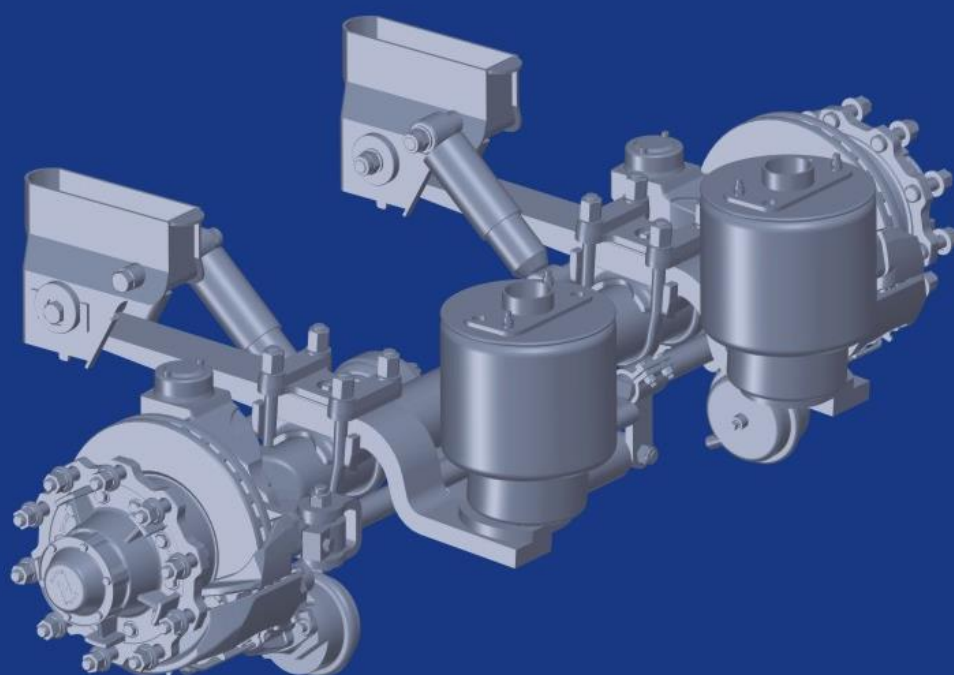




AXLE & SUSPENSION

*ALION*

安联(郑州)工程机械有限公司  
MANUFACTURING & ENGINEERING LTD.



# COMPANY PROFILE



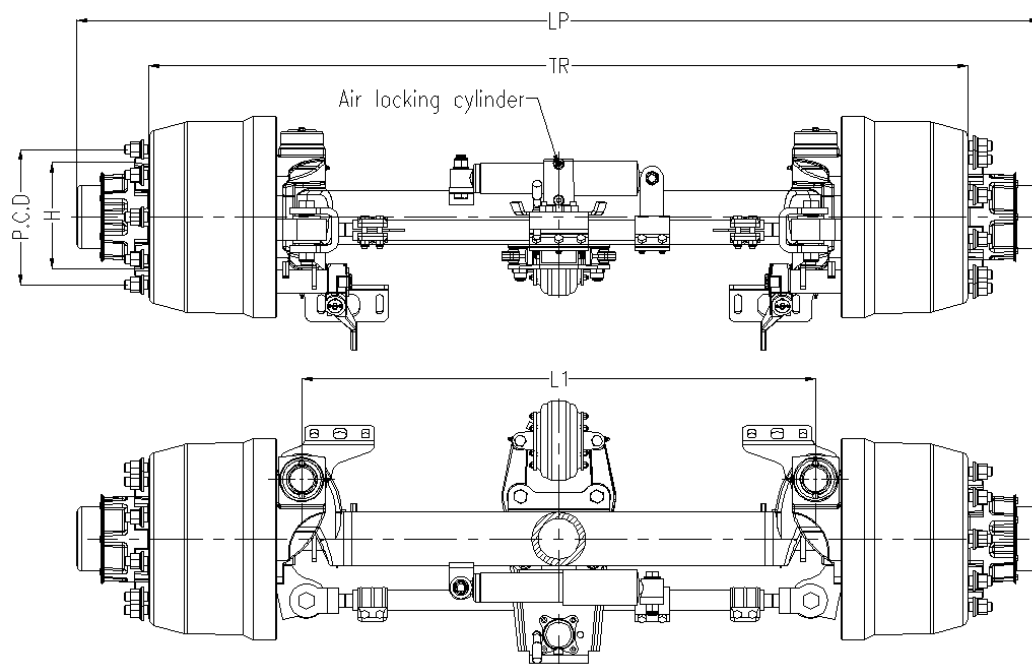
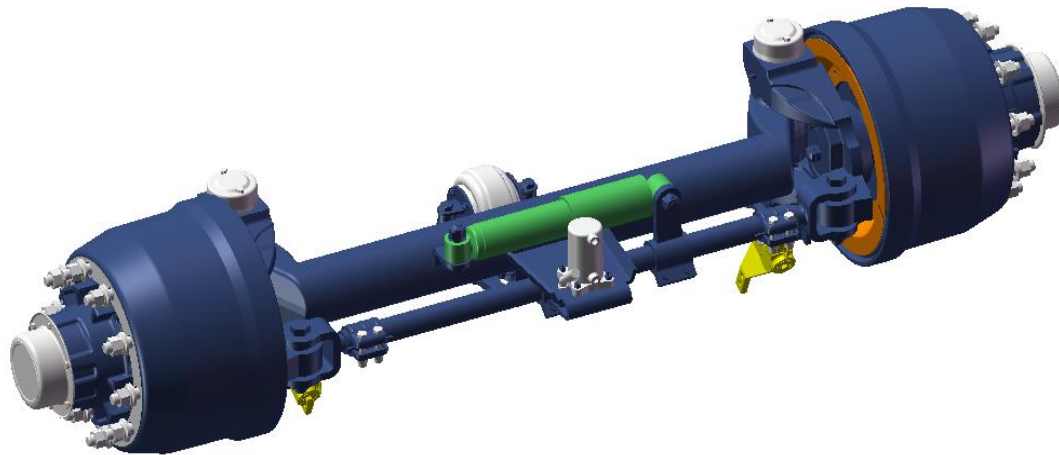
Alion Manufacturing & Engineering Ltd. was founded in 1998, it is a company with total investment CNY 50 million, covering a production area 16,650 square meter, located in Zhengzhou High Technology Industrial Zone, Henan, China.

