THE FIRST AND BIGGEST MANUFACTURER OF ROLLING STOCK IN THE MIDDLE EAST

The most significant advantages

Acquisition of the major part of the domestic market

Collaborate with top technology owners

significant export history

Wide variety of products

The Leading manufacturer of rolling stock in IRAN.

Technology

Products: In order to help the countries transportation industry with an approach based on safety, durability and trust

Innovation

Domestic Market

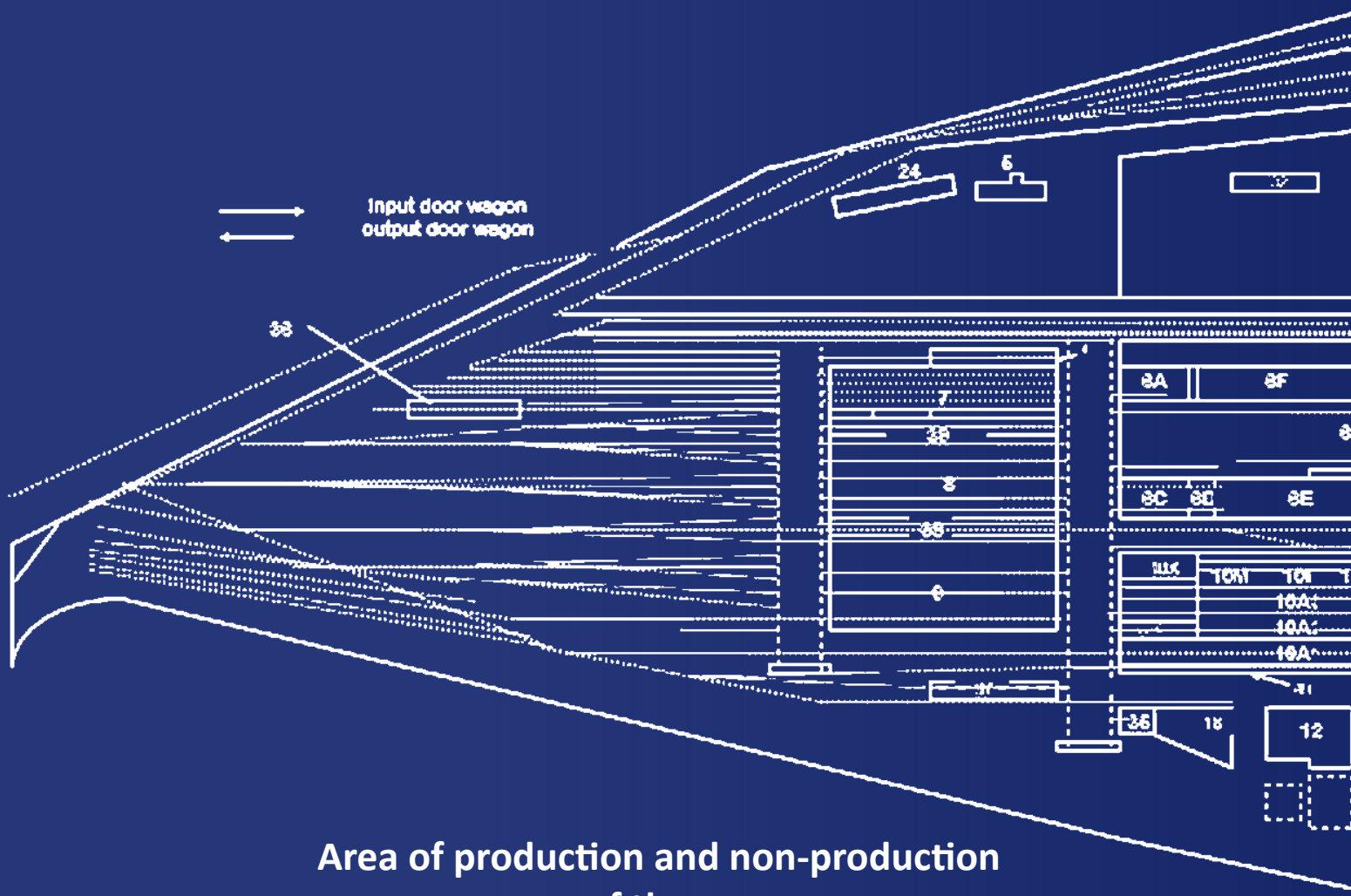
The highest domestic market position is held by Company.

Share of wagons in operation

Freight wagon	Passenger Coach	Metro	Locomotive
11000	420	280	96
Total in operation 27000	Total in operation 2440	Total in operation 1970	Total in operation 935

Share of wagons in local products

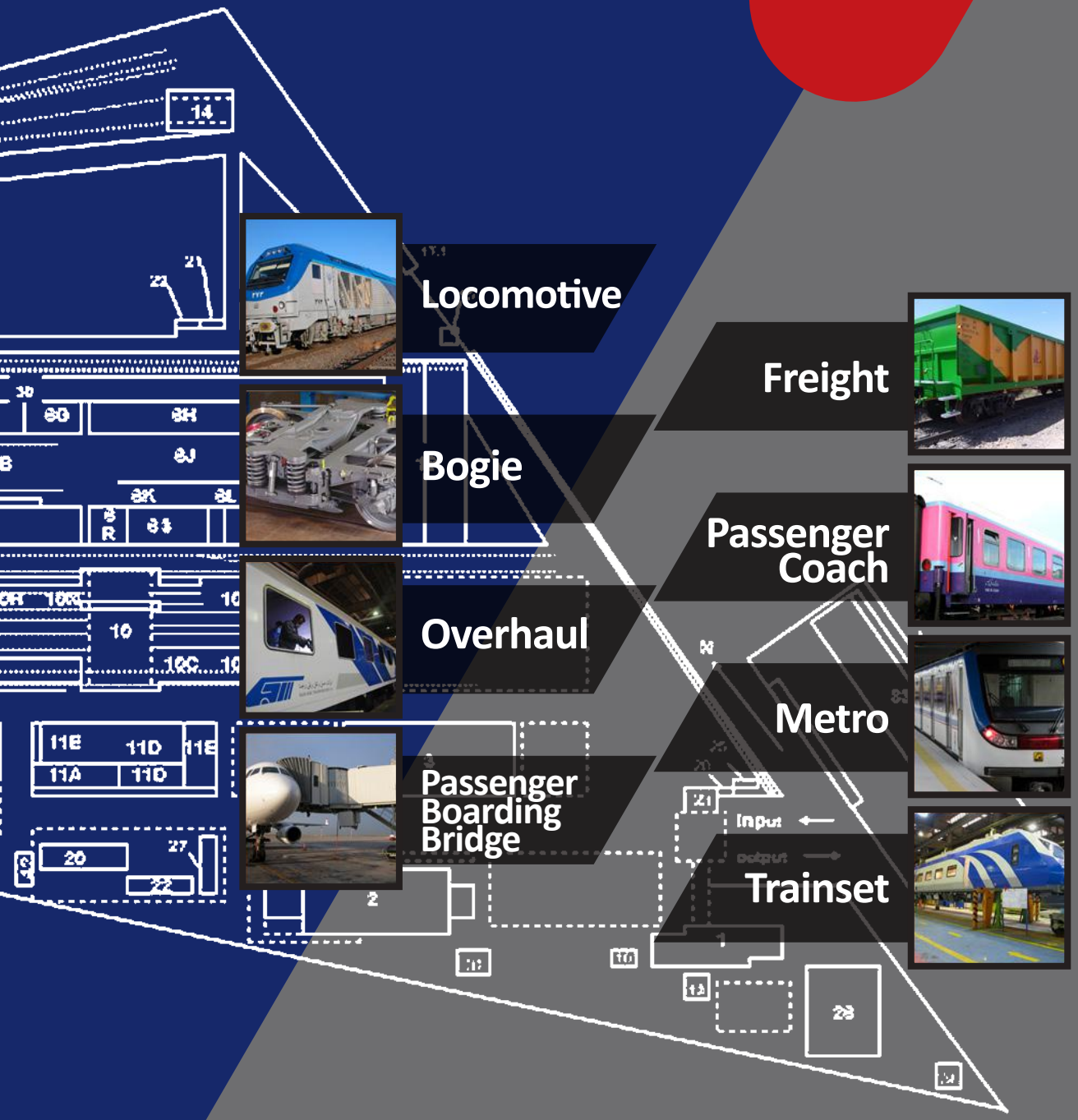
Freight wagon	Passenger Coach	Metro	Locomotive
11000	420	280	96
Total in operation 13000	Total in operation 700	Total in operation 1049	Total in operation 253



Area of production and non-production spaces of the company

company land area	354,000 m^2
production spaces	100,000 m^2
office buildings	14,000 m^2
storage	18,000 m^2
stadium	2,500 m^2

Variety of products and services



Locomotive

Bogie

Overhaul

Passenger Boarding Bridge

Freight

Passenger Coach

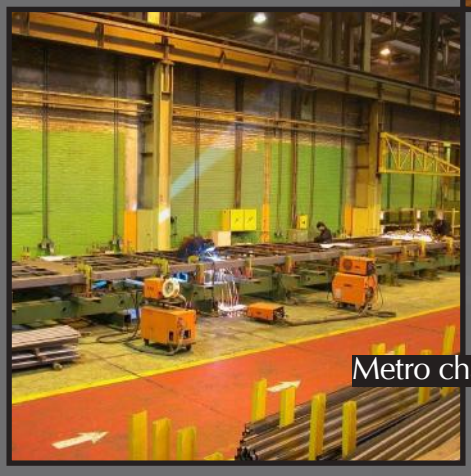
Metro

Trainset

Passenger car body construction workshop

Freight wagon assembly workshop

Locomotive final assembly workshop



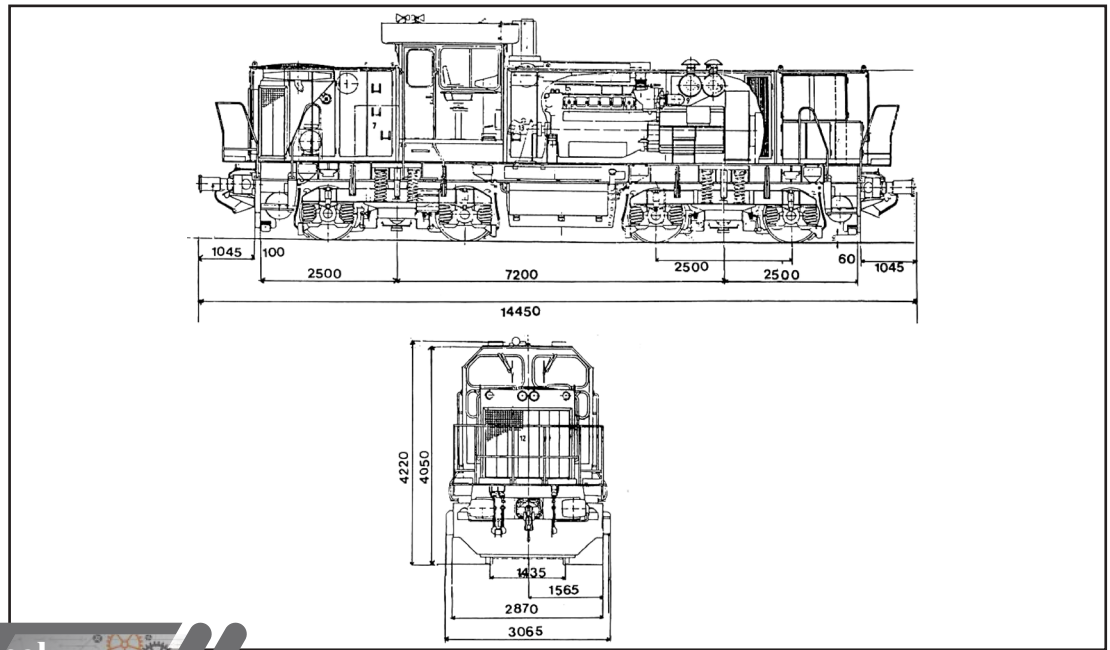
Metro chassis construction workshop

PRODUCTS and SERVICES

- Annual capacity of maintenance and overhaul of 1500 freight wagons
- Annual capacity of maintenance and overhaul of 100 passenger wagons
- Annual capacity of maintenance and overhaul of 20 locomotives
- The main reference for resolving heavy accidents and rebuilding freight, passenger and locomotive in Iran Railways
- The main reference for assembling wheelset of freight wagons, passengers, locomotives and multiple unit train in Iran

Locomotive
ME-10
DIESEL
ELECTRIC

Me 10 locomotive is a multi-purpose diesel electric locomotive AC/AC for shunting and line service with the 100 km/h speed. Satisfactory operation is insured in conditions of -15°C to +45°C at 1800 m above sea level. Locating the driver's cab near the center ensure optimum viewing on all sides. The diagonally arranged driver's desk incorporating the power power and brake controls permits smooth operationin both directions of travel.



Technical Specifications

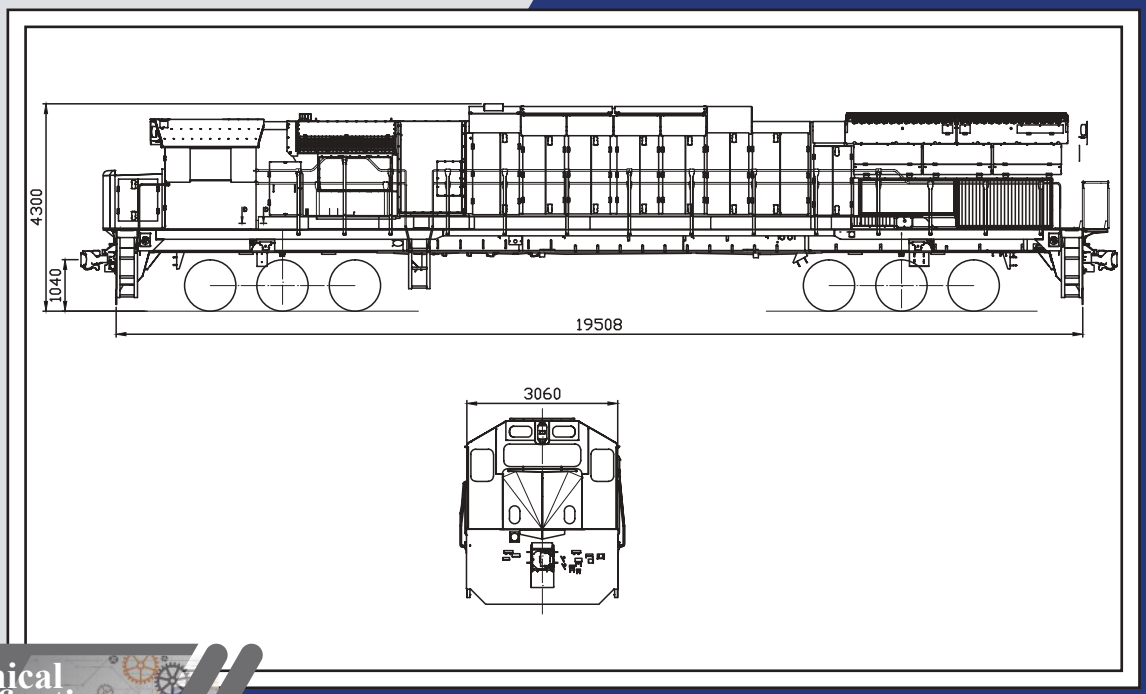
• Axless system	4with traction motors
• Input to generator	856 KW
• Prime traction force	250 KN
• Power transmission	AC/AC
• Max. speed	100 km/h
• Weight	78 tonnes
• Track gauge	1435 mm
• Lenght (over buffer)	14450 mm

• Height	4220 mm
• Width	3065 mm
• Wheel diameter	1000 mm
• Type of diesel engine	MTU,12V396TC14
• Engine power	at 45°C : 940 KW
• Min track radius	80 m
• Generator type	WB450H16 ABB
• Brake system	KE-GP-Em-Zk (KNORR)

Main Line Locomotive Pars 33

3300 hp

Pars 33 is a single-cab locomotive, with a corridor or outer porch as part of the body and chassis, which is equipped with one of the most advanced microprocessor control systems, the engine installed on this locomotive is 645E3, equipped with AC-DC system Internal in the main generator, DC auxiliary generator, AC mobile generator and 26L braking system. This locomotive has dynamic brakes and can be self-loaded up to 2300HP, and it is also possible to operate the locomotive by connecting to other locomotives.



