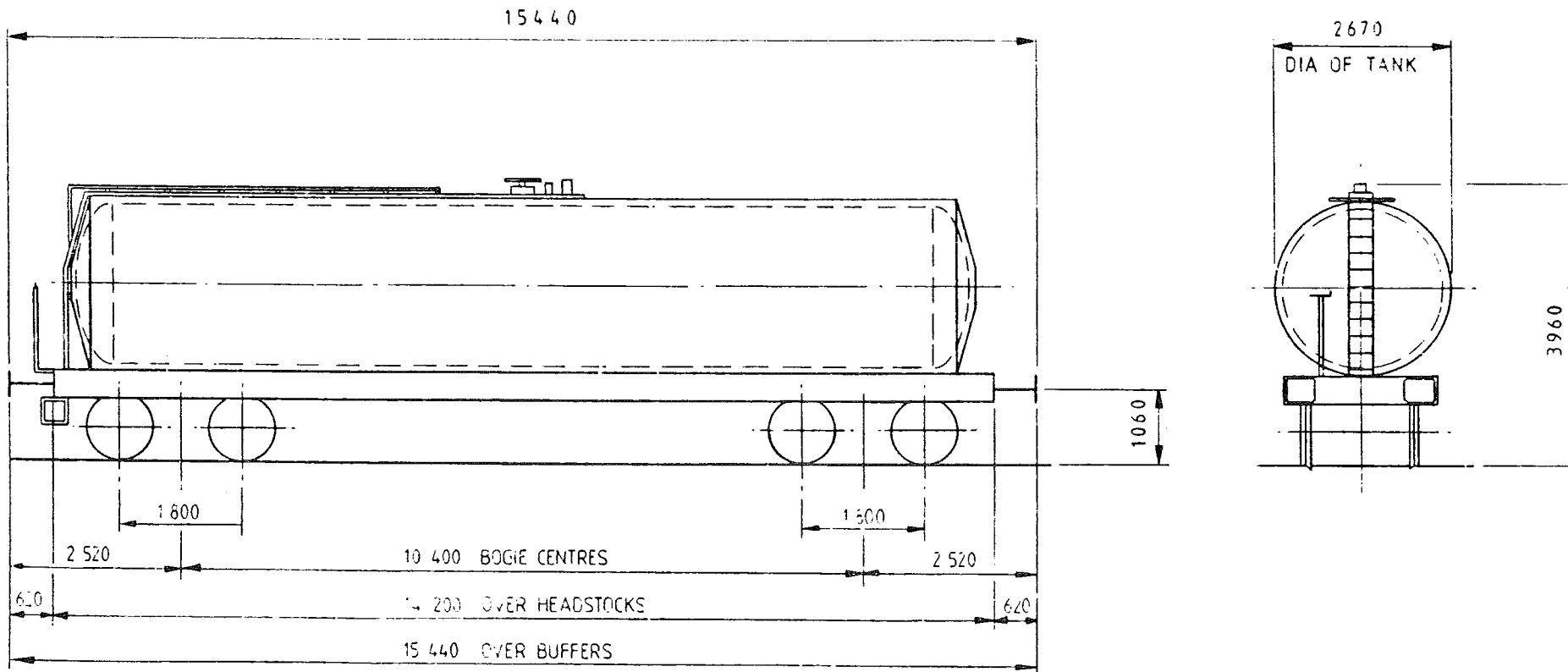
TYPE -	Zcfs (3)
WAGON No. -	23 80 /495 010-019
BUILDER -	GRAAFF KG
OWNER -	V.T.G.

ISSUE 1.

80t GLW BOGIE TANK WAGON

ICE 582

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
43.7t	51.7t	59.7t				60 mile/h UP TO		15t FORCE UP TO		5	6	W1319
S	43.7t	51.7t	59.7t		CARKND	-mile/h ABOVE		38t FORCE ABOVE				
					I C A D	80 tonne GLW		48t GLW				



TARE -	20.3t
CAPACITY, WEIGHT-	59.7t
CAPACITY, VOLUME-	60 m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.	-2.4.0.639 & 640

BRAKE -	AIR BLOCK; PLATFORM & SIDE SCREW
SUSPENSION -	Y25 CS2
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC, 450x340 HD
WHEELS -	φ920
JOURNALS -	φ130

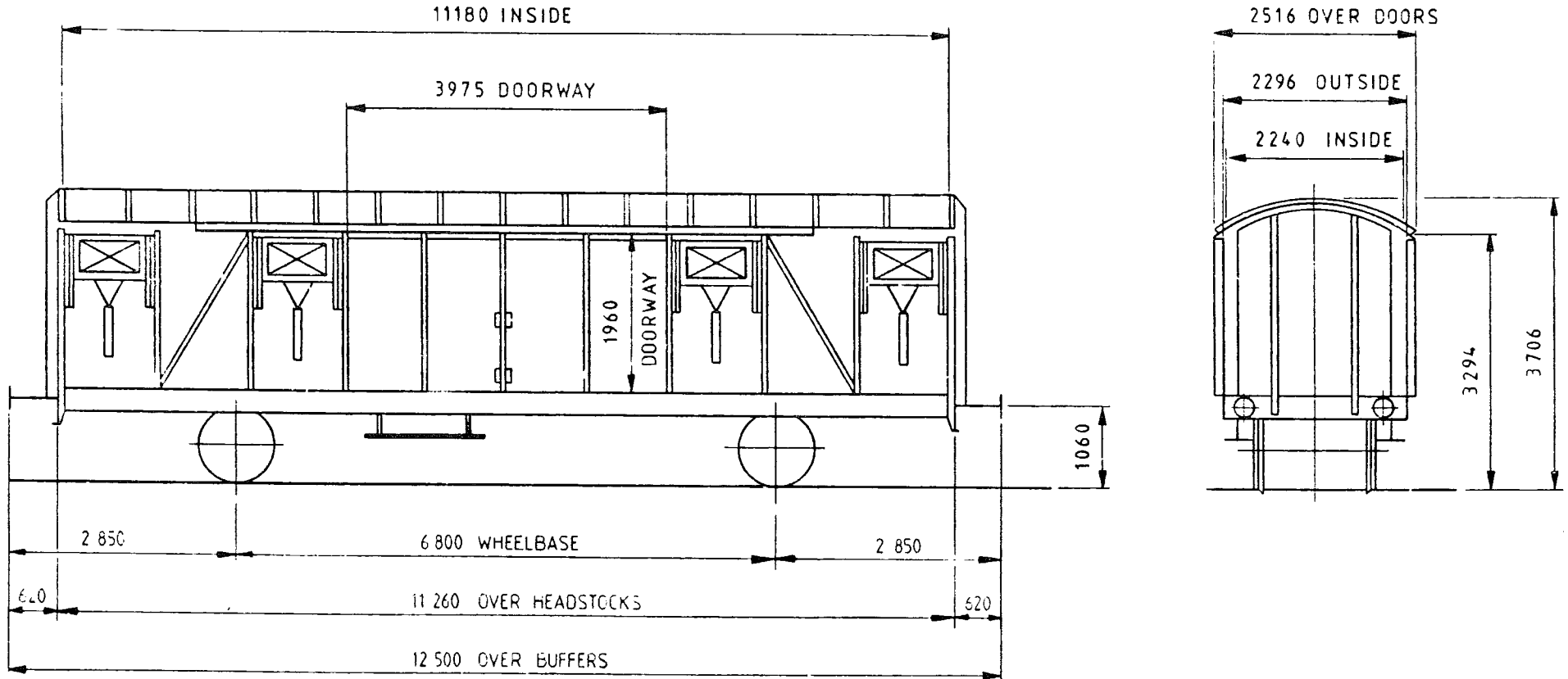
TYPE -	Zacefs (3)
WAGON No. -	3387 7996 048-053
BUILDER -	C.F.M.F.
OWNER -	SIMOTRA.

ISSUE 1

2 AXLE 33t GLW VAN

IME 583

	A	B	C	D	TOPS INFORMATION								
	19.5t	21t	21t		AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	19.5t	21t	21t		CARKND		60 mile/h UP TO mile/h ABOVE 33 tonne GLW		5t FORCE UP TO 18t FORCE ABOVE 24t G.L.W.		10	4	-
					I	M	B	C					



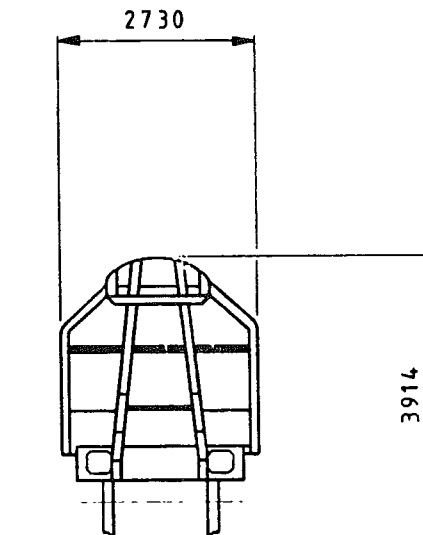
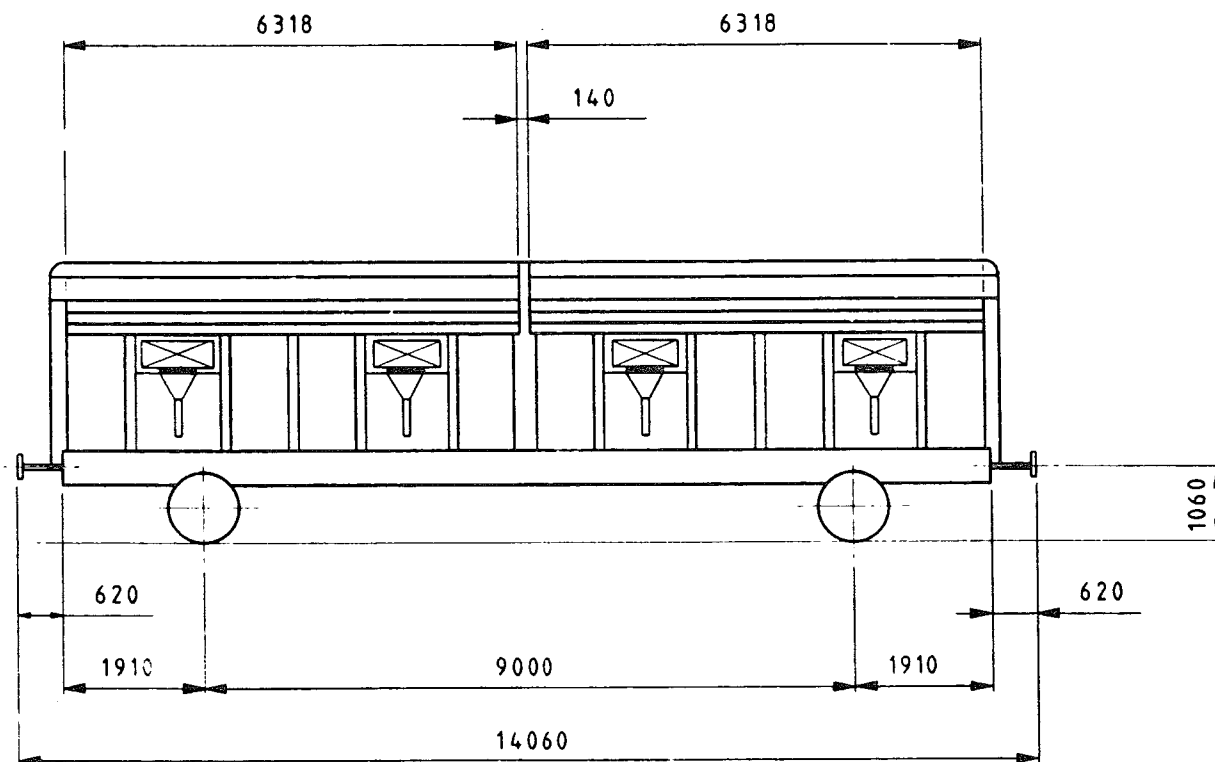
TARE -	12 t
CAPACITY, WEIGHT-	21t
CAPACITY, VOLUME-	49 m ³
FLOOR AREA -	25 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	1091.01.1

BRAKE -	AIR BLOCK ; SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅1000
JOURNALS -	∅130

TYPE -	HfkkS
WAGON No. -	21 80 2191 001, 019, 031, 049, 055, 085, 088, 095.
BUILDER -	H. FUCHS WAGGONFABRIK AG.
OWNER -	D.B.

ISSUE 1

				TOPS INFORMATION						
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
19t	23t	27t			60 mile/h UP TO mile/h ABOVE	FORCE UP TO		12	6	W1379
S	19t	23t	27t	CARKND		40 tonne GLW	FORCE ABOVE			
120		00	0	I T X M		V B 7 t				
						A B 9 t				
						V B 21 t				
						A B 15 t				



TARE -	13 t
CAPACITY, WEIGHT-	26.4 t
CAPACITY, VOLUME-	74.4 m ³
FLOOR AREA -	33.47 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	00.103.00.000

BRAKE -	DUAL, BLOCK; SIDESCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1000
JOURNALS -	∅ 130

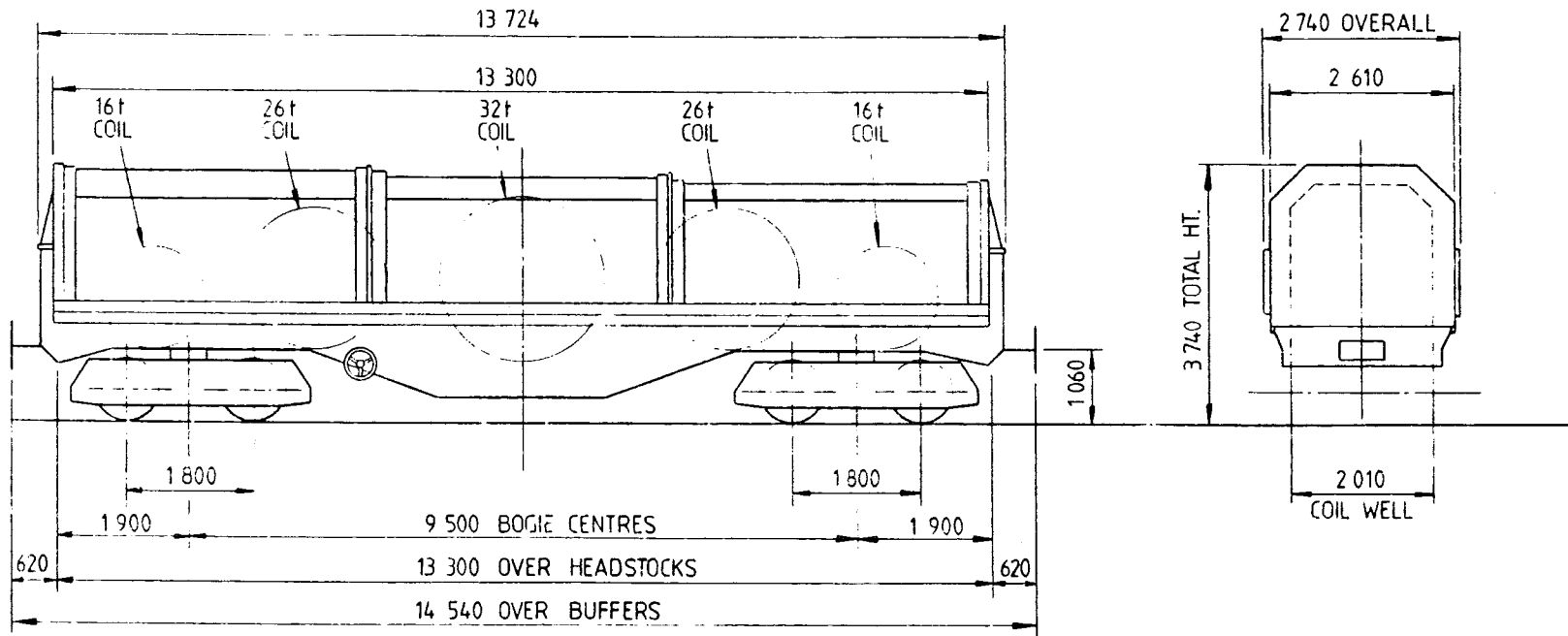
TYPE -	Hbfis
WAGON No. -	24 71 2396 200 - 299
BUILDER -	TAFESA SOCIEDAD ANONIMA
OWNER -	TRANSFESA

ISSUE 1

90 tonne GLW. TELESCOPIC HOOD COIL CARRIER

IPE 587

					TOPS INFORMATION							
90	A 39.5t	B 47.5t	C 55.5t	D 65.5t	AARKND CARKND I P A E	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 3	RA (GLW) 8	DESIGN SHEET W1378
S	39.5t	47.5t	55.5t	60 mile/h UP TO mile/h ABOVE		90 tonne GLW	18t UP TO 42t ABOVE	44t CHANGEVER WT.				
120	0.00t											



TARE -	24 500 kg
CAPACITY, WEIGHT-	65 500 kg
CAPACITY, VOLUME-	
FLOOR AREA -	
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	9450.81

BRAKE -	AIR, BLOCK
SUSPENSION -	LHB 78 BOGIE
COUPLINGS -	U.I.C. SCREW
BUFFERS -	RINGFEDER, 440 x 340
WHEELS -	920 DIA.
JOURNALS -	130 DIA ROLLER BEARINGS

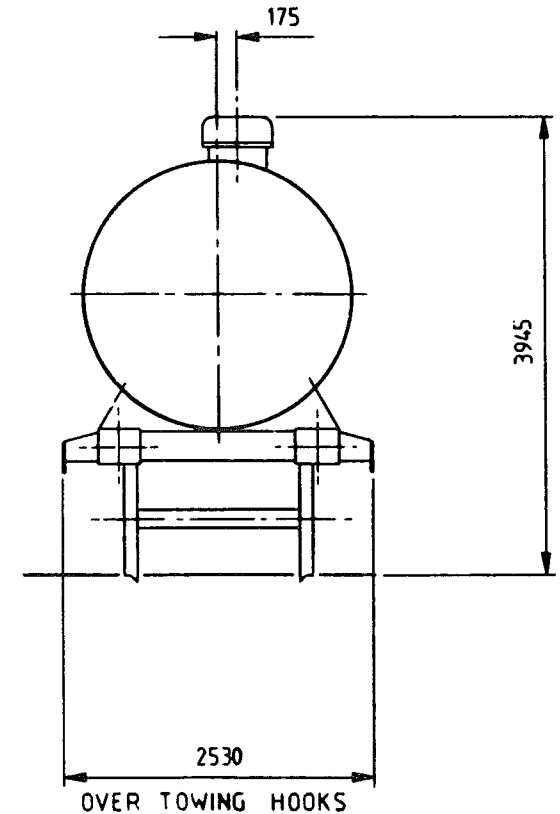
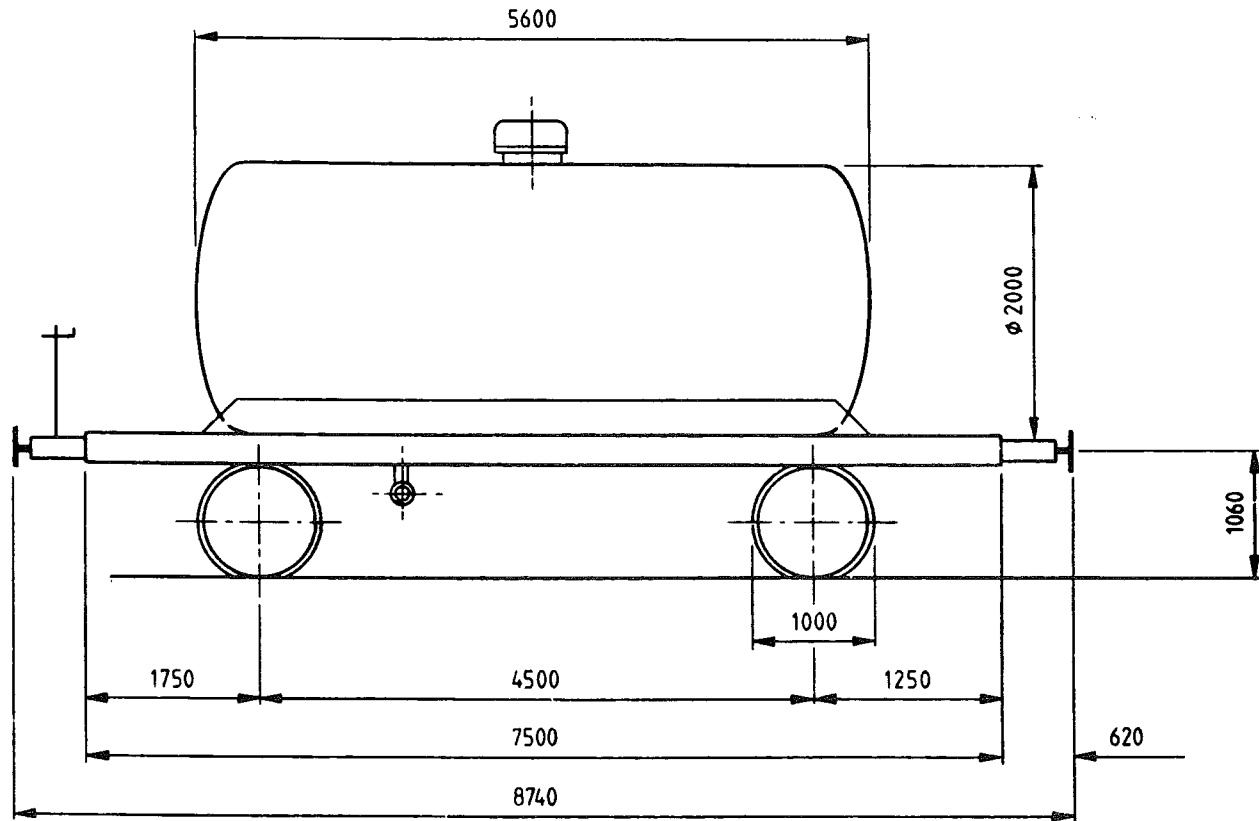
TYPE -	Tafhis
WAGON No. -	33 80 4746 000-049
BUILDER -	LINKE - HOFMANN - BUSCH
OWNER -	V.T.G.

ISSUE 1.

2 AXLE 40t G.L.W. TANK

ICE 588

				TOPS INFORMATION								
A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	17.6t	21.6t	25.6t			60 mile/h UP TO 40 tonne GLW		9t FORCE UP TO 22 tonne G.L.W.		4	6	W1419
S	17.6t	21.6t	25.6t			60 mile/h ABOVE		20t FORCE ABOVE				
				CARKND	I	C	A	D				



TARE -	14.4t
CAPACITY, WEIGHT -	25.6t
CAPACITY, VOLUME -	17m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	4508.87

BRAKE -	AIR BLOCK
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ1000
JOURNALS -	φ130

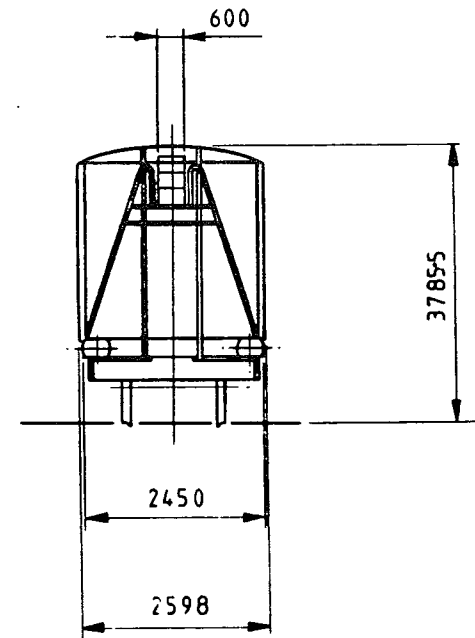
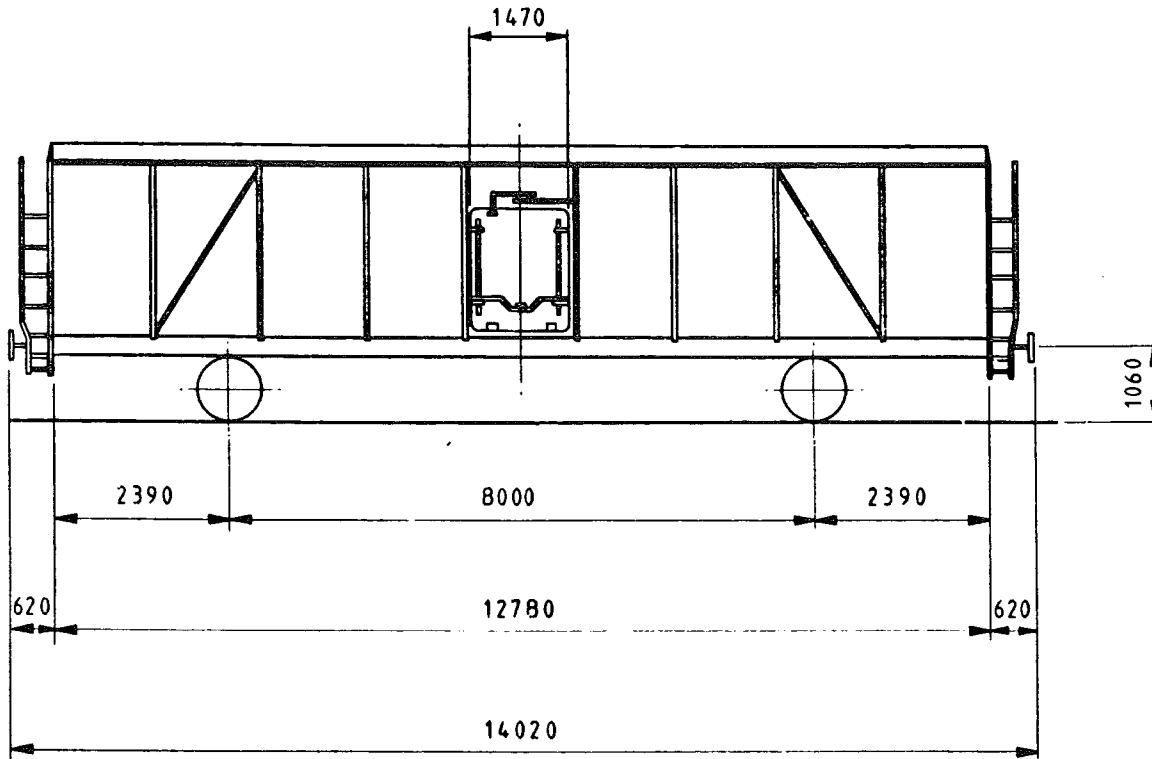
TYPE -	Zcfs
WAGON No. -	23 80 7391 070
BUILDER -	V.T.G.
OWNER -	V.T.G.

