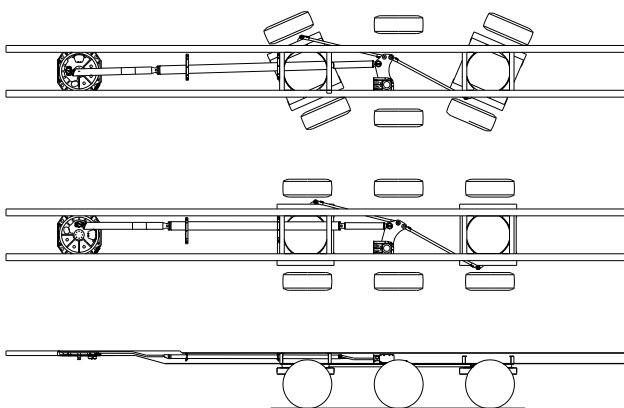


Application

TD-X for distribution transport



TD-X Mechanical Steering System

The TD-X steering arrangement is a mechanical system which is used primarily in distribution transport. The TD-X makes it possible to increase the axle distance of a 3-axle trailer so the driven axle of the tractor will not be overloaded, even when the trailer is only partially loaded. For tank-trailers a special version is available. The system allows the operator to make more efficient use of the trailer through improved manoeuvrability, providing the ability to negotiate small roundabouts on urban roads. Use of the TD-X results in a great reduction of tire wear and fuel costs.

Savings on

- Tyre wear
- Fuel consumption
- Time, through better manoeuvrability
- Vehicle maintenance
- Vehicle damage

Steering principle

While making a turn, the movement between the truck and trailer is transmitted by the fifth wheel plate, locked into the fifth wheel coupling by the steering wedge. The steering bar transmits this steering motion directly and without any play to a transfer lever. From the transfer lever, steering rods steer the axle mounting frames of the front and rear axles of the trailer.

The front axle of the trailer steers in the same direction as the truck, the rear axle of the trailer steers in the opposite direction.