Technical Specifications

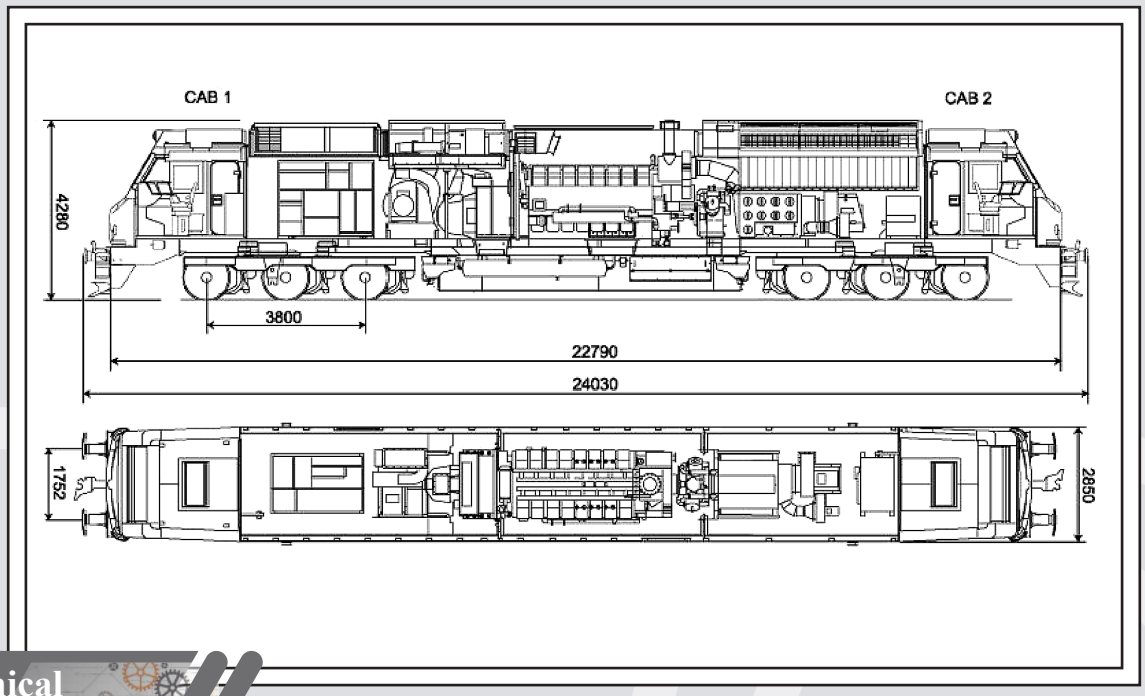
• Axless system	CO-CO
• Max.continuous traction	28000 kg force
• Min track radius	80 m
• Power transmission	AC/DC
• Max. speed	105 km/h
• Weight	120 tonne ±3%
• Track gauge	1435 mm
• Lenght (over buffer)	20.74 m

• Height	4300 mm
• Width	3060 mm
• Brake type	westinghouse, 26L
• Max. service power	3000 HP
• Fuel tank volume	9300 L
• Water tank volume	1116 L
• Gear ratio	62:15
• Max. braking force	26940 kg force

Main Line Locomotive
Alstom-AD43C
4300 hp

The locomotive AD43C exists in three versions (called A,B and C) with specific characteristics for three different uses:
- Locomotive A = Passenger version 20.5 metric tones per axles,
- Locomotive B = Freight version 20.5 metric tones per axles,
- Locomotive C = Freight version 23 metric tones per axles,

The freight versions (Locomotives B and C) have a limited maximum speed of 110 km/h.
The passenger version (Locomotive A) has a limited maximum speed of 150 km/h.



Technical Specifications

• Track gauge	1435 mm	• tarting Tractive Effort	48250/ 54200 daN
• Axles Arrangement	CoCo	• Diesel Engine Power	3160 kw
• Max. speed (Passenger/ Freight)	150/ 110 km/h	• Main Alternator	Alstom type AT 14
• Number of driving cab	2	• Weight (with 5000 lit fuel+8×60 lit sand)	123 tonnes
• Power Transmission Type	AC / AC	• Max. Permitted Axles Load (Full ballast loaded)	23 tonnes
• Diesel Engine Model	16 RK 215 (Ruston)	• Fuel Capacity	9200 lit

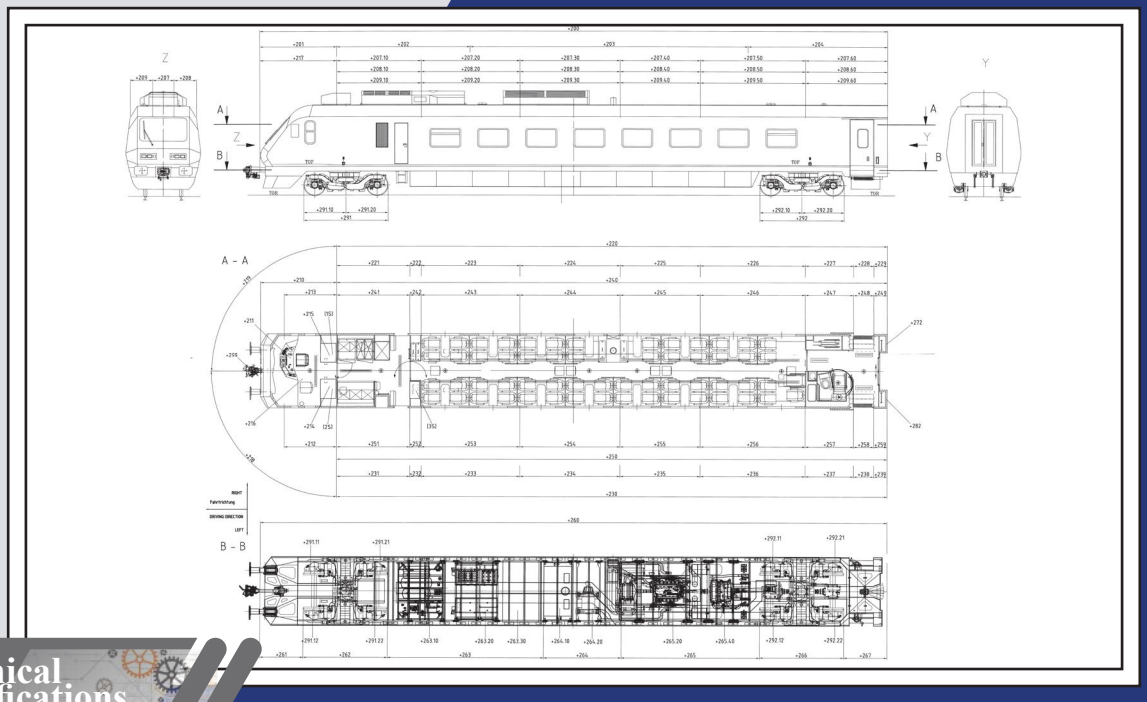
• Brake type: Electro Penumatic, PBL3

Passenger Coach
Metro | Trainset

Trainset

160 km/h

The DH4-1 PARADISE was developed for the Iranian Islamic Republic Railways (IIRR) as diesel hydraulic multiple unit trains (DMU) whose base configurations comprises 4 cars (two end and centre vehicles each). Centre vehicles can be removed or added in order to reduce the train to a 3-car trainset or extend it to a max. 8-car trainset. Operation of max. 16 car is possible as multiple train. Each car is equipped with one trailer bogie and one engine bogie as well as one specific traction unit. The traction units are identically constructed for centre and end vehicles.The multiple unit trains are operated on the long-distance railway line between the cities of Teheran and Mashad (approximately 930 km). The permissible max. speed of the trainsets is 160 km/h.



Technical Specifications

• Bogie Model	SF5000 DD	• Engine model	MAN Diesel (D2842LE602/604/607)
• Gauge	1435 mm	• Door system	Sliding Plug
• Max. speed	160 km/h	• Gearbox	Turbo Transmission T312 bre- 460kw,2033 rpm
• Coupler Model	Automatic Scharfenberg	• Fuel tank capacity	>1000 L

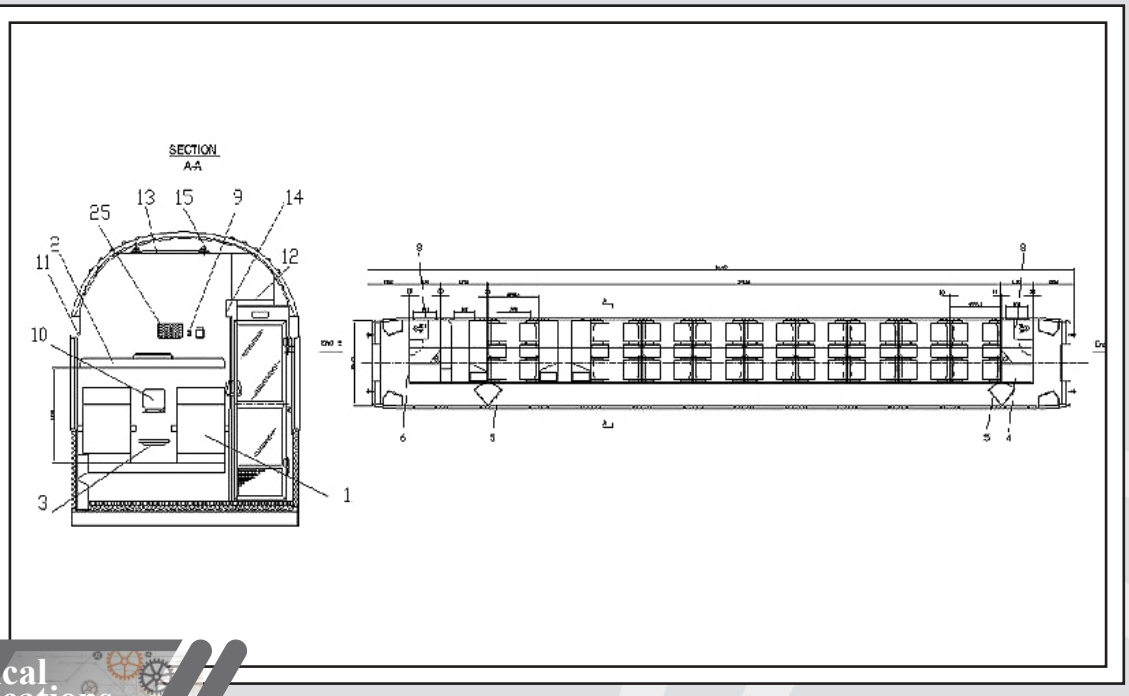
• Brake type: Electro penumatic friction brake with wheel disk

Passenger Coach
Metro | Trainset

Pars I first-class

5 star

Pars 5 star passenger coaches are designed and produced based on the international standards with a speed of 160 km/h. In order to increase the speed of the trains in the railways of Islamic Republic of Iran, these coaches could be upgrade to a speed of 200 km/h. These type of passenger coaches are designed and produced based on the technical and economic requirements of customers, which are economically competitive and offered at a favorable level in terms of quality.



Technical Specifications

• Track guage	1435 mm
• Number of axless	4 units
• Wheel diameter(NEW)	920 mm
• Length (over buffer)	26400 mm
• Width	2825 mm
• Height	4050 mm
• Brake system	pneumatic
• Rail type	UIC 60

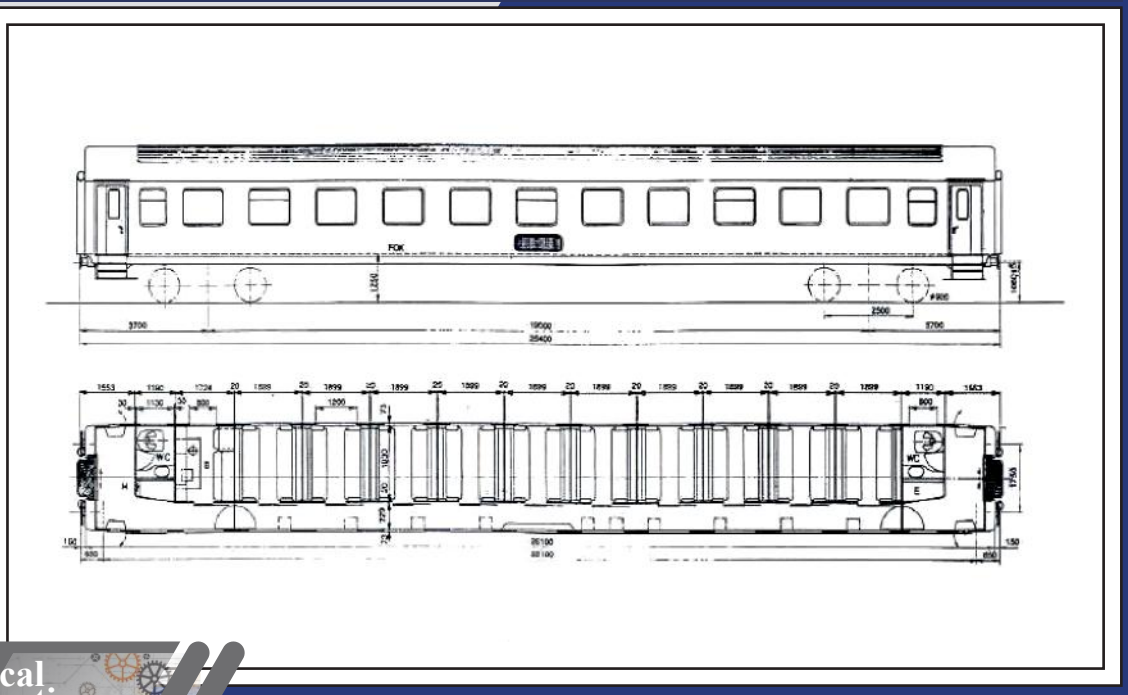
• Maximum line slope	28:1000
• Hook height (from rail surface)	1040 ±5 mm
• Min. & Max. ambient temperature	- 20°C + 50°C
• Passenger capacity	40
• Number of sanitary units	2 units
• Max. speed	160 km/h
• Passenger compartment	10
• Service compartment	1

Passenger Coach
Metro | Trainset

Passenger Coach

140 km/h

With ten compartments carrying 60 passengers, it design and manufactured based upon the international standards of European railways (UIC). The car is equipped with accommodations like air conditioning, reclining berths, folding table, intercom system, lighting and sufficient space for passengers to move, by and also luggage. To provide the best possible service, the host compartment is equipped with all necessary catering equipments like refrigerator, water cooler, heater,... and all these come along with fine sanitary services and high technological facilities which could serve the passengers with the greatest comfort all through the travel. Interior design and decoration are alterable according to customer desire and requirements.



Technical Specifications

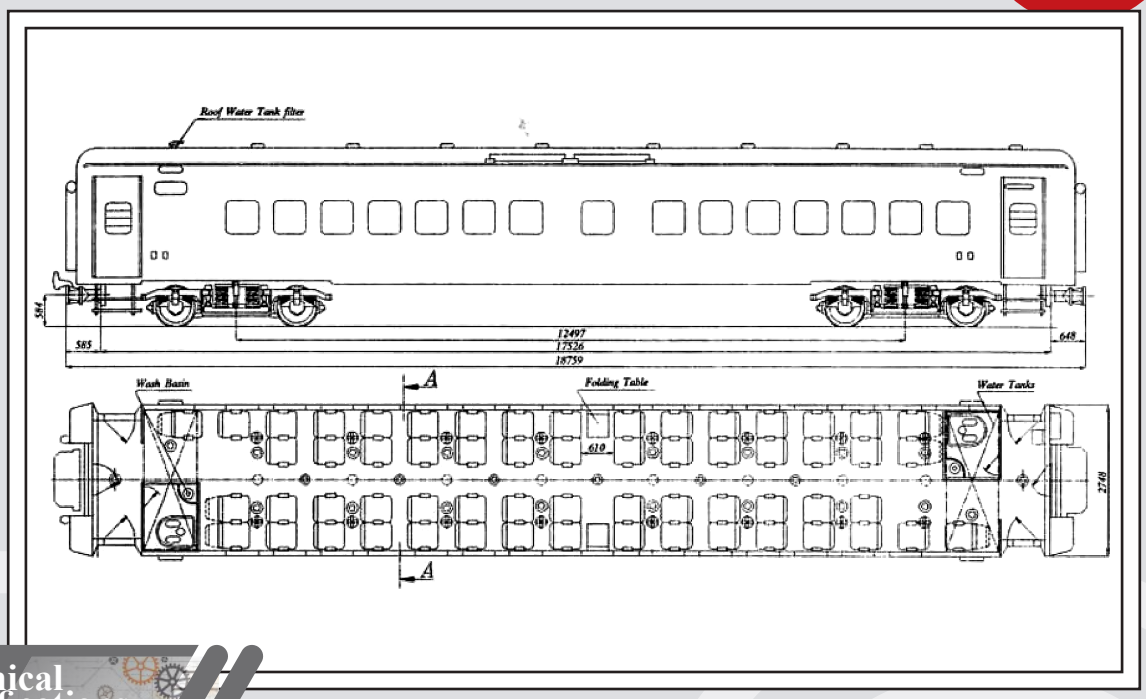
• Track guage	1435 mm
• Number of axless	4 units
• Wheel diameter(NEW)	920 mm
• Length (over buffer)	26400 mm
• Width	2825 mm
• Height	4050 mm
• (Coach) Min. track radius	80 m
• (Train) Mien. Curve radius	150 m

• Distance between pivots	19000 mm
• Weight	40.8 tonnes
• Max. service weight	45.8 tonnes
• Carrying capacity	60
• Number of sanitary units	2 units
• Max. speed	140 km/h
• Axles load	11.5 tonnes
• Classification	First Class

Passenger Coach
Metro | Trainset

Passenger Coach

Comfort and smooth-riding are of the main particulars, since it is equipped with advanced MD52 bogie of german design (adtrannz).