ISSUE 1

2 AXLE 40T GLW REFRIGERATOR VAN

HE 590

TOPS INFORMATION												
	A	B	C	D		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 12	RA (GLW) 6	DESIGN SHEET W1735
	15-2t	19-2t	23-2t			60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW		9t FORCE UP TO 18t FORCE ABOVE 24 tonne GLW				
S	15-2t	19-2t	19-2t			AARKND		CARKND				
						1	1	B	H			



TARE -	16.8t
CAPACITY, WEIGHT-	23.2t
CAPACITY, VOLUME-	44.43t
FLOOR AREA -	23.56m
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	IF 01/1

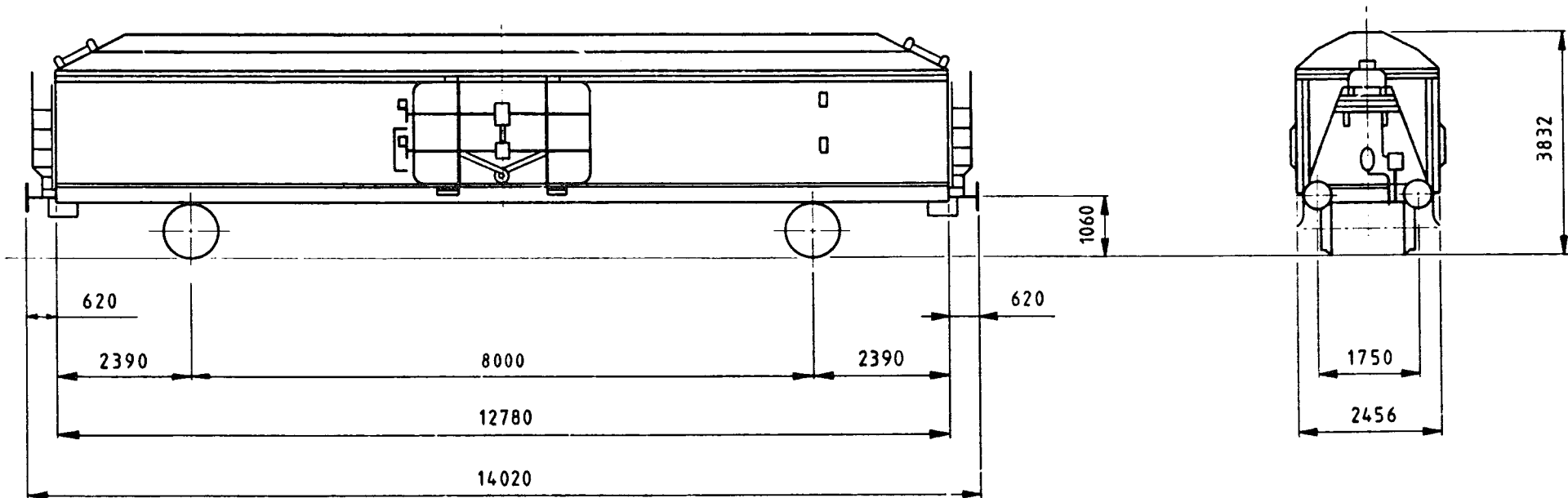
BRAKE -	AIR, VAC, THROUGH PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U I C
BUFFERS -	
WHEELS -	ø1000
JOURNALS -	ø130

TYPE -	lbfhps
WAGON No. -	04 83 8088 000-049
BUILDER -	BRUGEOISE & NIVELLES
OWNER -	INTERFRIGO

2 AXLE 40t GLW REFRIGERATOR VAN

11E591

					TOPS INFORMATION							
	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	18.1	22.1	26.1			60 mile/h UP TO mile/h ABOVE 40 tonne GLW		12t. FORCE UP TO 30t FORCE ABOVE 30t GLW		12	6	W1734
S	18.1	22.1	26.1		CARKND							
					I I B L							

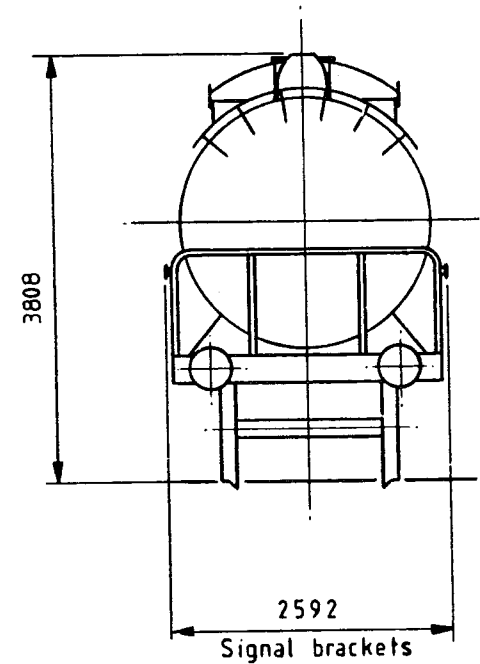
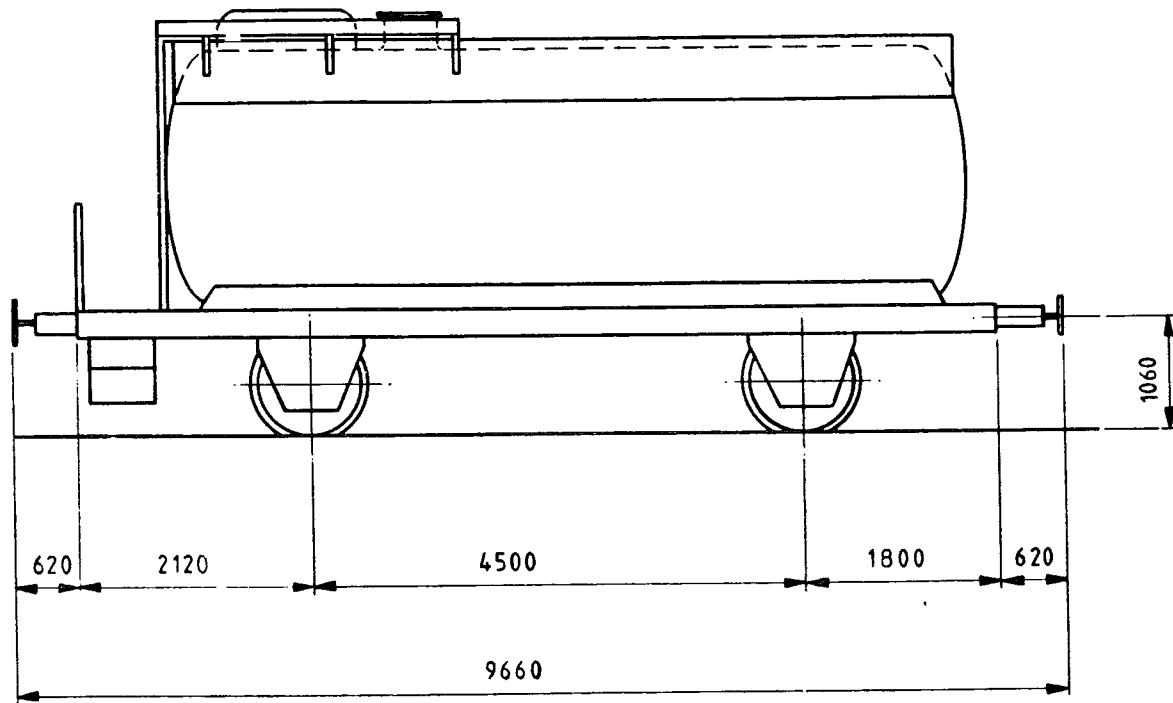


TARE -	13.9t
CAPACITY, WEIGHT-	26.1t
CAPACITY, VOLUME-	43.9m ³
FLOOR AREA -	23.6m ³
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	1F 11.01.001

BRAKE -	AIR. VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	
WHEELS -	∅ 1000
JOURNALS -	∅ 130

TYPE -	lbehps
WAGON No. -	03 83 8087 000-029
BUILDER -	BRUGEOISE & NIVELLES
OWNER -	INTERFRIGO

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19.5t	22.5t	26.5t			60 mile/h UP TO 40 tonne GLW		9t FORCE UP TO 22 tonne GLW		6	6	W1544
S	19.5t	22.5t	26.5t		CARKND	60 mile/h ABOVE		20t FORCE ABOVE				
					I C B C							



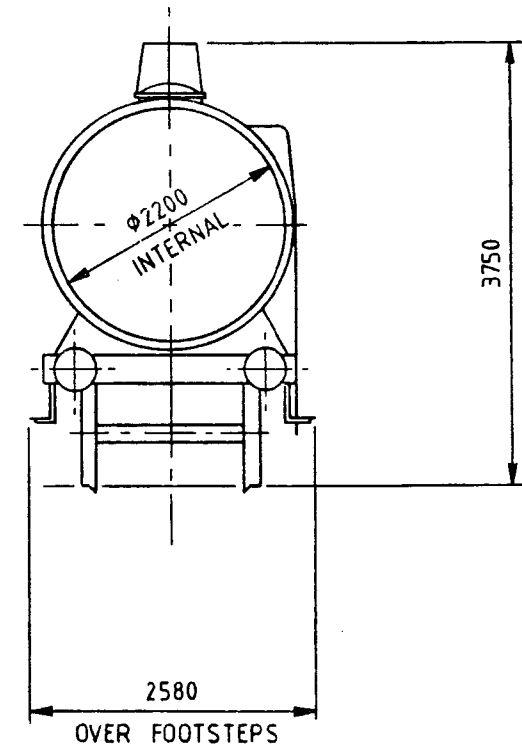
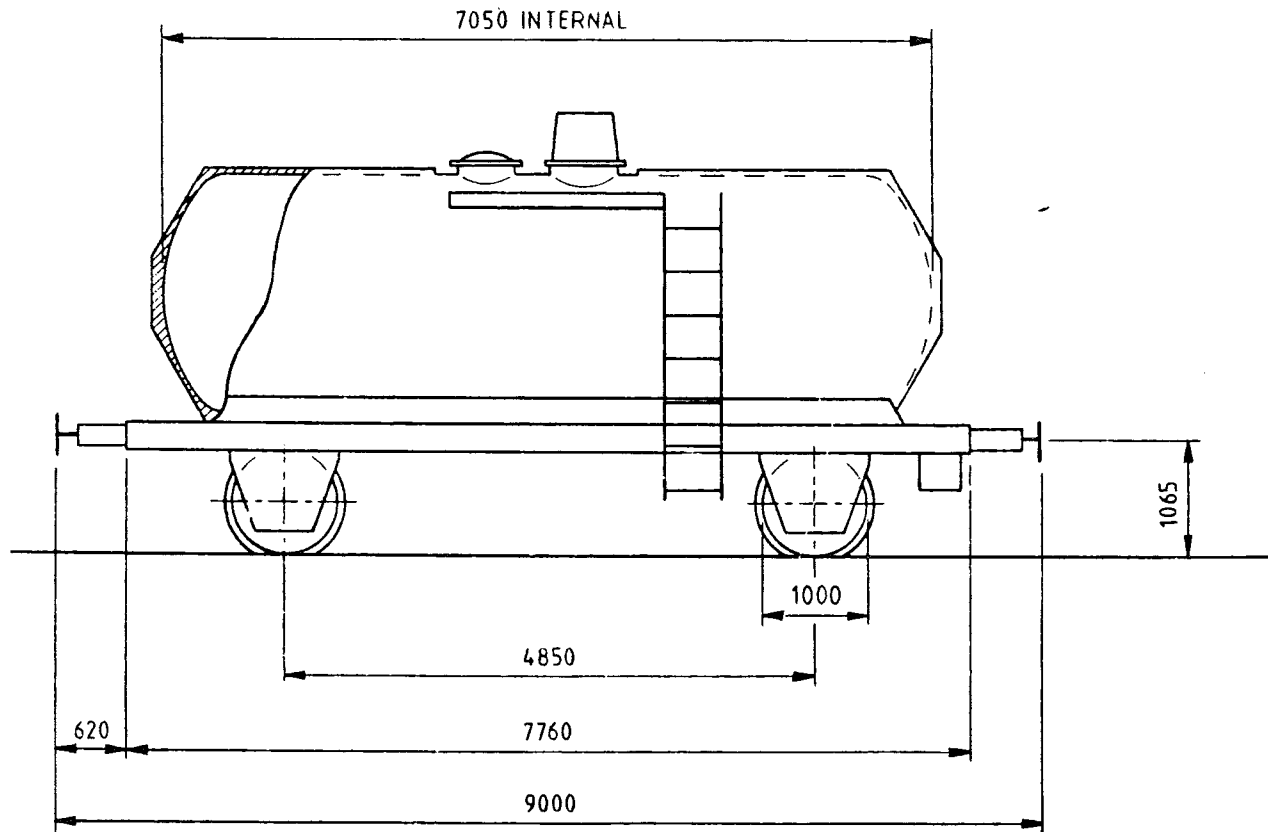
TARE -	13.5t
CAPACITY, WEIGHT-	26.5t
CAPACITY, VOLUME-	30 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRG. DRG. No.-	B 3031.01.2

BRAKE -	AIR;VAC.THROUGH PIPE; BLOCK
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C. SCREW
BUFFERS -	HYDRAULIC ø370
WHEELS -	ø1000
JOURNALS -	ø130

TYPE -	Z fgks
WAGON No. -	23 80 7395 400-405
BUILDER -	WAGGONFABRIK
OWNER -	E.V.A.

ISSUE 1

TOPS INFORMATION													
	A	B	C	D	AARKND			OPERATING SPEED 60 mile/h UP TO mile/h ABOVE 40 tonne GLW	BRAKE FORCE DATA		EXCESS LENGTH 5	RA (GLW) 6	DESIGN SHEET W1515
	19.9t	23.9t	27.9t		CARKND				9t FORCE UP TO	22 tonne G.L.W.			
S	19.9t	23.9t	27.9t		I	C	A		C	20t FORCE ABOVE			



TARE -	12.1t
CAPACITY, WEIGHT-	27.9t
CAPACITY, VOLUME-	26m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	—

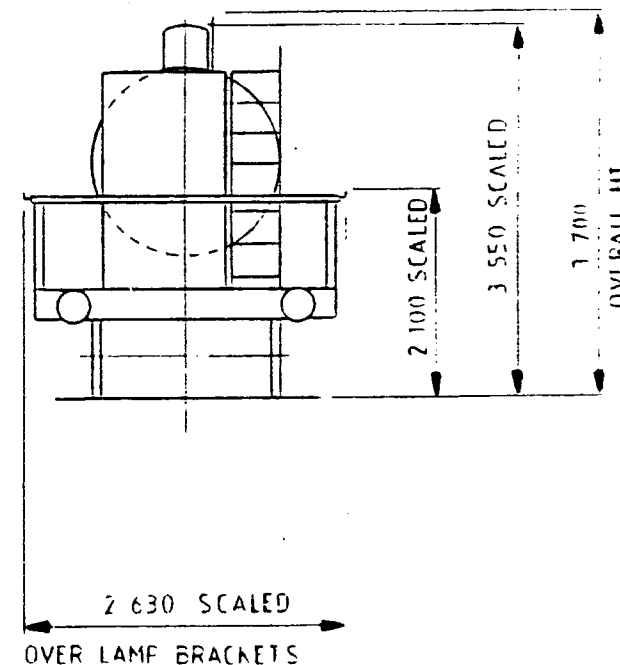
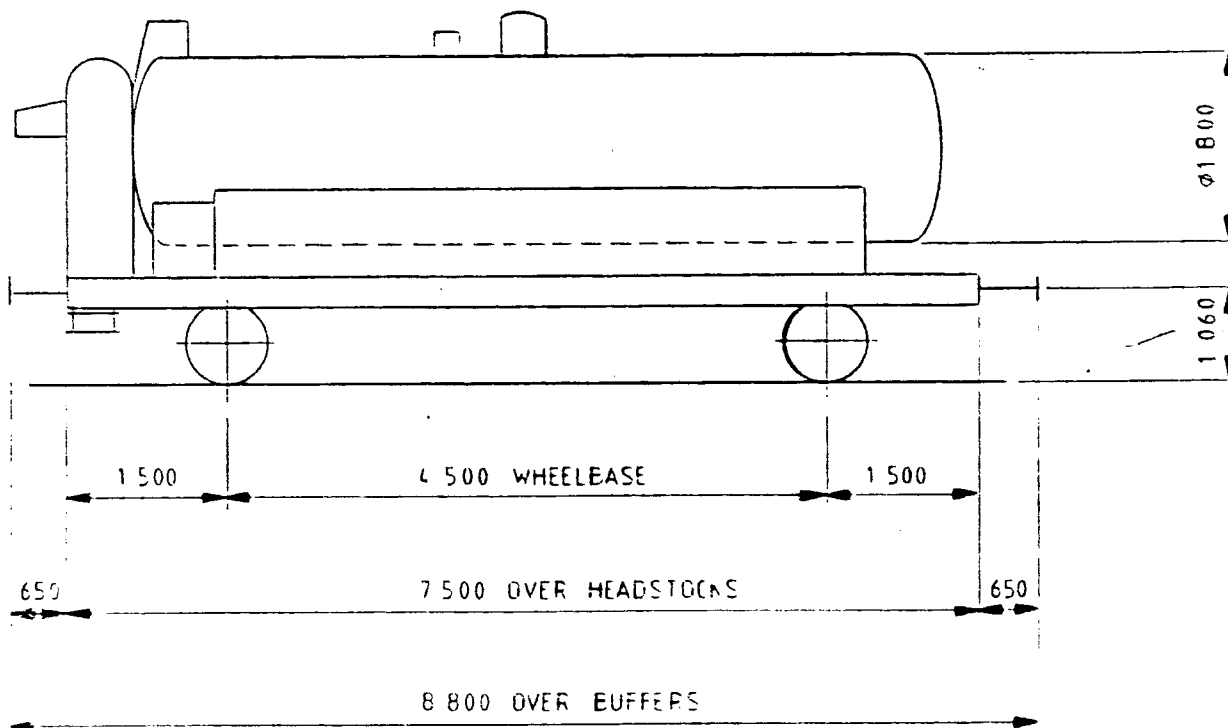
BRAKE -	AIR BLOCK
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C. SCREW
BUFFERS -	HYDRAULIC Ø 360 HD
WHEELS -	1000 DIA
JOURNALS -	130 DIA

TYPE -	Zefs
WAGON No. -	23 83 7397 900
BUILDER -	COSFER
OWNER -	MONTEDIPE S.p.A.

33t GLW 2 AXLE TANK

ICE 600

				TOPS INFORMATION						
A	B	C	D	AARRANG	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
22-71	22-71	22-71	22-71	CARKND	60 mile/h UP TO	10t FORCE UP TO	21t GLW	4	4	
S	22-71	22-71	22-71	I C A B	33 tonne GLW	17t FORCE ABOVE				



TARE -	10 600 Kg
CAPACITY, WEIGHT -	22-7t
CAPACITY, VOLUME -	15 m ³
FLOOR AREA -	—
MIN CURVE -	60m
GEN. ARRGT. DES. NO. -	WH 167

BRAKE -	AIR
SUSPENSION -	SINGLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1000
JOURNALS -	

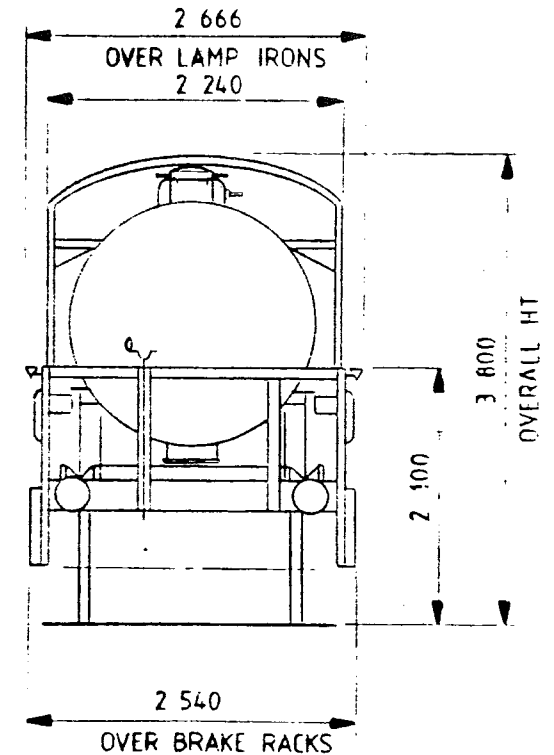
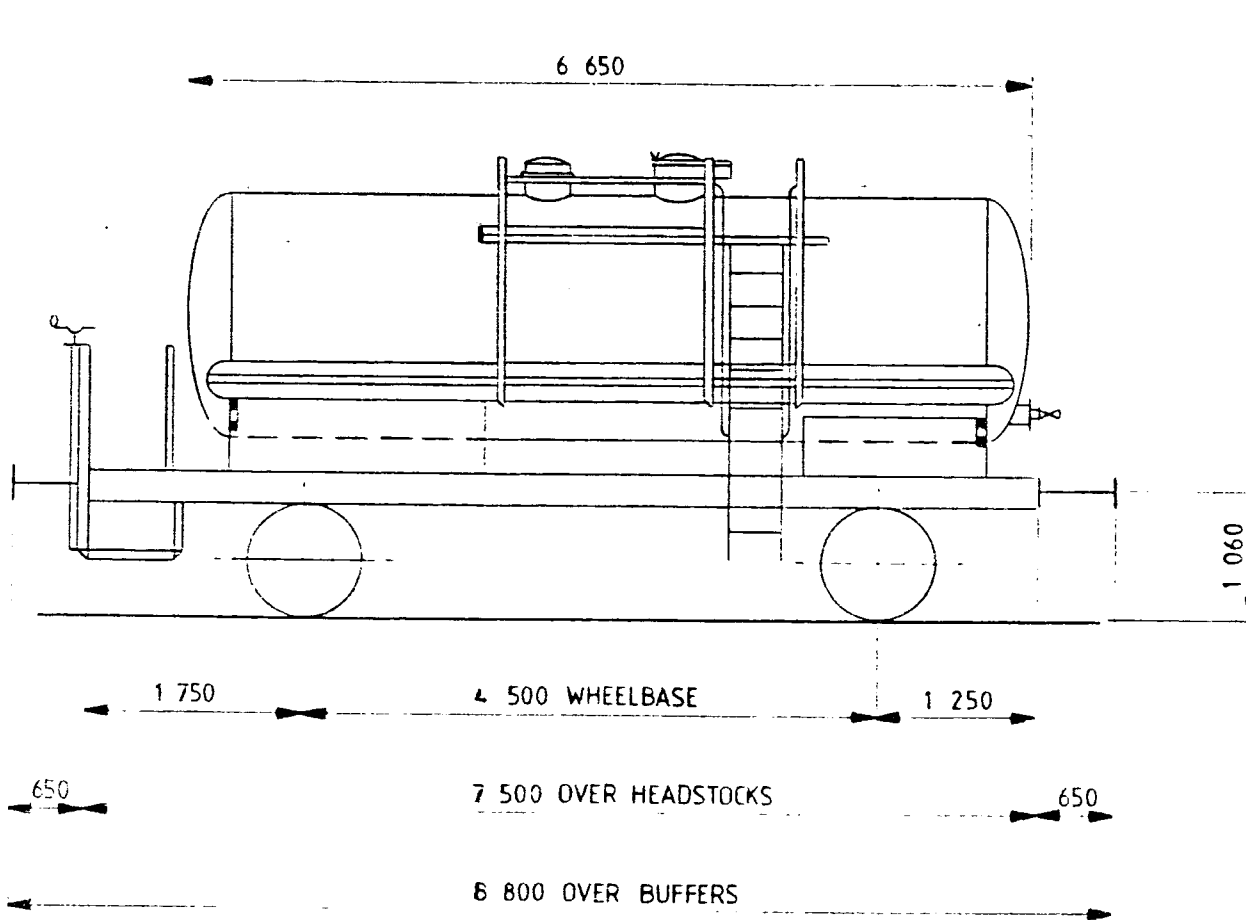
TYPE -	Z11ks
WAGON No. -	23 80 7490 000 007
BUILDER -	HULS CHEMICAL WORKS
OWNER -	DE

ISSUE :

32t. GLW. 2 AXLE TANK

ICE 638

TOPS INFORMATION											
A	E	C	E	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
205t	245t	285t		CARKND	50 mile/h UP TO	36 tonne GLW	6t. FORCE UP TO 14t. FORCE ABOVE	18t. GLW	4	3	
S	205t	245t	245t	I C B B	60 mile/h ABOVE						

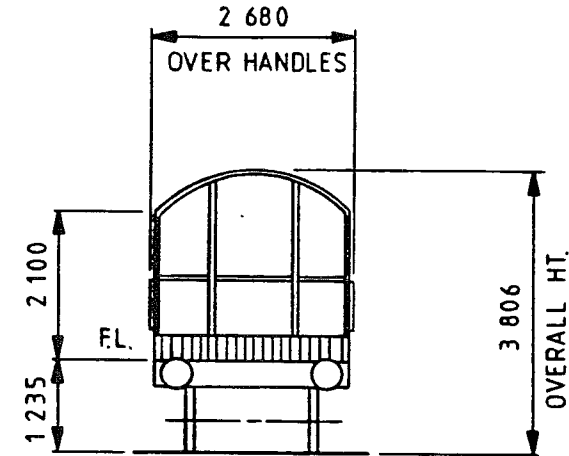
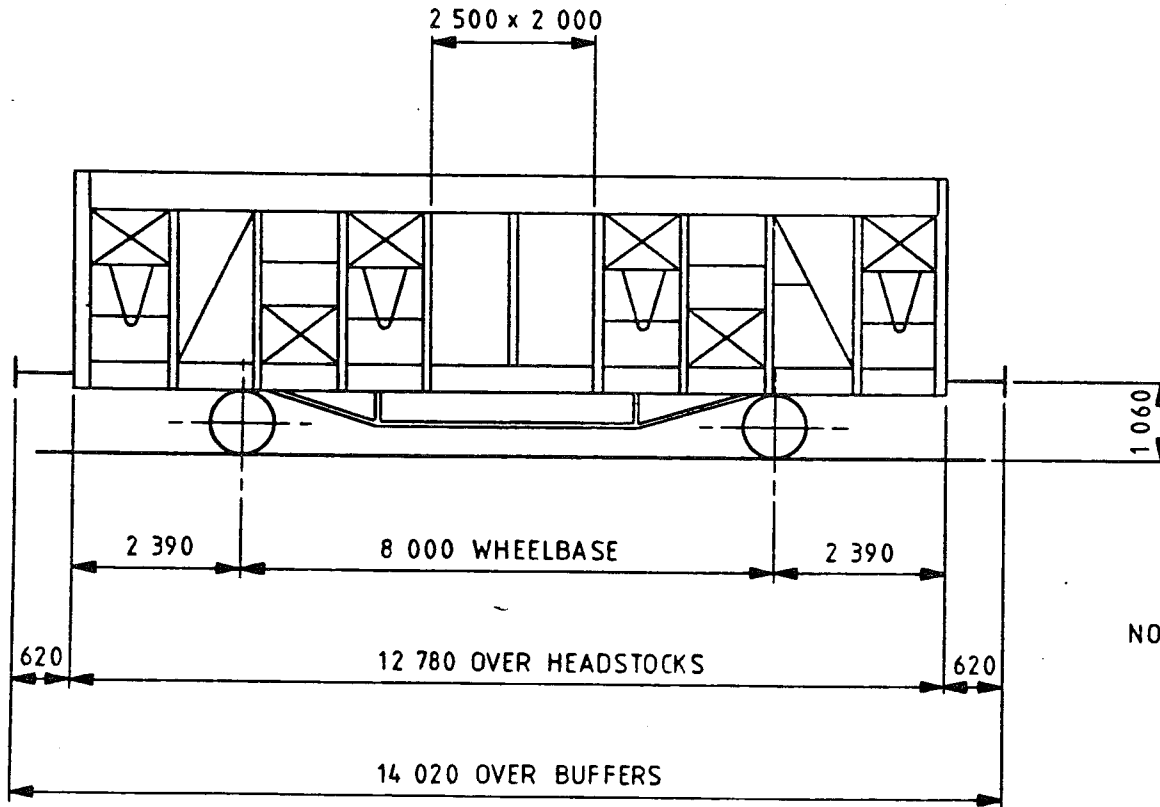


TARE -	11 200 Kg
CAPACITY, WEIGHT -	285t
CAPACITY, VOLUME -	20m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT DRG No. -	BT1229-2

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	J.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1m
JOURNALS -	

TYPE -	Zefs
WAGON No. -	23 80 7397 400
BUILDER -	
OWNER -	BADISCHE ANILIN & SODA WORKS

	A	B	C	D	TOPS INFORMATION								
	18 t	22 t	26 t		AARKND	OPERATING SPEED			BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	18 t	22 t	26 t		CARKND	60 mile/h UP TO mile/h ABOVE 40 tonne GLW			7 t FORCE UP TO 18 t FORCE ABOVE 23 t GLW		12	6	
					I	L	B	E					



NOTE:- WAGON NUMBERS 21 83 2388 000 - 049
(Hbcfhs) HAVE END DOORS

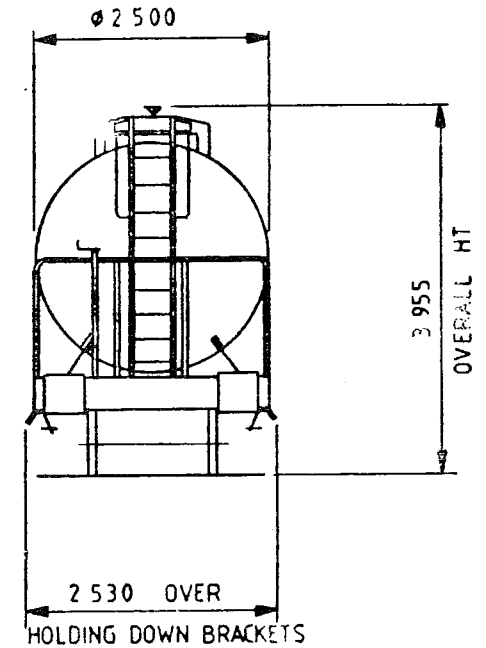
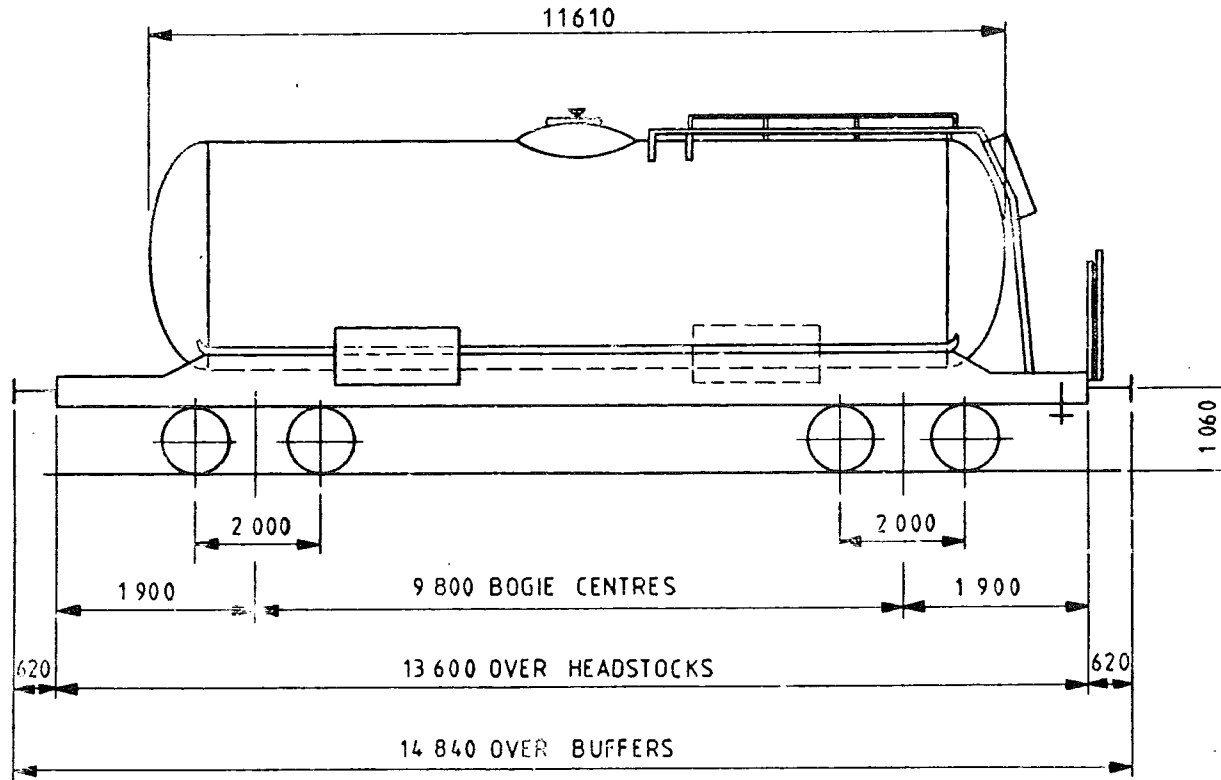
TARE -	14 t
CAPACITY, WEIGHT-	26 t
CAPACITY, VOLUME-	69 m ³
FLOOR AREA -	29 m ²
MIN. CURVE -	60 m
GEN. ARRG. DRG. No.-	84324

BRAKE -	AIR & VAC. THRO' PIPE, SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 440 HD
WHEELS -	ϕ 1000
JOURNALS -	ϕ 130

TYPE -	Hbcfhs ; Hbfhs
WAGON No. -	21 83 2382 300 - 699 21 83 2388 000 - 049
BUILDER -	F.S.
OWNER -	F.S.