Being an ISO 9001: 2015 International Quality System certified enterprise, since its born Alion has been concentrating on Research, Design & Manufacturing of Trailer axles, Agricultural axles, Special axles, Bogies, Mechanical & Air suspensions. During the past almost 20 years we have gained rich experience in the field of designing and manufacturing of Axles & Suspensions. At the same time, we continue to invest in the most advanced equipment and keep upgrading and maintaining the facilities we have had. We can provide our customers with high quality products by combining modern equipment with advanced processing technology and perfect Quality Control System.

Our business Philosophy is [people-oriented; Honesty and Sincerity; Continuous Improvement; Meeting customer's demands.](#)

Based on [Reliable Quality, Reasonable Price, Perfect Service](#), we have made our products enjoy high prestige in the market of America, Europe, Africa & Asia. Nowadays, Alion Manufacturing & Engineering Ltd. is becoming one of the leading manufacturers of Axles & Suspensions in China.

## Self steering axle

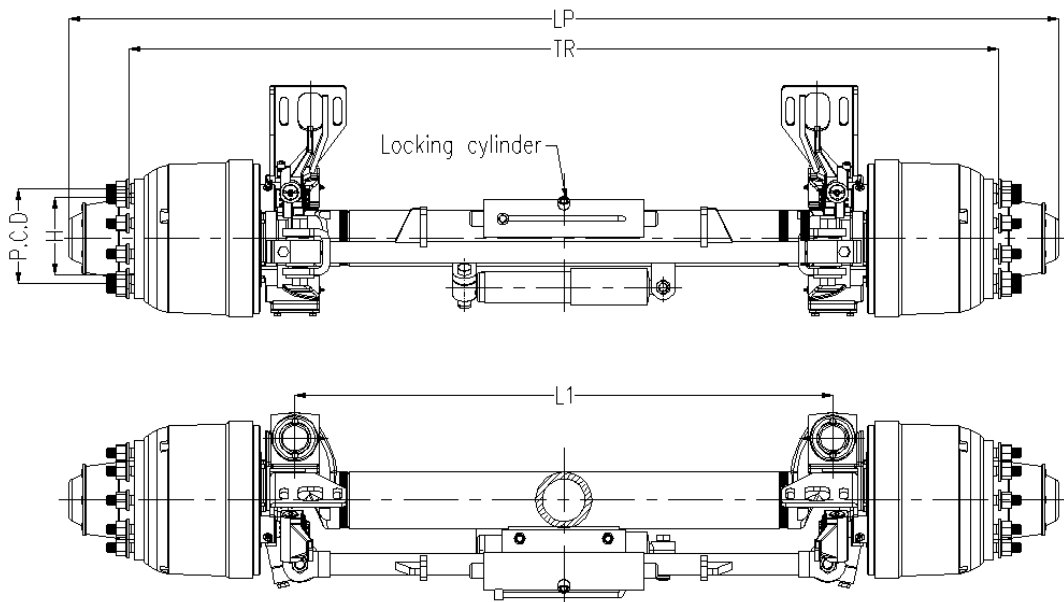
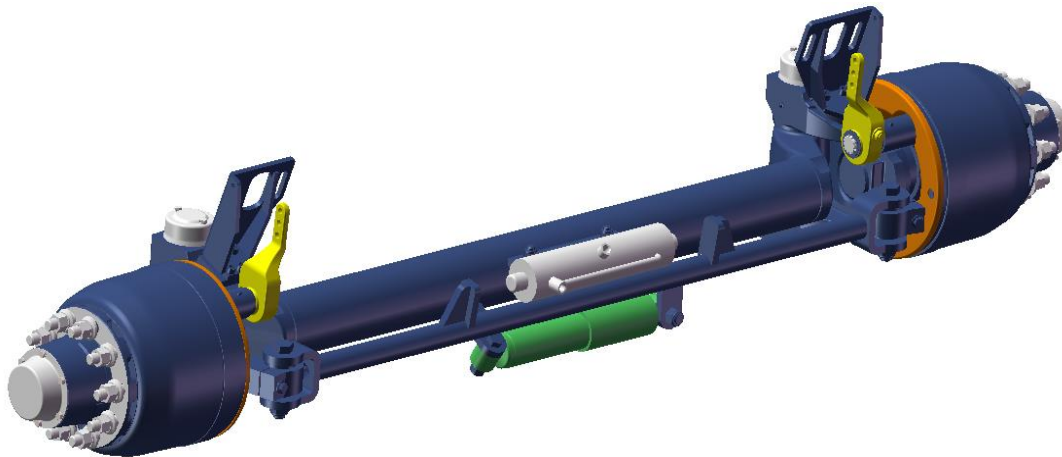


## Axle specifications

Axle Type	Max. Loading Capacity at 105km/h (kg)	LP Total Length (mm)	TR Track Length (mm)	L1 Kingpin Distance (mm)	Beam Type (mm)	Brake (mm)	Wheel Fixing			Max. Steering Angle
							Studs (mm)	P.C.D (mm)	H (mm)	
AL4220R127.1930T04	11,500	2270	1930	1210	∅127	∅420x203	10-M22x1.5	∅335	∅281	18°

- Notes:
1. Specified track length is available.
  2. ABS and automatic slack adjuster are available.
  3. Specified brake size & bearing sizes are available.
  4. 120x120, 130x130 & 150x150 axle beams are available.