Technical Specifications

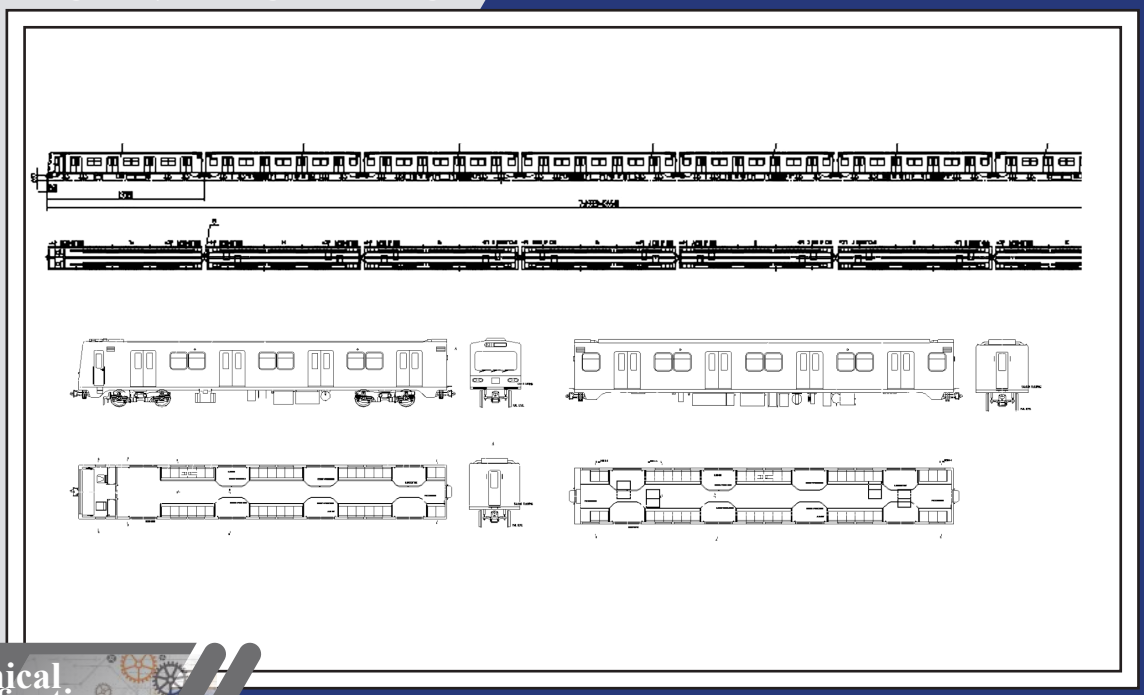
• Type of wagon	passenger car (WE)
• Number of seats	60
• Number of lavatory	2
• Weight (empty)	27 tonnes
• Max. travel speed	100 km/h
• Rail gauge	1000 mm
• Wagon length	18759 mm
• Wagon width	2743 mm
• Max. height	3429 mm

• Height of floor to top of rail	965 mm
• Bogie type	MD-52M
• Number of axles	4
• Distance between bogie centers	12497 mm
• Min track curvature	92 m
• Wheel diameter	725 mm
• Axles load	10 tonnes
• Coupling type	couplings type MCA-ph
• Brake system	automatic vacuum system

Passenger Coach
Metro | Trainset

Metro Car

Tehran Urban and Suburban Railway Corporation ordered 217 Metro Vehicles manufactured by Changchun Car Company for Tehran Metro Line 1 and Line 2 on Mar.23.1995. Tehran Line 2 (East-West) is all under the ground and served by 19 railway stations with a whole length of 19.7 km and max. gradient is 35%o. The railway line and steel track comply with UIC standard and the track gauge is 1435mm. The nominal supply voltage is 750 VDC and adopts third-rail current collecting mode. Carbody steel structure is whole bearing thin-shelled cylindrical welding structure with its strength complying with some developed country's standard. High-grade paints are applied to its outside, Interior and exterior modeling are carefully designed by art-designer, with bright and beautiful color and tone.



Technical Specifications

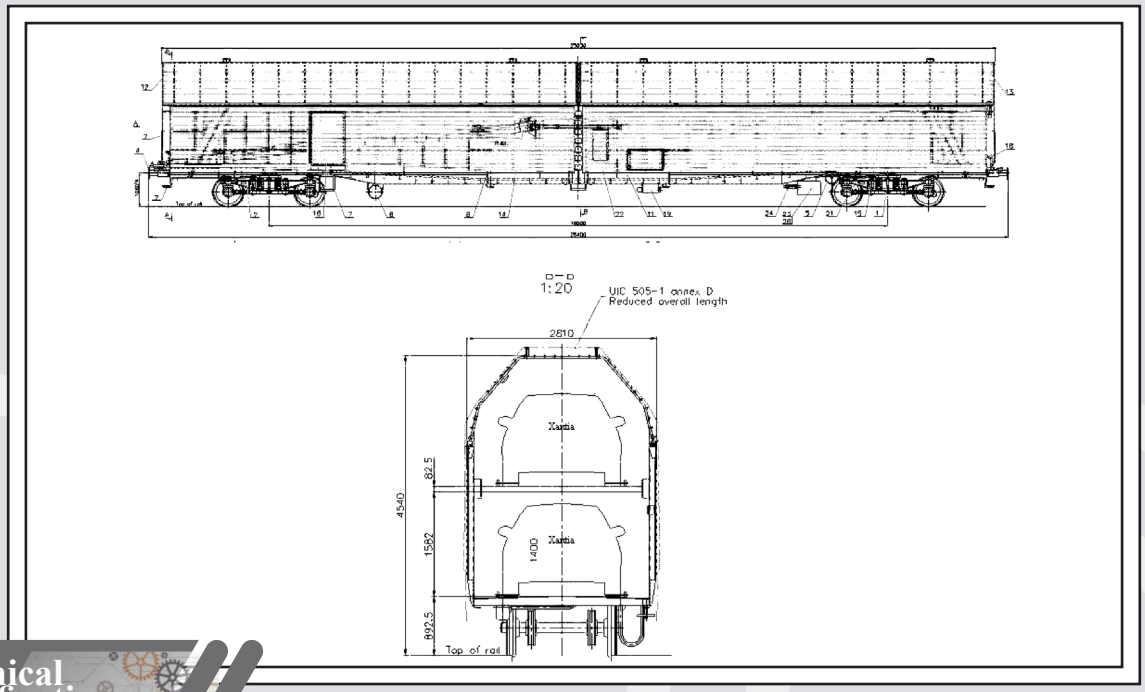
• Track guage	1435 mm
• carbody length	19000 mm
• carbody width	2600 mm
• Average speed (under normal)	35 km/h
• Max. speed	80 km/h
• Heigth of floor to top of rail	1100 mm

• Capacity (Normal load)	1290
• Min. radius of curvature	190 m
• Rated power of Traction motor	132 kw
• Output power of Auxiliary Inverter	45 kVA
• Tare weight	Tc: ≤29 t M: ≤36 t MS: ≤37 t
• Line voltage	750 VDC

Passenger Coach
Metro | Trainset

Car Carrier

These wagons are designed for transportation of cars with the capacity of 10 cars at least or 15 tonnes load arranged according to UIC 567-4. Wagons are fully covered double deck and can be loaded from both end of the car body. Max. speed of this wagon is 160 km/h and is suitable for servicing in passenger trains.

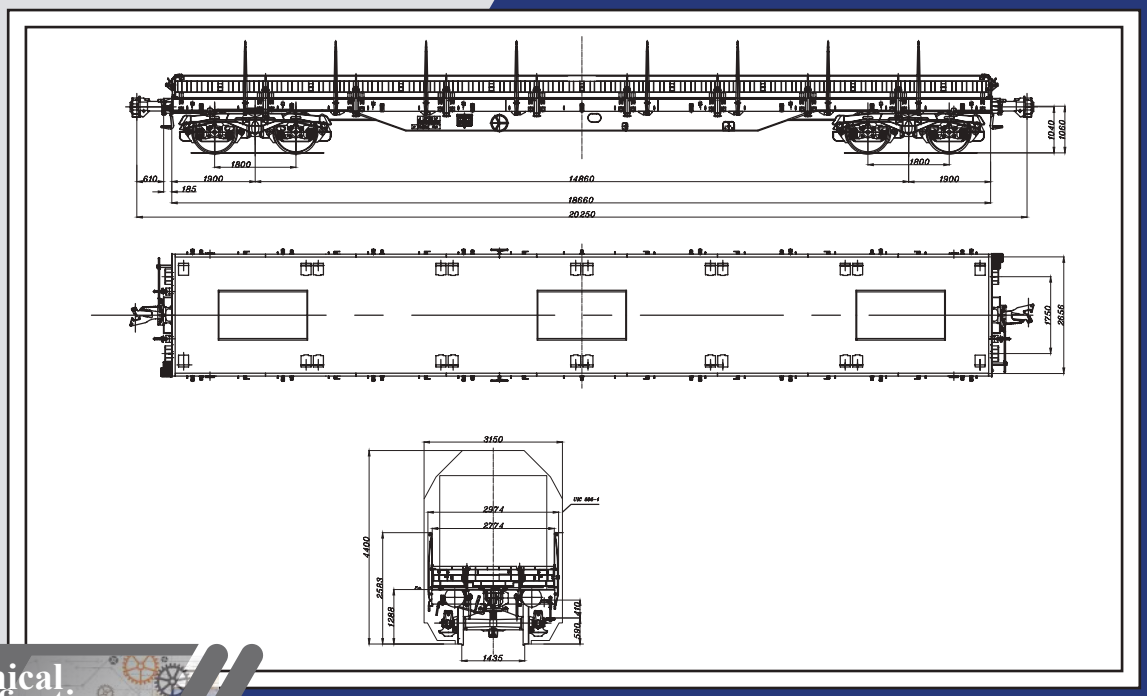


Technical Specifications

• Track gauge	1435 mm	• Brake type	EP KNORR
• Length (over buffer)	26400 mm	• Bogie type	MD 522
• Width	2810 mm	• Min. Curve radius	150/80 m
• Height	4540 mm	• Max. speed	160 km/h
• Axel load	15 tonnes	• Capacity	10 cars

Freight
Flat Wagon
loading area 49 m^2

Multi-purpose floor car made by Wagon Pars Company for carrying coils, bulk container loaders such as pipes, beams, corners, etc., is designed in accordance with the latest DIN and UIC standards. In designing and manufacturing this wagon, in addition to paying attention to the customer's opinions and needs, UIC, RIV, and RID standards have been used. The open body allows mechanization of loading and unloading. Wide loading surface and suitable dimensions of the wagon make it possible to use the wagon to transport all types of conventional loads. Container retaining locks are designed to rotate hinged when not in use and are flat and level with the floor of the wagon so that they do not interfere with the loading of parts or boxes.

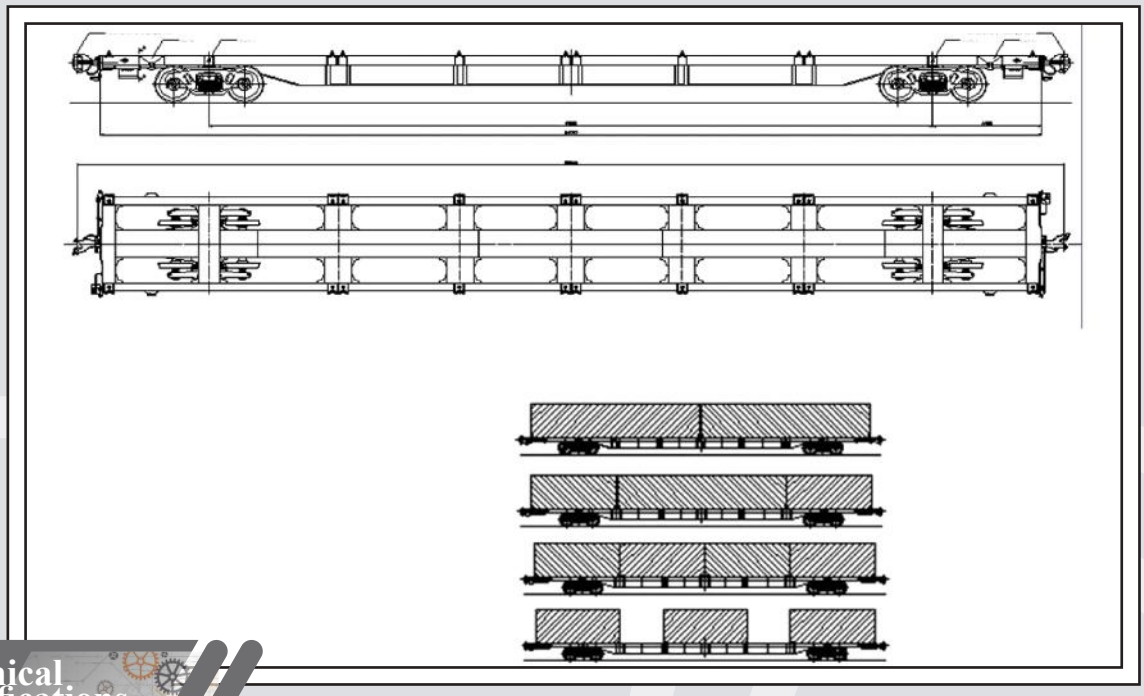


Technical Specifications

• Track guage	1435 mm	• Number of axles	4
• Coupler	Automatic SA3	• Weight	27.5 tonnes±3%
• Loading width	2650 mm	• Axles load	22.5 tonnes
• Loading length	18410 mm	• Min. rail curve radius	35 m
• Bogie type	Y25 Lsd1	• Brake system	Russian Brake type 12-132 or KNORR
• Container capacity	10,20,40 ft	• Max. speed	120 km/h

Freight
Flat Wagon
26m

Container wagon on 26 meters of Wagon Pars Company has the ability to load 65 tonens of cargo and is designed and built to carry all types of containers. The design of the wagon is such that it allows loading of 20 and 40 ft containers according to the dimensions listed in ISO and UIC standards. In designing and manufacturing this wagon, in addition to paying attention to the customer's opinions and needs, UIC, RIV and RID standards have been used.

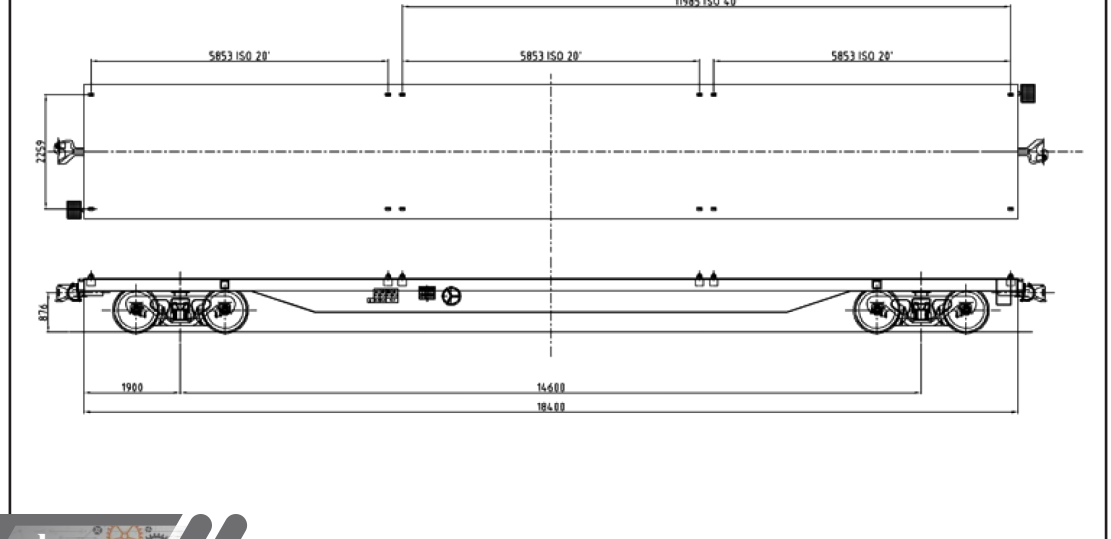


Technical Specifications

• Track guage	1435 mm	• Number of axles	4
• Chassis length	24700 mm	• Brake type	Russian/knorr
• Chassis width	2460 mm	• Bogie type	18-100 / Y25Lsd1
• Tare weight	25+5% tonnes	• Min. curve radius	75 m
• Max. load capacity	65 tonnes	• Max. speed	100 km/h

Freight
Flat Wagon
19m

This proposal containing the technical specification of Container transporting Wagon specially designed. Proposed Freight wagon is suitable for carry 20ft and 40ft containers. The maximum operational speed of wagon is 100 Km/h for loaded and 120 km/h for empty wagons. The wagon is designed as a welded structure equipped with 18-100 Russian bogies. The wagon design allows for subsequent installation of central SA3 design automatic coupler. This wagon is suitable for transport of four (20ft) container or two (40ft) container and etc...