ISSUE 1

				TOPS INFORMATION						
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
41.7t	49.7t	57.3t			60 mile/h UP TO mile/h ABOVE	80 tonne GLW	14t FORCE UP TO 36t FORCE ABOVE	40t GLW	4	6
S	41.7t	49.7t	57.3t	CARKND						
				I C B 0						



TARE -	22.775t
CAPACITY, WEIGHT-	57.3t
CAPACITY, VOLUME-	54.5 m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	108 460

BRAKE -	AIR & VACUUM THROUGH PIPE
SUSPENSION -	Y21 CSe
COUPLINGS -	U.I.C.
BUFFERS -	TYPE U4A 580 x 400HD
WHEELS -	$\phi 920$
JOURNALS -	$\phi 130$

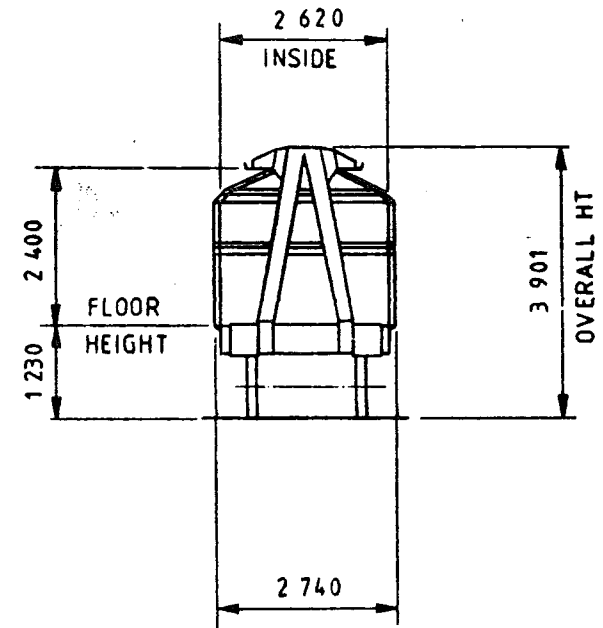
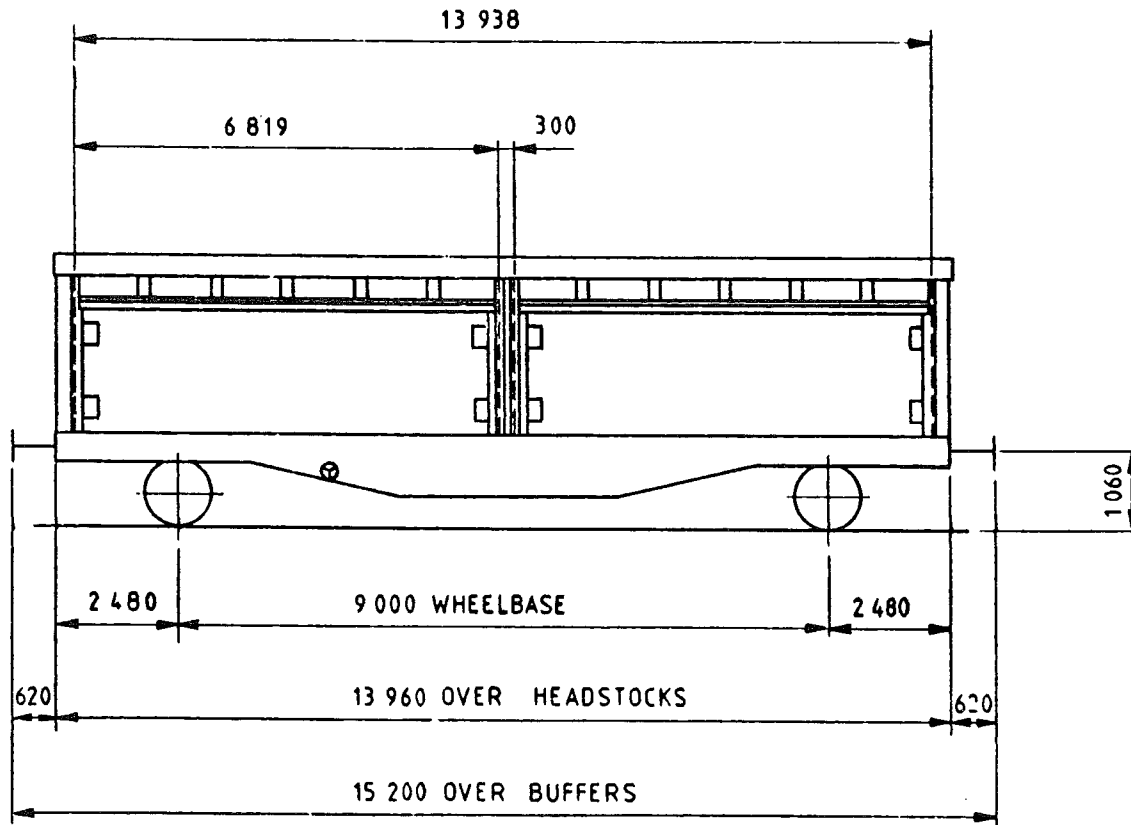
TYPE -	Zafs
WAGON No. -	34 87 7890 517
BUILDER -	FAUVET-GIREL
OWNER -	ERMEWA

ISSUE 1

45t GLW 2 AXLE VAN

IPE 663

					TOPS INFORMATION							
90	A 17t	B 21t	C 25t	D 30t	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	17t	21t	25t		CARKND	60 mile/h UP TO mile/h ABOVE 40 tonne GLW		8t FORCE UP TO 22t FORCE ABOVE 24t GLW		14	8	W1560
120	00.0t				I P A							



TARE -	15t
CAPACITY, WEIGHT-	45t
CAPACITY, VOLUME-	83.8 m ³
FLOOR AREA -	36.5 m ²
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	C2107 01 002

BRAKE -	AIR; SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER
WHEELS -	Ø920
JOURNALS -	Ø130

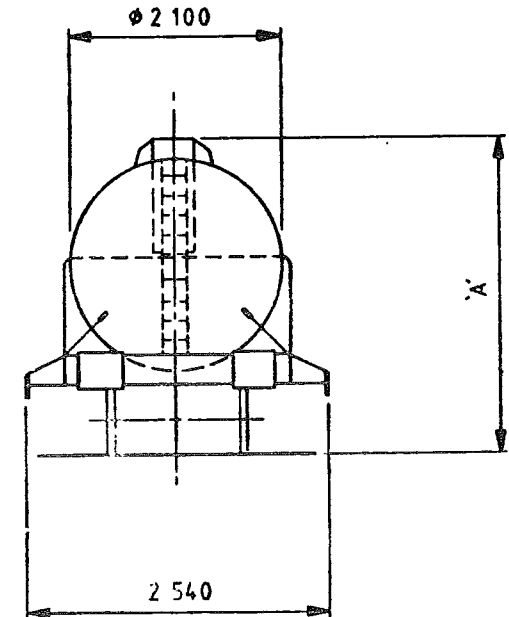
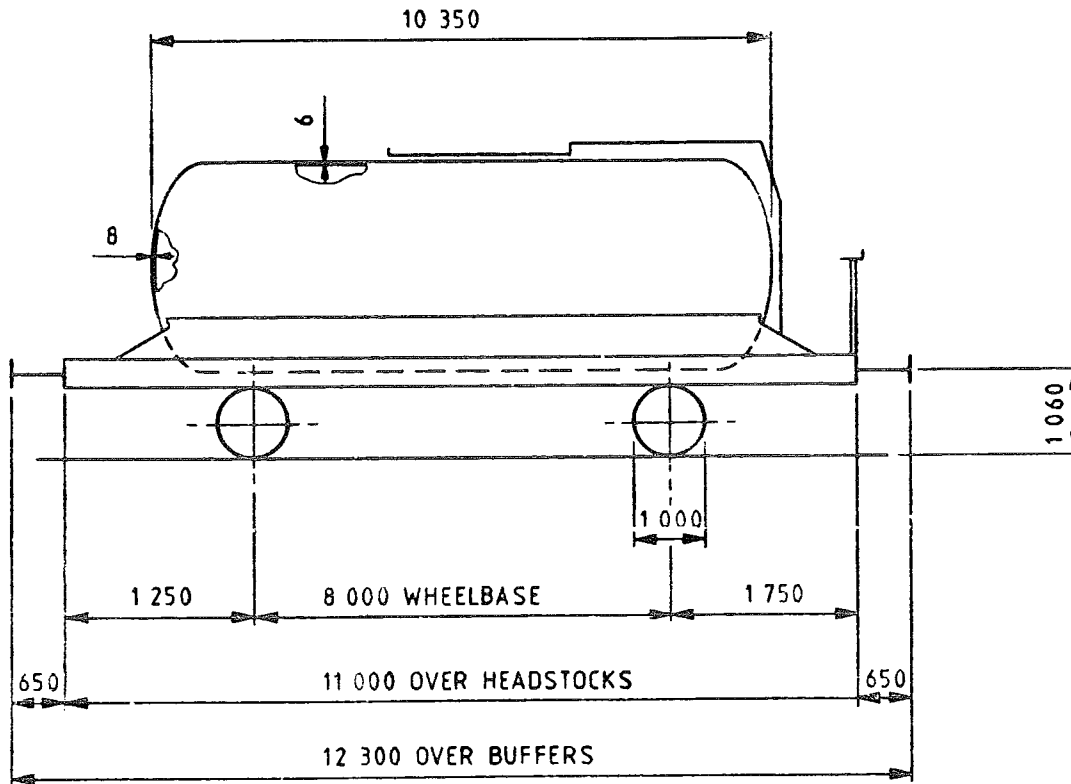
TYPE -	Hbfis
WAGON No. -	23 80 2398 500 & 501
BUILDER -	DUEWAG
OWNER -	EVA.

ISSUE 1

40 t GLW 2 AXLE TANK

ICE 666

					TOPS INFORMATION					
S	A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	16.5t	20.5t	24.5t			60 mile/h UP TO mile/h ABOVE 40 tonne GLW	20t FORCE UP TO 22 t GLW 11t FORCE ABOVE	10	6	W 1599
					CARKND I C A					



23 80 7498 000 + 001 - HEIGHT OVER TOP FITTINGS 'A' = 3 920
 23 80 7498 002 - HEIGHT OVER TOP FITTINGS 'A' = 3 770

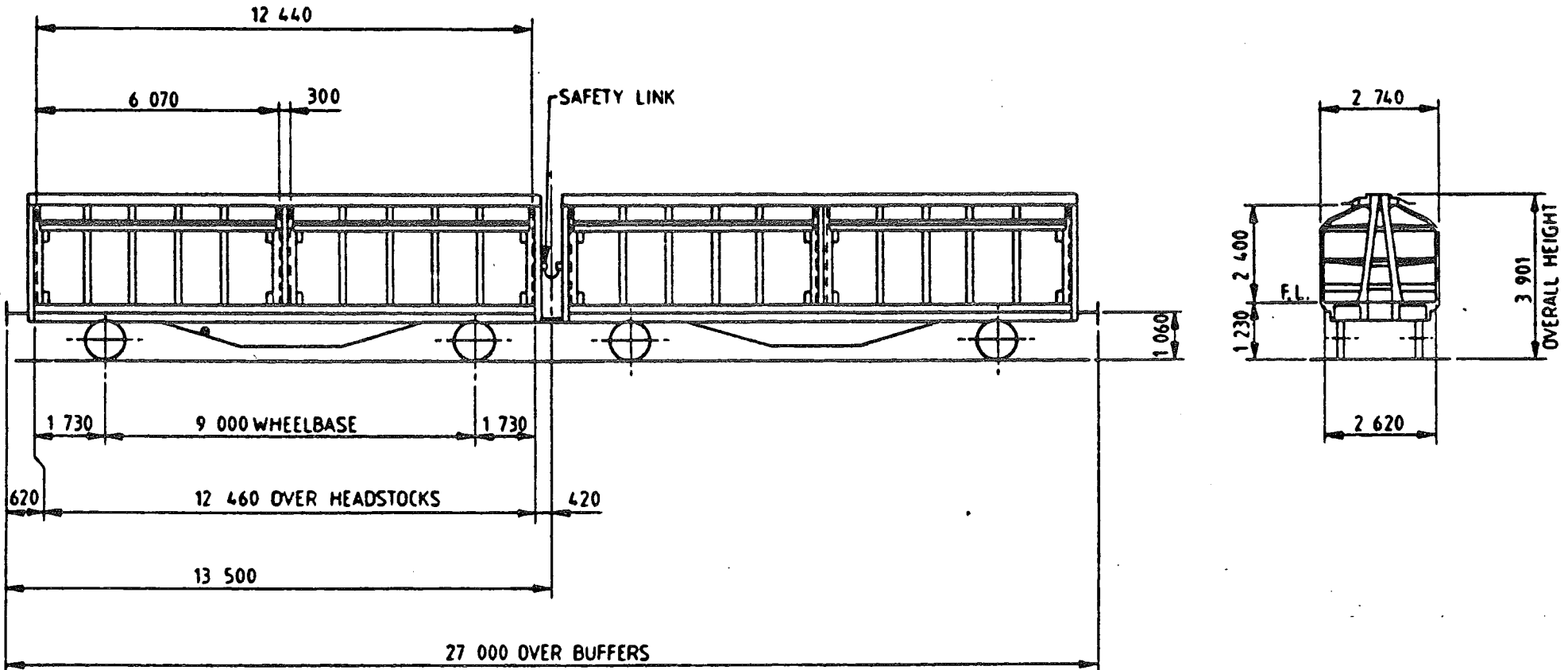
TARE -	15.5 t
CAPACITY, WEIGHT -	24.5 t
CAPACITY, VOLUME -	34 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	4217.80 + 81

BRAKE -	AIR, PLATFORM SCREW & SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	-
WHEELS -	∅ 1 000
JOURNALS -	∅ 130

TYPE -	Zcefkks
WAGON No. -	23 80 7498 000 - 002
BUILDER -	VTG
OWNER -	VTG

ISSUE 1

					TOPS INFORMATION							
90	A 36-71	B 44-71	C 52-71	D 62-71	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	36-71	44-71	52-71	62-71	CARKND	60 mile/h UP TO mile/h ABOVE 90 tonne GLW		VARIABLE LOAD = - 0.31 * (10.255 * t)		23	9	W1684
120	00-01				I P A L							



TARE -	27.3 t
CAPACITY, WEIGHT -	52.7 t
CAPACITY, VOLUME -	149.8 m ³
FLOOR AREA -	65 m ²
MIN. CURVE -	75 m
GEN. ARRGT. DRG. No. -	C20.1218

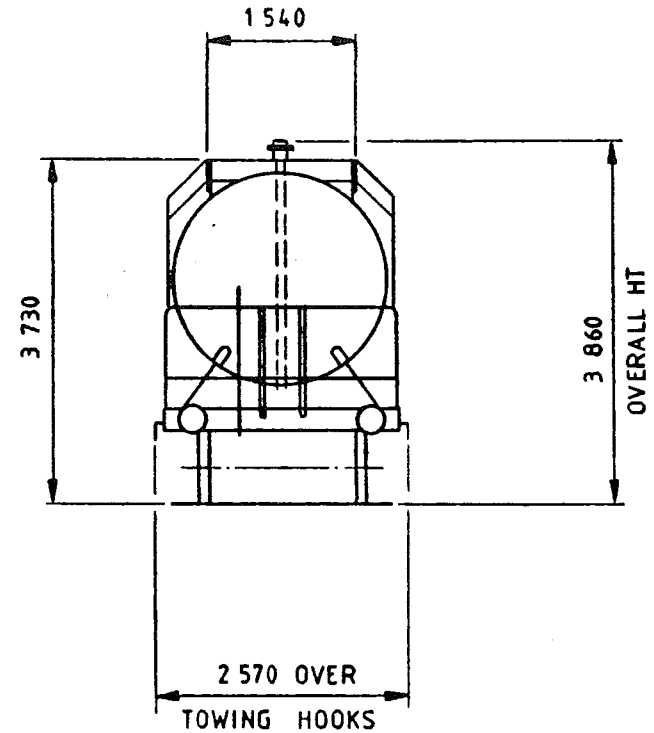
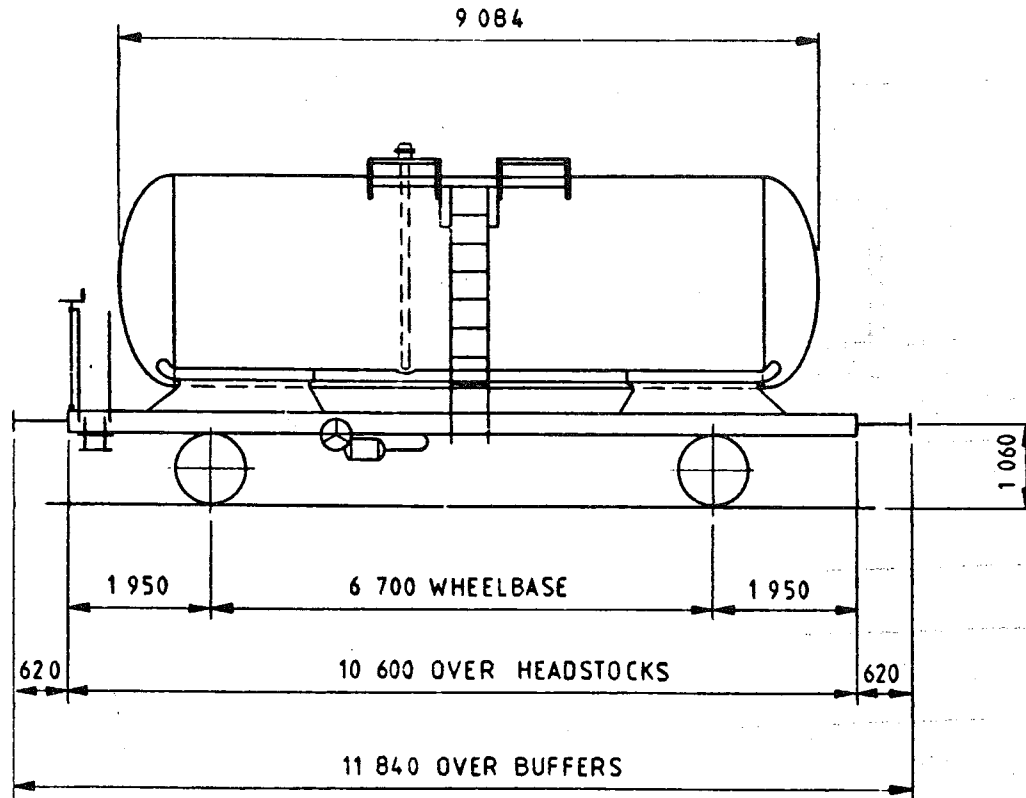
BRAKE -	AIR; SIDE SCREW
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER 32kJ
WHEELS -	Ø 920
JOURNALS -	

TYPE -	Habbis (1)/(2)
WAGON No. -	23 80 2794 000-099
BUILDER -	DUEWAG
OWNER -	E.V.A./DANZAS

40t GLW 2 AXLE TANK

ICE 669

					TOPS INFORMATION									
S	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET		
	20-5t	24-5t	28-5t		CARKND	60 mile/h UP TO mile/h ABOVE		40 tonne GLW		9t FORCE UP TO 19t FORCE ABOVE	23t GLW	9	6	W1736
					I C A									



TARE -	11.5t
CAPACITY, WEIGHT -	28.5t
CAPACITY, VOLUME -	27 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	1200

BRAKE -	AIR; SIDE SCREW
SUSPENSION -	DOUBLE LINK; 2 STAGE SPRING
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅1000
JOURNALS -	∅130

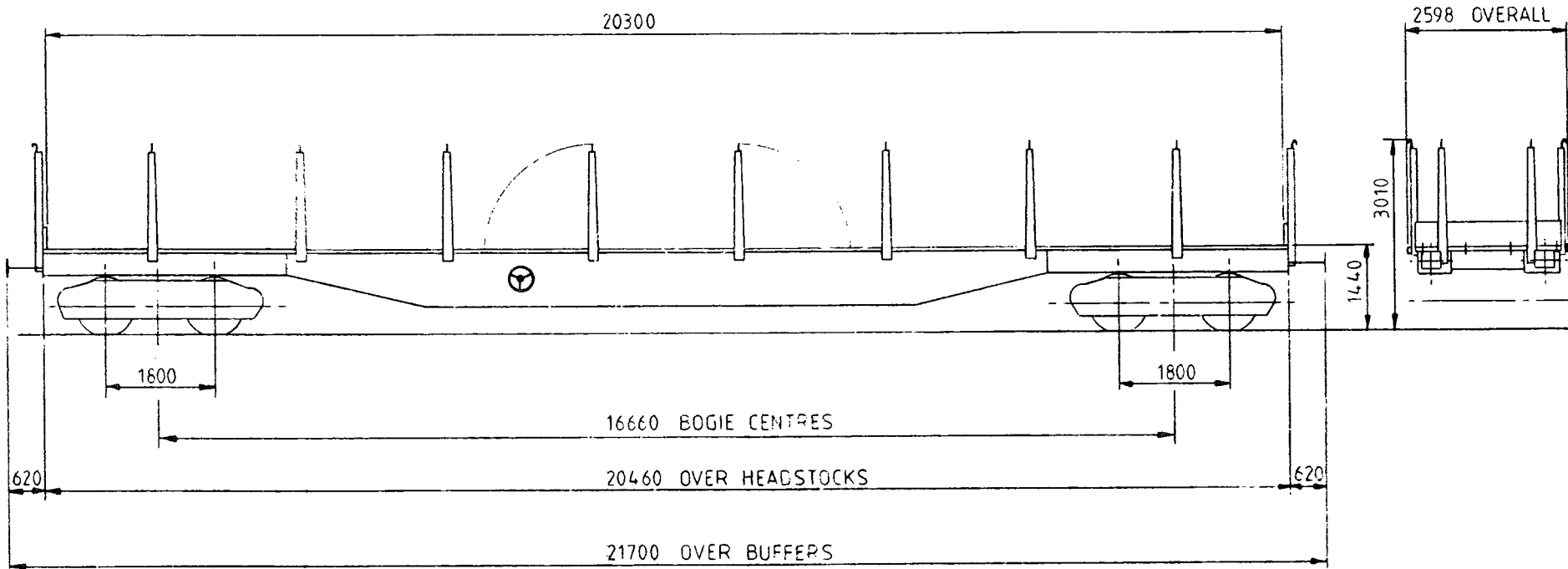
TYPE -	Z cfs
WAGON No. -	23 81 7391 000, 001
BUILDER -	WAGGON REP WERKSTATTE
OWNER -	EVA

ISSUE 1

90t GLW BOGIE FLAT WAGON

IFE 670

					TOPS INFORMATION							
90	39t	47t	55t	65t	AARKN CARKND i P A Q	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 13	RA (GLW) 8	DESIGN SHEET W1624
S	39t	47t	55t	60 mile/h UP TO -mile/h ABOVE-		90 tonne GLW	12.6 t FORCE UP TO 46.6 t FORCE ABOVE	48 tonne GLW				
120	0.00t											



TARE -	25 +
CAPACITY, WEIGHT-	65 +
CAPACITY, VOLUME-	—
FLOOR AREA -	49.5 m
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No.-	0-251.01.0003

BRAKE -	AIR, BLOCK
SUSPENSION -	TYPE WU83/mDB BOGIE
COUPLINGS -	U.I.C. SCREW
BUFFERS -	RINGFEDER 32 KJ
WHEELS -	920 DIA
JOURNALS -	130 DIA

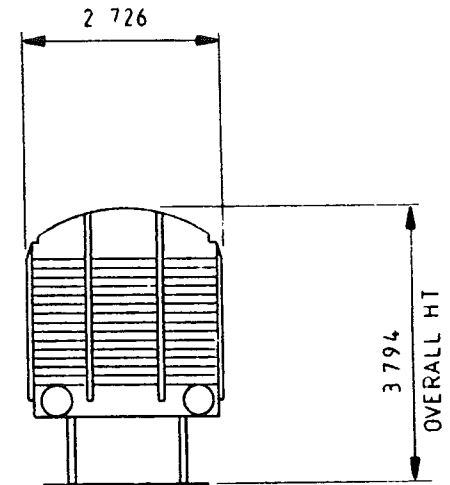
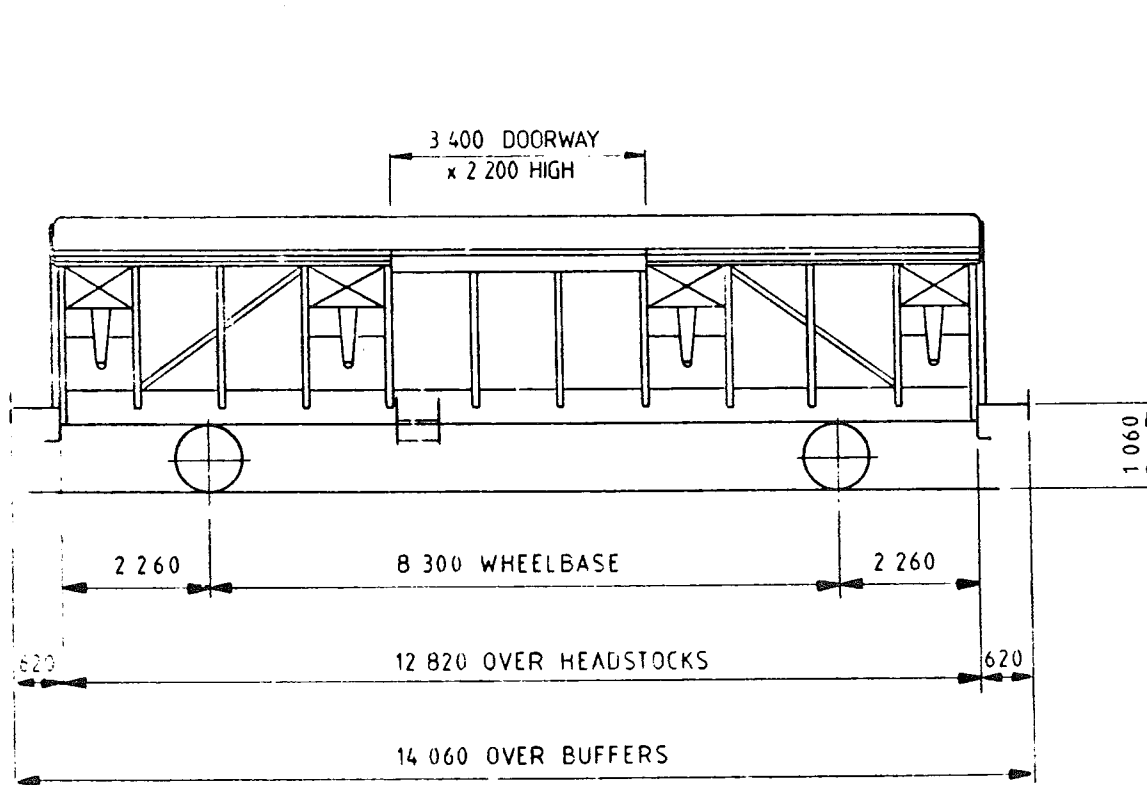
TYPE -	
WAGON No. -	33 80 4737 000-049
BUILDER -	WAGGON UNION
OWNER -	DANZAS

ISSUE 1

40t GLW 2 AXLE VAN

ITE 673

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	19.5t	23.5t	27.5t			60 mile/h UP TO mile/h ABOVE 40 tonne GLW		A.B) 11t FORCE UP TO V.B) 21t FORCE ABOVE A.B) 18t	18t GLW	12	6	W1663
S	19.5t	23.5t	27.5t		CARKND							
					I T X M							



TARE -	12.5t
CAPACITY, WEIGHT-	27.5t
CAPACITY, VOLUME-	66 m ³
FLOOR AREA -	30 m ²
M.N. CURVE -	60m
GEN. ARRGT. DRG. No.	108.00103

BRAKE -	DUAL; SIDE LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	φ1000
JOURNALS -	

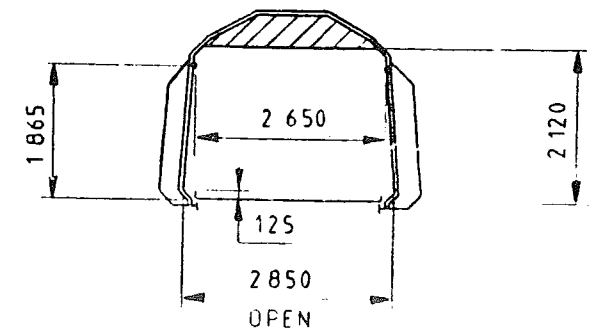
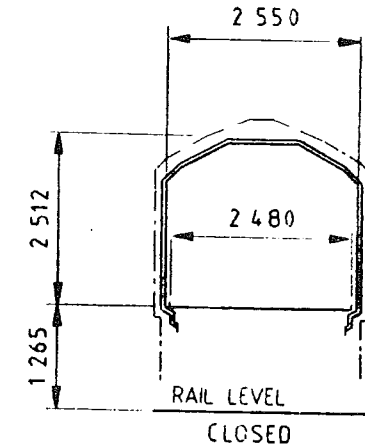
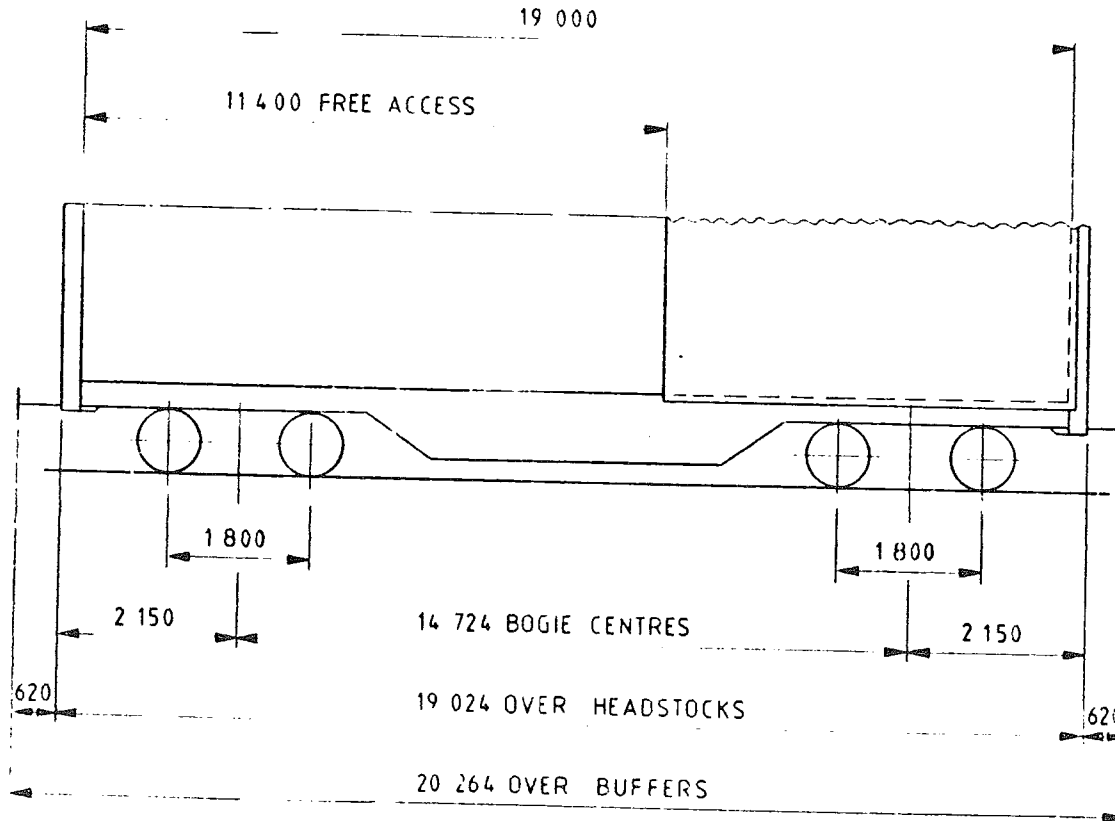
TYPE -	Hbfs
WAGON No. -	24 71 2380 000
BUILDER -	DIRECCION DE GESTION COMMERCIAL, MADRID
OWNER -	TRANSFESA