Technical Specification

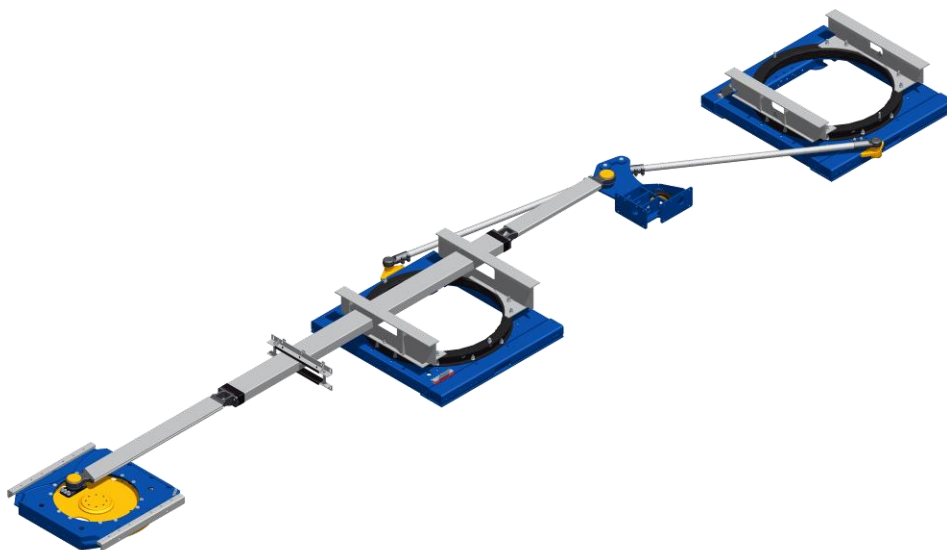
TD-X for distribution transport

General

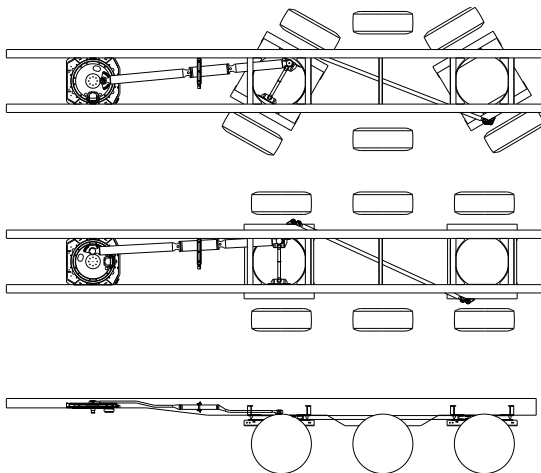
- A TD-X system steers the front and rear axle of a three axle trailer, the front axle steers in counter steering
- RDW test report according EEC guideline (R79) for most common TD-X configurations available at request (no. 56210101)
- Special TRIDEC spline bolts used for most bolt connections. No loosening of bolts and re-tightening not necessary
- Gross weight: upon 915kg. Net weight of steering system is reduced due to the replacement of a conventional rubbing plate with the TRIDEC unit and modifications to rear of chassis to accommodate the turntable
- Steering angles between 13 and 30°
- Components: fifth wheel unit, steering bar, transfer lever, steering rods, axle mounting frames

Technical Specification

Feature	Value
Number of steered axles	2
Fifth wheel load	15/20t
Axle load	10t
Spring centre	1200mm
Chassis centre	980/1200mm
Gross weight	Upon 915kg
Steering angles	13 to 30°

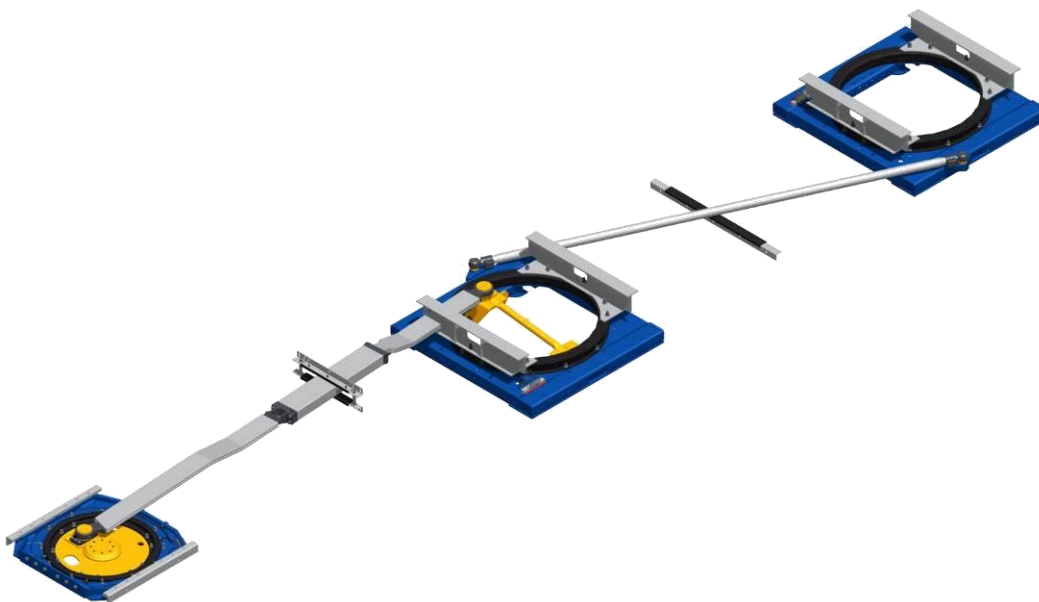


TD-XD the light-weight solution



TD-XD Mechanical Steering System

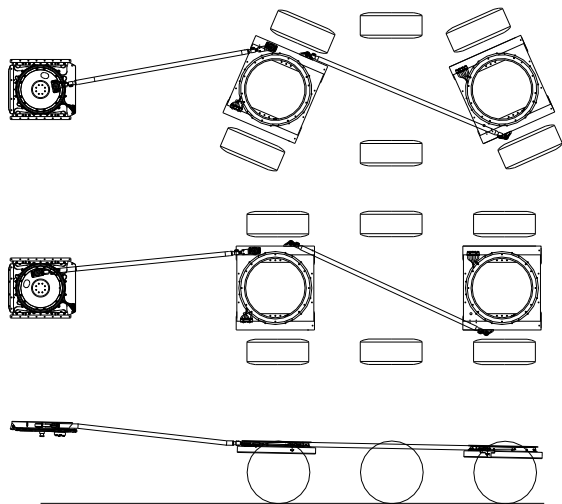
Applications requiring larger steering angles (upon 28°), or small angles in combination with sufficient height for the fifth wheel unit (135mm), can be equipped with the TRIDEC TD-XD steering system. The steering bar and rod is directly connected to the axle mounting frames, making the transfer lever redundant, beneficial for weight and price.