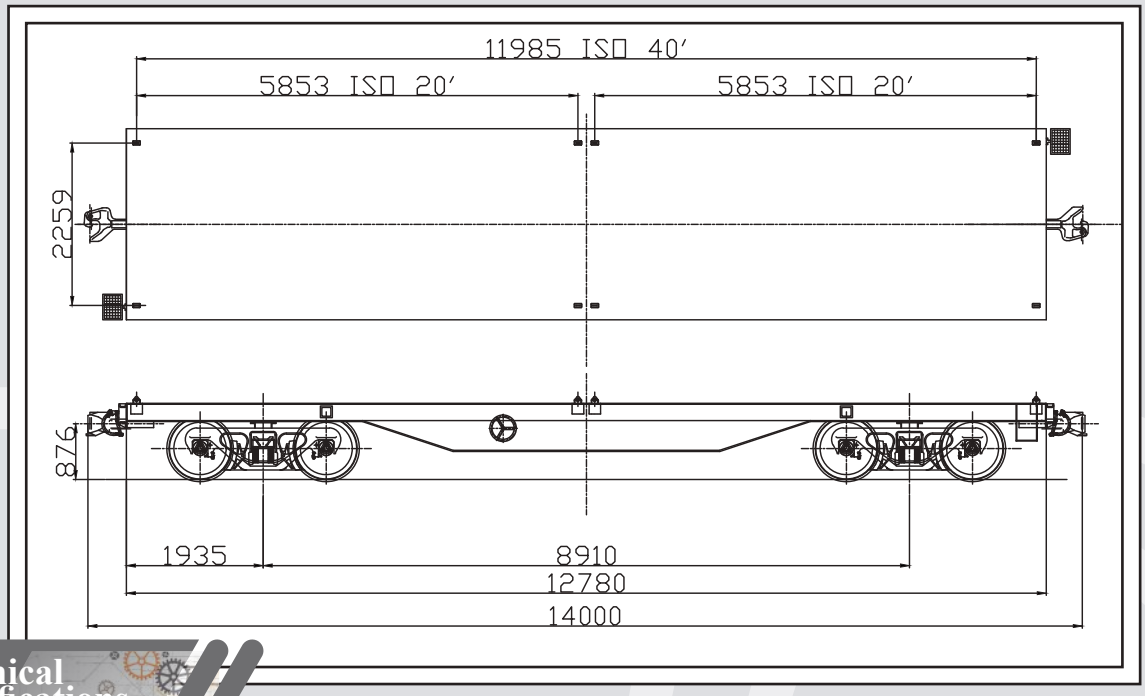
Technical Specifications

•	Clearance gauge	Cuban railway	
•	Track gauge	1435 mm	
•	Tare weight	~21 tonnes	
•	Max axles load	20.5 tonnes	
•	Speed	100 Km/h	
•	Min. curve radius (turnouts)	75 m	
•	Height of centerline of coupler above top of rail for unloaded wagon	876-40 mm	
•	Length over head stocks	18400 mm	

•	Length over coupler centers	19620 mm	
•	Distance between pivots	14600 mm	
•	Twist locks	3x20 ft, 1x40 ft	
•	Twist locks	Manual	
•	Draft gear and coupler	Acc. to atached	
•	Brake type	Russian	
•	Bogie	3 piece casting 18-100 or fabricate design	
•	Capacity	~60 tonnes	

Freight
Flat Wagon
14m

This proposal containing the technical specification of Container transporting Wagon specially designed. Proposed Freight wagon is suitable for carry 20ft and 40ft containers. The maximum operational speed of wagon is 100 Km/h for loaded and 120 km/h for empty wagons. The wagon is designed as a welded structure equipped with 18-100 Russian bogies. The wagon design allows for subsequent installation of central SA3 design automatic coupler. This wagon is suitable for transport of two (20ft) container or one (40ft) container.



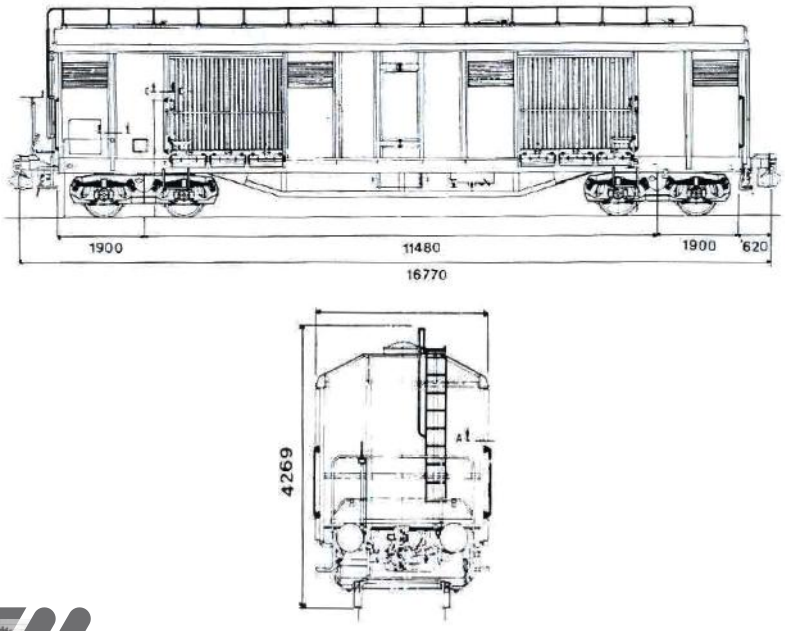
Technical Specifications

• Clearance gauge	Cuban railway
• Track gauge	1435 mm
• Tare weight	~20 tonnes
• Max axles load	20.5 tonnes
• Speed	100 Km/h
• Min. curve radius (turnouts)	80 m
• Height of centerline of coupler above top of rail for unloaded wagon	876-40 mm
• Length over head stocks	12780 mm

• Length over coupler centers	14000 mm
• Distance between pivots	8910 mm
• Twist locks	2x20 ft, 1x40 ft
• Twist locks	Manual
• Bogie	3 piece casting 18-100
• Brake type	Russian
• Draft gear and coupler	According to layout
• Capacity	60 tonnes

Freight
Covered Wagon
55Tonnes,105 m^3

This freight wagon is suitable for transportation of packed cargoes, industrial parts, materials, foodstuff and grains. The roof and the wall are made of ST52-3 steel plates with respectively 1.5 and 3 mm thickness. The car has 4 siding doors(2150x2500 mm) for loading of cargoes which need to be carried in covered vehicles. Loading of grains and foodstuff is also possible through 4 flaps(600mm in diameter) which are placed at intervals on the roof it's equipped with automatic couplings, draft gears and 350 KN buffers with max stroke of 90mm.Bogie is 665 IIRR model, H type with the speed up to 120 km/h. Brake system is compressed air brake type KE-GP-16"

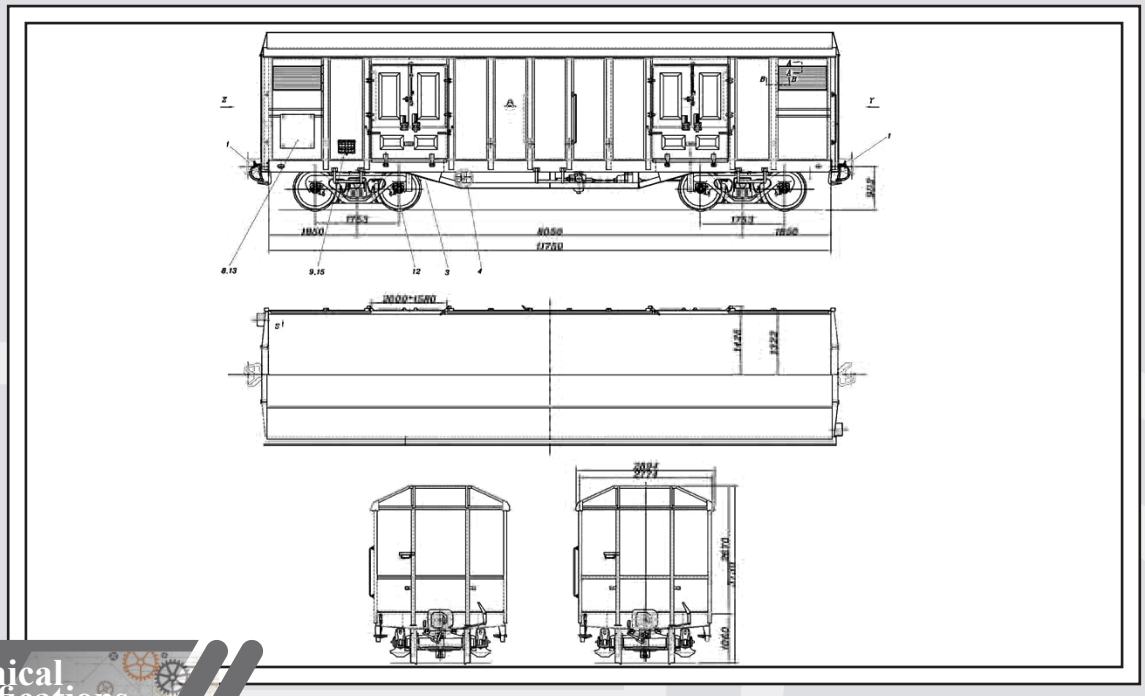


Technical Specifications

• Track guage	1435 mm	• car weight	25 tonnes
• Length (over buffer)	16770 mm	• Axles load	20 tonnes
• Width	2880 mm	• Min. curve radius	60 m
• Height	4269 mm	• Brake system	2KE-GP-16" KNORR
• loading area	40 m^2	• Loading capacity	55 tonnes
• Loading volume	105 m^3	• Max. speed	120 km/h

Freight
Covered Wagon
45Tonnes, 70m^3

This proposal containing the technical specification of Covered Wagon specially designed for Sudan Railways. This fright wagon is suitable for transportation of packed cargoes, industrial parts, material, foodstuff and grains. The wagon has 2x2 hinged doors (1800x1580mm) for loading cargoes which need to be carried in covered vehicle. Coupler is "Alliance type" , bogie is 3 pieces casting (stabilize) and has compressed air brake system . Mapna wagon pars co. has product 180 units of the fright wagon for sudan railway , in 2006,Sudan railways placed order for 50unit of this kind of wagon to PMWCo. Proposed freight wagons are suitable The maximum operational speed of wagon is 100 Km/h for loaded and 120 km/h for empty wagons.They will be designed in accordance with UIC comprehensive fundamentals for design and construction of Freight wagons.



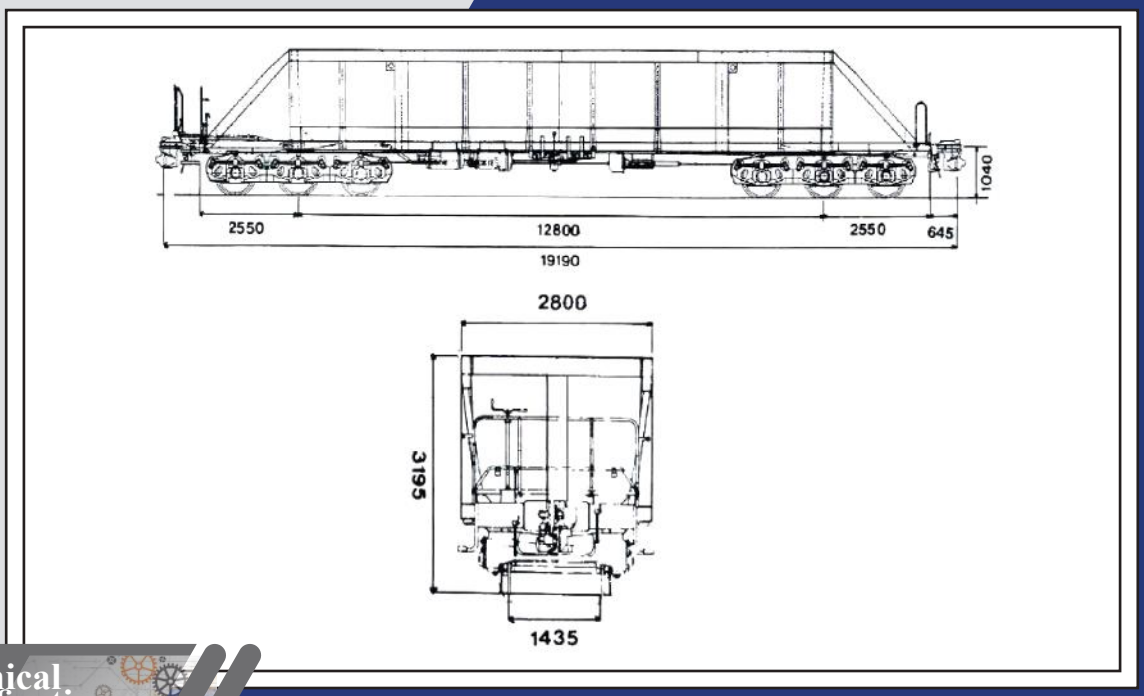
Technical Specifications

•	Clearance gauge	Sudan railway	
•	Track gauge	1067 mm	
•	Tare weight	~20 tonnes	
•	Max axles load	16.5 tonnes	
•	Speed	100 Km/h	
•	Length over head stocks	11750mm	
•	Distance between pivots	8050 mm	

•	Max width	2894 mm	
•	Height	~3430 mm	
•	No. of doors	two in each side	
•	Dimension of Doors	1800x1580 mm	
•	Draft gear and coupler	Alliance II type	
•	Brake type	KE-G-16"	
•	Capacity	45 tonnes	

Freight
6 axles Wagon

This wagon is designed to carry minerals and to discharging this wagon, rotary tiplers should be used. This wagon is designed for a maximum speed of 100 km/h when loading and 120 km/h when empty and is equipped with KE-GP- (2x14 ") brakes and a maximum load of 135 tonnes.
Dimensions and all specifications of this wagon are in accordance with UIC standards for 6-axles wagons with axial load of 22.5 tonnes.



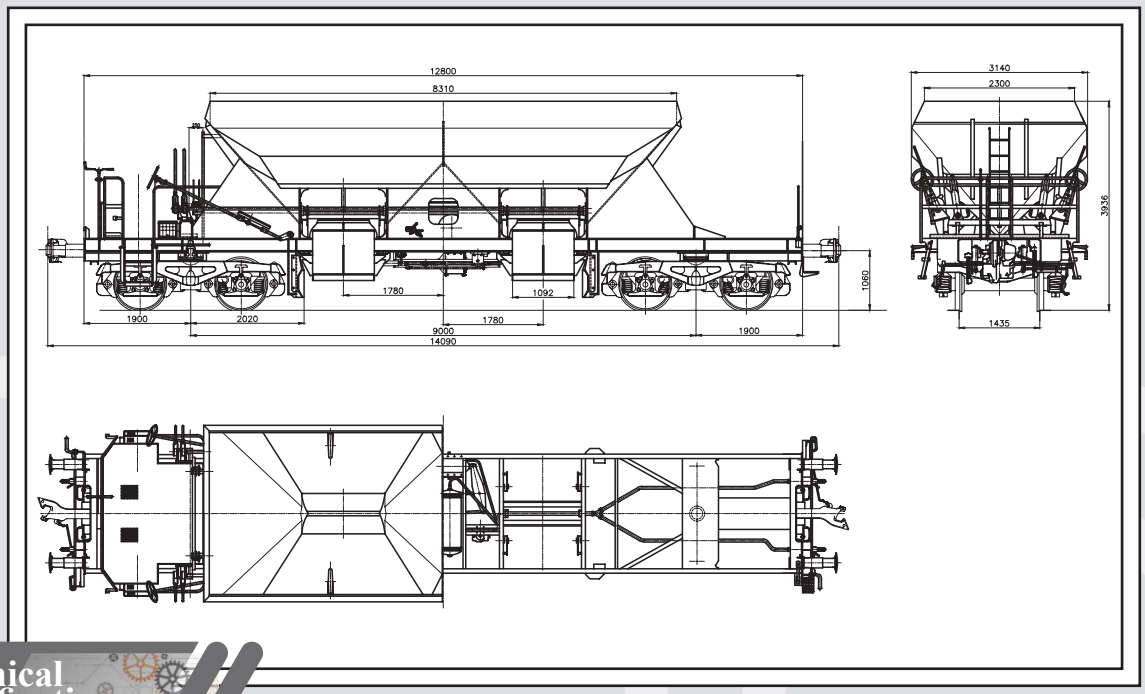
Technical Specifications

• Track guage	1435 mm
• Length of Chassis	17900 mm
• Width	2800 mm
• Height	3195 mm
• Capacity	60 m^3

• Tare weight	~31 tonnes ±3%
• Axles load	22.5 tonnes
• Min. curve radius	60 m
• Brake system	KE – GP-16"
• Max. speed	120 km/h

Freight **Ballast Wagon**

This wagon is designed for carrying ballast with a volume of 39 cubic meters, for the Iranian railway. The maximum speed is 100 km/h with full loading and 120km/h without load.
The structure of the wagon is welded and equipped with Y25 Lsd1 bogie, which covers the railway Gabari of the Islamic Republic of Iran. The design of this type of wagon is accordance to UIC standard.