ISSUE 1

84t GLW 'EASILOADER' CURTAIN-SIDED WAGON

IPE 672

	A	B	C	D	TOPS INFORMATION									
90	40t	48t	56t	60t	AARKND			OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
S	40t	48t	56t	60t	CARKND									
120	00-0t				I	P	A	60 mile/h UP TO mile/h ABOVE	84 tonne GLW	15t FORCE UP TO 40t FORCE ABOVE	42t GLW	2	6	W1643



TARE -	24t
CAPACITY, WEIGHT -	60t
CAPACITY, VOLUME -	
FLOOR AREA -	47.12 m ²
MIN. CURVE -	35 m
GEN. ARRGT. DRG. No. -	PR 545

BRAKE -	AIR
SUSPENSION -	Y 25 cm
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC 450-340HD
WHEELS -	135
JOURNALS -	Ø130

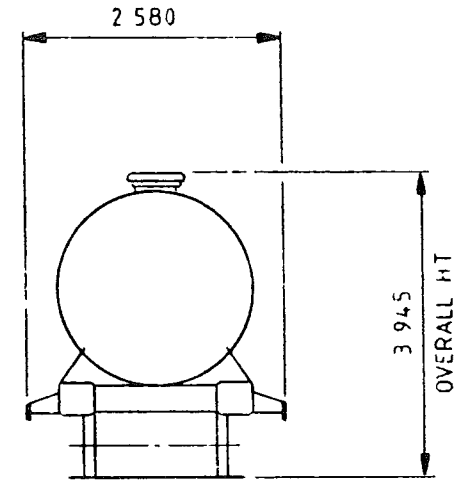
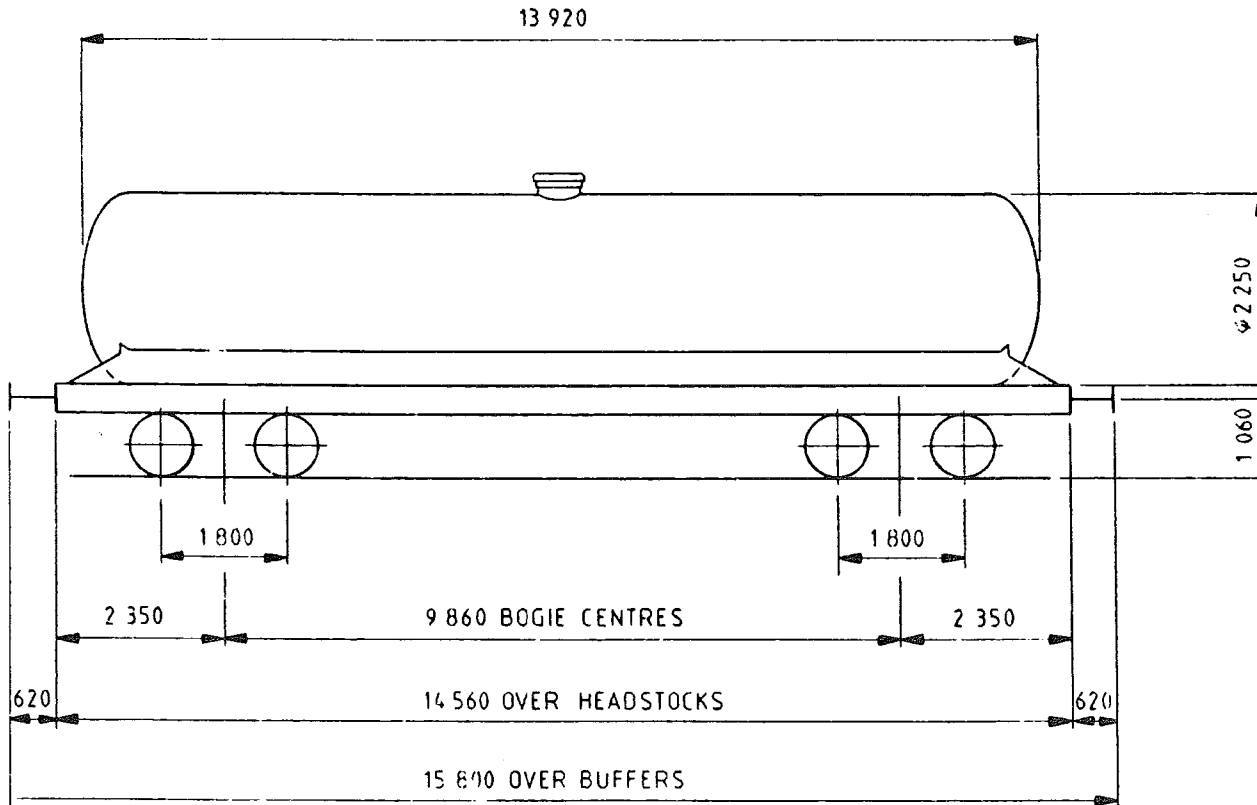
TYPE -	S1s (i)
WAGON No. -	33 87 4746 012-019
BUILDER -	INCE-TRANS-HEYWOOD
OWNER -	RAILSENE

ISSUE 1

90t GLW BOGIE TANK

ICE 674

					TOPS INFORMATION								
90	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	38.4t	46.4t	54.4t	64.4t	CARKND		60 mile/h UP TO mile/h ABOVE 90 tonne GLW		VARIABLE LOAD 0.282 * (0.512 * t)				
120	00-11				I	C	A	D			5	8	W1671



TARE -	25.6 t
CAPACITY, WEIGHT -	64.4 t
CAPACITY, VOLUME -	52 m ³
FLOOR AREA -	
MIN. CURVE -	36 m
GEN. ARRGT DRG. No -	Z552.80

BRAKE -	AIR: PLATFORM & SIDE SCREW
SUSPENSION -	WU 80 DB BOGIE
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	Ø920
JOURNALS -	Ø130

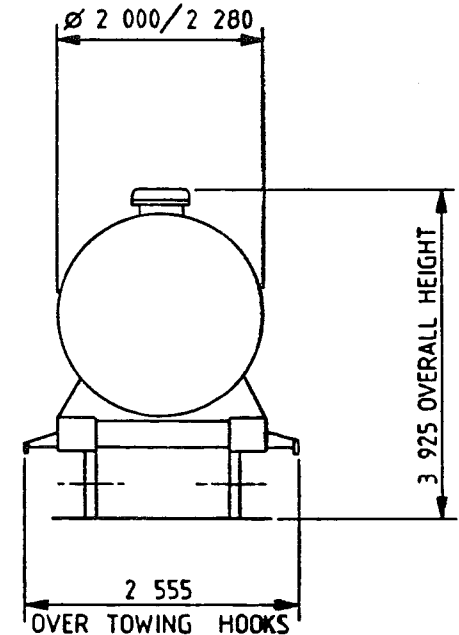
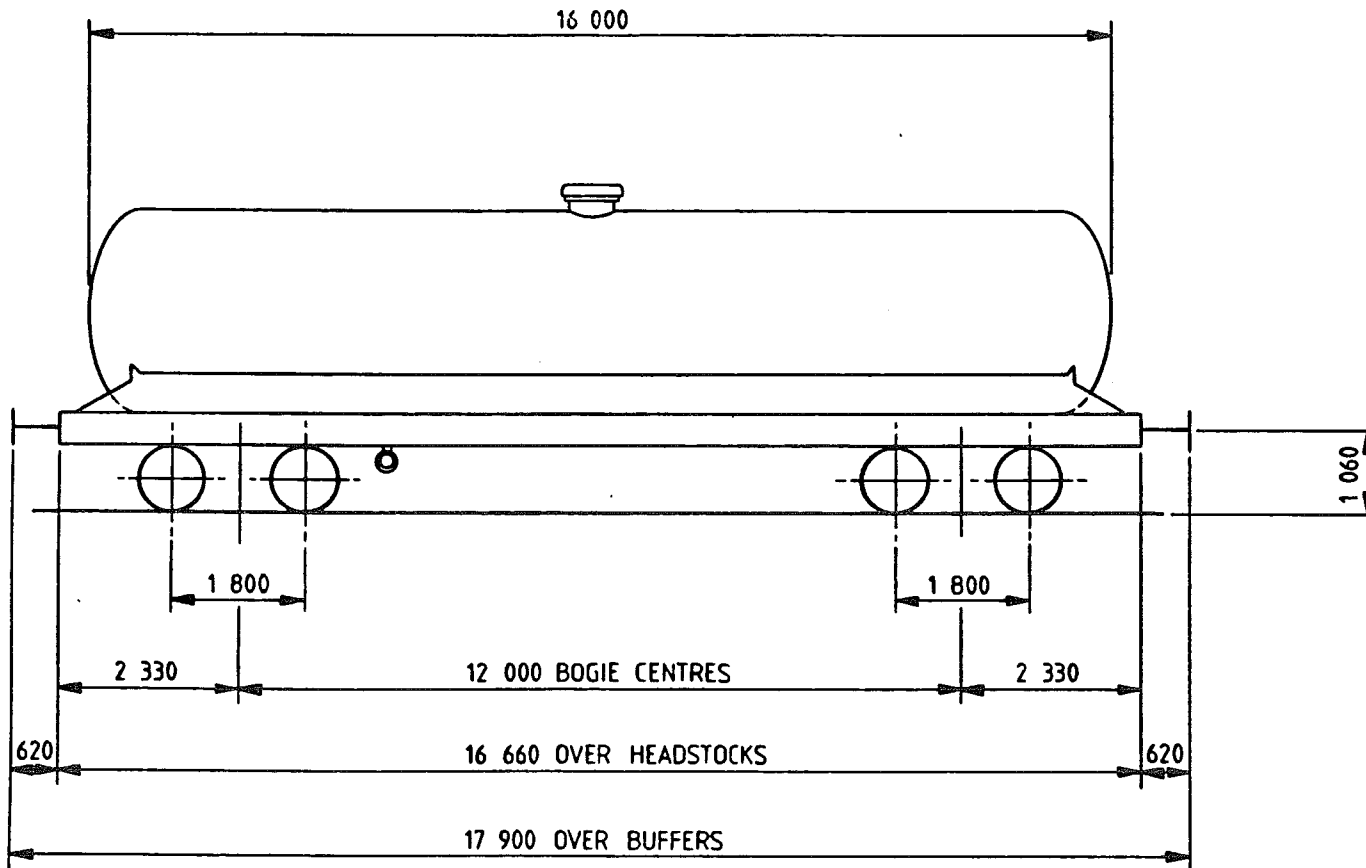
TYPE -	Zafjs (3)
WAGON No. -	005-014 33 80 7794 017-026
BUILDER -	LFB
OWNER -	VIC

ISSUE 1

80t GLW BOGIE TANK

ICE 676

					TOPS INFORMATION							
90	40.7t	48.7t	56.7t	59.7t	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	40.7t	48.7t	56.7t	56.7t	CARKND	60 mile/h UP TO mile/h ABOVE		16t FORCE UP TO 42t FORCE ABOVE		8	6	W 1766
120	00-0t				I C A	80 tonne GLW		44t GLW				



NOTES:-
D-LINE LOADING ONLY APPLIES FOR TRAFFIC FROM VIENNA.
(3) SUITABLE FOR RUNNING EMPTY UP TO 120km/h
VARIABLE GAUGE; 1524 FINLAND (VR)
1435 BR

TARE -	23.3t
CAPACITY, WEIGHT-	59.7t (SEE NOTE)
CAPACITY, VOLUME-	56m ³
FLOOR AREA -	—
MIN. CURVE -	35m
GEN. ARRGT. DRG. No.-	

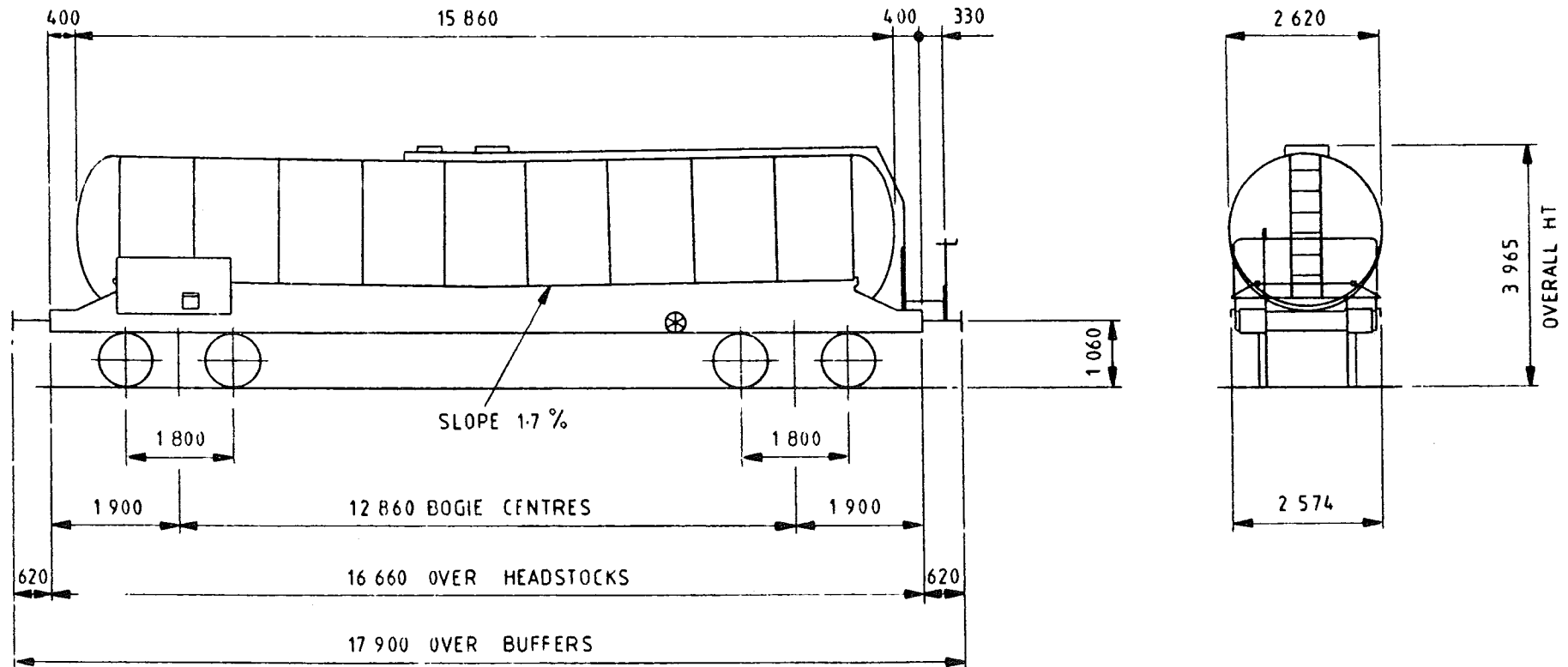
BRAKE -	AIR BRAKE; PLATFORM AND SIDE SCREW
SUSPENSION -	LHB 82 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 550 x 340
WHEELS -	∅ 920
JOURNALS -	∅ 120

TYPE -	Zafs (3) (SEE NOTE)
WAGON No. -	34 80 7899 000-009
BUILDER -	FRANZ KAMINSKI
OWNER -	V.T.G.

90 t GLW BOGIE TANK

ICE 677

TOPS INFORMATION											
	A	B	C	D		AARKND	OPERATING SPEED	BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
90	38.7t	46.7t	54.7t	64.7t			60 mile/h UP TO mile/h ABOVE	12.745t FORCE UP TO 47t FORCE ABOVE	8	9	W1762
S	38.7t	46.7t	54.7t	64.7t		CARKND					
120	00-0t					I C A D					



TARE -	25.5t
CAPACITY, WEIGHT -	64.7t
CAPACITY, VOLUME -	75m ³
FLOOR AREA -	
MIN. CURVE -	35m
GEN. ARRGT. DRG No. -	380.00.990.009

BRAKE -	AIR PLATFORM & SIDE SCREW
SUSPENSION -	Y 25 LS.
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 340 x 450 HD
WHEELS -	Ø920
JOURNALS -	Ø130

TYPE -	1
WAGON No. -	33 87 7994 000-009
BUILDER -	ANF INDUSTRIE
OWNER -	SIMOTRA

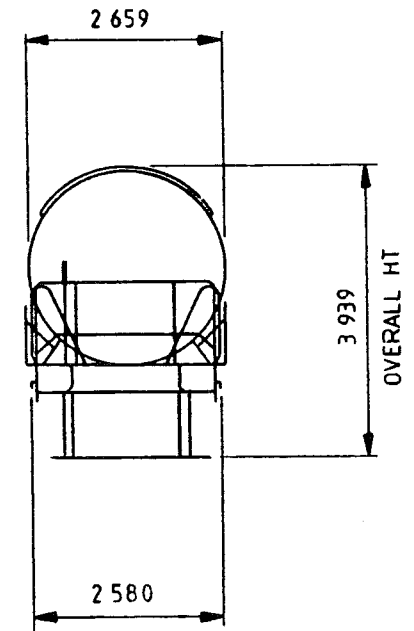
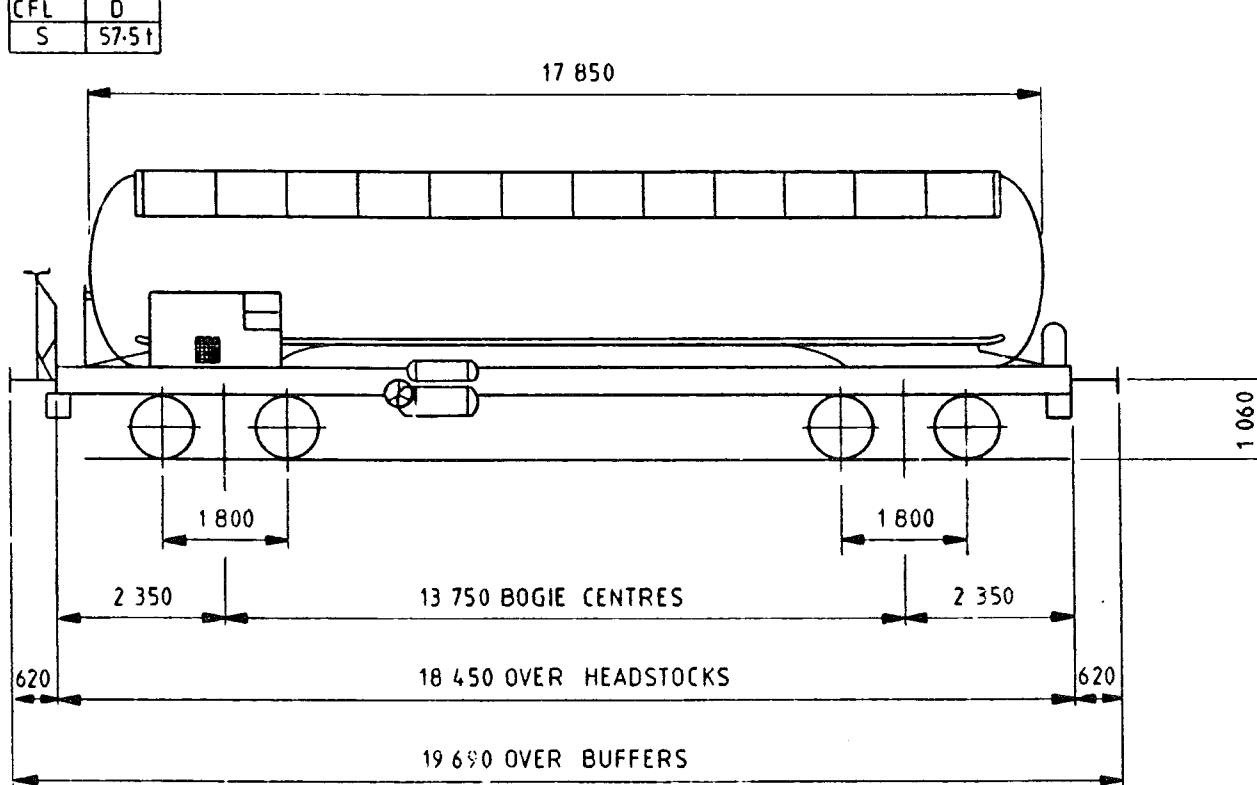
ISSUE 1

90t GLW BOGIE TANK

ICE 679

					TOPS INFORMATION								
90	31.5t	39.5t	47.5t	57.5t	AARKND		OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
S	31.5t	39.5t	47.5t	47.5t	CARKND		60 mile/h UP TO mile/h ABOVE	90 tonne GLW	32.5t FORCE UP TO 47.3t FORCE ABOVE	59t GLW	11	9	W1808
120	00-0t				I	C	A	D					

BR DB	
CFL	D
S	57.5t



TARE -	32.5t
CAPACITY, WEIGHT -	57.5t
CAPACITY, VOLUME -	93m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No. -	7 12 20.0.01

BRAKE -	AIR; SIDE SCREW & PLATFORM
SUSPENSION -	LHB 82 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HD 340.550
WHEELS -	ø920
JOURNALS -	ø130

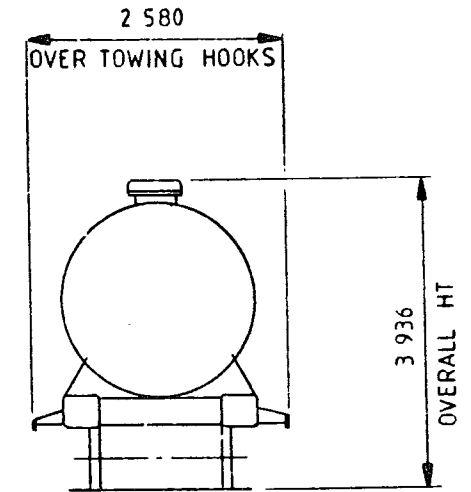
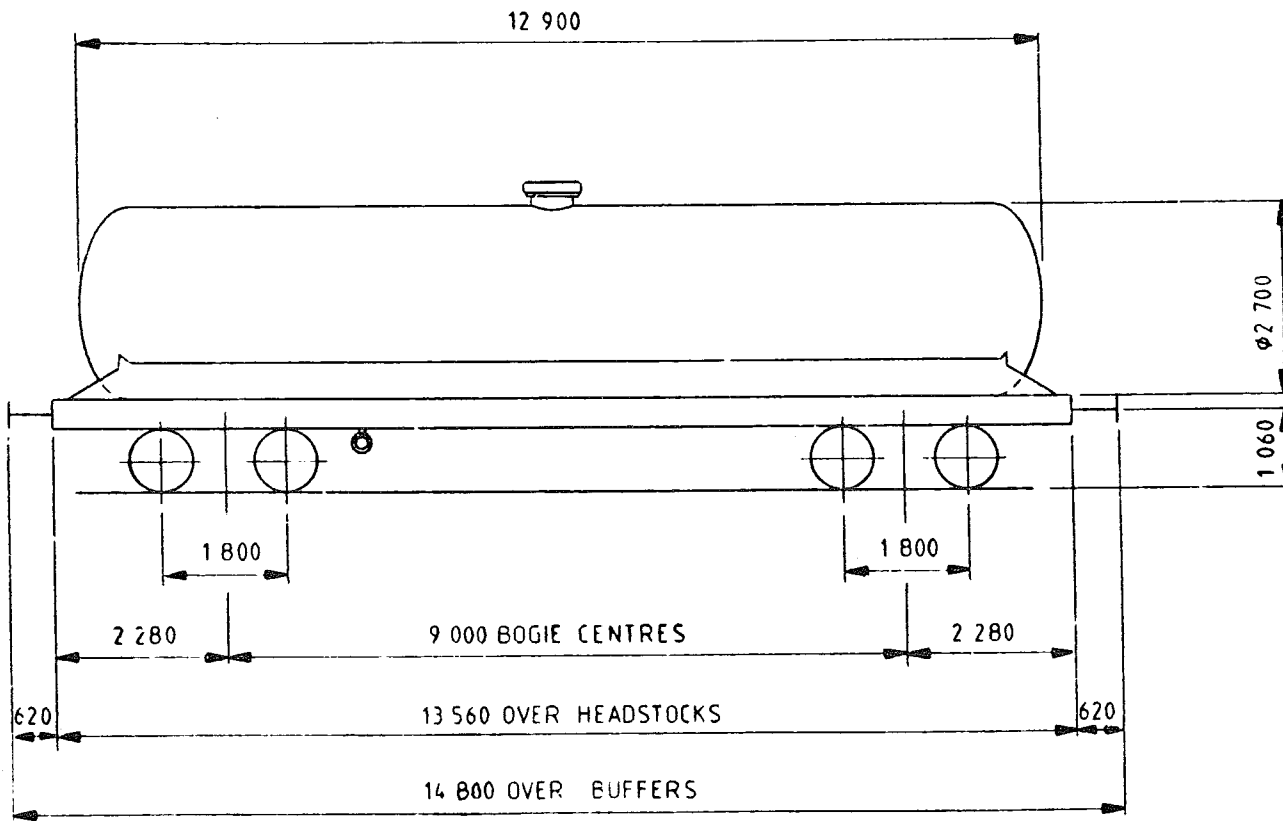
TYPE -	Zafgsi3)
WAGON No. -	33 80 7794 027-030,035,036
BUILDER -	LINKE-HOFMANN-BUSCH
OWNER -	V.T.G

ISSUE 1

80t GLW BOGIE TANK

ICE 681

TOPS INFORMATION												
				AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
	A	B	C	D		60 mile/h UP TO mile/h ABOVE		17.39t FORCE UP TO 41.6t FORCE ABOVE		4	6	W1788
S	39t	47t	55t		CARKND	80 tonne GLW		41 GLW				
120	00 0t				I C A D							



TARE -	25t
CAPACITY, WEIGHT-	55t
CAPACITY, VOLUME-	70m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT DRG. No.-	

BRAKE -	AIR PLATFORM & SIDE SCREW
SUSPENSION -	DB BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	φ920
JOURNALS -	φ130

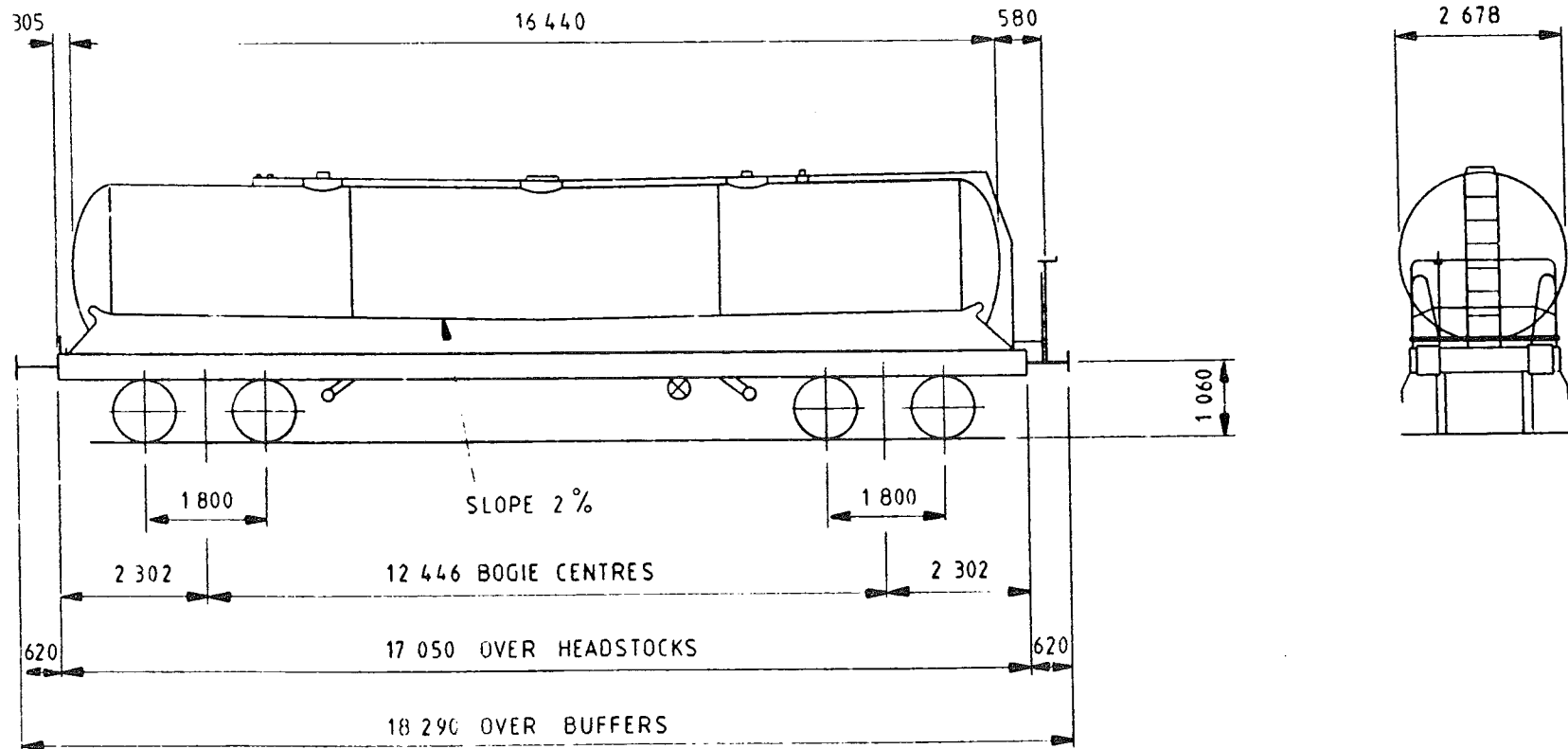
TYPE -	Zafgs(3)
WAGON No. -	33 80 7794 015, 016
BUILDER -	LINKE HOFMANN-BUSCH
OWNER -	V.T.G.