## Self steering axle



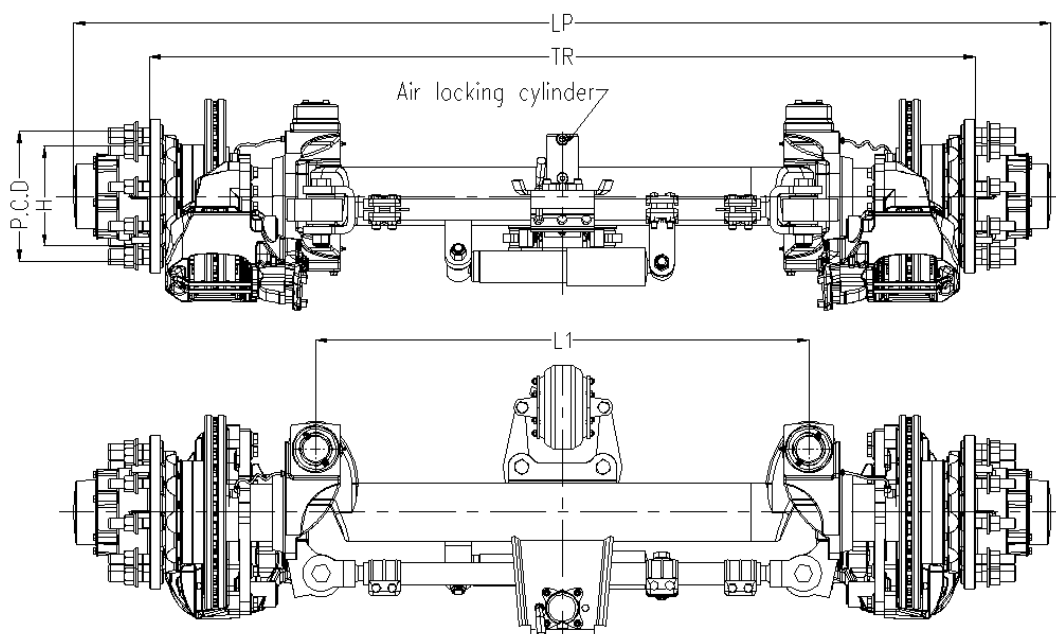
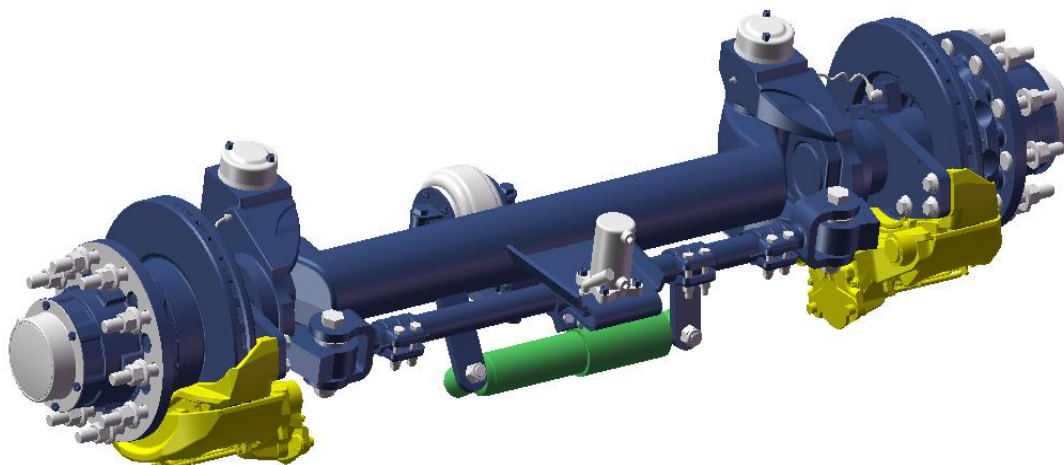
## Axle specifications

Axle Type	Max. Loading Capacity at 105km/h (kg)	LP Total Length (mm)	TR Track Length (mm)	L1 Kingpin Distance (mm)	Beam Type (mm)	Brake (mm)	Wheel Fixing			Max. Steering Angle
							Studs (mm)	P.C.D (mm)	H (mm)	
AL3119R127.1970T01	11,000	2143	1970	1218	∅127	∅310×190	10-M22×1.5	∅225	∅176	18°

- Notes:
1. Specified track length is available.
  2. ABS and automatic slack adjuster are available.
  3. Specified brake size & bearing sizes are available.
  4. 120x120, 130x130 & 150x150 axle beams are available.