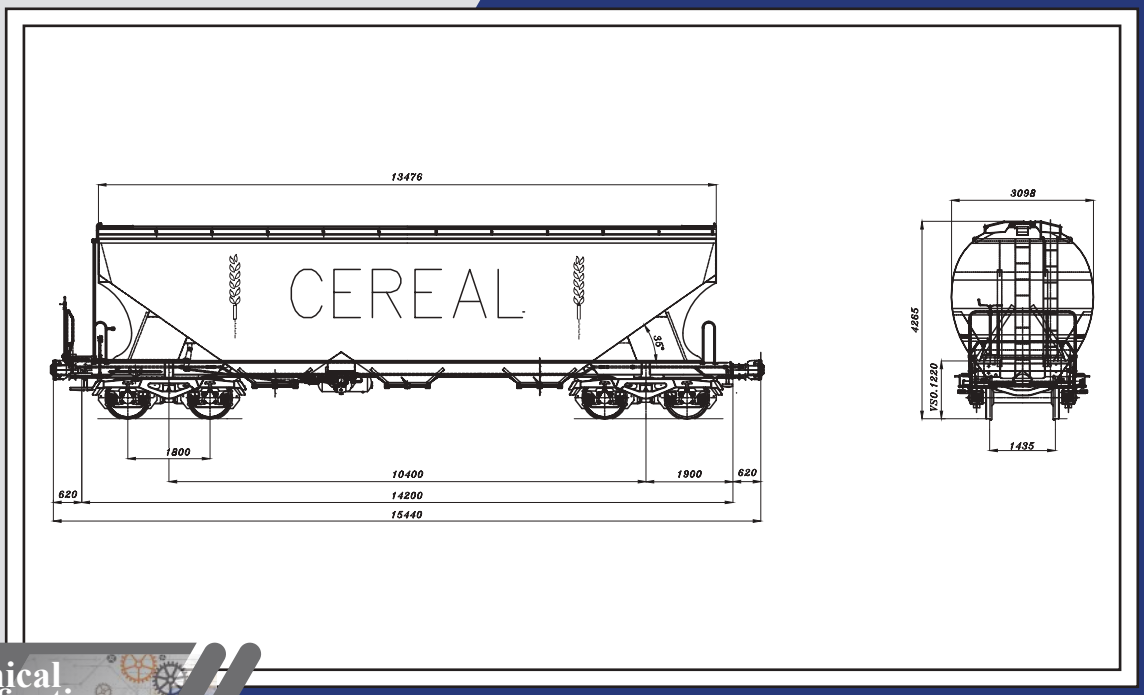


Technical Specifications

• Track guage	1435 mm	• Tare weight	23 tonnes
• Number of axles	4	• Loading weight	67 tonnes
• Loading Capacity	39 m^3	• Axles load	22.5 tonnes
• Body width	3140 mm	• Bogie	Y25Lsd1
• Body length	14090 mm	• Brake type	KE-GP-16(KNORR)
• Height of wagon	3936 mm	• Max. speed	120 km/h

Freight **Hopper Wagon**

This 4-axles wagon with a loading capacity of 68.5 tonnes and a loading volume of 90m3 is suitable for transporting grains such as wheat and barley. By opening and closing the hinged doors, the loading operation is performed from above, and by opening and closing the lower valves, the unloading operation is performed manually. The unloading of the wagon is done based on the force of gravity, and at the end and in the middle of the wagon, funnels with an angle of 55 and 35 degrees are placed for unloading. The design of the wagon is in accordance with UIC and RIV standards. It will also be suitable for operation in Iranian weather conditions

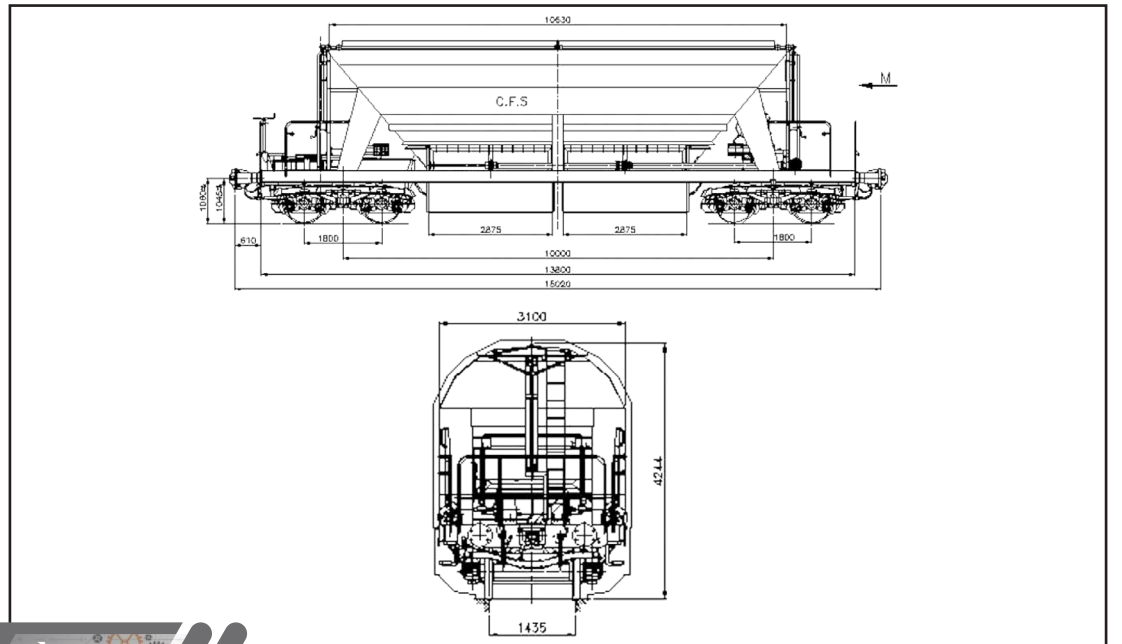


Technical Specifications

• Track guage	1435 mm	• Empty weight	21.5 tonnes ± 3%
• Length	15440 mm	• Capacity	90 m3
• Width	3098 mm	• Axles load	22.5 tonnes
• Height over rail	4265 mm	• Coupler	Automatic SA3
• Number of axles	4	• Brake system	KE-G-(A) or 12-132 Russian
• Permitted loading weight	68.5 tonnes	• Max. speed	120 km/h

Freight **Phosphate Wagon**

This 4-axlesd special goods wagon is designed to transport phosphate, sulfur and sand in bulk with specific gravity range (1.48-1.5) and granules size 0.05 - 1 mm, self discharging and suitable to operate in the continental dusty climate.

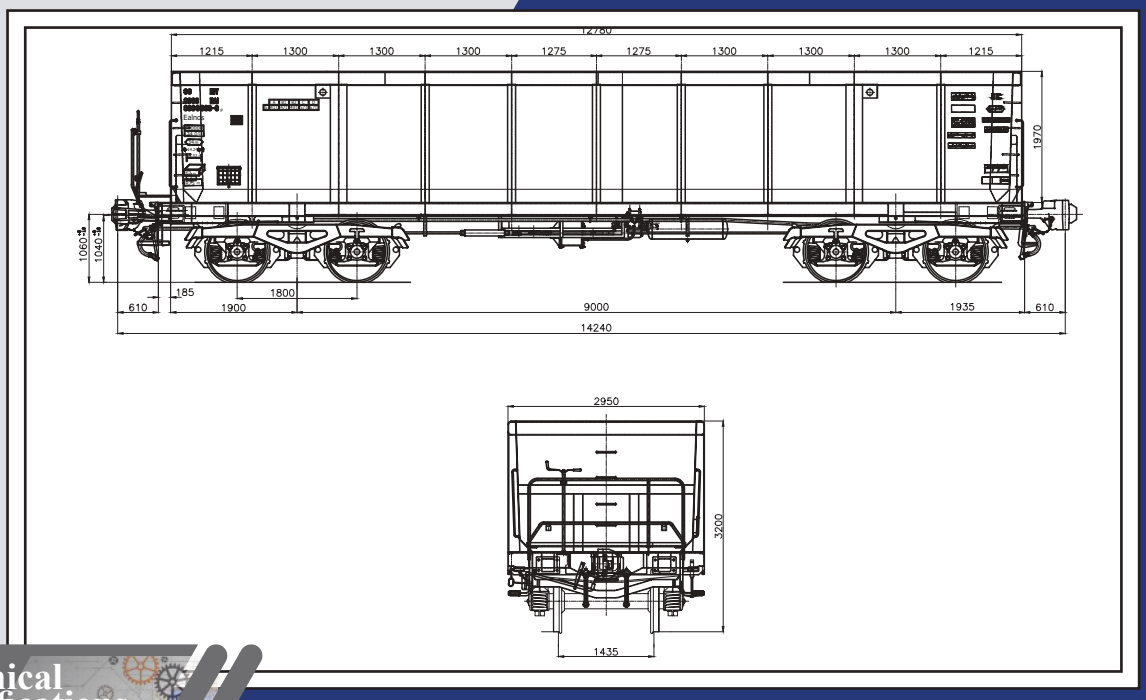


Technical Specifications

• Track guage	1435 mm	• Axles load	22.5 tonnes
• Length (over buffer)	15040 mm	• Min. curve radius	75 m
• Capacity	62 tonne	• Brake type	KE-GP-16"
• Tare weight	28 tonnes	• Max. speed	120 km/h
• Bogie wheel base	1800 mm	• Bogie type	KE-G-16"

Freight **high-sided Wagon**

High-sided wagons with loading capacities of 65.5 tonnes and 67.5 tonnes are suitable for carrying ore and minerals, and are suitable for speeds of 120 km/h without load and 100km/h with load. The wagon is designed in accordance with UIC, RIV and Iranian weather conditions. The main body and floor of the wagon are made of St52-3 sheet. In addition, due to having valves for unloading from below, this wagon is designed in such a way that during unloading, the materials are directed out of the rails and have a suitable slope. The number of valves is 14, with 7 valves on each side.



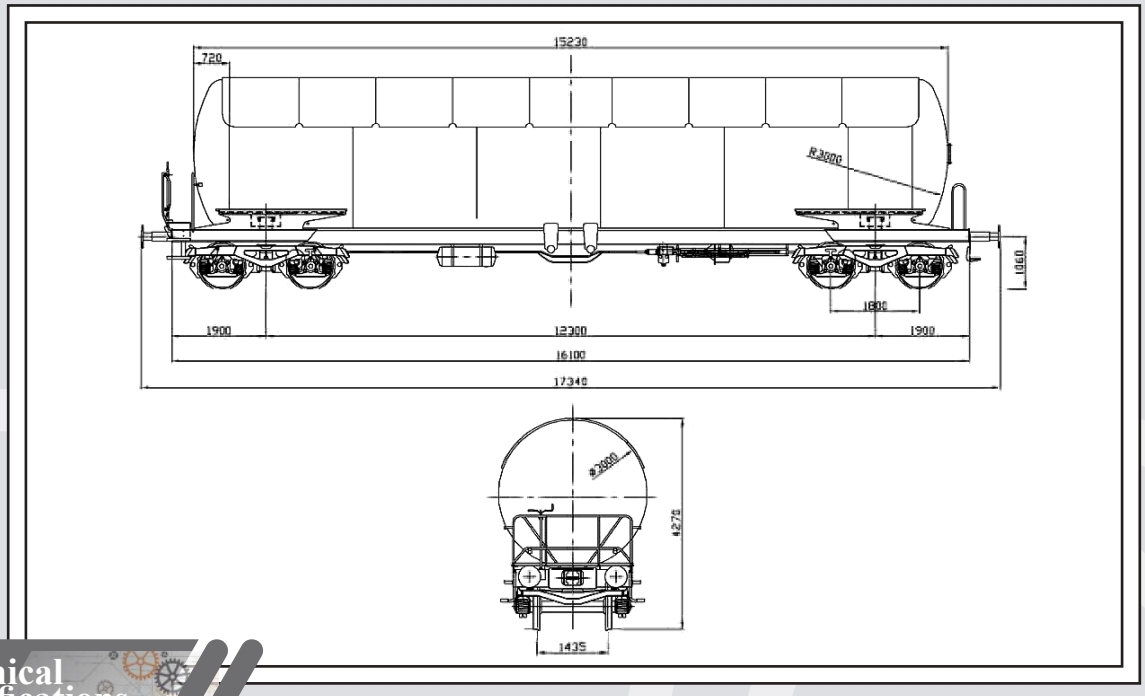
Technical Specifications

• Track guage	1435 mm
• Length (over buffer)	14240 mm
• Width	2950 mm
• Height	3200 mm
• Length of car body	12780 mm
• bogie	Y25-Lsd1or Russian 18-100

• Tare weight	22.5 tonnes
• Payload (approx)	67.5 tonnes
• Axles load	22.5 tonnes
• Min. curve radius	60 m
• Brake system	KE-GP-16" or Russian 18-100
• Max. speed	120 km/h

Freight
LPG-Tank Wagon

The Tank is made of a cylinder of 3000mm in diameter with 16500mm length and 14mm in thickness of steel plate ST47. Charging and discharging is performed by two valves which are activated at 23 bar pressure. Voluminal capacity is 95 m^3 and loading capacity is 46 tonnes. Bogie is Y25, H type with the speedup to 120km/h. Brake system is compressed air brake system type KE-GP_16". manufactured by Knorr.



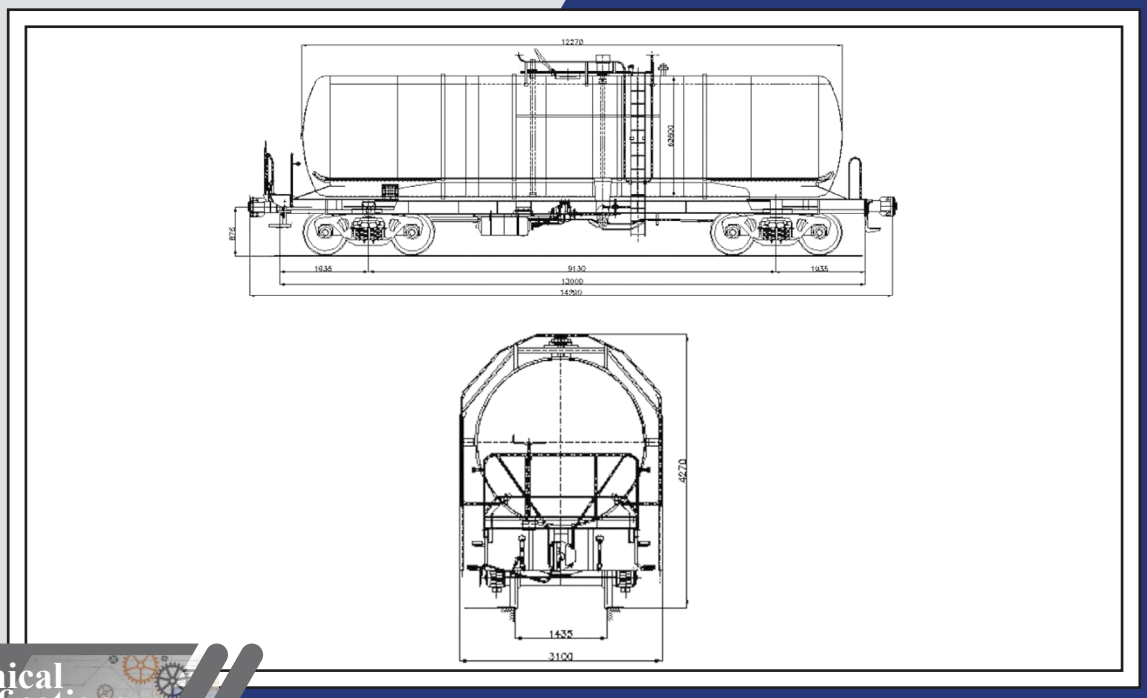
Technical Specifications

• Track guage	1435 mm	• Weight (tare/loaded)	34/80 tonnes
• Coupler height from TOR	1040 mm	• Axles load	20 tonnes
• Bogie	Y 25	• Min. rail curve radius	75 m
• Bogie wheel base	1800 mm	• Brake system	KE-GP-16"
• Dimension	Acc. to layout	• Max. speed	120 km/h

Freight **Tank Wagon**

72 m^3

The four axlesd tank wagon is intended for transportation of light petroleum products. These products are dangerous materials and are subject to RID regulations for class 3. The wagon design guarantees enough stability during train movement. The underframe is a welded construction made of steel plates and rolled steelsections.