Technical specification

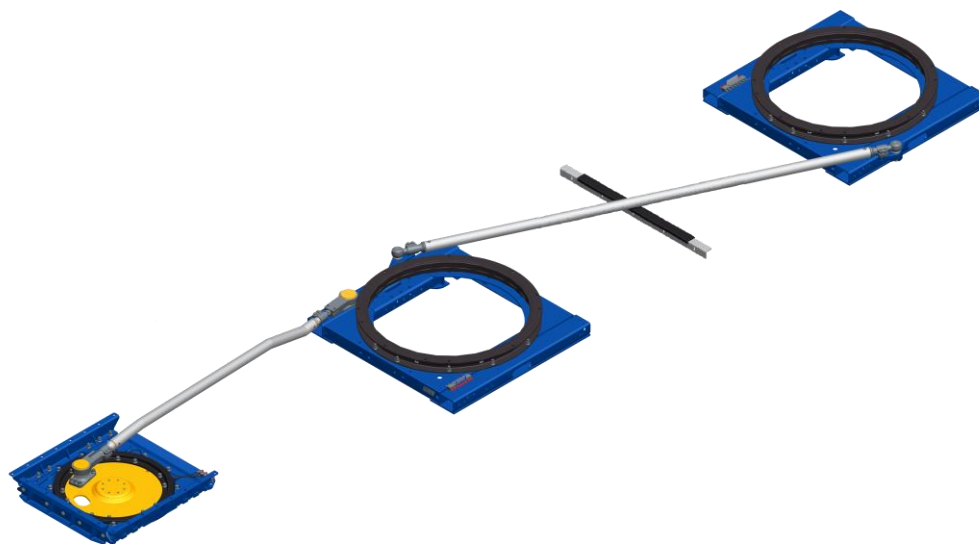
Feature	Value
Number of steered axles	2
Fifth wheel load	15/20t
Axle load	10t
Spring centre	1200mm
Chassis centre	980/1200mm
Gross weight	Upon 780kg
Steering angles	19 to 30°

TD-XDT Tank



TD-XDT Tank Mechanical Steering System

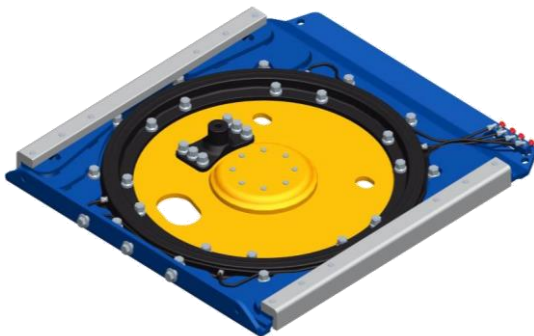
Specially for short tank-trailers, TRIDEC supplies the light-weight TD-XDT Tank steering system. The fifth wheel unit is bolted directly to the tank. The steering rods are mounted fully outside the axle mounting frame's turntables, requiring no protrusion in the tank's axle mountings over both steered axles.