## Self steering axle

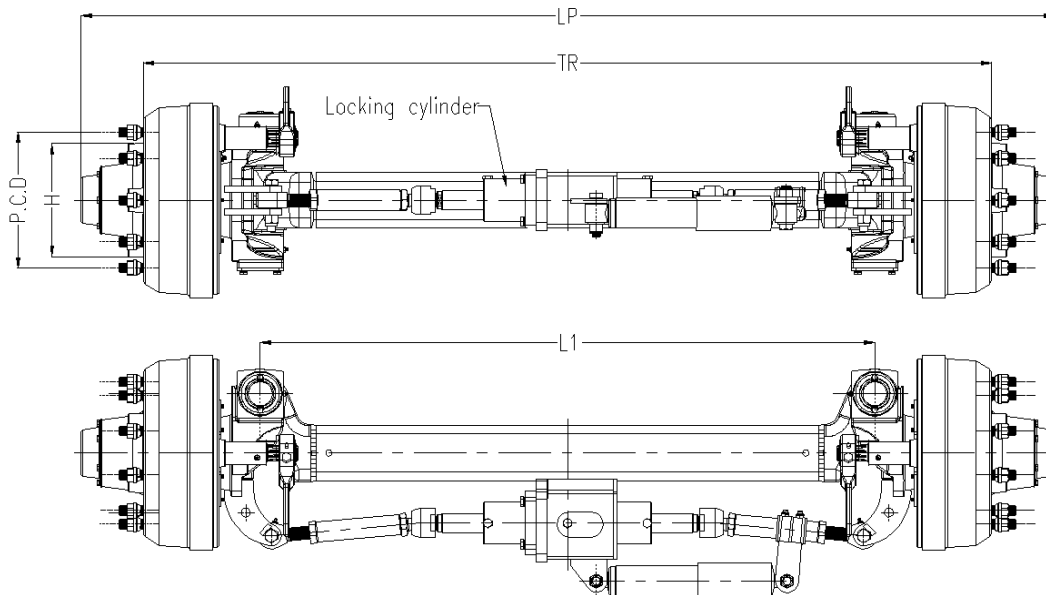
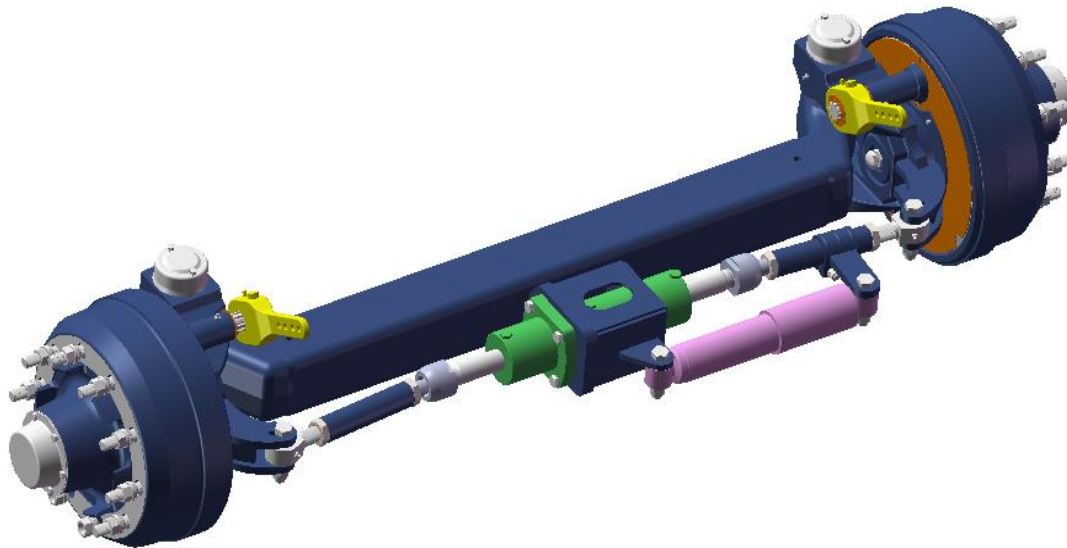


## Axle specifications

Axle Type	Max. Loading Capacity at 105km/h (kg)	LP Total Length (mm)	TR Track Length (mm)	L1 Kingpin Distance (mm)	Beam Type (mm)	Brake (in.)	Wheel Fixing			Max. Steering Angle
							Studs (mm)	P.C.D (mm)	H (mm)	
AL4345R127.1850T02S	11,000	2162	1850	1091	∅127	22.5" DISC	10-M22×1.5	∅285.75	∅220	18°

- Notes:
1. Specified track length is available.
  2. ABS is available.
  3. Specified brake sizes & bearing sizes are available.
  4. 120x120, 130x130 & 150x150 axle beams are available.