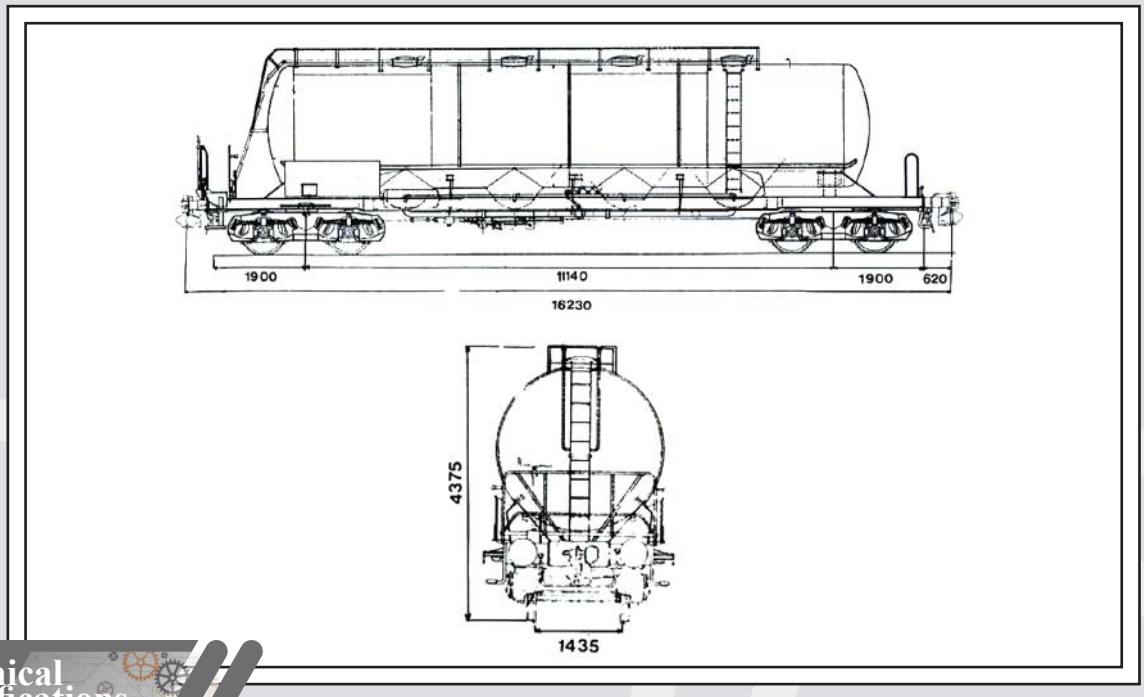
Technical Specifications

• Track guage	1435 mm
• Min. Curve radius	75 m
• Height	4265 mm
• Distance of pivots	9680 mm
• Bogie wheel base	1850 mm
• Tank capacity	72 m^3
• Tank diameter	2800 mm
• Tank length	12270 mm

• Test over pressure	4 bar
• Tare weight	ca. 25 tonnes
• Tital weight	88 tonnes
• Axles load	22 tonnes
• Mine. Curve radius	75 m
• Max. speed	120 km/h
• Brake system	Russian
• Bogie type	3 pieces casting

Freight **Cement Wagon**

Suitable for transportation of cement and other bulk good such as chalk, aluminum powder and granules smaller than 4 mm in size. The tank has diameter of 2600 mm width 12710 mm length and 6 mm thickness. End interior is sloped with 4 mm plates. At the bottom there are 4 discharging funnels. Loading is through 4 flaps on the top of the car. Discharging is performed with the capacity of 1.2 tonnes per min. with the help of compressed air through a 100 mm tube. this system is able to shoot the material up to the height of 20 meters in the silo. The tank volume is 25 cu. m. and the loading capacity of car is 55 tonnes. bogie is 665 IIRR, H type with the speed up to 120 km/h. comprssed air brake system, type KE-GP-16.

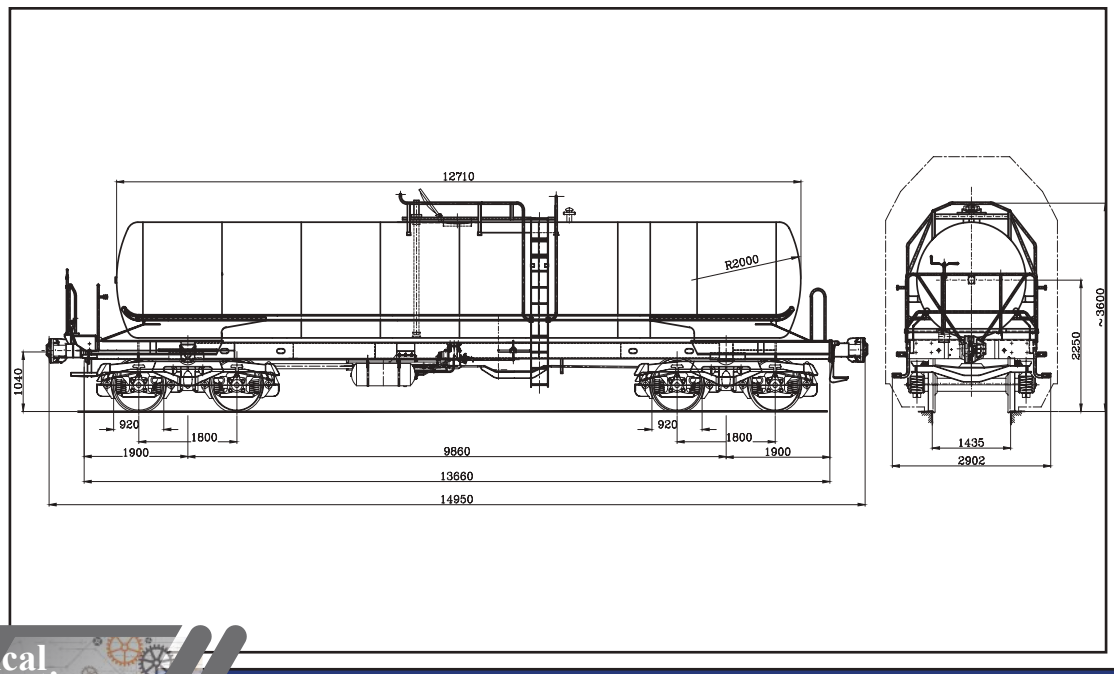


Technical Specifications

• Track guage	1435 mm	• Car weight	25.5 tonnes
• Length (over buffer)	16230 mm	• Loading Capacity	54.5 tonnes
• Height	4375 mm	• Axles load	20 tonnes
• Width	3130 mm	• Min. curve radius	60 m
• Chassis length	14940 mm	• Brake type	KE-GP-16"
• Loading volume	52 m^3	• Max. speed	120 km/h

Freight
Acid Tank Wagon

General design of the wagon is based on the standard of tank wagons according to UIC573 and this wagon is designed to carry sulfuric acid. The wagon is suitable for high speeds with a speed of 120 km/h without load and 100 km/h with load and is also equipped with a brake type and is used in SS/S type traffic.



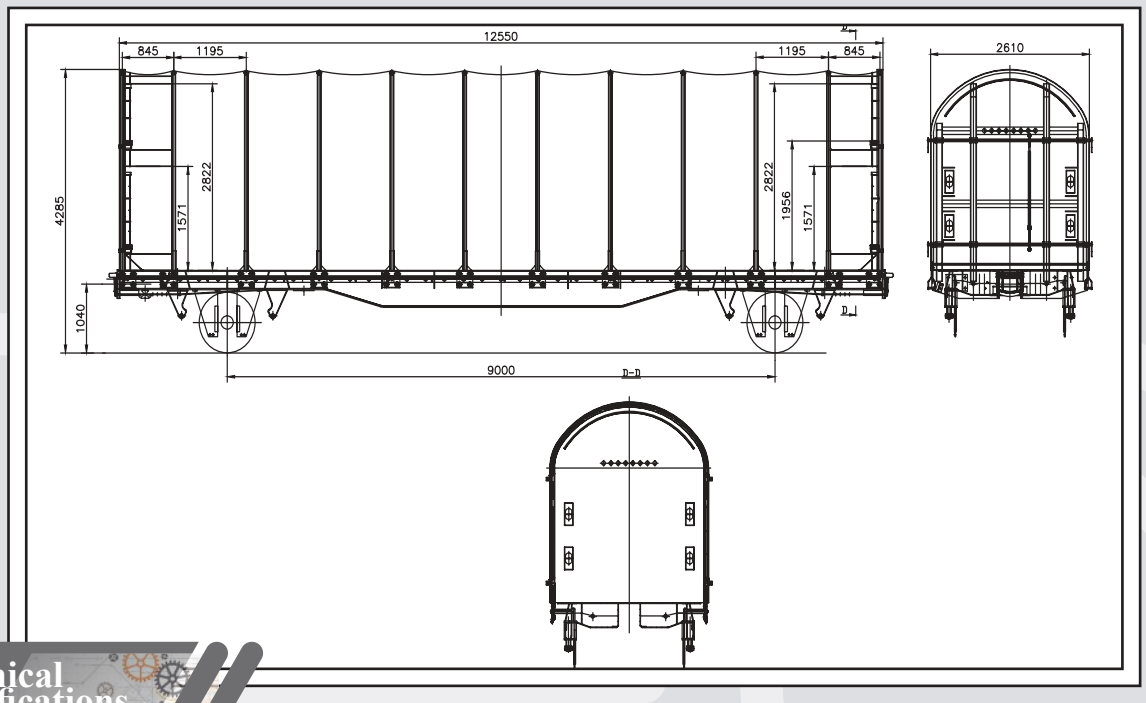
Technical Specifications

• Track guage	1435 mm
• Length	14950 mm
• Width	3134 mm
• Height (from top of rail)	3893 mm
• distance between the two bogie centers	9860 mm
• Tank volume	37.5m3
• Permitted loading volume	36 m3

• Number of axles	4
• weight	~ 24.5 tonnes ± 3%
• Coupler	Automatic SA3
• Axles load	22.5 tonnes
• Mine. Curve radius	75 m
• Max. speed	100 km/h
• Brake system	KNORR
• Bogie type	Y25Lsd1

Freight
Tentcover Wagon
(Rilns Wagon)

Two-axles wagon with tented brake conveyor, can be used to transport goods that need protection from the weather and to provide industrial and commercial services. This wagon is in accordance with UIC standards 592-2, 592-3, 592-4. , 571 is designed. The design of the wagon structure is such that it has sufficient strength against all forces applied during operation and impacts applied by other wagons. The design of this type of wagon is in accordance with DIN and UIC standards related to the design and construction of freight wagons. This wagon is capable of installing SA3 Radara automatic coupler. The material used in the wagon is carbon steels St52-3, St37-2 or similar.

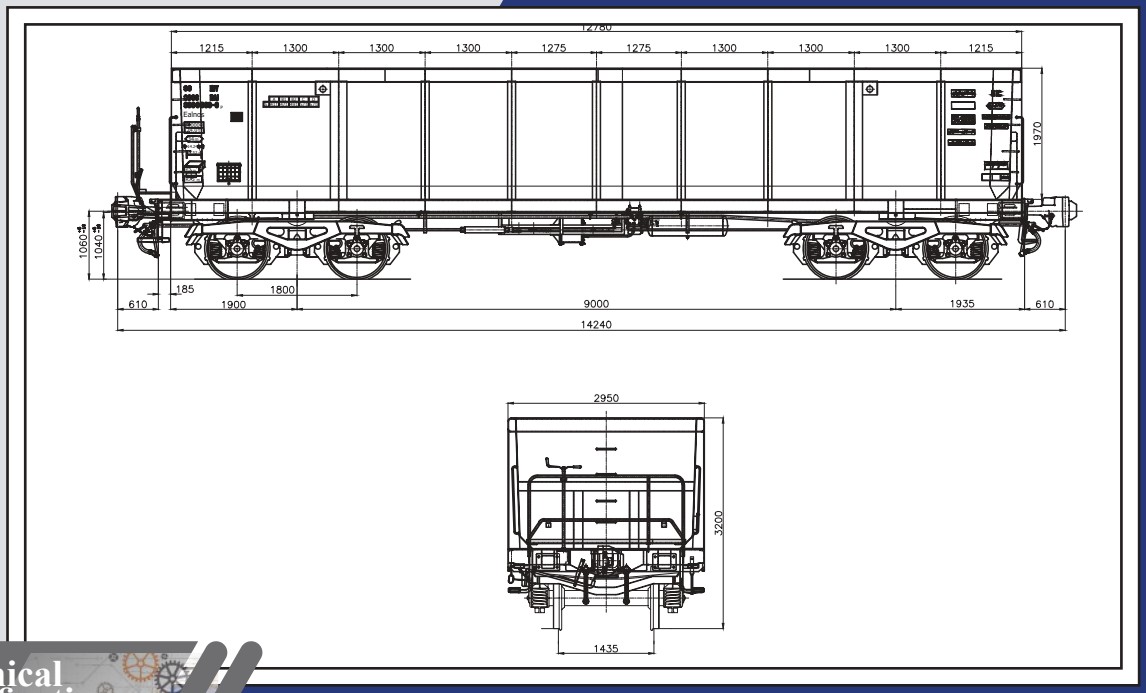


Technical Specifications

• Track guage	1435 mm	• Lenght of body	12620 mm
• No. of axless	2	• Width of body	2610 mm
• Tare weight	13.2 tonnes ±3%	• coupling type automatic	SA3
• axles load	22.5 tonnes	• Height	4285 mm
• Max. speed	120 km/h	• wheel diameter	920 mm

Freight
HWW
Light

The recently developed lightweight long-sided freight wagon represents a notable advancement in freight transport technology. Distinguished by the integration of novel materials, this wagon exceeds conventional counterparts in both material composition and load capacity, boasting an additional 2.5-ton payload capacity. Furthermore, the implementation of these new materials underscores exceptional anti-corrosion properties, ensuring enhanced longevity and durability under various environmental conditions.



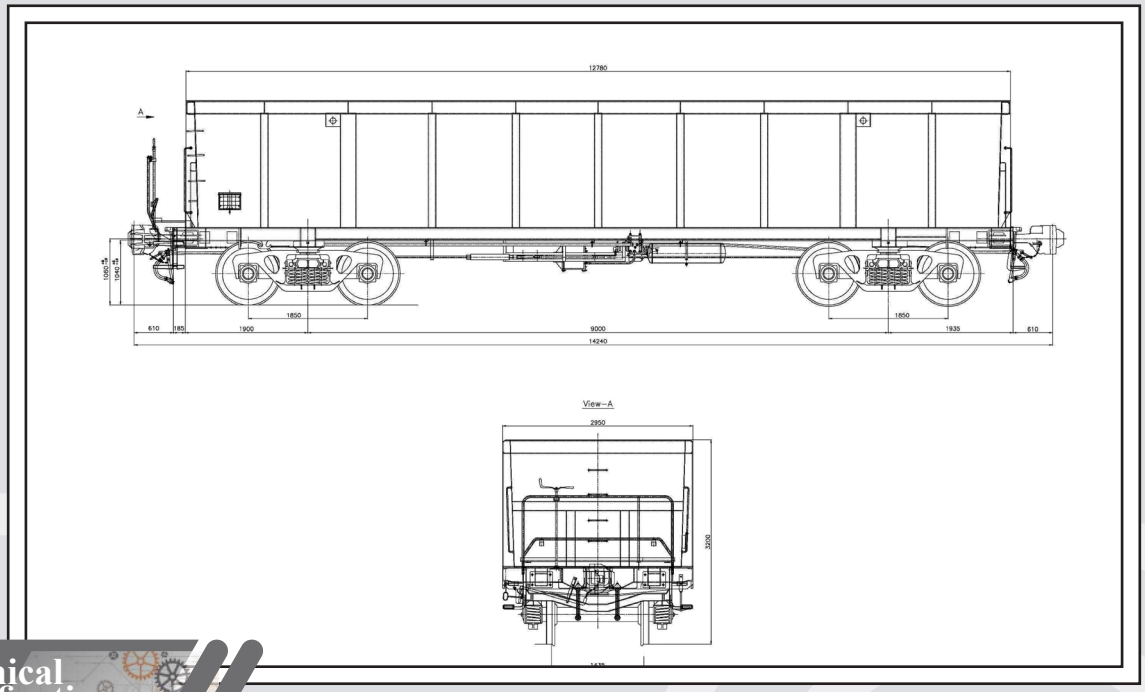
Technical Specifications

• Track guage	1435 mm
• Length	14240 mm
• Width	2950 mm
• Height (from top of rail)	3200 mm
• distance between the two bogie centers	9000 mm
• Loading Capacity	69.5 tonnes
• Gabari	UIC 505-1

• Number of axles	4
• weight	~ 20.5 tonnes ± 3%
• Coupler	Automatic SA3
• Axles load	22.5 tonnes
• Max. speed	120 km/h (100 km/h when loading)
• Brake system	KNORR
• Bogie type	Y25Lsd1

Freight
HWW
25t-RR

The recently developed high-sided freight wagon by Wagon Pars is engineered to facilitate the transportation of heavy loads, and can withstand an axle load of 25 tons.