ISSUE 1

90 t GLW BOGIE TANK

ICE 685

TOPS INFORMATION															
				AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET			
90	A	B	C	D											
S	39:21	47:21	55:21	65:21	CARKND		60 mile/h UP TO mile/h ABOVE		80 tonne GLW		14 t FORCE UP TO 47 t FORCE ABOVE	49 t GLW	9	9	W1850
120	JG 1			I C A											



TARE -	24.8t
CAPACITY, WEIGHT-	65.2t
CAPACITY, VOLUME-	90m ³
FLOOR AREA -	
MIN. CURVE -	35m
GEN. ARRGT DRG No -	103529

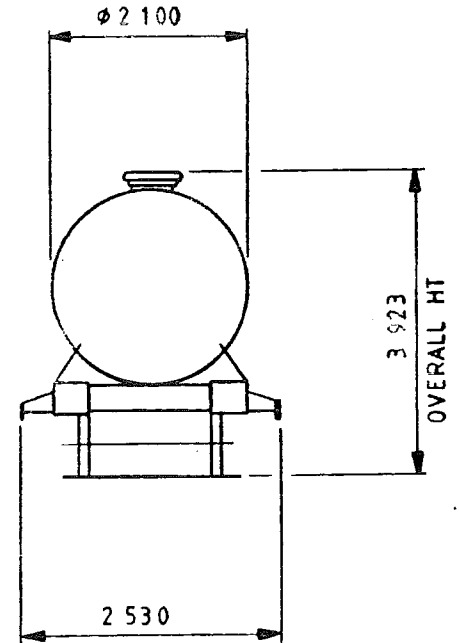
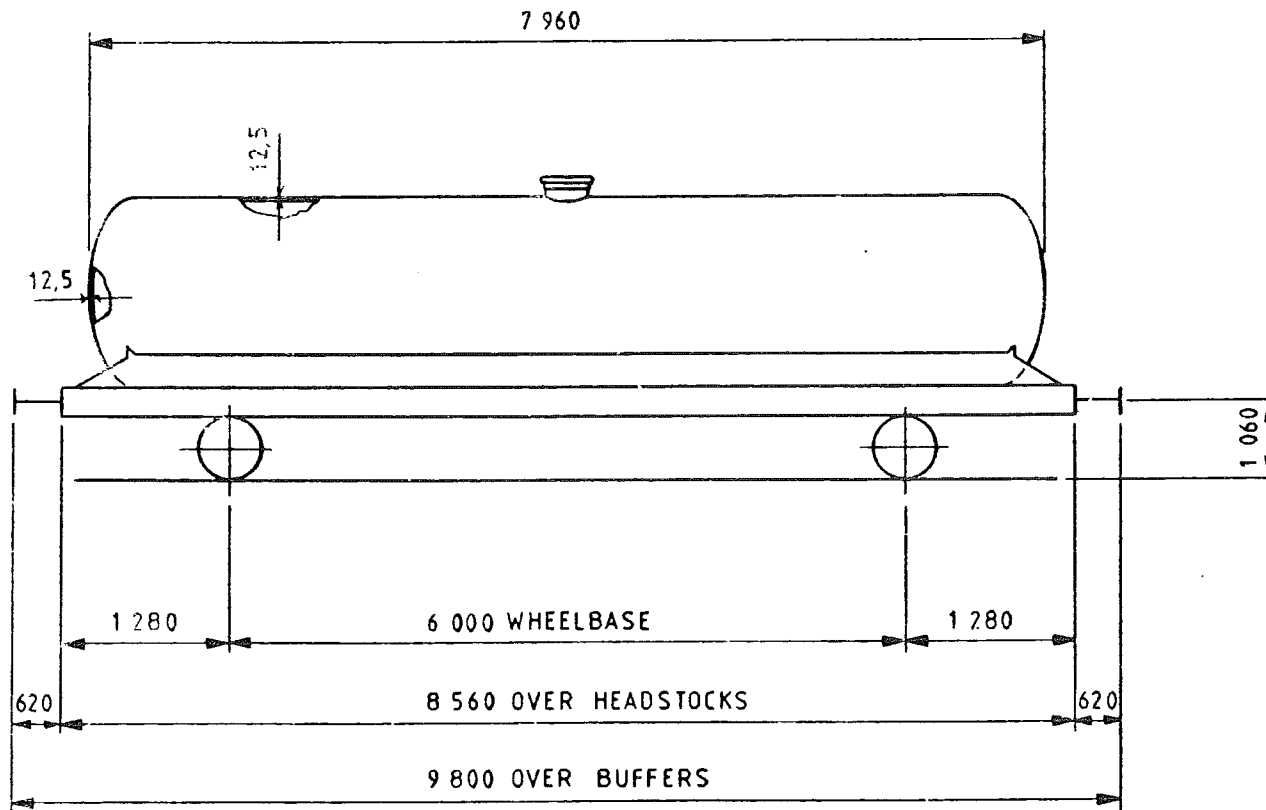
BRAKE -	AIR, PLATFORM & SIDE SCREW
SUSPENSION -	Y 25 Ls BOGIE
COUPLINGS -	U.I.C
BUFFERS -	HYDRAULIC 345 x 265 HD
WHEELS -	φ 920
JOURNALS -	φ 130

TYPE -	Z 31s (3)
WAGON No. -	33 70 7E99 141-048
BUILDER -	ARBEL FAUVET RAIL
OWNER -	TIP HOOK

2 AXLE TANK WAGON

ICE 687

					TOPS INFORMATION							
90	A 17t	B 21t	C 25t	D 30t	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET	
S	17t	21t	25t	25t	CARKND	60 mile/h UP TO mile/h ABOVE	45 tonne GLW	8t FORCE UP TO 22t FORCE ABOVE	24t GLW	6	8	W1827
120	00-0				I C A							



TARE -	15t
CAPACITY, WEIGHT-	30t
CAPACITY, VOLUME-	26 m ³
FLOOR AREA -	-
MIN. CURVE -	35m
GEN. ARRGT. DRG. No.-	-

BRAKE -	AIR; LEVER
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER 450 * 340 HD
WHEELS -	Ø 920
JOURNALS -	Ø 130

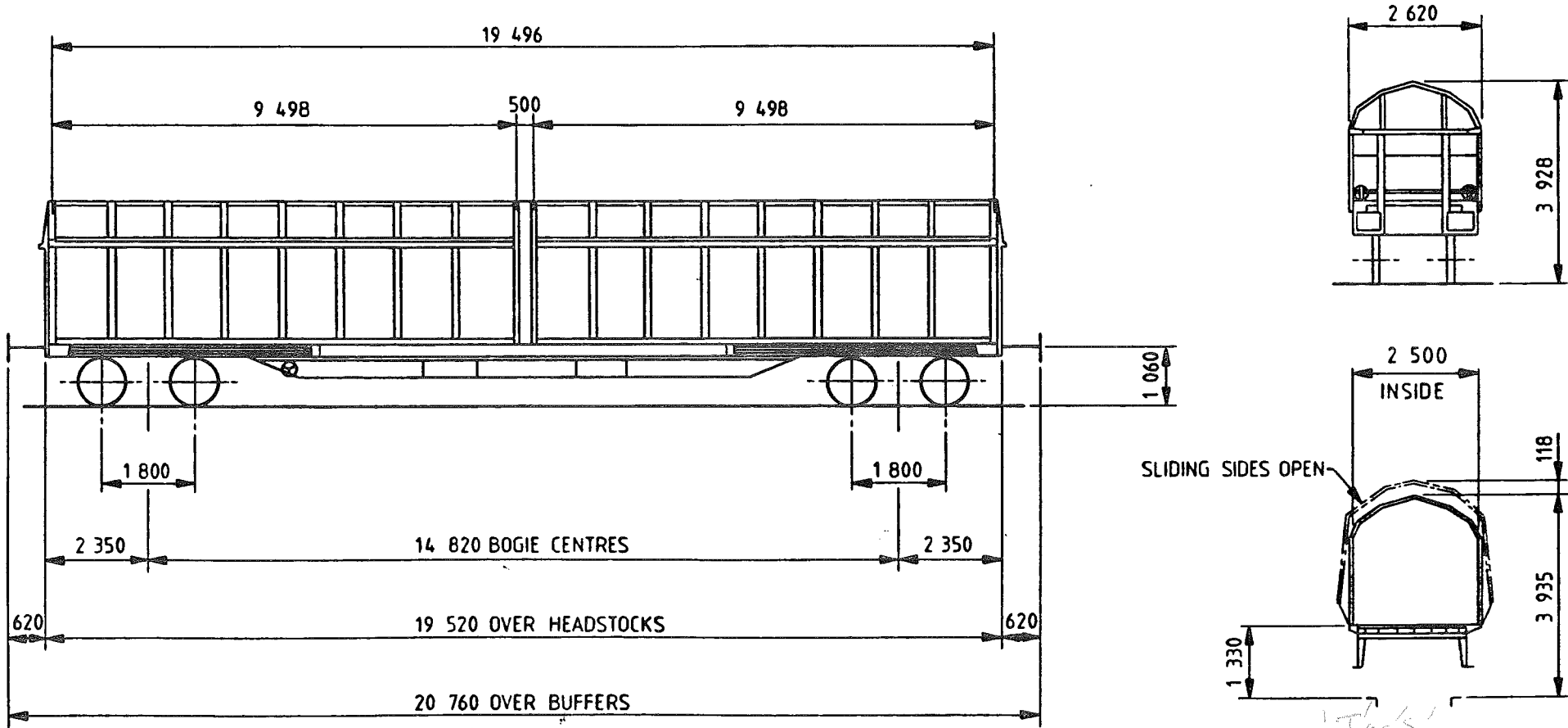
TYPE -	Zcfs (3)
WAGON No. -	23 80 7495 020-022
BUILDER -	KAMINSKI
OWNER -	V T G

ISSUE 1

90t GLW BOGIE VAN

IPE 690

					TOPS INFORMATION								
90	38t	46t	54t	64t	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 13	RA (GLW) 8	DESIGN SHEET W1858
S	38t	46t	54t	54t	CARKND		60 mile/h UP TO - mile/h ABOVE 90 tonne GLW		15t FORCE UP TO 46t FORCE ABOVE 48t GLW				
120	00-0t				I	P	A						

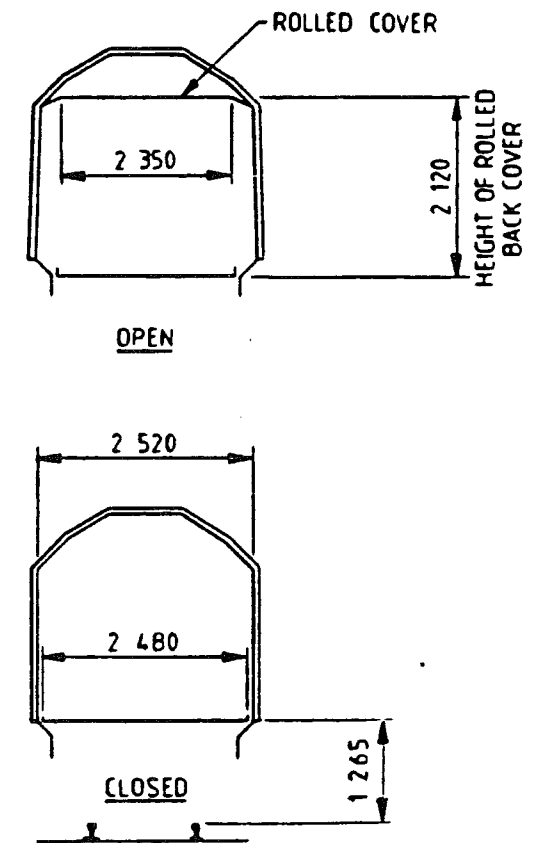
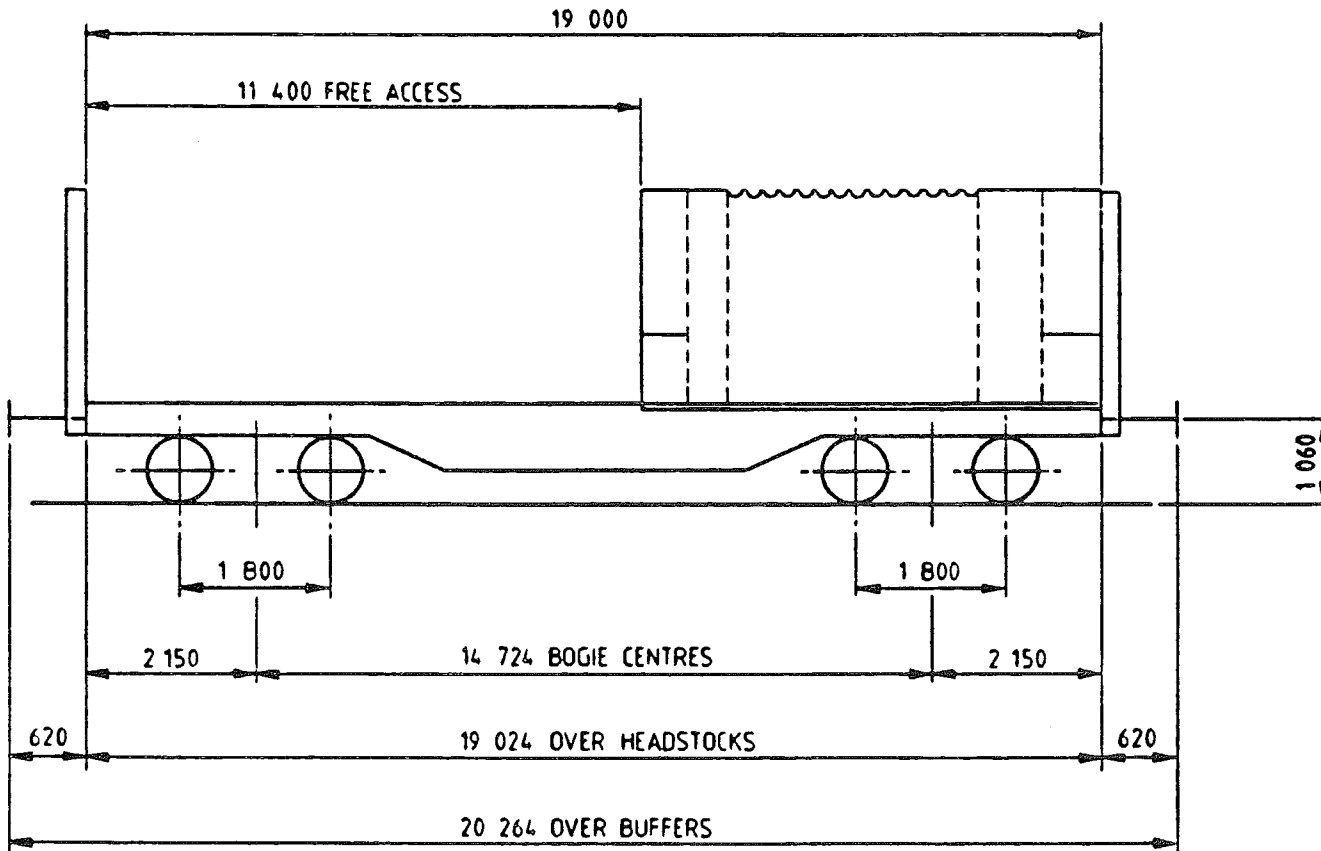


TARE -	26t
CAPACITY, WEIGHT-	64t,
CAPACITY, VOLUME-	-
FLOOR AREA -	48.74 m ²
MIN. CURVE -	50m COUPLED TO SIMILAR VEHICLE
GEN. ARRG. DRG. No.-	0-144.01.0003

BRAKE -	AIR; SIDE SCREW
SUSPENSION -	DB TYPE 642 BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	RINGFEDER, 550 x 340 HD
WHEELS -	∅ 920
JOURNALS -	∅ 130

TYPE -	
WAGON No. -	83 80 4741 001-060
BUILDER -	WAGGON-UNION
OWNER -	E.V.A.

					TOPS INFORMATION							
90	A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	39.7t	48.7t	56.7t	65.7t	CARKND	60 mile/h UP TO mile/h ABOVE 90 tonne GLW		16t FORCE UP TO 42t FORCE ABOVE 45t GLW		12	8	
120	00-0t				I P A							



TARE -	24.3t
CAPACITY, WEIGHT -	65.7t
CAPACITY, VOLUME -	112m ³
FLOOR AREA -	-
MIN. CURVE -	35m
GEN. ARRGT. DRG. No.-	1207

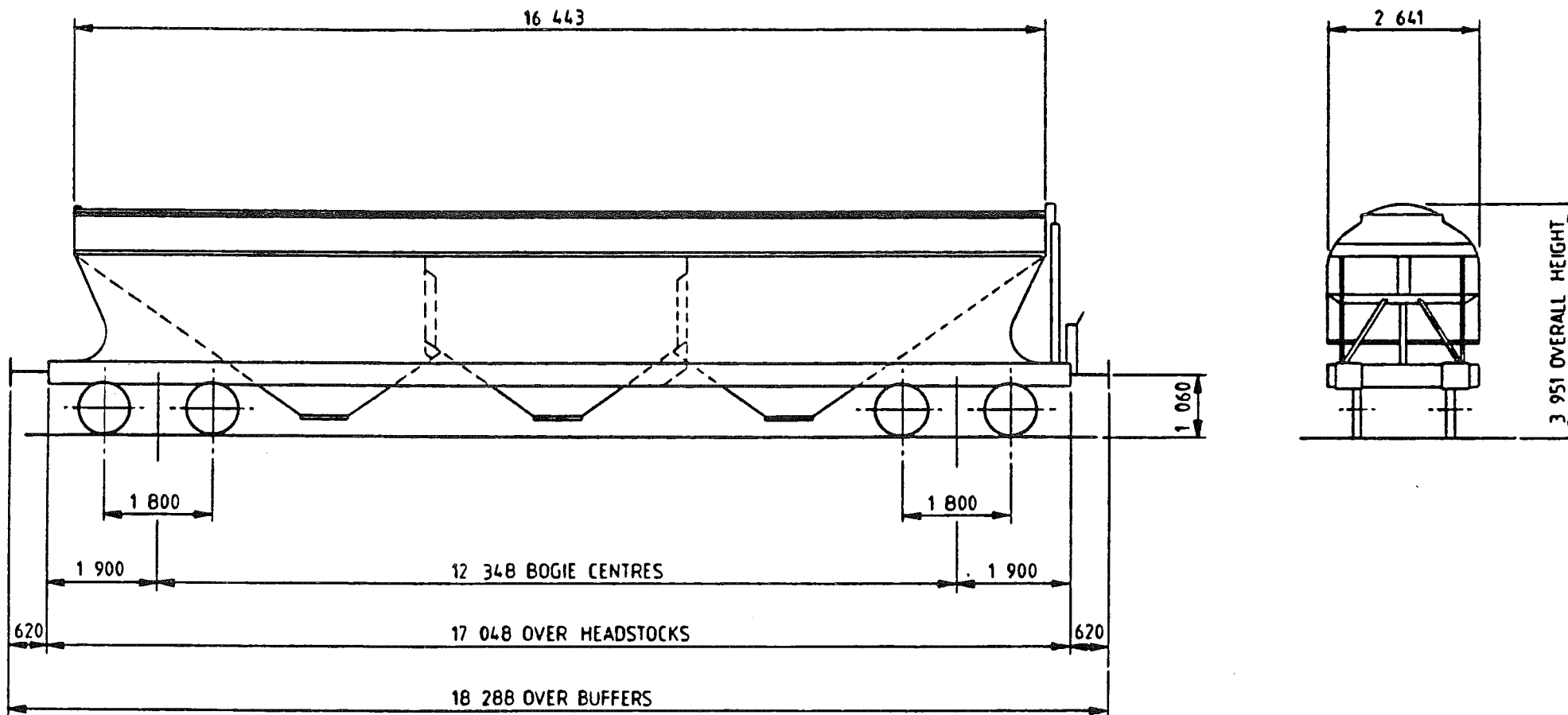
BRAKE -	AIR, SIDE SCREW
SUSPENSION -	Y 25 LST
COUPLINGS -	U.I.C.
BUFFERS -	US HYDRAULIC
WHEELS -	∅ 920
JOURNALS -	∅ 130

TYPE -	
WAGON No.-	33 87 4741 000
BUILDER -	LATELIER BRETON
OWNER -	

80t GLW BOGIE HOPPER

IPE 693

				TOPS INFORMATION															
	A	B	C	D	AARKND				OPERATING SPEED		BRAKE FORCE DATA				EXCESS LENGTH	RA (GLW)	DESIGN SHEET		
	43t	51t	59t		CARKND				60 mile/h UP TO mile/h ABOVE		80 tonne GLW		14t FORCE UP TO 36t FORCE ABOVE				9	6	
S	43t	51t	59t		I	P	B	H			40t GLW								
120	00-0t																		

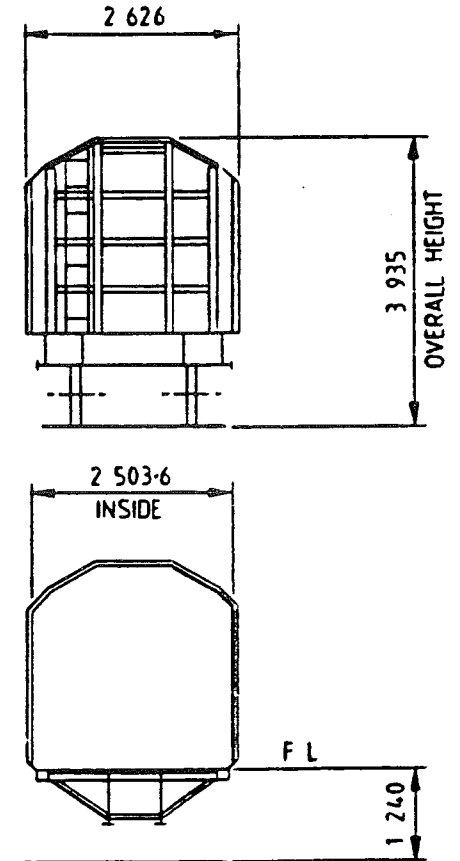
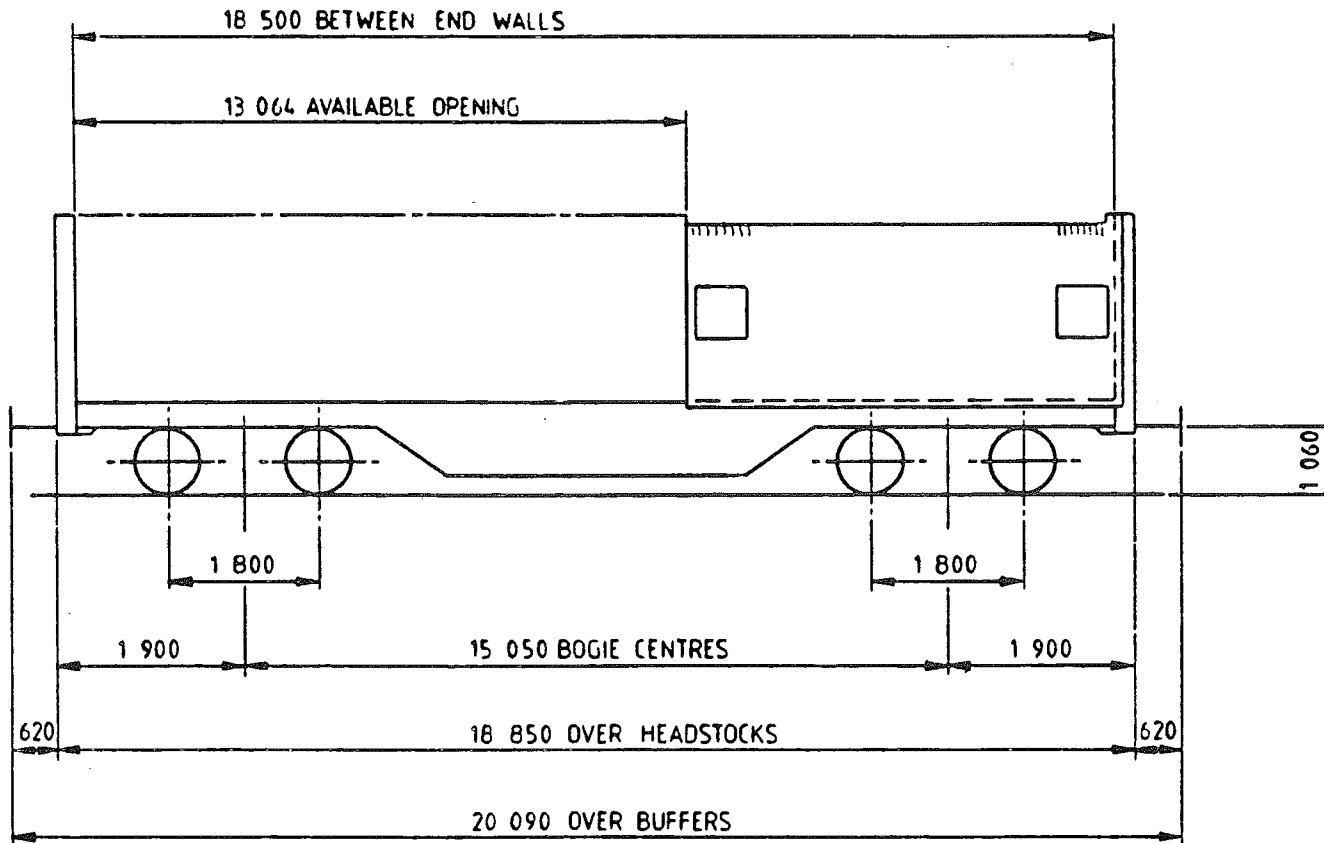


TARE -	21t
CAPACITY, WEIGHT-	59t
CAPACITY, VOLUME-	95m ³
FLOOR AREA -	
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	107280

BRAKE -	AIR, VACUUM THRO PIPE, SIDE SCREW
SUSPENSION -	
COUPLINGS -	INTERNATIONAL SCREW
BUFFERS -	HYDRAULIC \varnothing 560-340
WHEELS -	
JOURNALS -	\varnothing 130

TYPE -	Uafgpps (4)
WAGON No. -	33 87 9262 000-009
BUILDER -	FAUVET-GIREL
OWNER -	

					TOPS INFORMATION								
90	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 12	RA (GLW) 8	DESIGN SHEET W 1914
S	39t	47t	55t	65t	CARKND		60 mile/h UP TO 50 mile/h ABOVE 80 tonne GLW		13t FORCE UP TO 47t FORCE ABOVE 49t GLW				
120	00-0t				I P A								



TARE -	25t
CAPACITY, WEIGHT-	65t
CAPACITY, VOLUME-	—
FLOOR AREA -	41.3 m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	20050-990-000

BRAKE -	AIR; SIDE SCREW
SUSPENSION -	Y25 Lsd BOGIE
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC US, CATEGORY A
WHEELS -	∅ 920
JOURNALS -	∅ 130

TYPE -	
WAGON No. -	33 87 4741 001-012
BUILDER -	ANF INDUSTRIE
OWNER -	S.A.T.I.

FRENCH NATIONAL RAILWAYS (SNCF)

Country 87

TANK WAGONS

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>	Exchange Conditions 23,33,34.
ICE549	80t bogie tank wagon	33 87 7996 040 - 33 87 7996 045.	
ICE560	80t bogie tank wagon	33 87 7996 046, 33 87 7996 047.	
ICE582	80t bogie tank wagon	33 87 7996 048 - 33 87 7996 053.	
ICE659	80t bogie tank wagon	34 87 7890 517.	
ICE677	90t bogie tank wagon	33 87 7994 000 - 33 87 7994 009.	

FRENCH NATIONAL RAILWAYS (SNCF)

Country 87

VANS

Exchange Conditions 21,43.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IIE304	40t 2 axle van	21 87 2380 500 - 21 87 2380 999.
IPE540	40t 2 axle curtain sided van	43 87 2396 001 - 43 87 2396 005.

FRENCH NATIONAL RAILWAYS (SNCF)

Country 87

<u>HOPPERS</u>		Exchange Conditions 23.33.
<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IPE389	80t bogie hopper	33 87 5699 001.
IPE426	40t 2 axle silo wagon	23 87 9192 000.
IPE453	80t bogie covered hopper	33 87 9382 000 - 33 87 9382 021.
IPE480	40t 2 axle twin hopper	23 87 9192 001.
IPE693	80t bogie hopper	33 87 9282 000 - 33 87 9282 009.

FRENCH NATIONAL RAILWAYS (SNCF)

Country 87

ATOMIC FLASK WAGONS

Exchange Condition 33.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IPE475	152 5t 8 axle atomic flask wgn.	33 87 9985 000 - 33 87 9985 007.

FRENCH NATIONAL RAILWAYS (SNCF)

Country 87

FLAT WAGONS

Exchange Conditions 23,33,43,44,83.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IPE545	80t bogie "debach vit" curtain sided flat wagon	83 87 4739 000 - 83 87 4739 034.
IPE573	30t 2 axle container flat	23 87 4420 000.
IPE672	84t bogie "easyloader" curtain sided flat wagon	33 87 4746 012 - 33 87 4746 019.
IPE691	90t bogie "easyloader" curtain sided flat wagon	33 87 4741 000.
IPE694	90t bogie hooded flat wagon	33 87 4741 001 - 33 87 4741 012.
ITE537	40t 2 axle caisse mobile (swap body) flat	44 87 9195 000.
ITE542	40t 2 axle caisse mobile (swap body) flat	43 87 9196 000 - 43 87 9196 019.
ITE543	40t 2 axle caisse mobile (swap body) flat	43 87 9196 020 - 43 87 9196 024.

FRENCH NATIONAL RAILWAYS (SNCF)

Country 87

WELL WAGONS

Exchange Condition 31.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IXE393	66t bogie well wagon	31 87 9899 000 - 31 87 9899 004.

BELGIAN NATIONAL RAILWAYS (B)

Country 88

TANK WAGONS

Exchange Condition 23.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
ICE174	37t 2 axle tank wagon	23 88 7194 000.
ICE425	40t 2 axle tank wagon	23 88 7499 001, 23 88 7499 004, 23 88 7499 005, 23 88 7499 007 - 23 88 7499 010.

BELGIAN NATIONAL RAILWAYS (B)

Country 88

FLAT WAGONS

Exchange Condition 21.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IFE276	40t 2 axle flat wagon	21 88 4140 101 - 21 88 4140 199.
IFE464	38.7t 2 axle 3 plank flat	21 88 4140 200 - 21 88 4140 299.

BELGIAN NATIONAL RAILWAYS (B)

Country 88

<u>VANS</u>		Exchange Conditions 04,21.
<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IIE299	40t 2 axle refrigerator van	04 88 8092 000 - 04 88 8092 199.
IIE300	36t 2 axle refrigerator van	04 88 8089 983, 04 88 8089 985, 04 88 8089 988 - 04 88 8089 998.
IIE326	36t 2 axle refrigerator van	04 88 8091 002 - 04 88 8091 008.
ILE266	40t 2 axle van	21 88 2390 034, 21 88 2390 036 - 21 88 2390 097.
ILE479	40t 2 axle van	21 88 5799 000 - 21 88 5799 049.
IME035	32t 2 axle van	21 88 2140 000 - 21 88 2140 199.
IME036	32t 2 axle van	21 88 2140 201 - 21 88 2140 224.
IME037	32t 2 axle van	21 88 2140 406 - 21 88 2140 409, 21 88 2140 412 - 21 88 2140 415, 21 88 2140 417, 21 88 2140 418, 21 88 2140 421, 21 88 2140 422.

BELGIAN NATIONAL RAILWAYS (B)

Country 88

OPEN WAGONS

Exchange Condition 21.