## Self steering axle

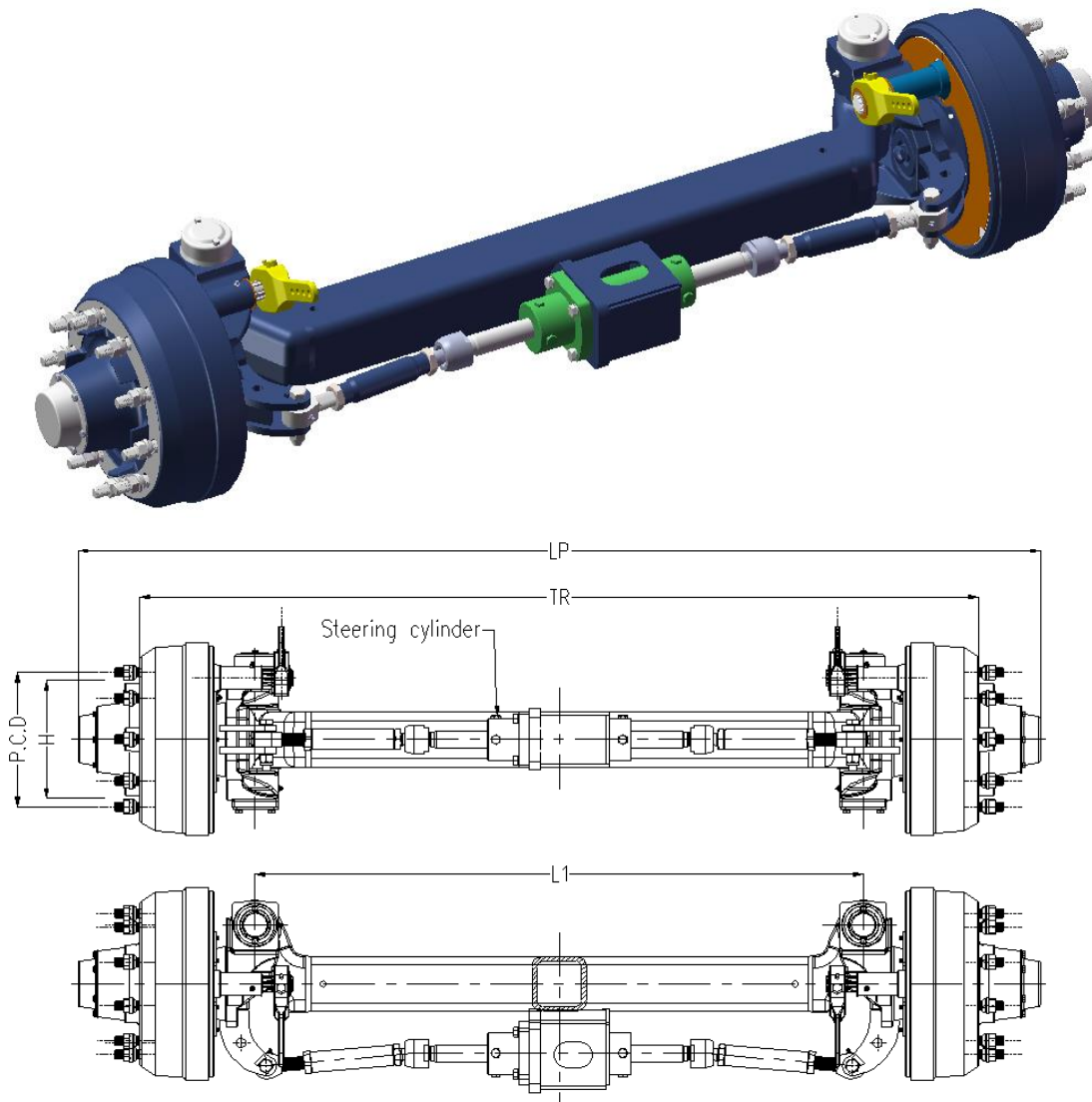


## Axle specifications

Axle Type	Max. Loading Capacity at 60km/h (kg)	LP Total Length (mm)	TR Track Length (mm)	L1 Kingpin Distance (mm)	Beam Type (mm)	Brake (in.)	Wheel Fixing			Max. Steering Angle
							Studs (mm)	P.C.D (mm)	H (mm)	
AL4012S130.2000T03	13,000	2296	2000	1450	□130	∅406×120	10-M22×1.5	∅335	∅281	16°

- Notes:
1. Specified track length is available.
  2. ABS and automatic slack adjuster are available.
  3. Specified brake sizes & bearing sizes are available.
  4. ∅127, 120x120 & 150x150 axle beams are available.