Technical specification

Feature	Value
Number of steered axles	2
Fifth wheel load	15t
Axle load	10t
Spring centre	1200mm
Frame height	100mm
Gross weight	775kg
Steering angles	24°

Components



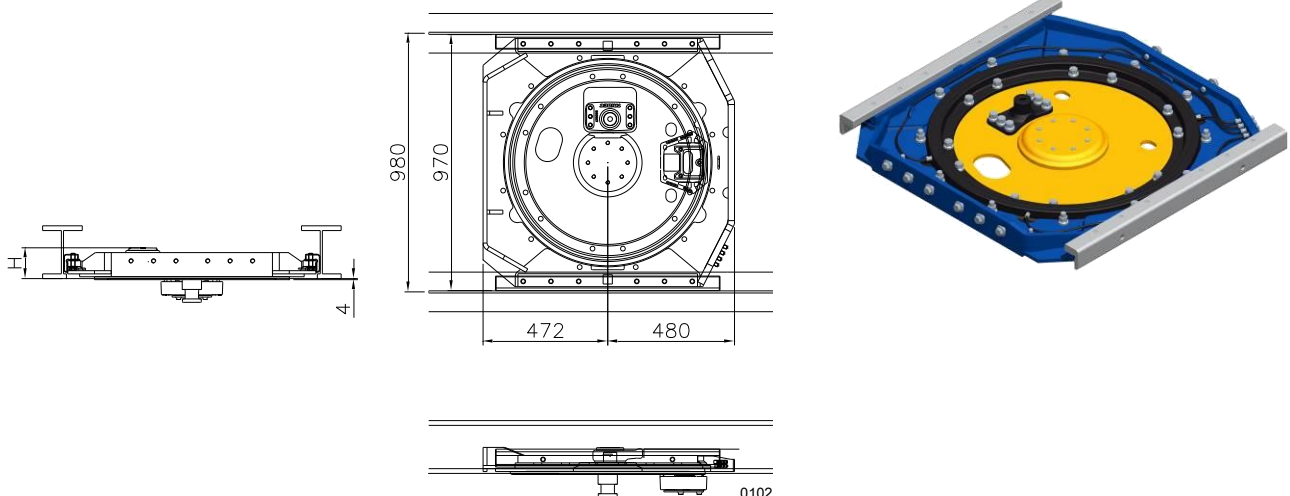
Fifth wheel unit

- Bolted into the chassis by supplied mounting profiles, which are welded into the chassis resulting in simple and quick installation
- Easy maintenance and possible repairs
- Equipped with JOST turntable, 2" king pin and TRIDEC steering wedge
- Treatment: KTL
- 3 versions possible: TD-K, TD-T & TD-G

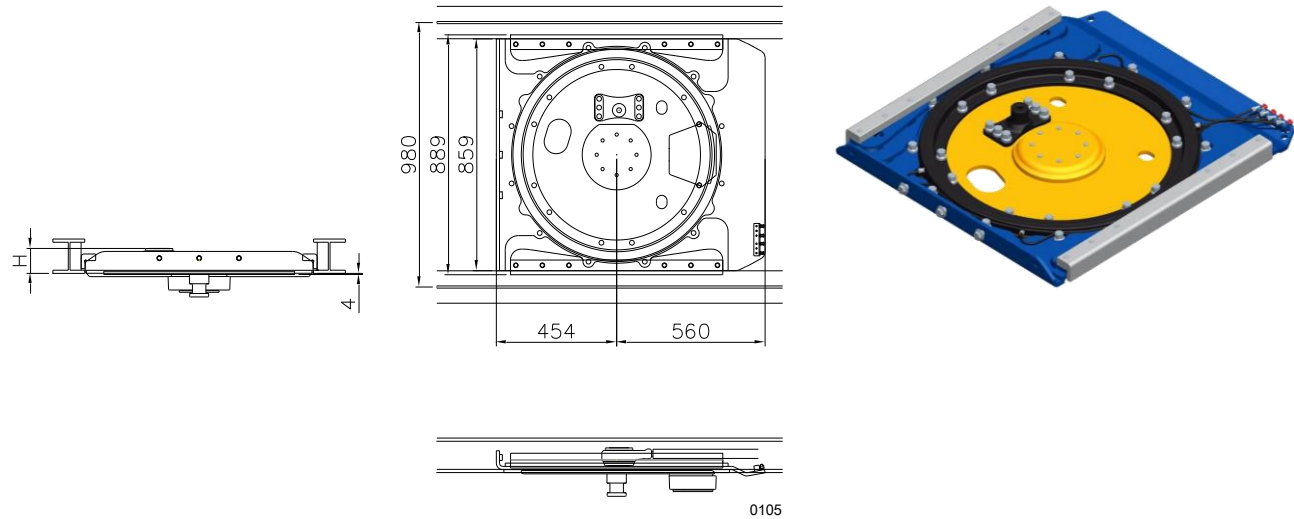
		Fifth wheel unit					
		TD-K	TD-T	15		20	
Max. load	t	15	15	15	15	20	20
Width W	mm	970	889	970	1190	970	1190
Chassis centre CC	mm	980	980	980	1200	980	1200
Weight	kg	174	163	225	282	235	299