<u>Diagram</u>	<u>Description</u>	<u>Vehicle Numbers</u>
IOE377	40t 2 axle high sided open	21 88 6094 000 - 21 88 6094 019.

BELGIAN NATIONAL RAILWAYS (B)

Country 88

HOPPERS

Exchange Condition 33.

Diagram DescriptionVehicle Numbers

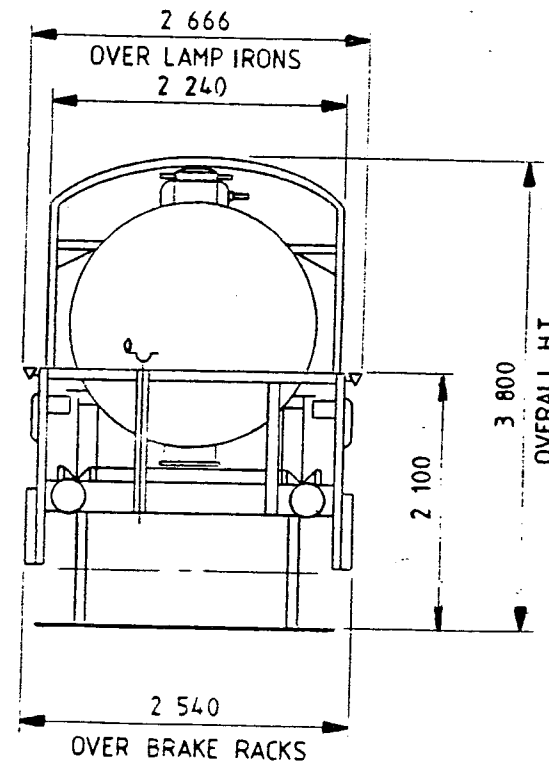
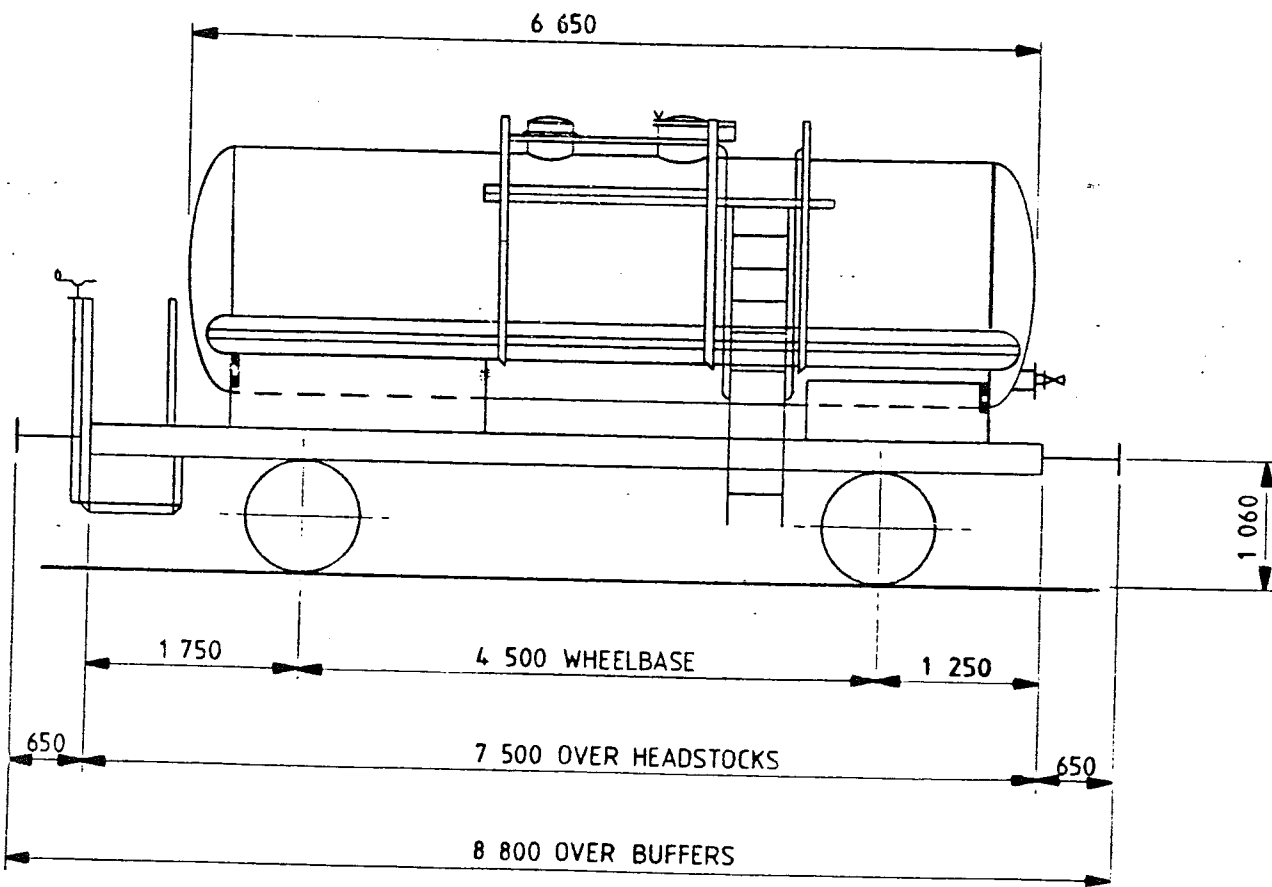
IPE442 80t bogie hopper

33 88 9380 010 - 33 88 9380 053,
33 88 9380 100 - 33 88 9380 110.

32t. GLW. 2 AXLE TANK

ICE 001

	A	B	C	D	TOPS INFORMATION							
	20-7t	21t	21t		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
					CARKND	50 mile/h UP TO mile/h ABOVE 32 tonne GLW		6t. FORCE UP TO 14t. FORCE ABOVE 18t. GLW		4	3	
					I C B B							



TARE -	11 200 Kg
CAPACITY, WEIGHT-	21t
CAPACITY, VOLUME-	20m ³
FLOOR AREA -	-
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	BT 1229-2

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370HD
WHEELS -	ϕ 1m
JOURNALS -	

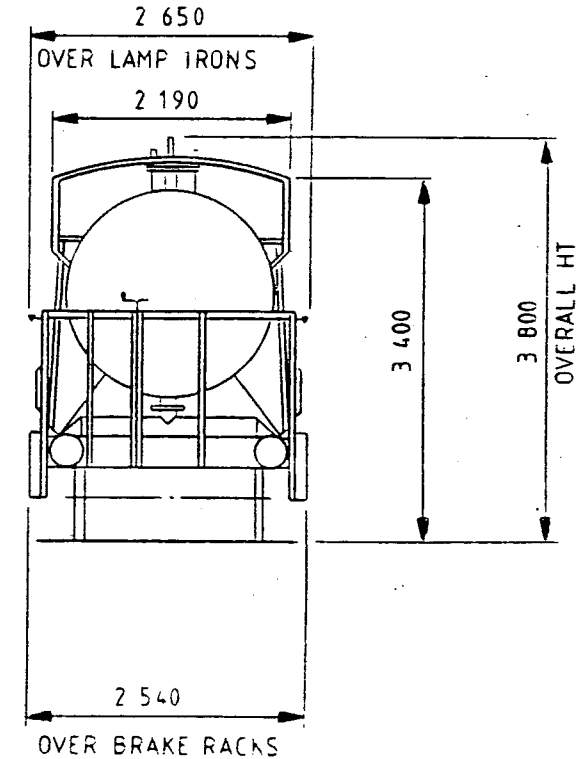
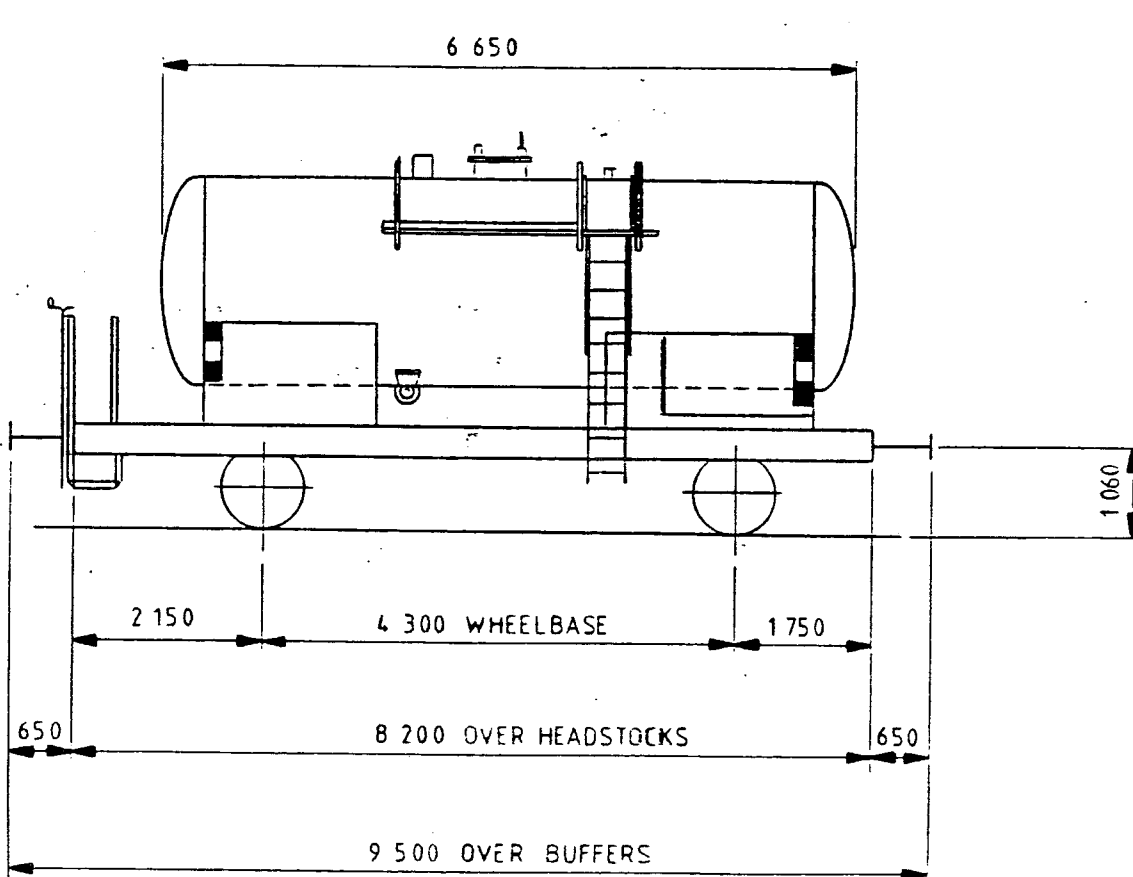
TYPE -	Zef
WAGON No. -	23 80 7197 401
BUILDER -	
OWNER -	BADISCHE ANILIN & SODA WORKS

ISSUE 1

32t GLW 2 AXLE TANK

ICE 002

				TOPS INFORMATION						
A	B	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
17.51				CARKND	50 mile/h UP TO	6t FORCE UP TO	17t GLW	5	3	
				I C A B	mile/h ABOVE	32 tonne GLW				



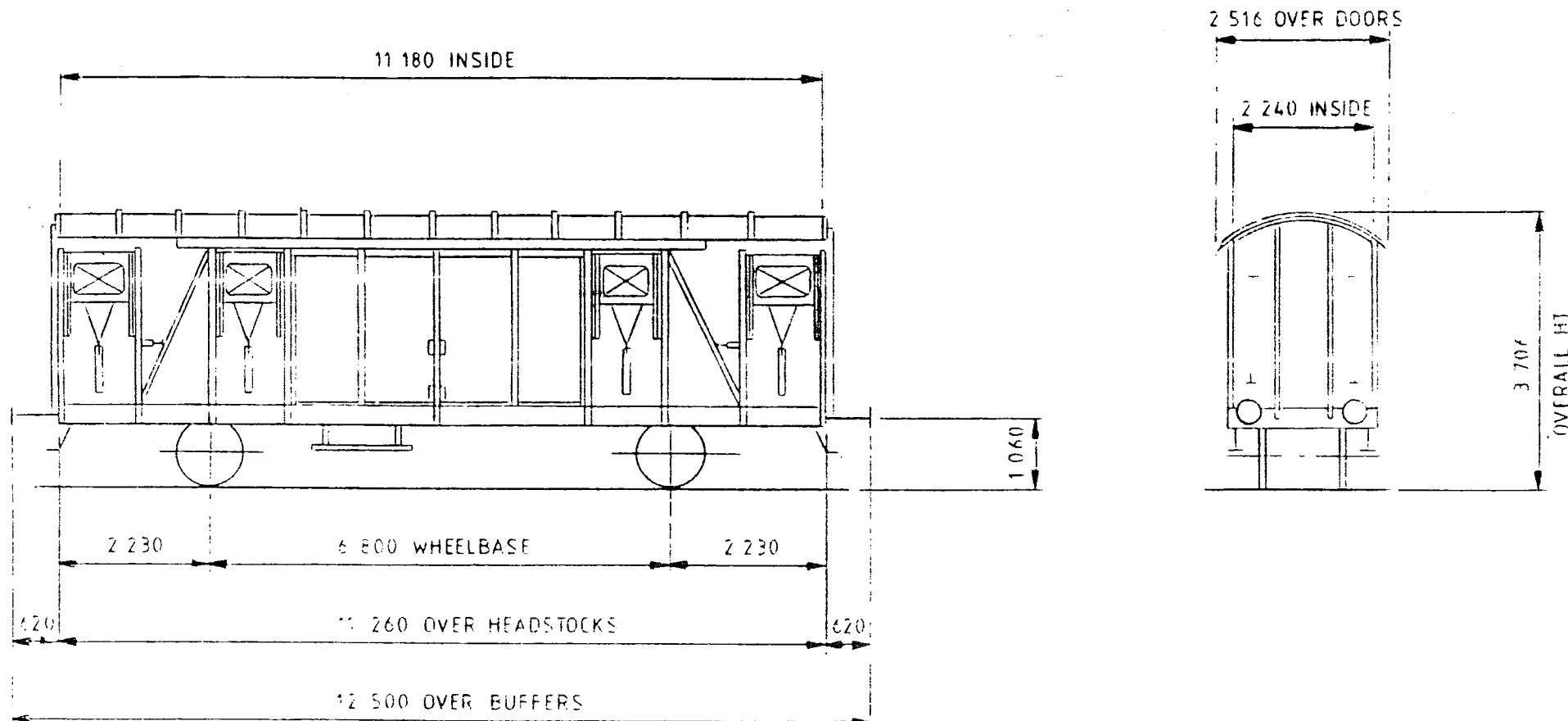
TARE -	14 000 kg
CAPACITY, WEIGHT -	17.5 t
CAPACITY, VOLUME -	15 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	BT 250-2

BRAKE -	AIR
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1 000
JOURNALS -	

TYPE -	Z cfs
WAGON No. -	23 80 7391 722
BUILDER -	
OWNER -	BADISCHE ANIUN & SODA WORK

ISSUE 1

A E C I		TOPS INFORMATION						
191 231,271	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S 1191,231,271	CARKND	60 mile/h UP TO 39 tonne GLW		5 t FORCE UP TO 23 t GLW		10	6	
	T M B C	60 mile/h ABOVE		18 t FORCE ABOVE				



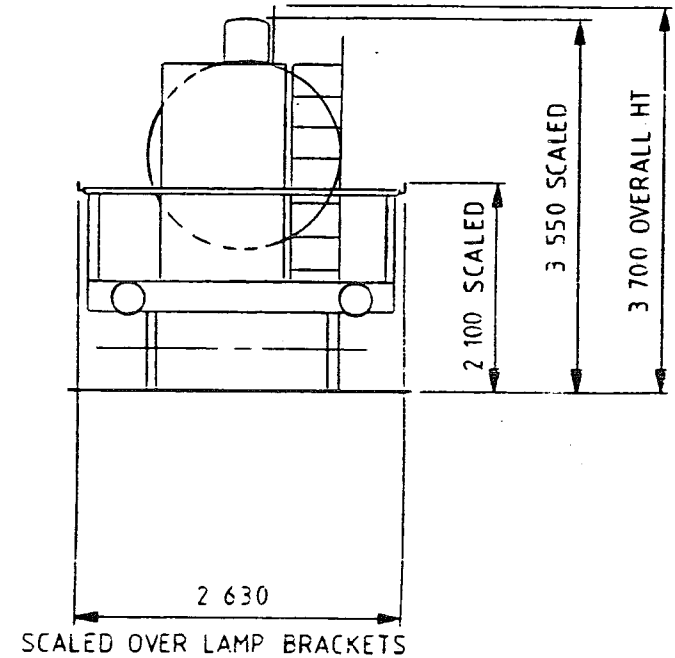
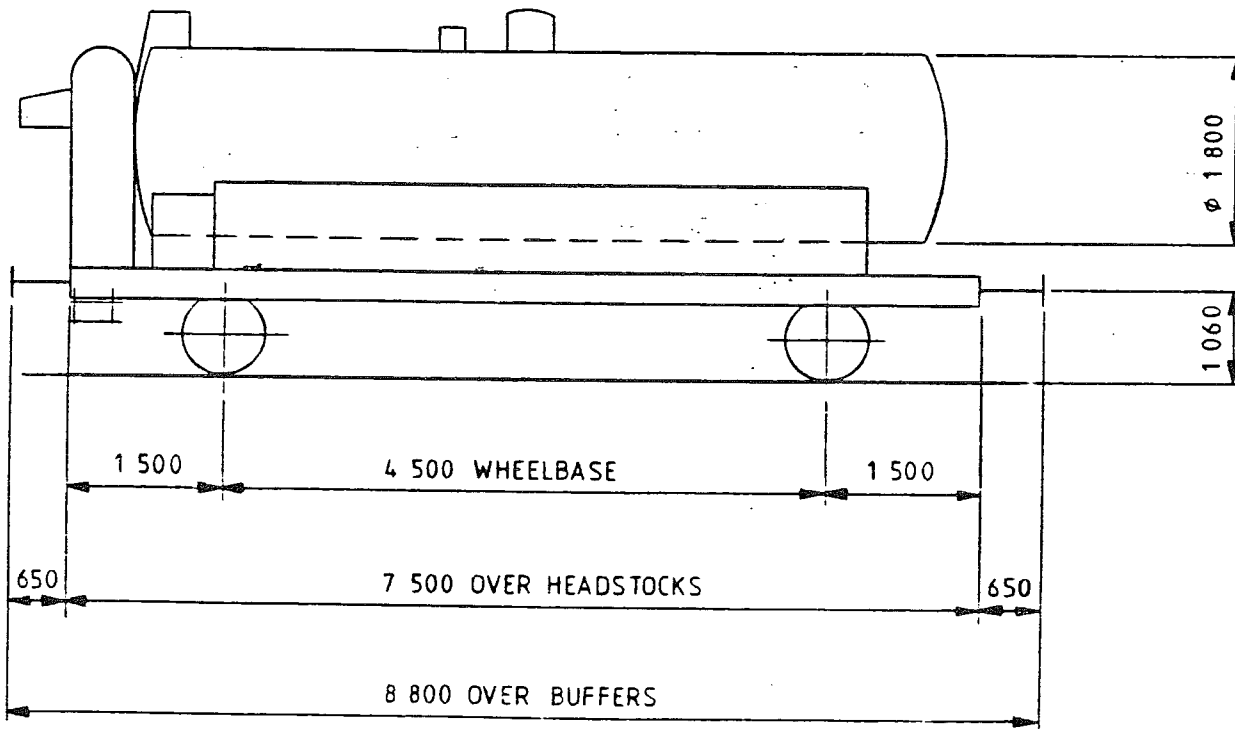
TARE -	12 000 kg
CAPACITY WEIGHT -	27 t
CAPACITY VOLUME -	49 m ³
FLOOR AREA -	25 m ²
MIN CURVE -	60 m
GEN. A/RGT. DPG No.	1 091 071

BRAKE -	AIR & VAC THRO' PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	φ 1 m
JOURNALS -	φ 130

TYPE -	Hts
WAGON No. -	006 - 070
	21 80 2140 072 082
	084 - 149
BUILDER -	WAGON FABRIK
OWNER -	DB

ISSUE 1

	A	B	C	D	TOPS INFORMATION							
	214†	227†	227†		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	214†	227†	227†		CARKND	60 mile/h UP TO mile/h ABOVE 33 tonne GLW		10 † FORCE UP TO 17 † FORCE ABOVE 21 † GLW		4	4	
					I	C	B	B				

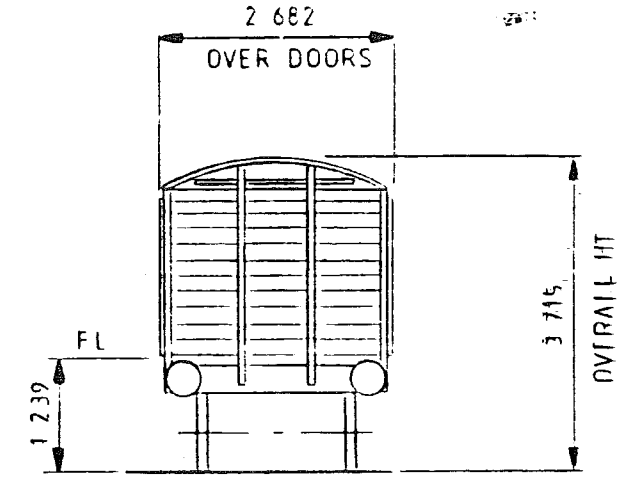
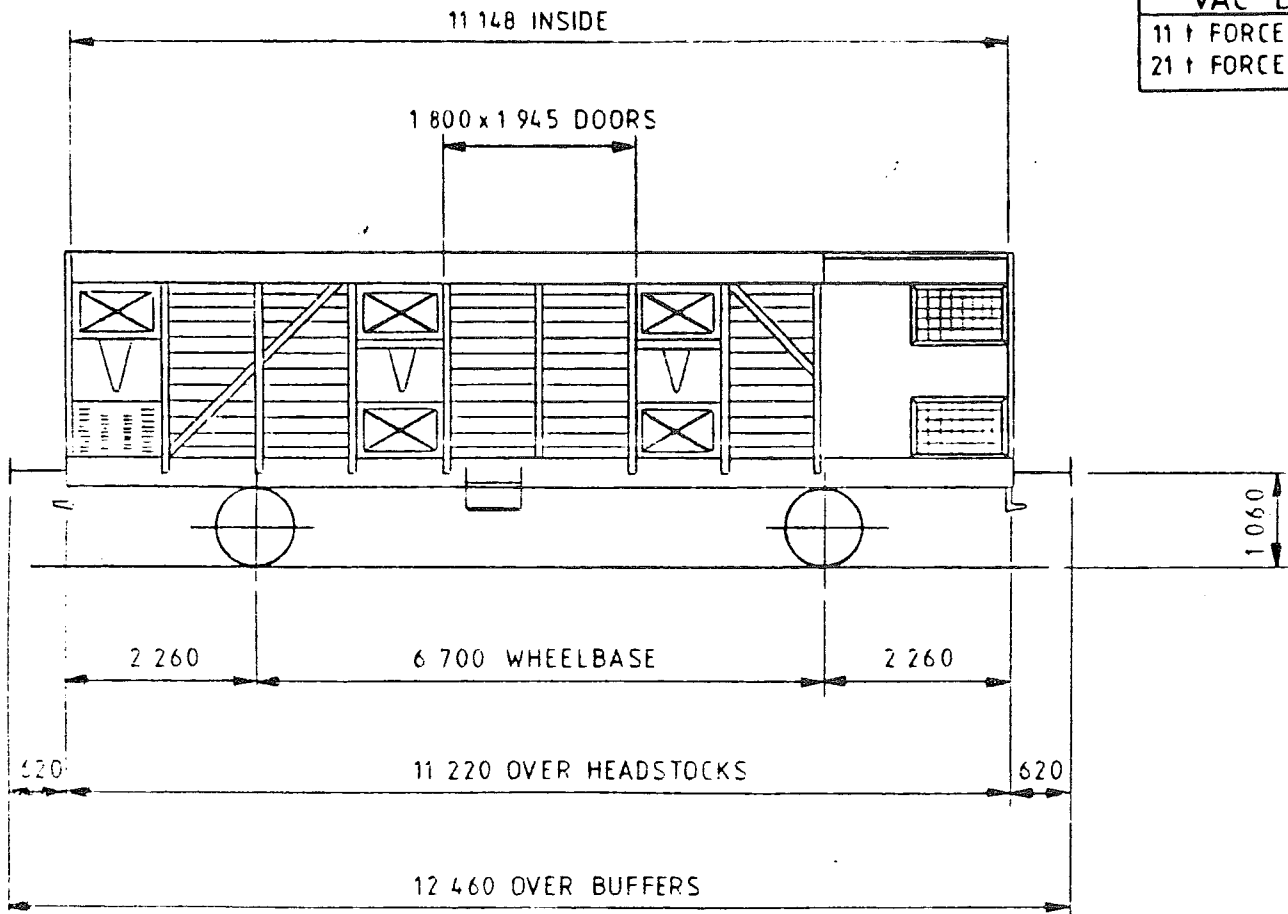


TARE -	10 600 Kg
CAPACITY, WEIGHT-	22.7†
CAPACITY, VOLUME-	15 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	WH167

BRAKE -	AIR & VAC. THRO' PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1 m
JOURNALS -	

TYPE -	Zfkks
WAGON No. -	23 80 7490 000, 001
BUILDER -	HULS CHEMICAL WORKS
OWNER -	DB

	A	B	C	D	TOPS INFORMATION							
	19 t	23 t	27 t		AARKND	OPERATING SPEED		AIR BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	19 t	23 t	27 t		CARKND	60	mile/h UP TO	11 t FORCE UP TO	23 t GLW	10	6	
					I T X M		mile/h ABOVE	18 t FORCE ABOVE				
							40 tonne GLW	VAC BRAKE				
								11 t FORCE UP TO	26 t GLW			
								21 t FORCE ABOVE				

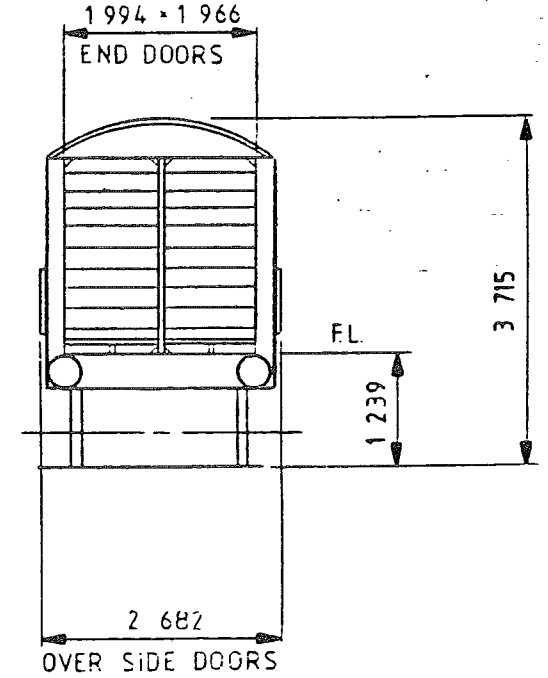
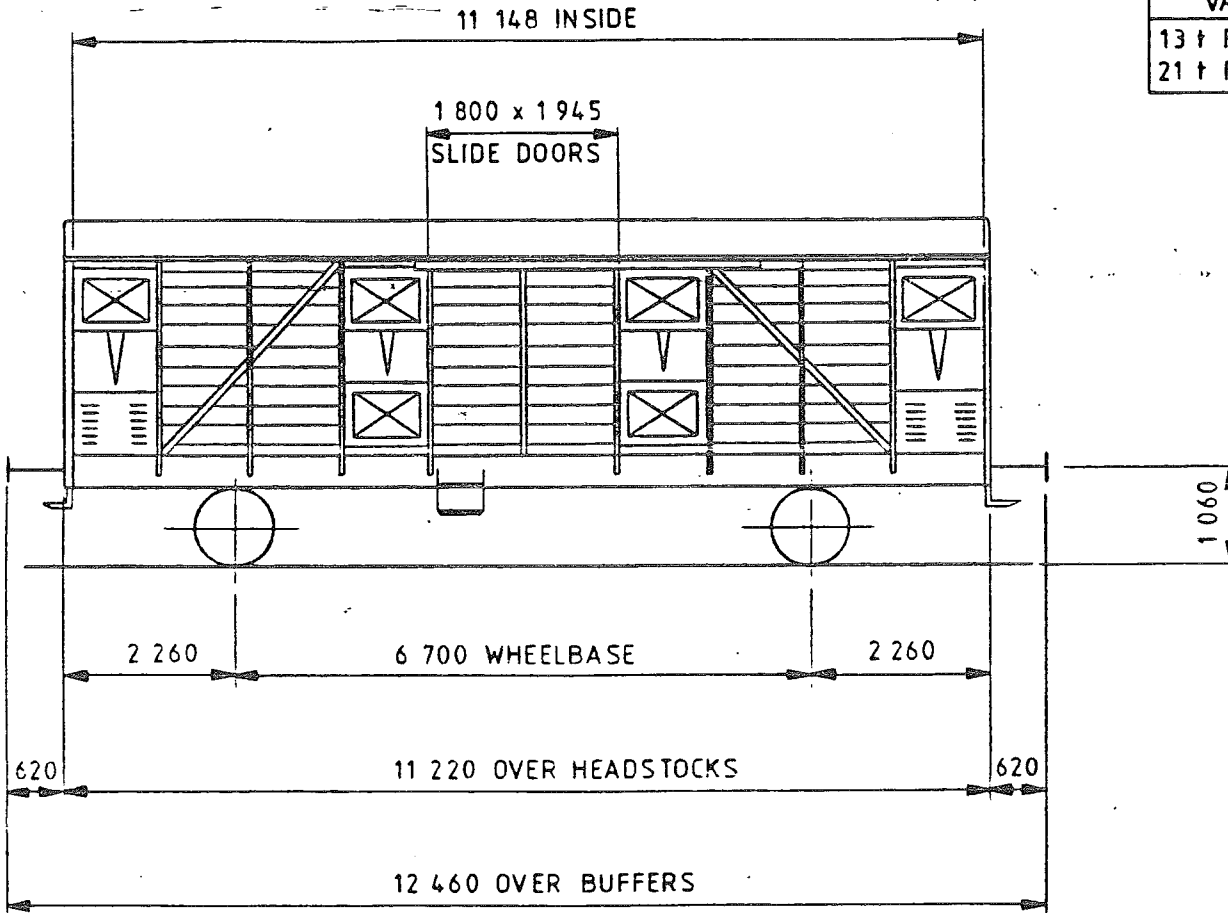


TARE -	12 700 Kg
CAPACITY, WEIGHT -	27 t
CAPACITY, VOLUME -	53.5 m ³
FLOOR AREA -	26 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.	04 ^E 406