## Power steering axle

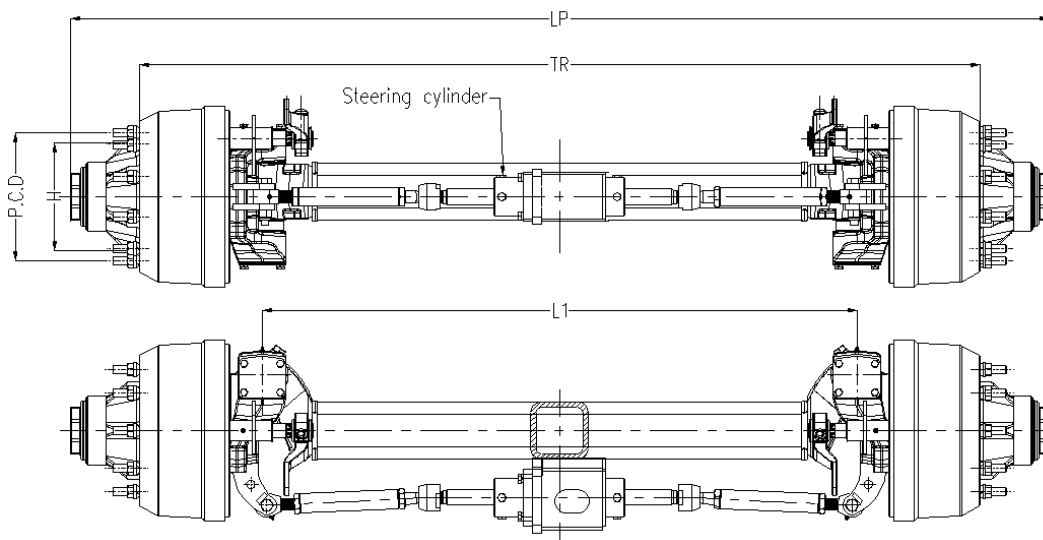
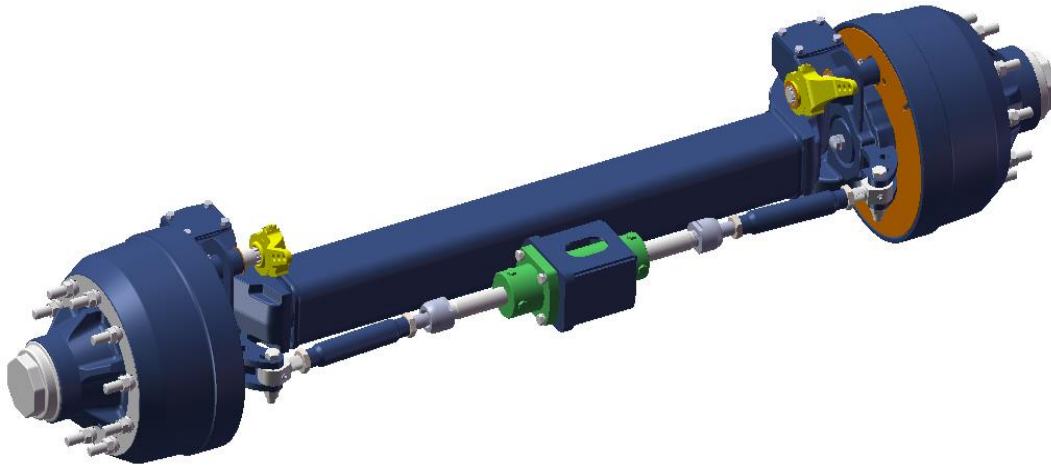


## Axle specifications

Axle Type	Max. Loading Capacity at 60km/h (kg)	LP Total Length (mm)	TR Track Length (mm)	L1 Kingpin Distance (mm)	Beam Type (mm)	Brake (mm)	Wheel Fixing			Max. Steering Angle
							Studs (mm)	P.C.D (mm)	H (mm)	
AL4012S130.2000T02	13,000	2296	2000	1450	□130	∅406×120	10-M22×1.5	∅335	∅281	18°

- Notes:
1. Specified track length is available.
  2. ABS and automatic slack adjuster are available.
  3. Specified brake sizes & bearing sizes are available.