		koppelingsplateau		
		TD-K	TD-T	TD-G
Mounting height TD-X H mm				
Steering angle < 17°		-	-	135
Steering angle upon 17°		92	92	125
Mounting height TD-XD H mm				
Steering angle < 28°		-	-	135
Steering angle upon 28°		92	92	125

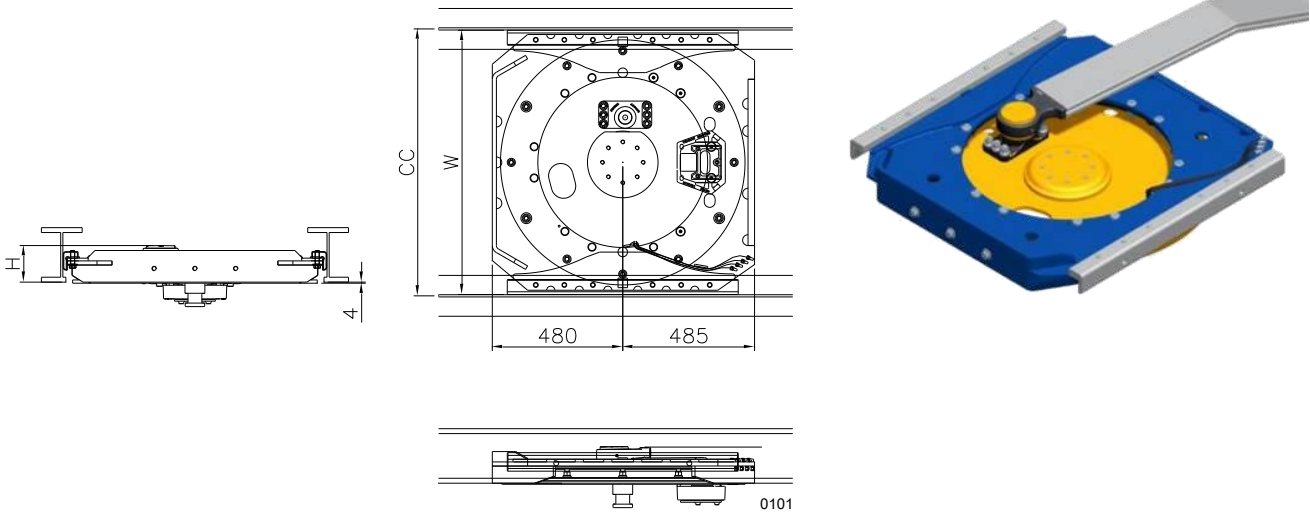
Fifth wheel-unit TD-K



Fifth wheel-unit **TD-T**



Fifth wheel-unit **TD-G**



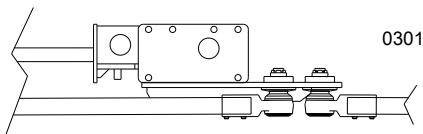
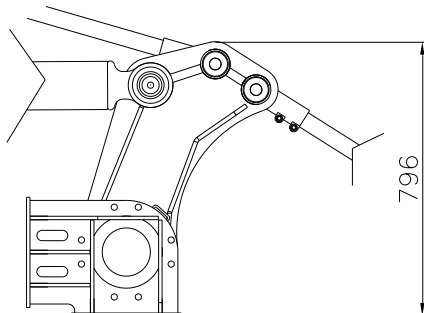