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC ϕ 460
WHEELS -	ϕ 1 006
JOURNALS -	

TYPE -	Hfhs
WAGON No. -	24 71 2148 { 000 - 395 693 - 990,952
BUILDER -	LINKE, HOFMANN, BUSCH
OWNER -	TRANSFESA

				TOPS INFORMATION						
	A	B	C	D	AARKND	OPERATING SPEED	AIR BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	18.5t	22.5t	26.5t		CARKND	60 mile/h UP TO	11 t FORCE UP TO	10	6	
S	18.5t	22.5t	26.5t		I T X N	mile/h ABOVE 40 tonne GLW	18 t FORCE ABOVE	23 t GLW		
							VAC. BRAKE			
							13 t FORCE UP TO	26 t GLW		
							21 t FORCE ABOVE			



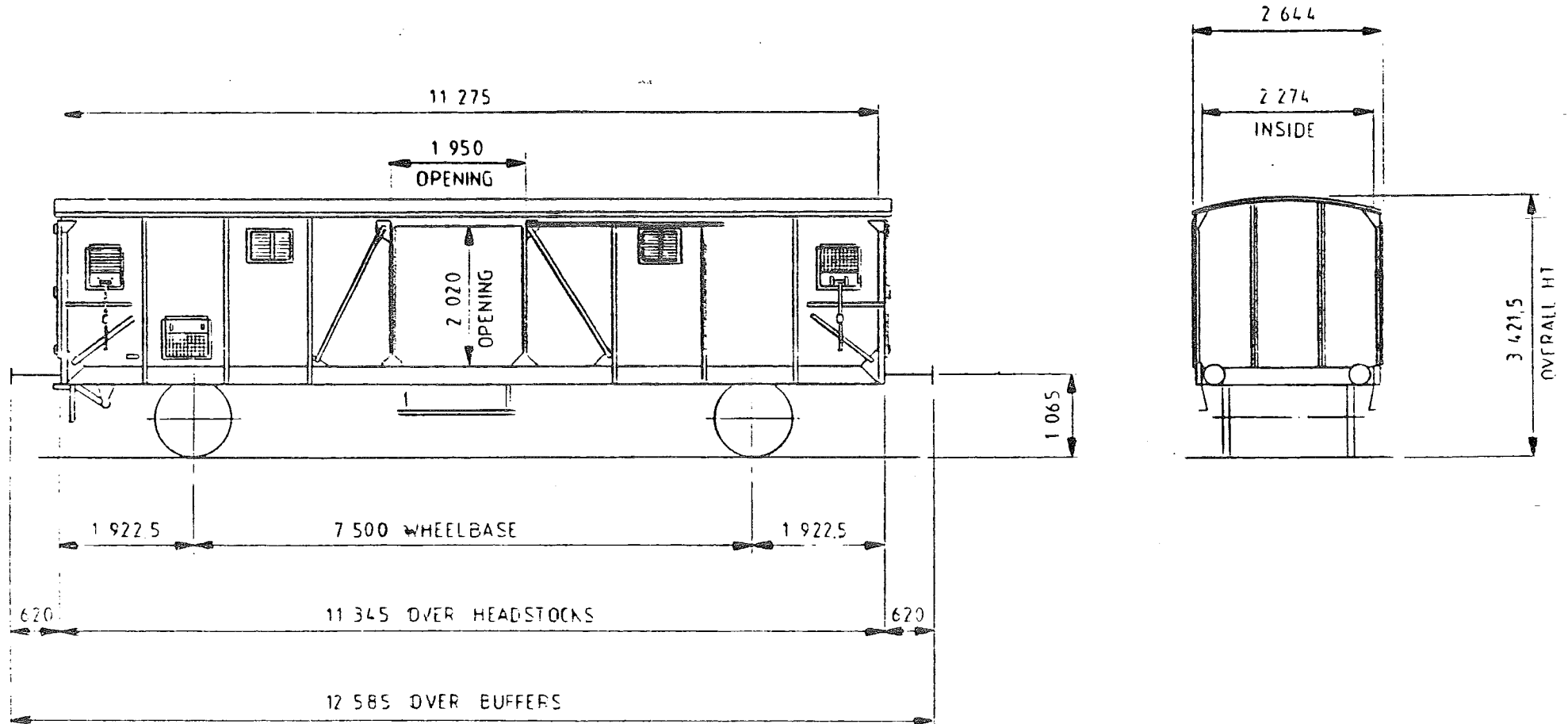
TARE -	13 100 Kg
CAPACITY, WEIGHT -	26.5t
CAPACITY, VOLUME -	53.5 m ³
FLOOR AREA -	26 m ²
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	04D

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 460
WHEELS -	ϕ 1 006
JOURNALS -	

TYPE -	Hcfhs
WAGON No. -	24 71 2147 000 - 487
BUILDER -	LINKE - HOFMANN - BUSCH
OWNER -	TRANSFESA

ISSUE 1

A E C E		TOPS INFORMATION							
201		44RKN	OPERATING SPEED		AIR BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S		3ARKN	60 mile/h UP TO mile/h ABOVE 32 tonne GLW		61 FORCE UP TO 121 FORCE ABOVE 151 GLW		10	3	
		I M X C							

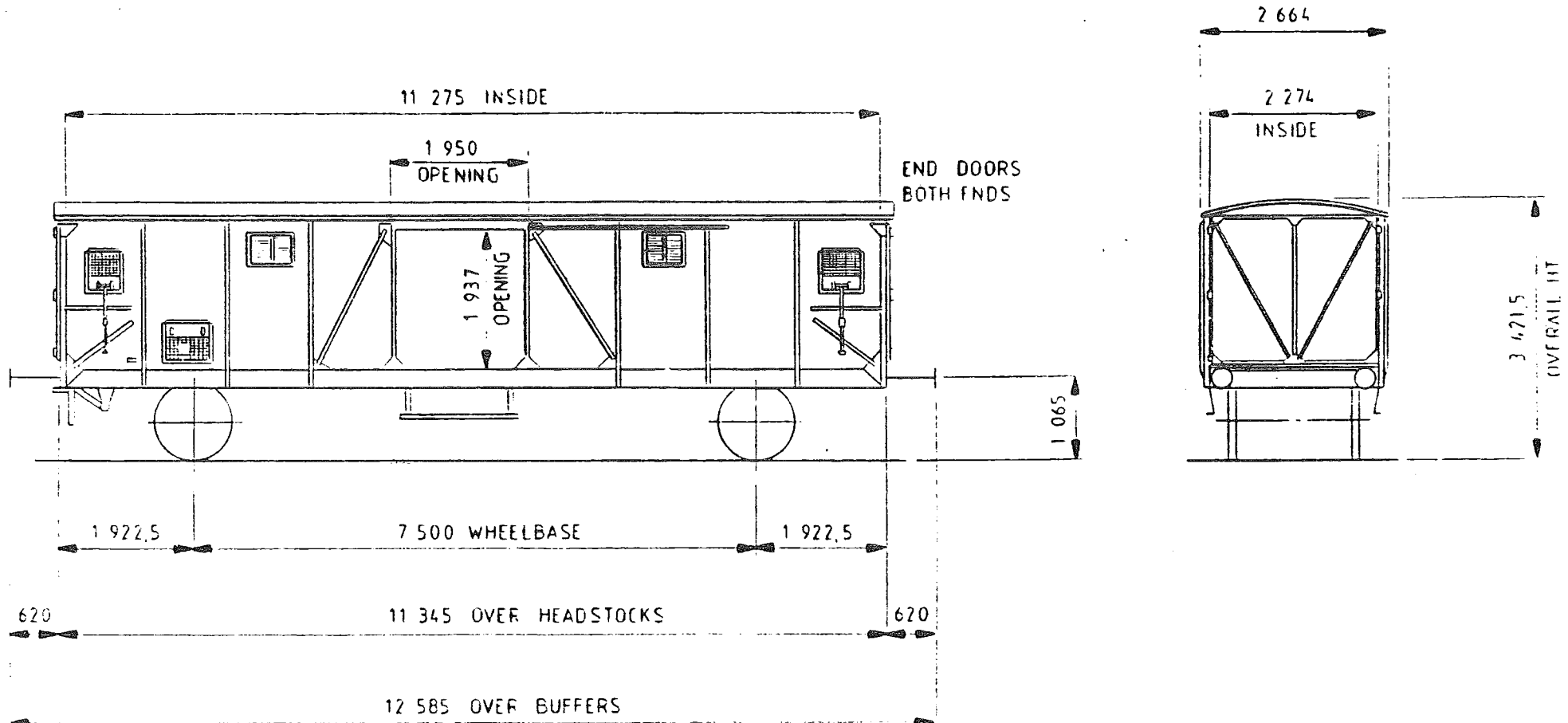


TARE -	12 080 Kg
CAPACITY, WEIGHT-	201
CAPACITY, VOLUME-	515 m ³
FLOOR AREA -	25.6 m ²
MIN. CURVE -	60 m
GEN. ASSEMBLY DRG. No.	

BRAKE -	DUAL
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C
BUFFERS -	HYDRAULIC
WHEELS -	ø1 000
JOURNALS -	ø 130

TYPE -	H 1 s
WAGON No. -	21 86 2140 000-199
BUILDER -	
OWNER -	S.N.C.E

A B C D		TOPS INFORMATION						
	201	AARND	OPERATING SPEED		AIR BRAKE FORCE DATA	EXCESS LENGTH	RA (GLW)	DESIGN SHEET
S	201	CARND	60 mile/h UP TO	32 tonne GLW	6t FORCE UP TO	10	3	
		MIX E	mile/h ABOVE		12t FORCE ABOVE			



TARE -	12 080 Kg
CAPACITY WEIGHT -	20t
CAPACITY VOLUME -	51 m ³
FLOOR AREA -	25.6 m ²
MIN. CURVE -	60 m
GEN. ARREST DRG. NO. -	

BRAKE -	DUAL
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C
BUFFERS -	HYDRAULIC
WHEELS -	φ 1000
JOURNALS -	φ 130

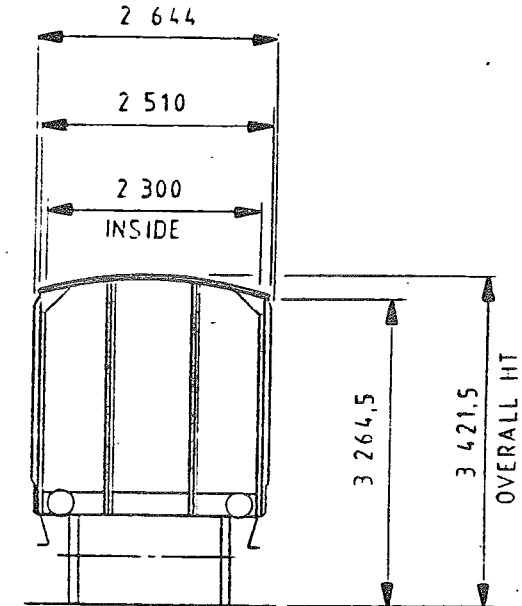
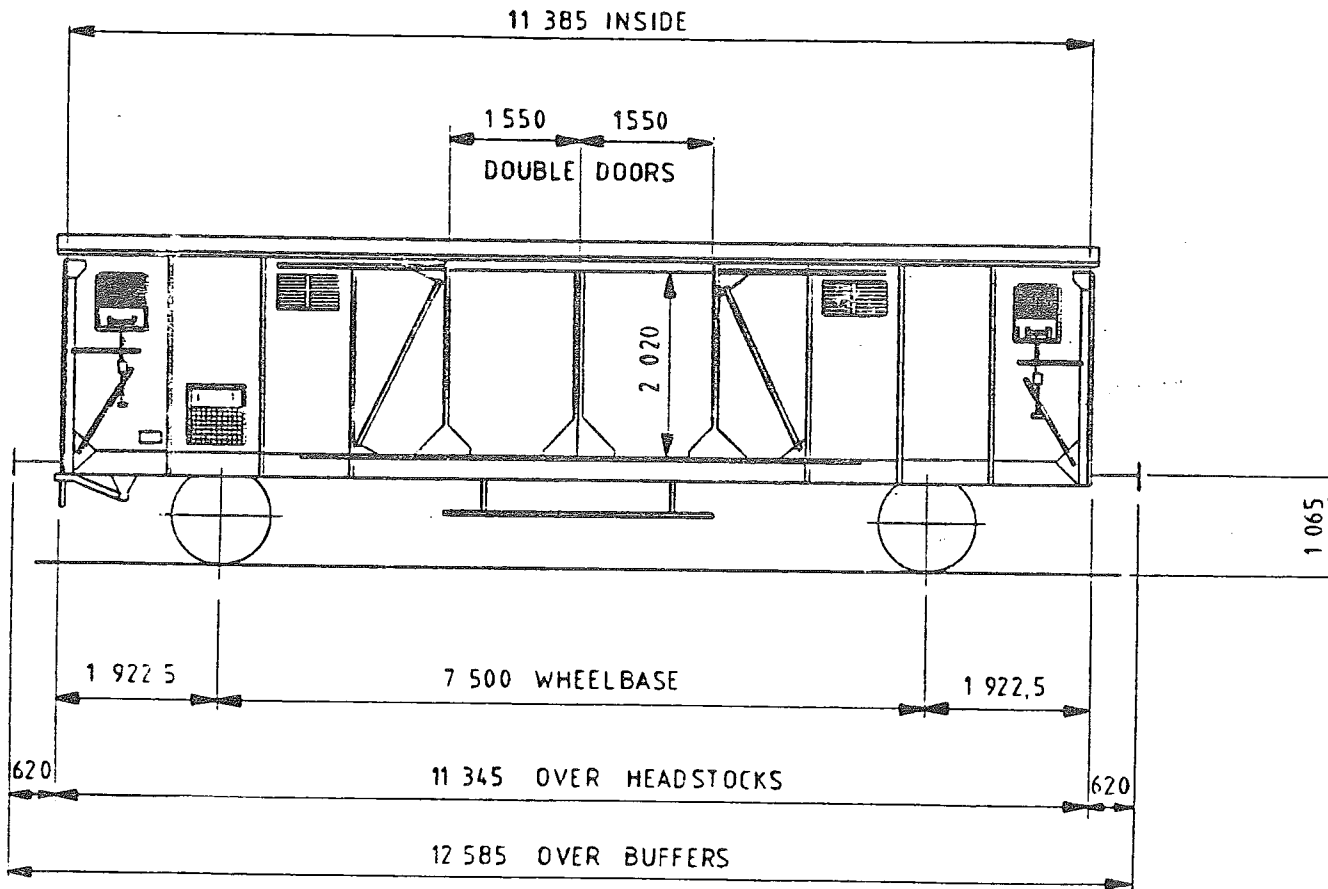
TYPE -	H 1 s
WAGON No. -	21 8E 2140 201 - 224
	NOT INCL
BUILDER -	
OWNER -	S.N.C.E

ISSUE 1

32t GLW 2 AXLE VAN

IME 037

					TOPS INFORMATION							
	A	S	C	D	AARKND	OPERATING SPEED		AIR BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
		201			CARKND	60 mile/h UP TO		61 FORCE UP TO		10	3	
S		201			I M X C	32 tonne GLW		121 FORCE ABOVE				
						mile/h ABOVE		151 GLW				



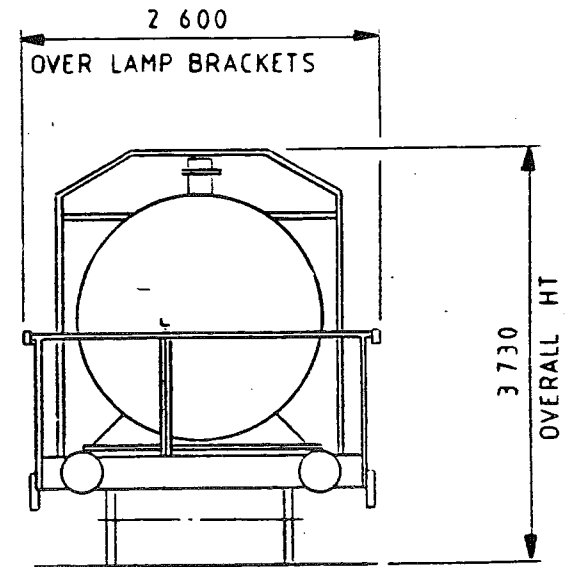
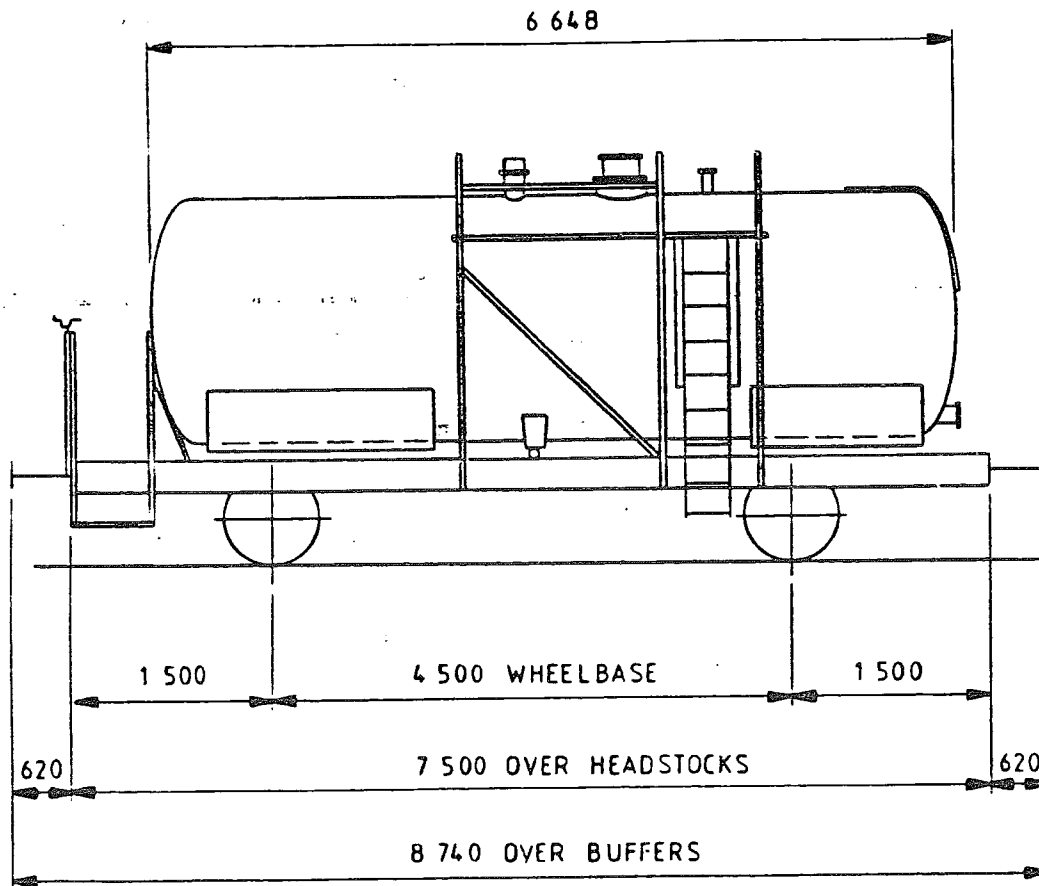
TARE -	12 000 kg
CAPACITY, WEIGHT -	201
CAPACITY, VOLUME -	51 m ³
FLOOR AREA -	25.63 m ²
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	

BRAKE -	DUAL
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC
WHEELS -	∅ 1 000
JOURNALS -	∅ 130

TYPE -	H1s
WAGON No. -	21 88 2140 406 - 409, 412 - 415, 417, 418, 421, 422
BUILDER -	
OWNER -	SNCB

ISSUE 1

					TOPS INFORMATION								
	A	B	C	D	AARKND		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	185t	22.5t	26.5t		CARKND		60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW		7t FORCE UP TO 18t FORCE ABOVE 23t GLW				
S	18.5t	22.5t	22.5t		I	C	B	B			4	6	



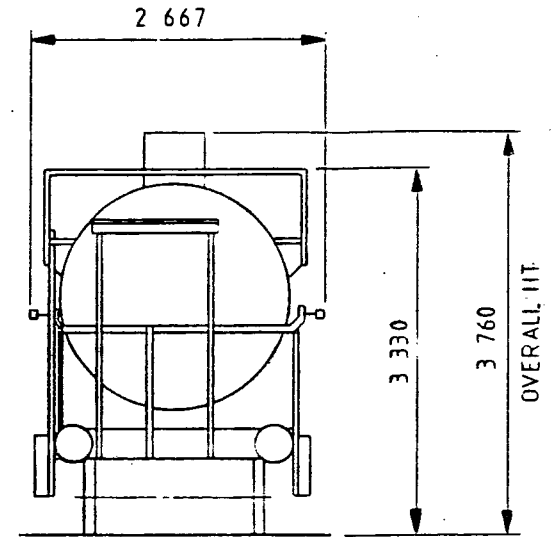
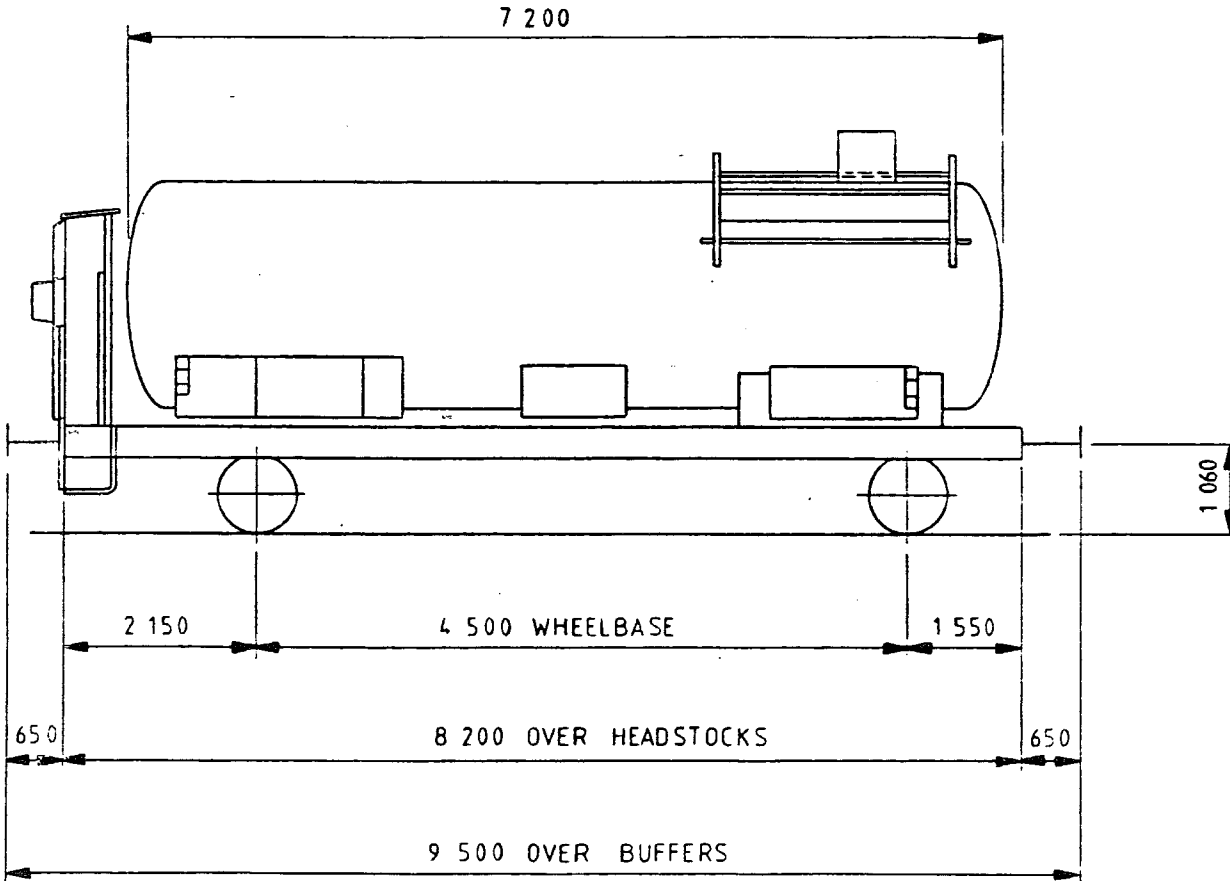
TARE -	13 500 Kg
CAPACITY, WEIGHT-	26.5t
CAPACITY, VOLUME-	15 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	BT 320-2

BRAKE -	AIR & VAC THRO PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

TYPE -	Z c f s
WAGON No. -	23 80 7391 721
BUILDER -	B.A.S.F.
OWNER -	D. B

ISSUE 1

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
16t					CARKND	50 mile/h UP TO mile/h ABOVE		9t FORCE UP TO 17t FORCE ABOVE		5	3	
					I C A B	32 tonne GLW		21t GLW				



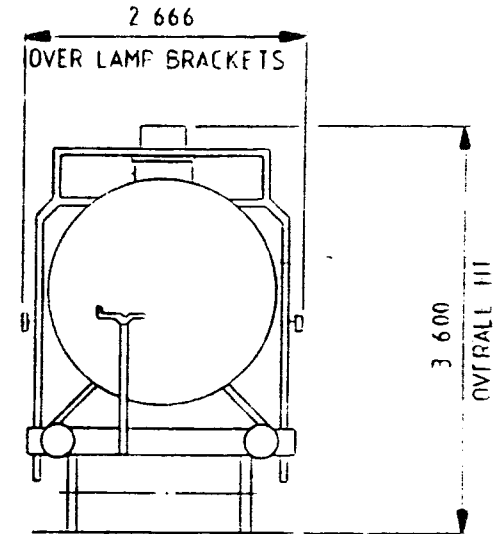
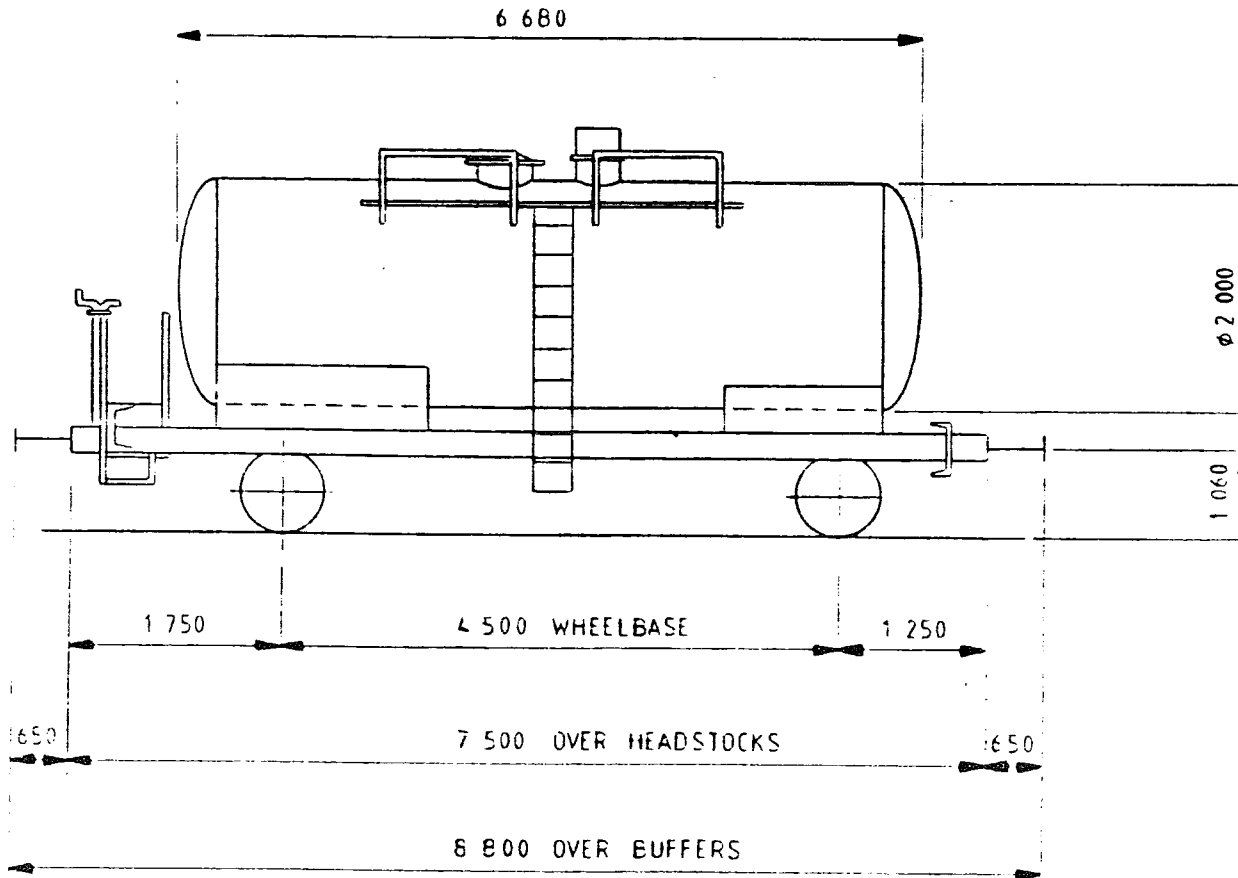
TARE -	15 425Kg
CAPACITY, WEIGHT-	16t
CAPACITY, VOLUME-	20 m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ARRGT. DRG. No.-	BT 210-2

BRAKE -	AIR
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

TYPE -	Zfgkx
WAGON No. -	23 80 7288 000
BUILDER -	B. A. S. F.
OWNER -	D. B.