  4. ∅127, 120x120 & 150x150 axle beams are available.

## Power steering axle



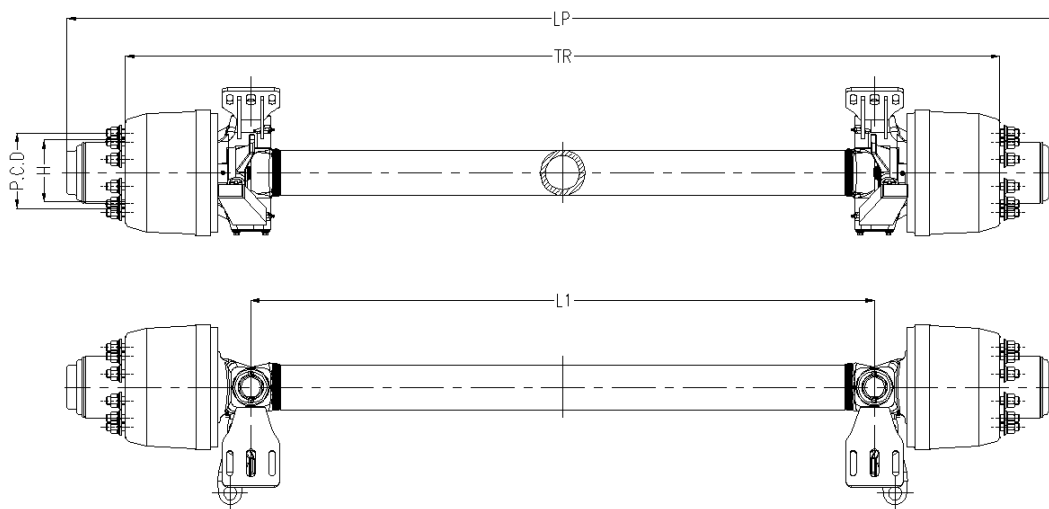
## Axle specifications

Axle Type	Max. Loading Capacity at 60km/h (kg)	LP Total Length (mm)	TR Track Length (mm)	L1 Kingpin Distance (mm)	Beam Type (mm)	Brake (mm)	Wheel Fixing			Max. Steering Angle
							Studs (mm)	P.C.D (mm)	H (mm)	
AL4218S150.2200T01	16,000	2561	2200	1556	□150	∅420×180	10-M22×1.5	∅335	∅281	18°

- Notes:
1. Specified track length is available.
  2. ABS and automatic slack adjuster are available.
  3. Specified brake sizes & bearing sizes are available.