Steering bar

- The bar consists of three pieces, which are supported by special support-brackets, and connects the fifth wheel unit with the transfer-lever (TD-X), or the first axle mounting frame (TD-XD)
- The first and last bar are available in different offsets, to overcome height-deviations in the chassis
- When necessary the middle bar is also equipped with an offset
- Maintenance-poor bearings equipped with the patented TRIDEC 'sealed for life' constructions
- Shims allow for alignment, by adjusting the rod's length
- Treatment:
 - front and rear rod are KTL treated
 - middle rod is galvanised

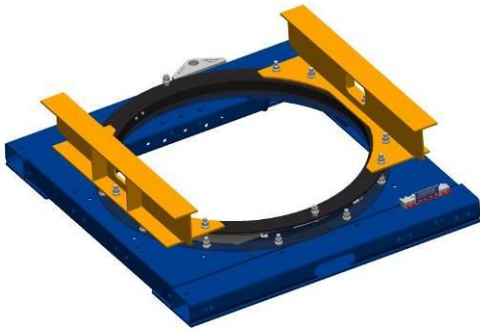
Steering rod

- Steering rods are equipped with maintenance poor ball-joints
- Easy alignment by turning the ball-joint in or out of the steering rod
- Treatment:
 - ball joints KTL treated
 - round rods TD-X galvanised
 - round rod TD-XD KTL treated



Transfer lever (only at TD-X)

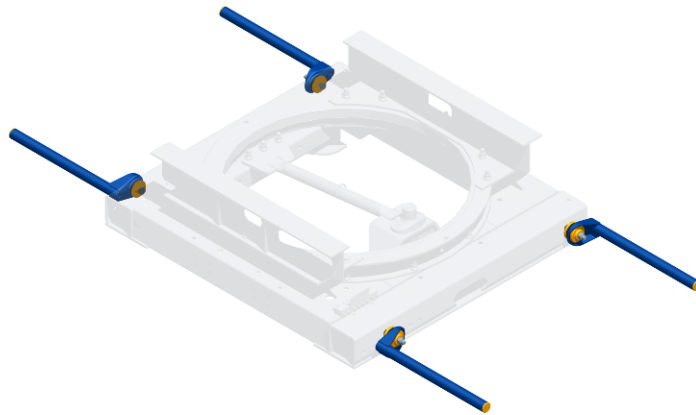
- To be mounted to the chassis by a boltable support-bracket
- State of the art bearing with protection cover and dirt-seal
- Centralized greasing block
- Treatment: KTL



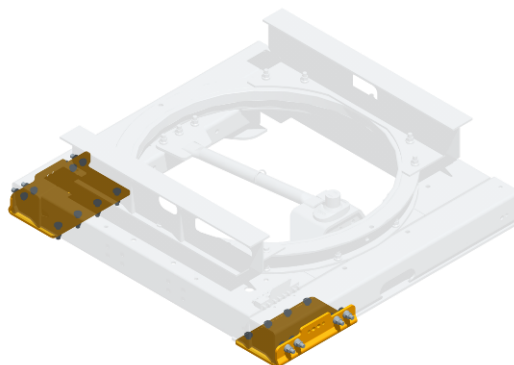
Axle mounting frame

- Suitable for use with most common tyre dimensions and axles with air suspension
- Axle load 10t (legally approved)
- 1200mm spring centre
- Axle mounting frame height is 100 or 140mm
- TRIDEC specific JOST turntable with a diameter of 1100 or 1200mm, 90mm height, KTL treated
- Cross members to support the turntable are included as part of the supplied kit
- Greasing points centralized on one greasing block.
- Welding of thrust plates no longer required, due to use of special TRIDEC spline bolts for mounting the turntable on the chassis
- Optional mudguard supports (lengths 455/575/770mm) with vibration reducing rubbers bolted to the turntable frame
- Treatment: KTL (standard). Optional: galvanised, supplied with two hanger bracket mounting plates