ISSUE 1

	A	B	C	D	TOPS INFORMATION							
	221	261	301		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
					CARKND	50 mile/h UP TO mile/h ABOVE		51 FORCE UP TO 151 FORCE ABOVE		4	6	
					I C A A	40 tonne GLW		191 GLW				

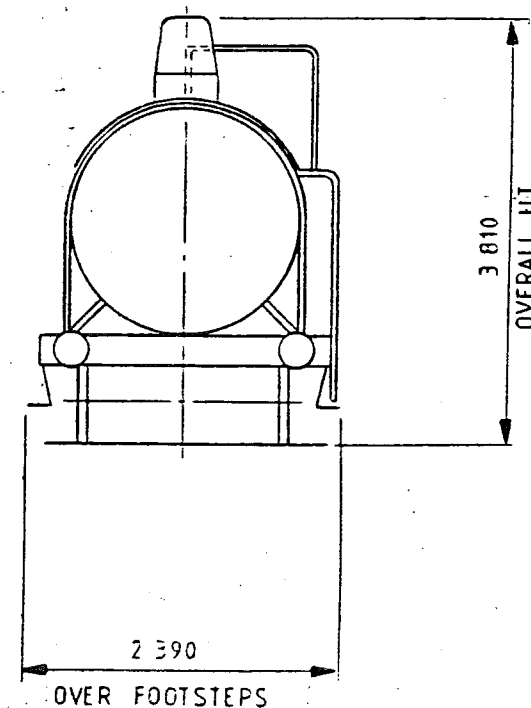
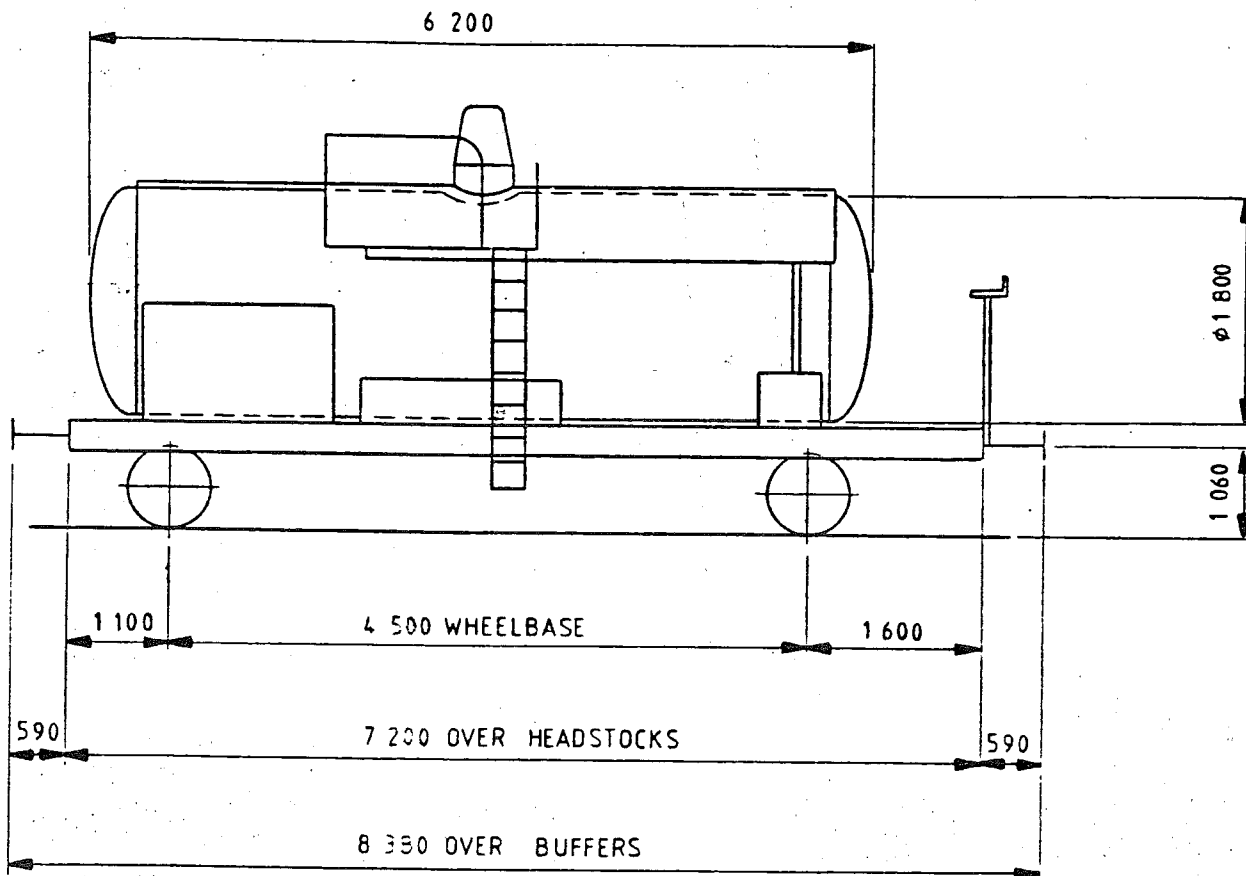


TARE -	10 000 Kg
CAPACITY, WEIGHT -	30
CAPACITY, VOLUME -	20 m ³
FLOOR AREA -	—
MIN. CURVE -	60m
GEN. ARRGT DRG. No. -	BT 1023-2

BRAKE -	AIR
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC 2370 HD
WHEELS -	2940
JOURNALS -	2130

TYPE -	Z e f
WAGON No. -	23 80 7197 402
BUILDER -	B.A.S.F.
OWNER -	D.B.

					TOPS INFORMATION							
A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
18.5t	18.5t	18.5t			CARKND	50 mile/h UP TO mile/h ABOVE 32 tonne GLW		8t FORCE UP TO 21t FORCE ABOVE 26 tGLW		4	3	
					I C B A							



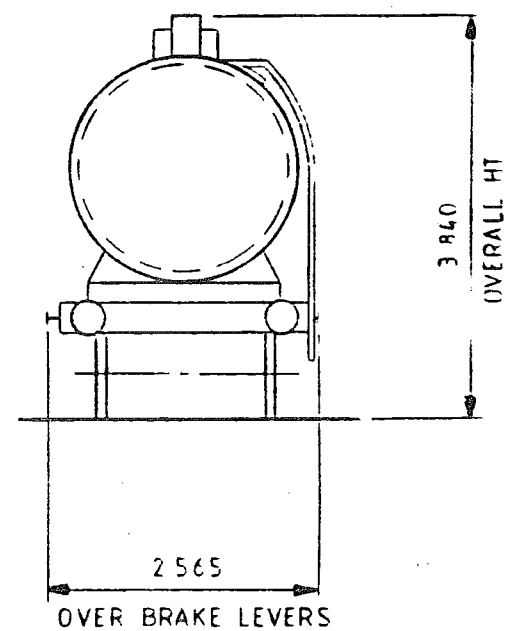
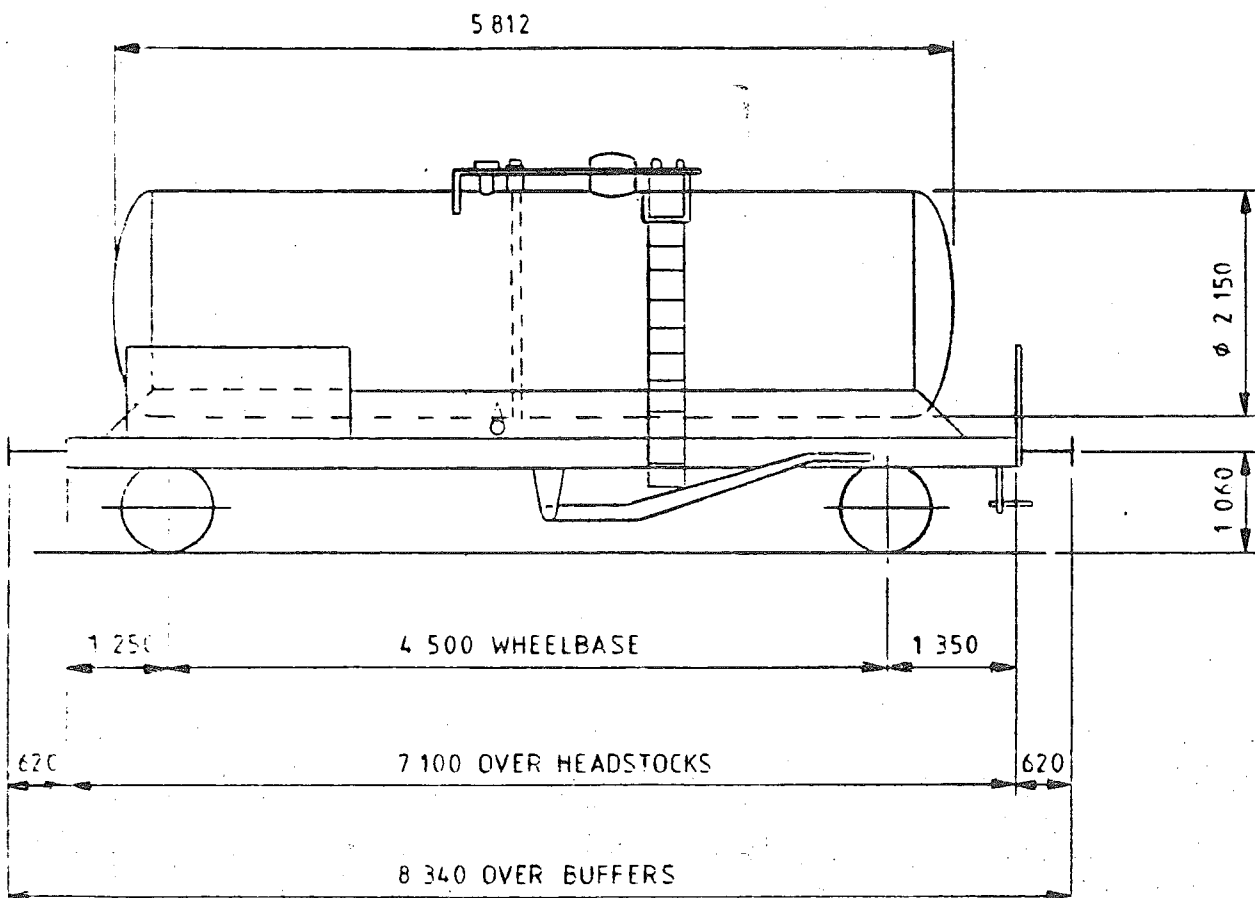
TARE -	13 500 Kg
CAPACITY, WEIGHT-	18.5t
CAPACITY, VOLUME-	14 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No.-	1340

BRAKE -	AIR & VAC. THRO PIPE
SUSPENSION -	SINGLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

TYPE -	Z 1 g k k
WAGON No. -	21 83 7288 000
BUILDER -	
OWNER -	SICEDISON

ISSUE 1

				TOPS INFORMATION						
A	P	C	D	AARKND	OPERATING SPEED	BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
19 81 23 81	27 81			CARKND	60 mile/h UP TO	5 t FORCE UP TO	19 t GLW	4	6	
S	19 81 23 81	23 81		I C B B	50 mile/h ABOVE	36 tonne GLW				



TARE -	12 200 Kg
CAPACITY, WEIGHT -	28 2 t
CAPACITY, VOLUME -	20 m ³
FLOOR AREA -	-
MIN CURVE -	60 m
GEN. APPT DRG. No -	8502 5

BRAKE -	AIR & VAC THRO' PIPE
SUSPENSION -	
COUPLINGS -	UTC
BUFFERS -	HYDRAULIC
WHEELS -	φ1 000
JOURNALS -	φ130

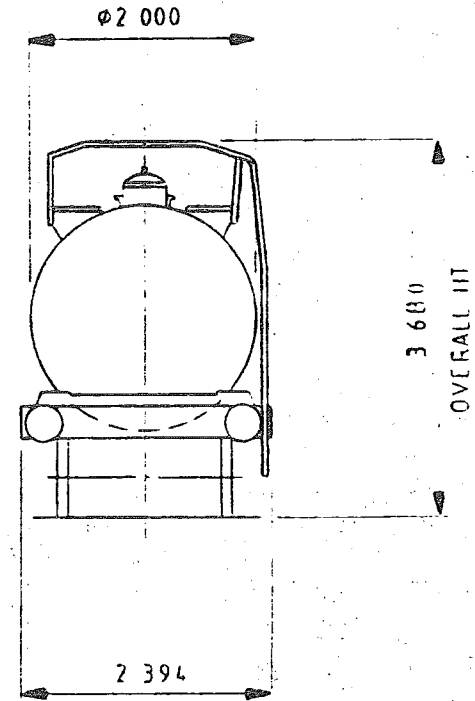
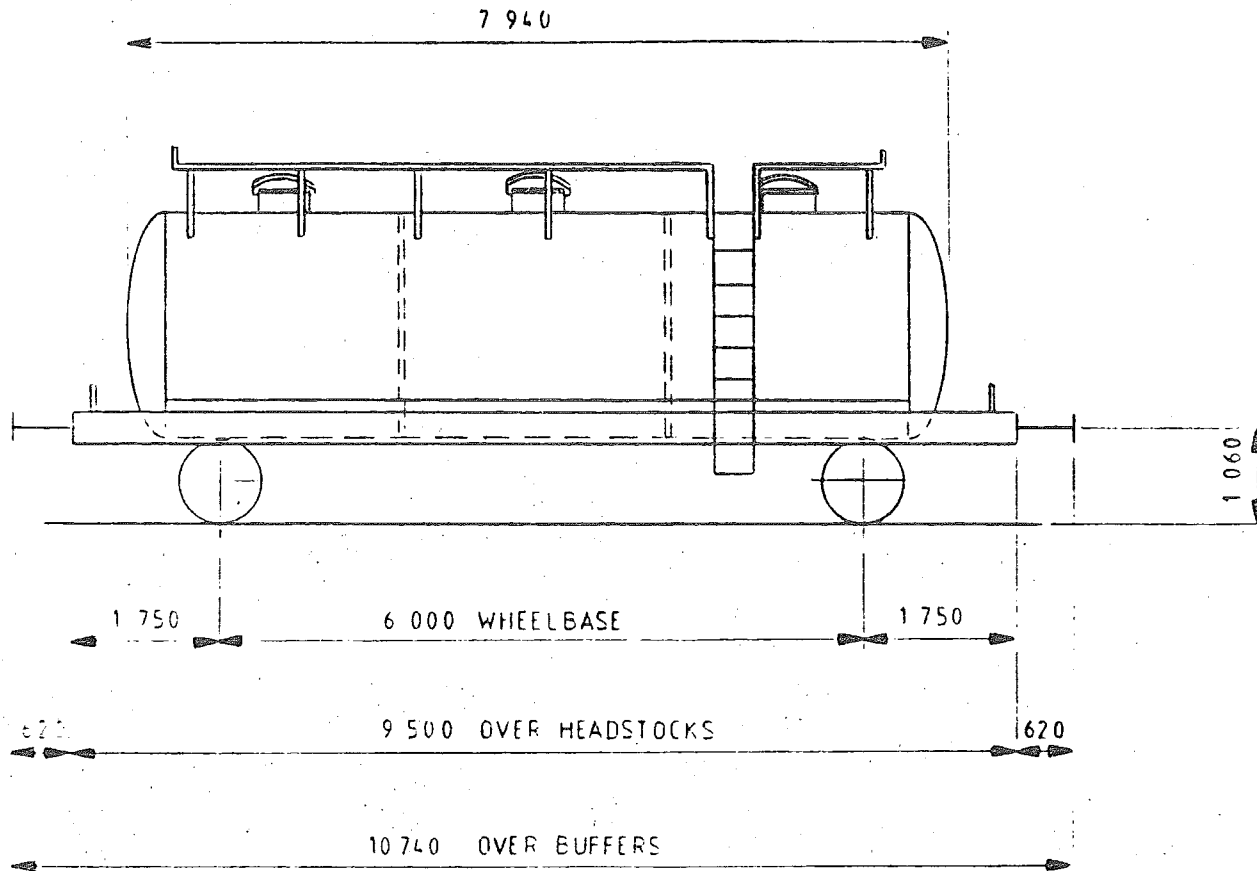
TYPE -	Zefs
WAGON No. -	23 87 7397 500
BUILDER -	FAUVET - GIREL
OWNER -	Roquette

ISSUE 1

401 GLW 2 AXLE TANK

ICE 091

				TOPS INFORMATION							
A	B	C	D	AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
19-81	23-81	27-81			60 mile/h UP TO	36 tonne GLW	51 FORCE UP TO	191 GLW	7	ε	
S	19-81	23-81	23-81	CARKND	50 mile/h ABOVE		151 FORCE ABOVE				
				I	C	X	W				



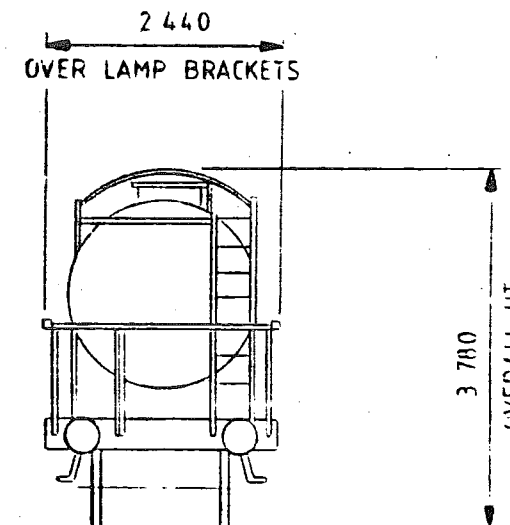
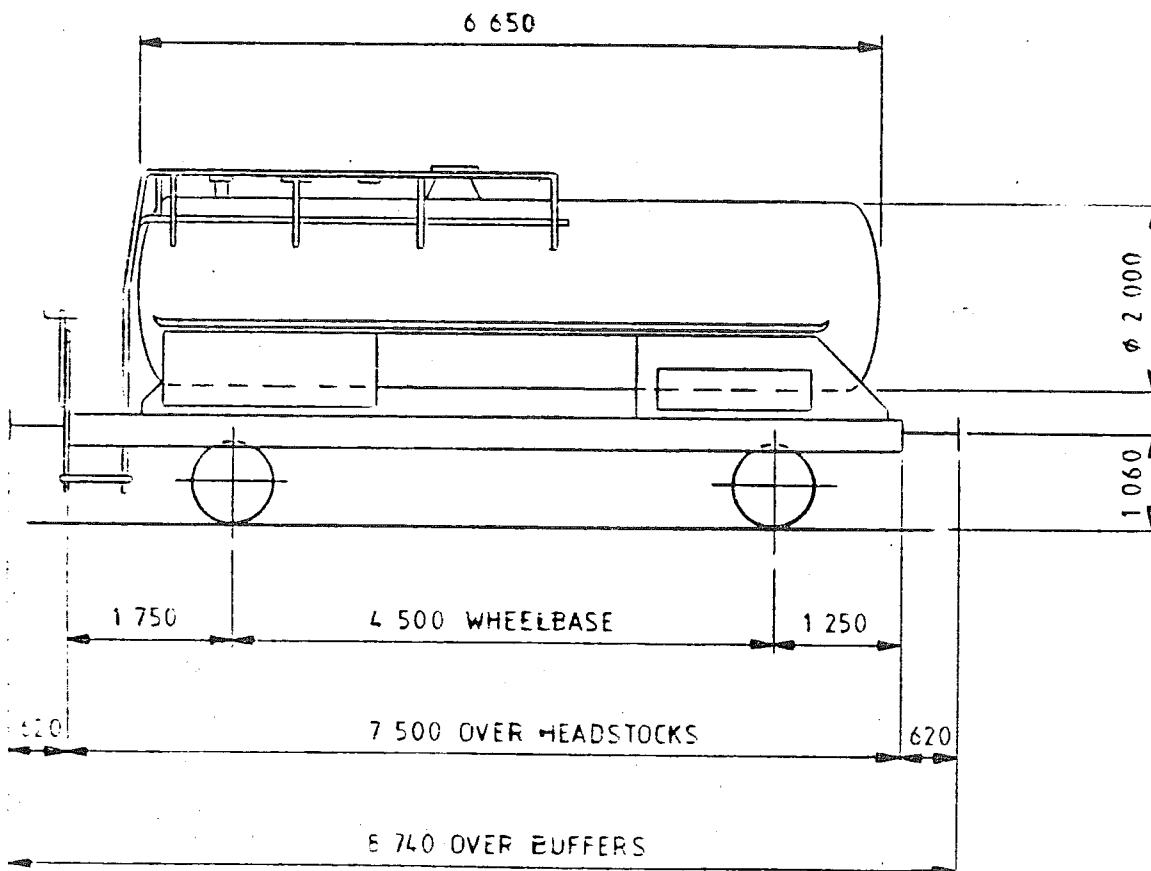
TARE -	12 200 Kg
CAPACITY, WEIGHT-	27-81
CAPACITY, VOLUME-	24 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	7008.01 01

BRAKE -	DUAL
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ø 460HD
WHEELS -	ø 1 006
JOURNALS -	ø 130

TYPE -	Z.I.s.
WAGON No. -	24 80 7390 400-404
BUILDER -	WAGGONFABRIK
OWNER -	DANZAS

ISSUE

A E C D		TOPS INFORMATION						
207124712871		OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 4	RA (GLW) 6	DESIGN SHEET
S 207124712471		60 mile/h UP TO 50 mile/h ABOVE 36 tonne GLW		5 t FORCE UP TO 15 t FORCE ABOVE 19 t GLW				
		CAPAND						
		I E A B						



TARE -	11 300 Kg
CAPACITY, WEIGHT -	28 7t
CAPACITY, VOLUME -	19 m ³
FLOOR AREA -	-
MIN. CURVE -	60 m
GEN. ASSEMBLY DRG. No. -	H 7200-2

BRAKE -	AIR
SUSPENSION -	DOUBLE LINK
COUPLINGS -	UIC
BUFFERS -	HYDRAULIC
WHEELS -	φ 1m
JOURNALS -	φ 130

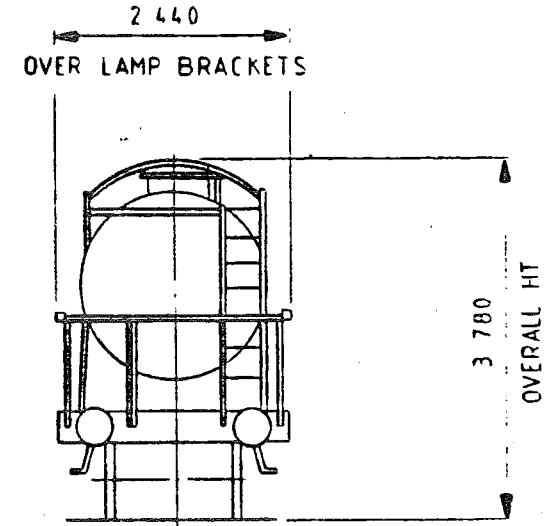
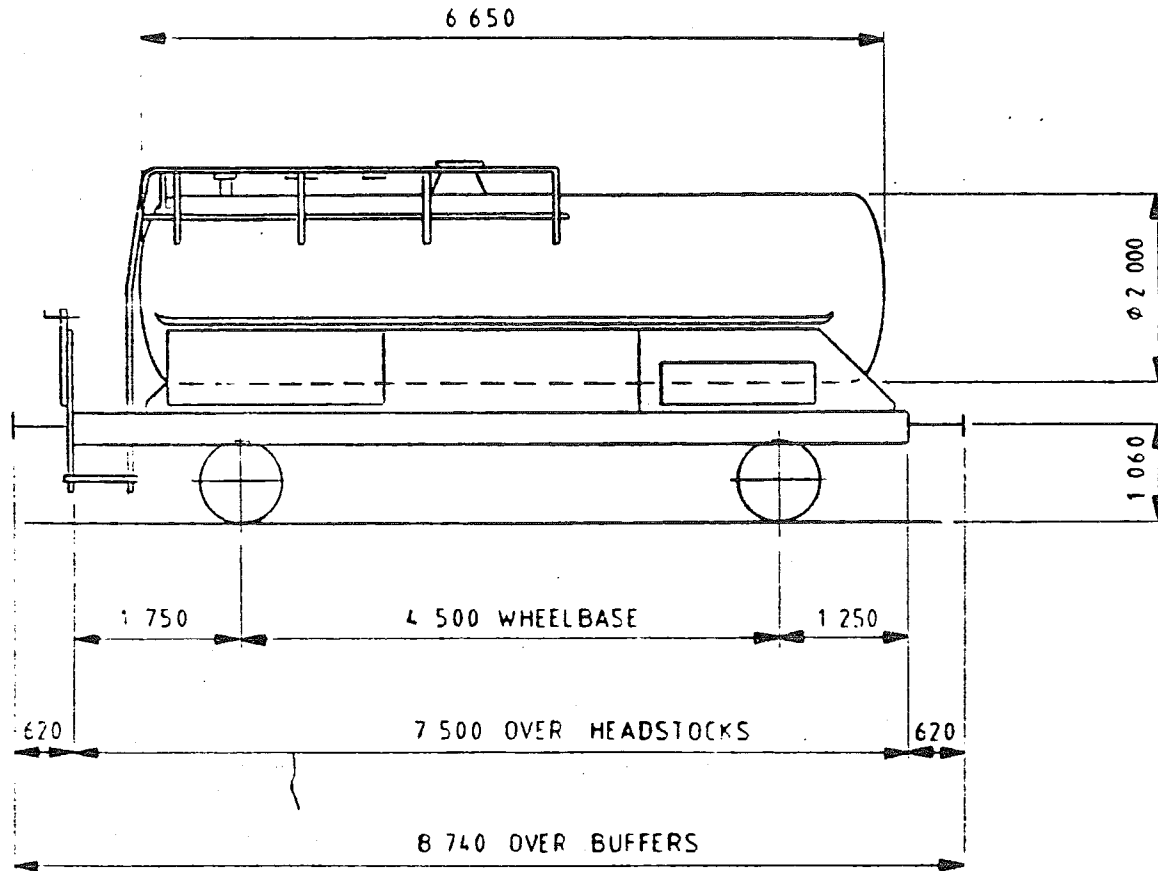
TYPE -	Zcfs
WAGON No. -	23 80 7391 700
BUILDER -	HULS
OWNER -	DB

ISSUE 1

40t GLW 2 AXLE TANK

ICE 110

TOPS INFORMATION													
	A	B	C	D		AARKND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH	RA (GLW)	DESIGN SHEET
	21-31	25-31	29-31			CARKND	60 mile/h UP TO	36 tonne GLW	51 FORCE UP TO	191 GLW	4	6	
S	21-31	25-31	25-31			I C A B	50 mile/h ABOVE		151 FORCE ABOVE				



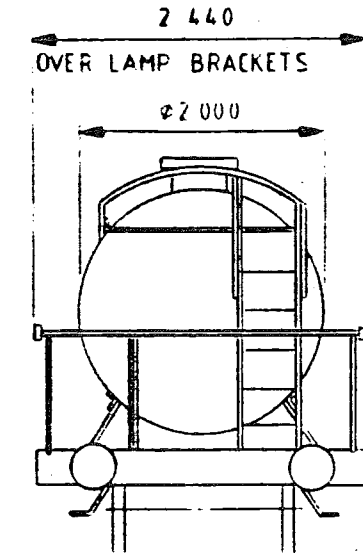
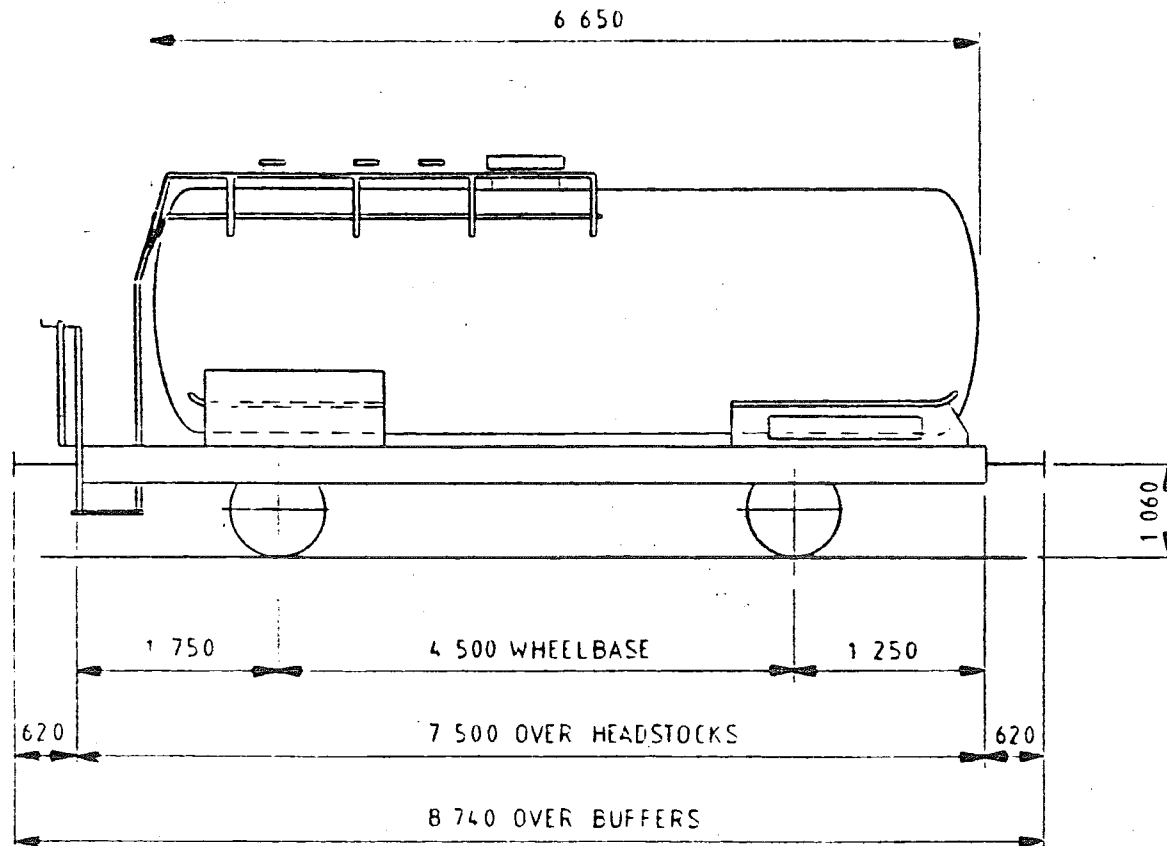
TARE -	10 650 Kg
CAPACITY, WEIGHT -	29.31
CAPACITY, VOLUME -	19 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. ARRGT. DRG. No. -	H 7602.2

BRAKE -	AIR
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1 000
JOURNALS -	ϕ 130

TYPE -	Z.c.f.s
WAGON No. -	23 80 7391 701
BUILDER -	HULS
OWNER -	D.B.

ISSUE 1

A E C D		TOPS INFORMATION							
	18-41, 22-41, 26-41	AARXND	OPERATING SPEED		BRAKE FORCE DATA		EXCESS LENGTH 4	RA (GLW) 6	DESIGN SHEET
S	18-41, 22-41, 22-41	CARKND	60 mile/h UP TO 50 mile/h ABOVE	40 tonne GLW	61 FORCE UP TO 151 FORCE ABOVE	19t GLW			
		I C E E							



TARE -	13 600 Kg
CAPACITY, WEIGHT -	26.4t
CAPACITY, VOLUME -	19.4 m ³
FLOOR AREA -	—
MIN. CURVE -	60 m
GEN. APPGT. DES. NO. -	H7598-2

BRAKE -	AIR & VAC THRO PIPE
SUSPENSION -	DOUBLE LINK
COUPLINGS -	U.I.C.
BUFFERS -	HYDRAULIC ϕ 370 HD
WHEELS -	ϕ 1000
JOURNALS -	ϕ 130

TYPE -	Z cis
WAGON No. -	23 80 7391 702
BUILDER -	HULS CHEMICAL WOP+S
OWNER -	D.E

ISSUE :