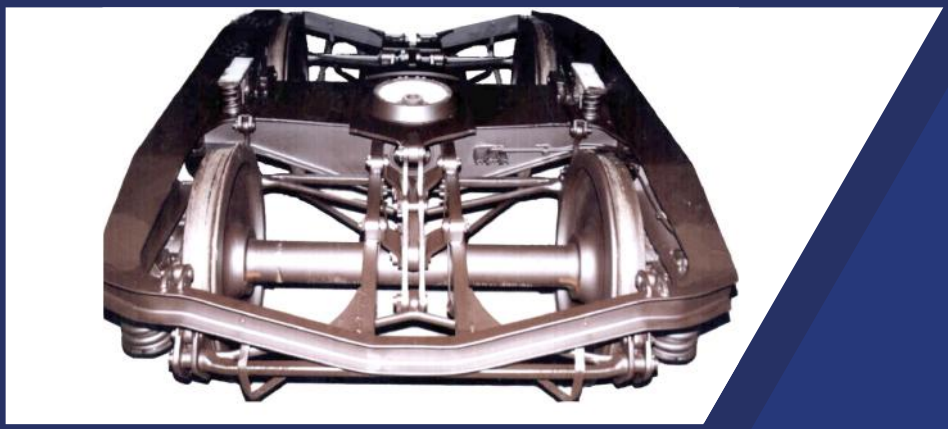


Technical Specifications

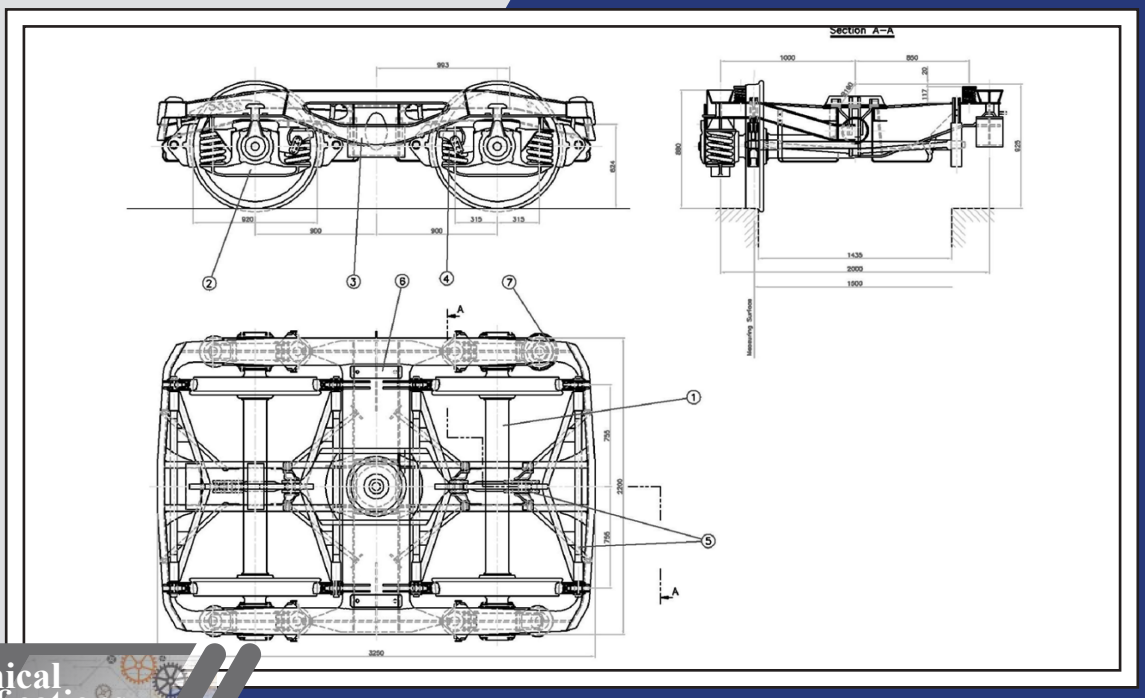
• Track guage	1435 mm
• Length	14240 mm
• Width	2950 mm
• Height (from top of rail)	3200 mm
• distance between the two bogie centers	9000 mm
• Loading Capacity	77 tonnes
• Gabari	UIC 505-1

• Number of axles	4
• weight	~ 23 tonnes ± 3%
• Coupler	Automatic SA3
• Axles load	25 tonnes
• Max. speed	120 km/h (100 km/h when loading)
• Brake system	Russian
• Bogie type	M.I.G31

Bogie
Y25-Rs2a



The bogie designed for international gauge and consists of a welded frame and coil spring suspension. Suspension damping is by means of a LENOIR type friction device. The axles is according to UIC 811-1 normalized and the wheel is monoblock type according to UIC 812-3. Wagon Pars Company has produced 1948 sets of bogie type Y25 for Syrian Railway and 1098 sets for RAI up to now.



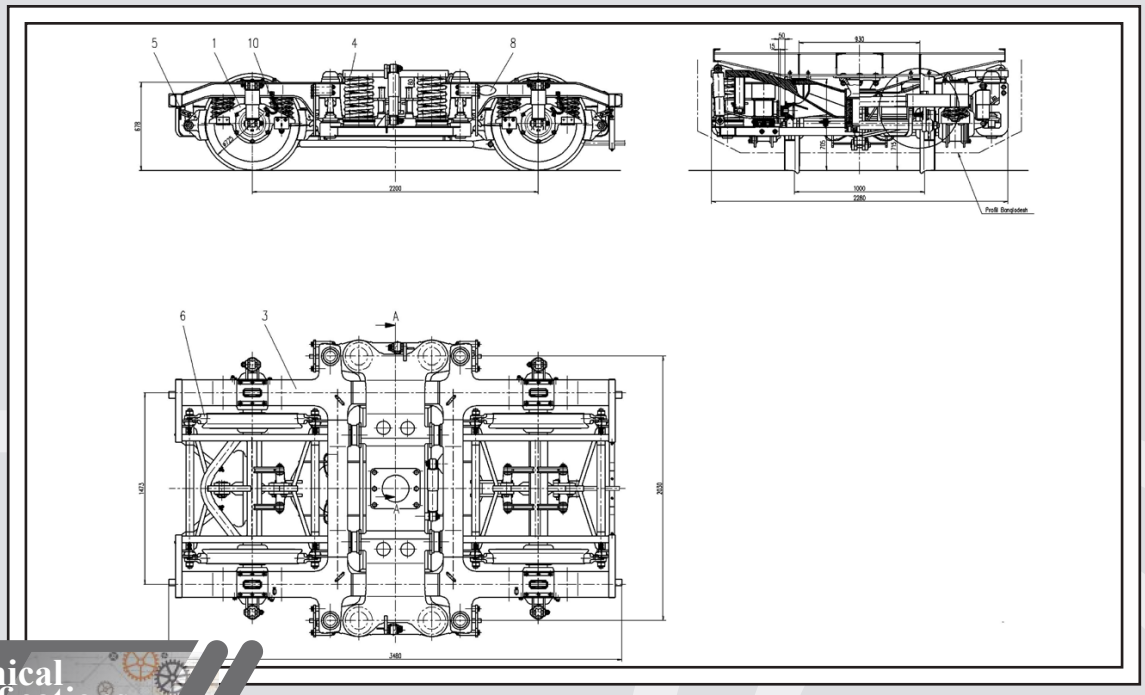
Technical Specifications

• Track guage	1435 mm
• Min. Radius	75 m
• Max. axles load	20 tonnes
• Speed	100/120 km/h
• Wheel base	1800 mm

• Wheel type	monoblock
• Wheel diameter	920/840 mm (new/worn)
• Bogie weight	4500 kg
• Brake shoes	Casting
• Spring type	coil spring

Bogie
MD 52-m

The bogie type MD52-M was originally designed and manufactured by M/S Wagon Union, GmbH, Germany. This Company being acquainted with the name of Bombardier transportation GMBH . Wagon Pars Company has produced 144 sets of bogie type MD52-M for BR by technology transfer from Bombardier transportation Co. and now has contracted with CRC for production and delivery of 164 sets of this bogie type for The Bangladesh Railways. These bogies will be used under the passenger wagons which will be manufactured by CRC.

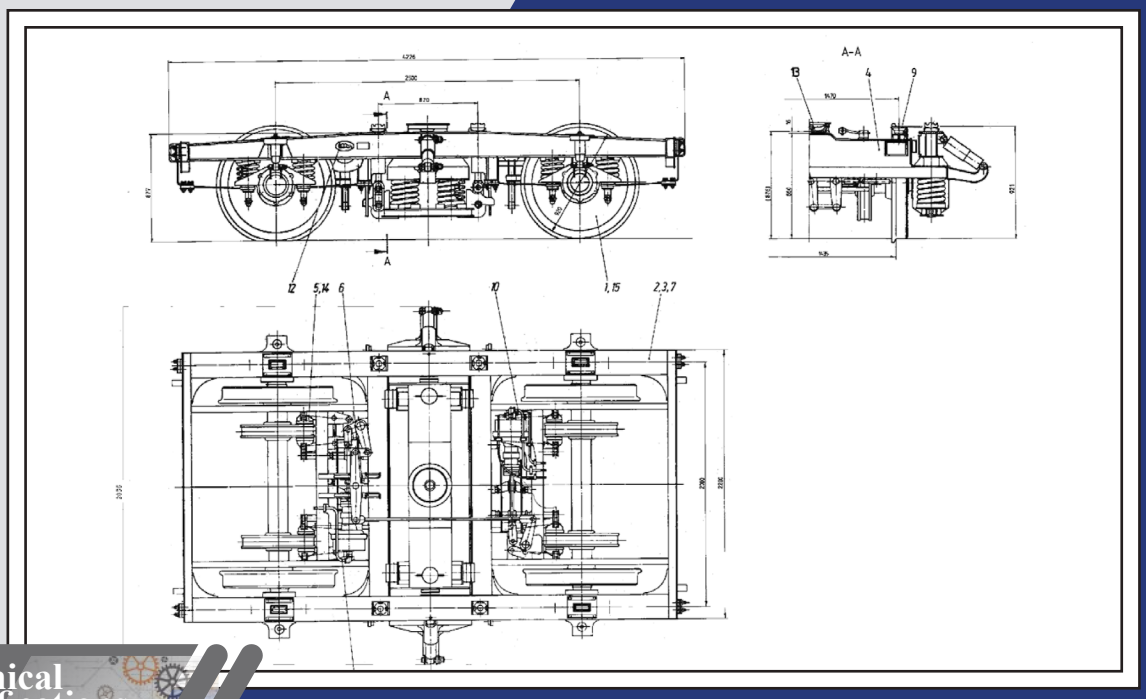


Technical Specifications

• Track guage	1000 mm	• Wheel type	retyreable
• Min. Radius	91.4 m	• Wheel diameter	725/695 mm (new/worn)
• Max. axles load	10 tonnes	• Bogie weight	4510 kg
• Speed	100 km/h	• Brake shoes	Casting
• Wheel base	2200 mm	• Spring type	coil spring

Bogie
MD36

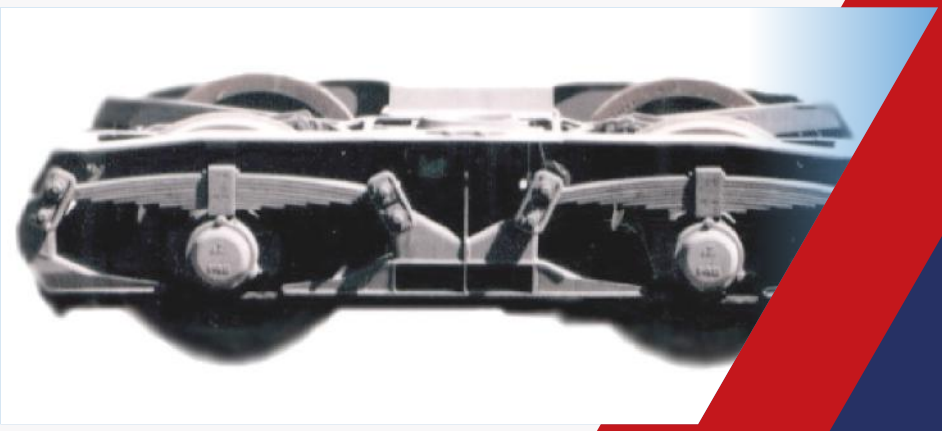
The bogie MD36 is standard type of construction Minden-Deutz 36 with helical and dust-proof shock absorbers. They have a double spring Suspension and are able to take up center pivot loads up to full carrying capacity of the wheelsets. All opening for levers and pins are provided with exchangeable steel bushes. Wagon Pars Company has produced 382 sets of this kind of bogie working under first class passenger coaches manufactured by WPC which are in operation in RAI tracks. Meanwhile Wagon Pars Company has contracted for 200 units of passenger coaches equipped with this type of bogie for export as well as 200 bogies for RAI in 2006.



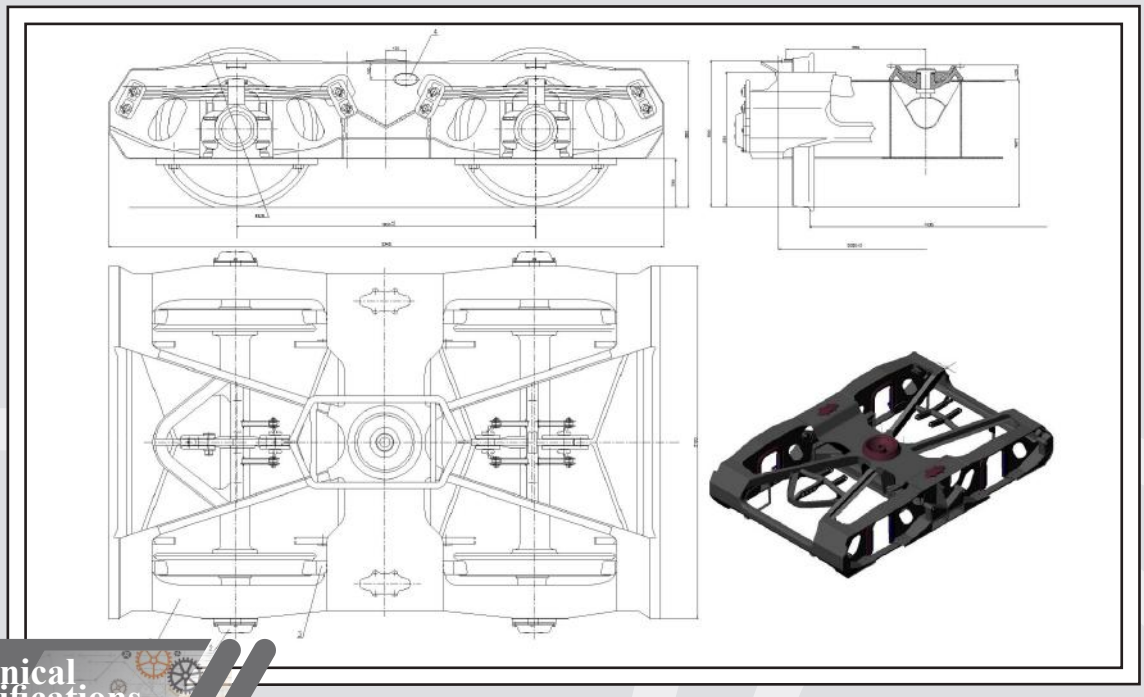
Technical Specifications

• Track guage	1435 mm	• Wheel type	retyreable
• Min. Radius	80 m	• Wheel diameter	920/860 mm (new/worn)
• Max. axles load	16 tonnes	• Bogie weight	5500 kg
• Speed	140 km/h	• Brake shoes	disc
• Wheel base	200 mm	• Spring type	coil spring

Bogie
H665-IIRR



The bogie H 665/IIRR is a special execution of the freight wagons bogie WU 83 of the Wagon Union and is a further development of the successful and reliable bogie type 665, which has been developed and tested in close connection with the "Deutsche Bundesbahn", and has been in service for years. While designing the frame special emphasise was placed upon an optimal production method and very robust execution, in order to reduce the maintenance requirements. The longitudinal and cross clearance of the axles bearing to the frame permit a radial adjustment of the wheel set in curves down to 150 m curves. Wagon Pars Company has produced 6095 sets of this kind of bogie for different types of freight wagons such as Tank & Covered Wagons.