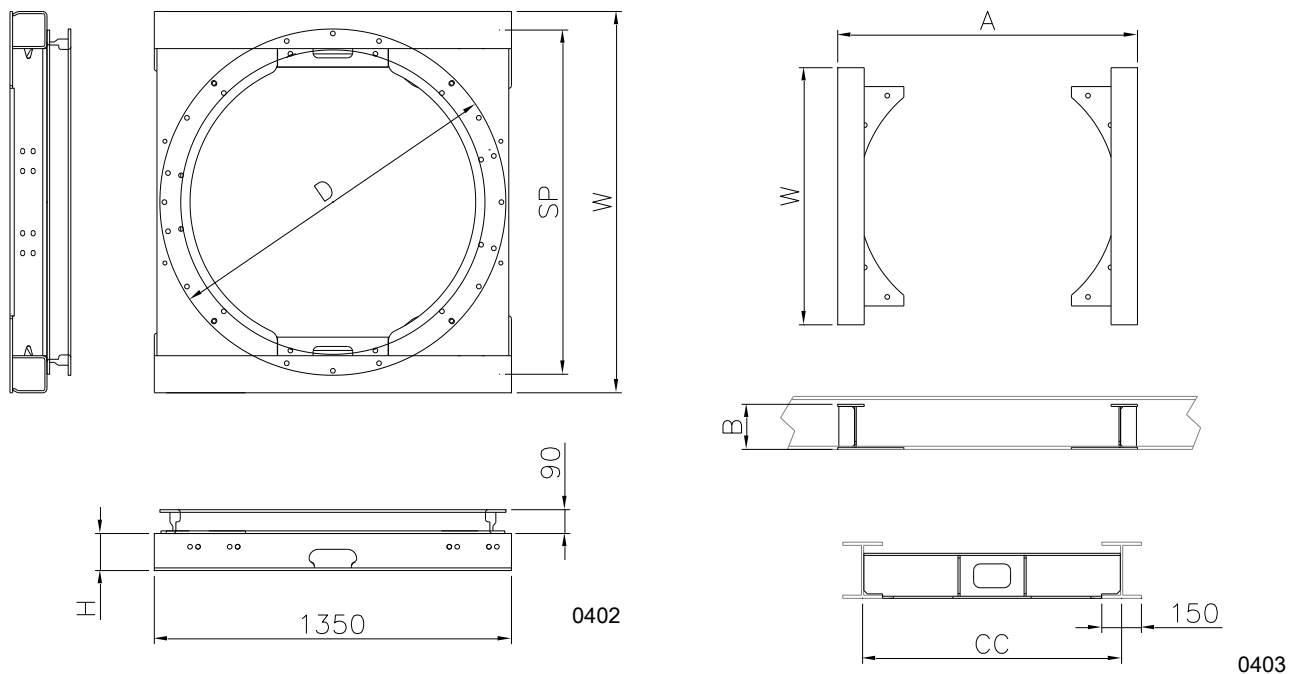
Mudguard supports:



Hanger bracket mounting plates:



Axle mounting frame and cross members



Axle mounting frame

Spring centre SP (mm)	Height H (mm)	Width W (mm)	Turntable D (mm)	Weight (kg)
1200	100	1340	Ø 1100 / 1200	247 / 256
1200	140	1340	Ø 1100 / 1200	274 / 283

Cross members

Chassis centre CC (mm)	Width W (mm)	Height B (mm)	Turntable D (mm)	A (mm)
980	970	170 / 230	Ø 1100	1134
1200	1190	170 / 230	Ø 1200	1236

Order references

TD-X Mechanical Steering System

Code	Description
0301	TD-X steering system 2 axles steering
0302	TD-XD steering system 2 axles steering
0305	TD-X steering system, with TD-T fifth wheel unit, 2 axles steering
0306	TD-XD steering system, with TD-T fifth wheel unit, 2 axles steering
0308	TD-XDT Tank steering system, 2 axles steering

TD-X & TD-XD Options

Code	Description
0320	Fifth wheel unit TD-K
0322	20 ton fifth wheel unit
0323	Bended mid-section steering rod
0325	Adjustable mudguard support galvanised (set of 2, length 455, 575 or 770 mm)
0326	Leaf-spring bracket support plate, to bolt to the axle mounting frame (set of 2 pieces)
0327	Galvanised axle mounting frame with KTL treated turntable and 2 leaf-spring bracket support plates (each turning unit)

The information contained in this document gives an indication of the possibilities. Not all exceptional models are included in this document. Please contact our sales department to determine whether a particular configuration of the system can be used in your trailer or that special solutions are possible.

Sales contact

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