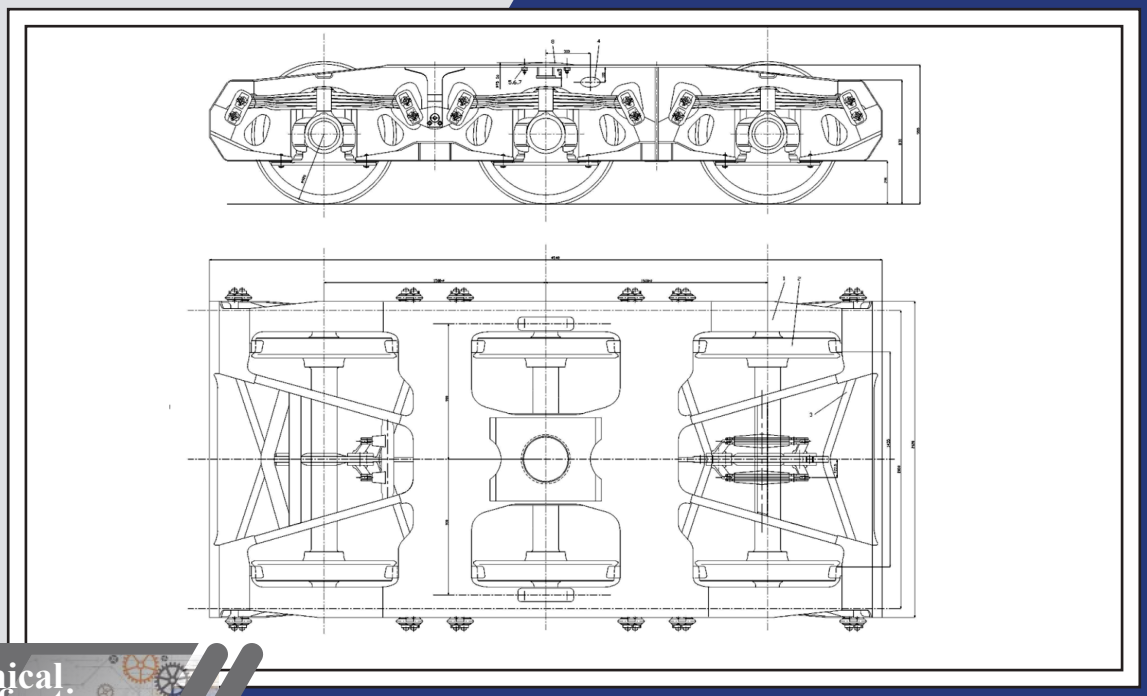


Technical Specifications

• Track guage	1435 mm	• Wheel type	retyreable
• Min. Radius	75 m	• Wheel diameter	920/840 mm (new/worn)
• Max. axles load	20 tonnes	• Bogie weight	4860 kg
• Speed	100/120 km/h	• Brake shoes	Casting
• Wheel base	1800 mm	• Spring type	parabolic

Bogie
WU-84

The Bogie WU84 is a developed version of the bogie type WU 83H665. This bogie has been adapted for the purpose of transport heavy loads. For this reason this kind of bogie is equipped with three axless. Wagon Pars Company has produced 2660 sets of this kind of bogie for RAI. This type of bogie has developed for the axles load of 22.5 tons by WPC's design department.

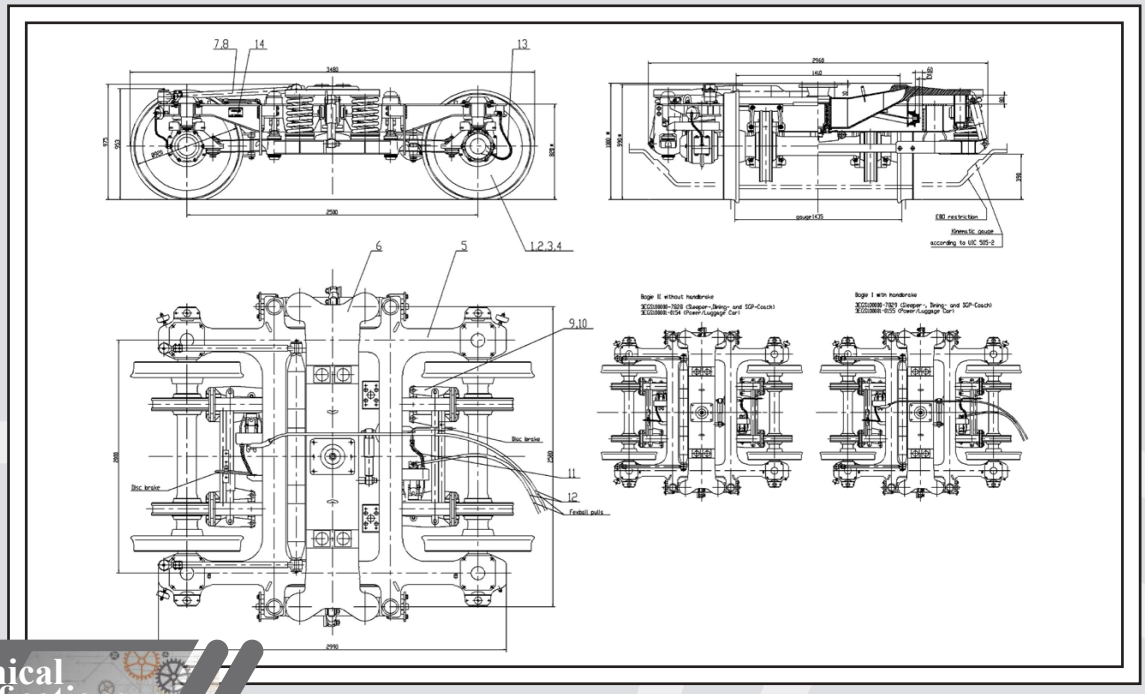


Technical Specifications

• Track guage	1435 mm	• Wheel type	retyreable
• Min. Radius	60 m	• Wheel diameter	920/840 mm (new/worn)
• Max. axles load	22.5 tonnes	• Bogie weight	7520 kg
• Speed	100/120 km/h	• Brake shoes	Casting
• Wheel base	1500 mm	• Spring type	parabolic

Bogie
MD 523-1

This bogie meets UIC condition and is designed for using in passenger coaches. The primary suspension system is located between the wheel set roller bearing and the bogie frame. The secondary damping system is located between the bogie bolster and the bogie frame. The manufacturing Technology of this bogie has been awarded through Bombardier transportation Co. for manufacturing of 366 sets of this kind of bogie for Iranian railway, which are running at maximum speed of 160 km/h over RAI tracks.

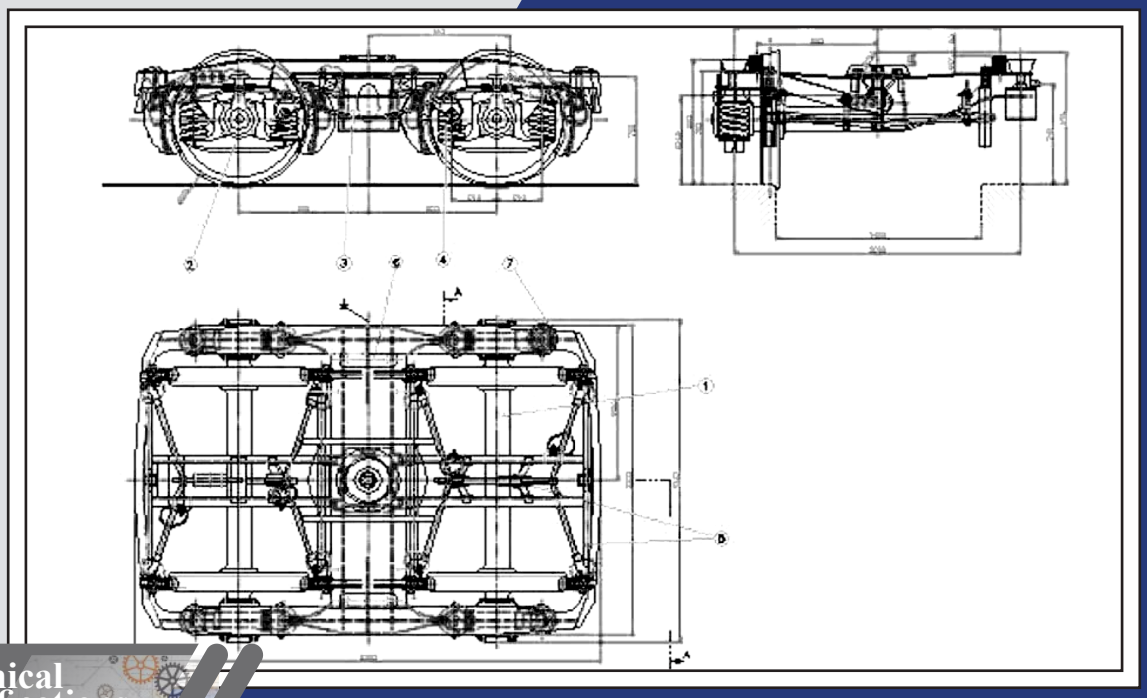


Technical Specifications

• Track guage	1435 mm	• Wheel type	monoblock
• Min. Radius	80 m	• Wheel diameter	920/860 mm (new/worn)
• Max. axles load	16 tonnes	• Bogie weight	6000 kg
• Speed	160 km/h	• Brake shoes	two disc brake/axles
• Wheel base	2500 mm	• Spring type	coil spring

Bogie
Y25-lsd1

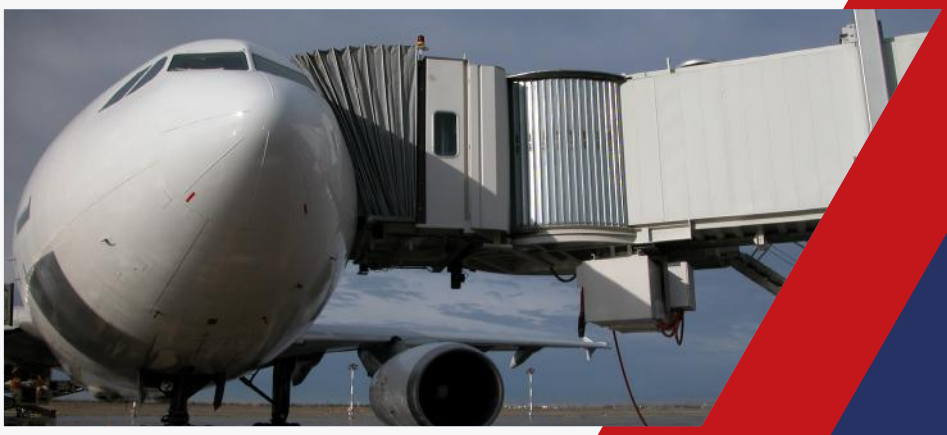
This bogie is designed on the base of ERRI-UIC standards, for freight wagons with the axles load of 22.5 tons and speed of 100 km/h that can be operated with speed of 120 km/h with axles load of 20 tons. This kind of bogie with the frame of welded structure of steel plates and profiles and casting steel has been produced by Wagon Pars Company in 2007.



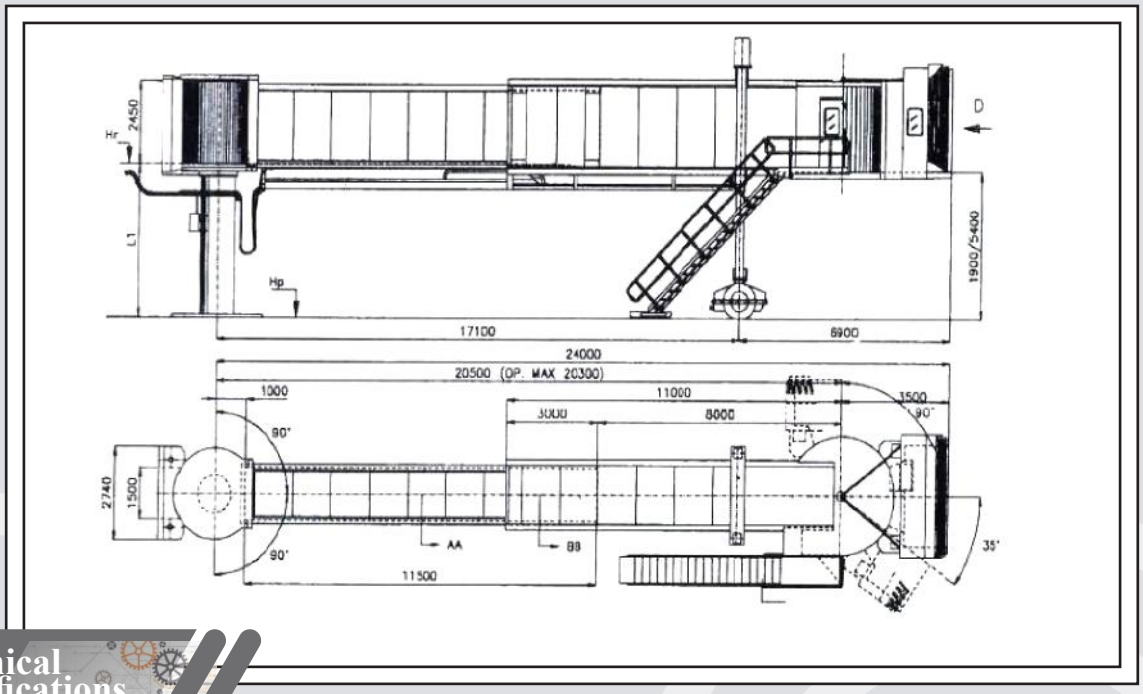
Technical Specifications

• Track gauge	1435 mm	• Min. Curve radius	75 m
• Axles load	22.5 tonnes	• Max. speed	120 km/h
• Bogie weight	4776 kg	• Wheel diameter	920/840 mm (new/worn)
• Brake shoes	Casting	• Spring type	coil spring

Passenger Boarding Bridge



For comfort of the aircraft passengers, economy and safety purpose whith coopration of the TEAM company we have collected all advanced technology in our P.B.B design variety of the colours, safe condition and attractive features is part of our design and also manufacturing of P.B.B is in accordance with international and IATA standard.



Technical Specifications

- PLC OPERATION
- CCTV CONTROL
- GOOD VISION TO THE PRON
- ELECTRICALY OPERATED TRACTION MOTOR WITH EQUIPPED GEAR BOXES
- HYDRAULIC LIFTING WITH SYNCHRONIZING DEVICE AND MECHANICAL BACK UP SYSTEM

- ANGLE OF TURN (TERMINAL-PORTATION) 180 (90 LEFT AND 90 RIGHT)
- ANGLE OF TURN (AIRCRAFT PORTION) 90 LEFT AND 30 RIGHT
- ANTI CORROSION STRUCTURE
- SOUND RESISTANCE STRUCTURE
- WATERPROOF STRUCTURE
- LENGTH FROM 10.5 METERS UP TO 40.8 METERS

General characteristics

- Minimum working life 20 years
- Liability period 12 month
- Rotation angle of rotunda 90° right/left
- Rotation angle of bridgehead 90° left/35° right
- Length
  - Minimum 18.5 m
  - Maximum 31.5 m
- Elevation range of bridgehead floor:
  - Maximum 5410 mm
  - minimum 1900 mm

- Electrical supply
  380/220 50 Hz 3 phases , 4 wire with earthing
- Lighting voltage
  220 V/50 Hz
- Voltage control
  24 V AC
- Ambient temperature
  - minimum -32° C
  - maximum +52° C
- Humidity
  100%

- Bridgehead/cabin

a) internal dimension:
- width 3.100 mm
- height 2.800 mm
- depth 1.270 mm

b) Swinging double door:
- width 1.400 mm
- height 2.200 mm

c) Rotation:
- left 90°
- Right 35°