## Power steering axle for TRIDEC control system

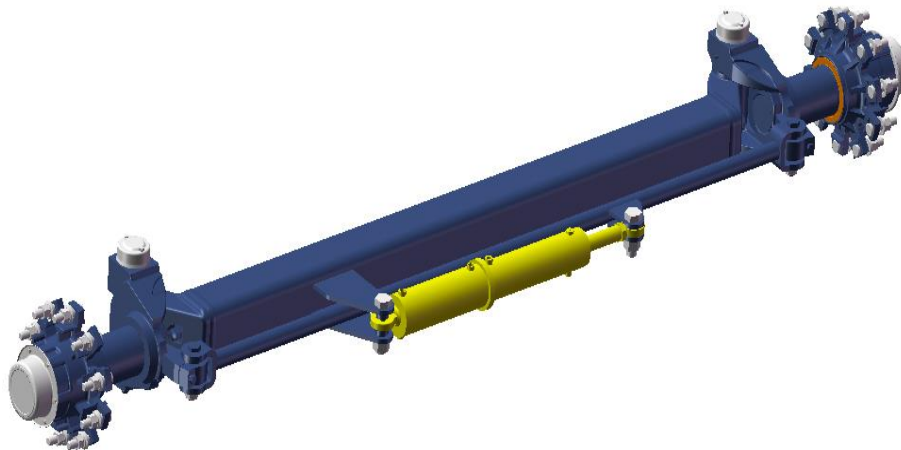


### Axle specifications

Axle Type	Max. Loading Capacity at 105km/h (kg)	LP Total Length (mm)	TR Track Length (mm)	L1 Kingpin Distance (mm)	Beam Type (mm)	Brake (mm)	Wheel Fixing			Max. Steering Angle
							Studs (mm)	P.C.D (mm)	H (mm)	
AL3119R127.2500T02	12,000	2808	2500	1766	∅127	∅310×190	10-M22×1.5	∅225	∅176	35°

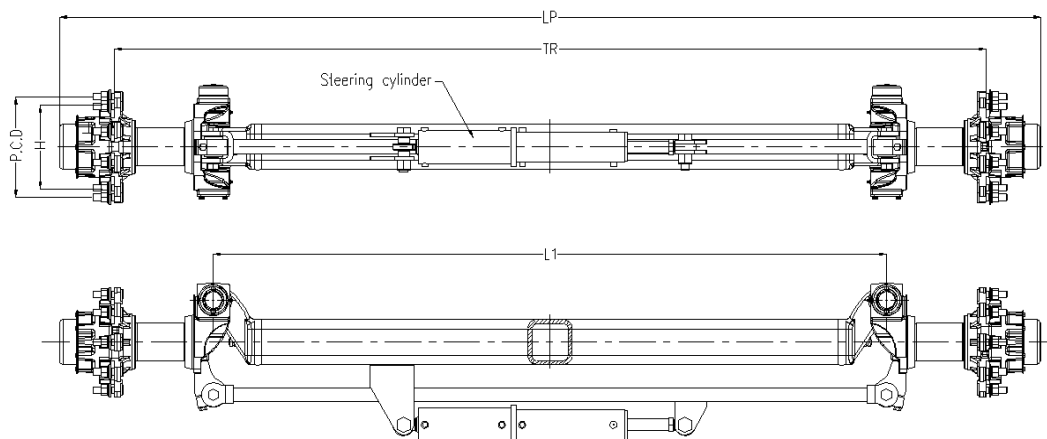
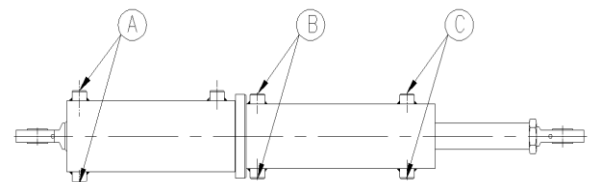
- Notes:
1. Specified track length is available.
  2. ABS and automatic slack adjuster are available.
  3. Specified brake sizes & bearing sizes are available.

## Multi-functional steering axle



Multi-functional cylinder:

- Self steering mode: Port A & C in use, Port B fitted with air breather.
- Power steering mode: Port B & C in use, Port A with air breather.

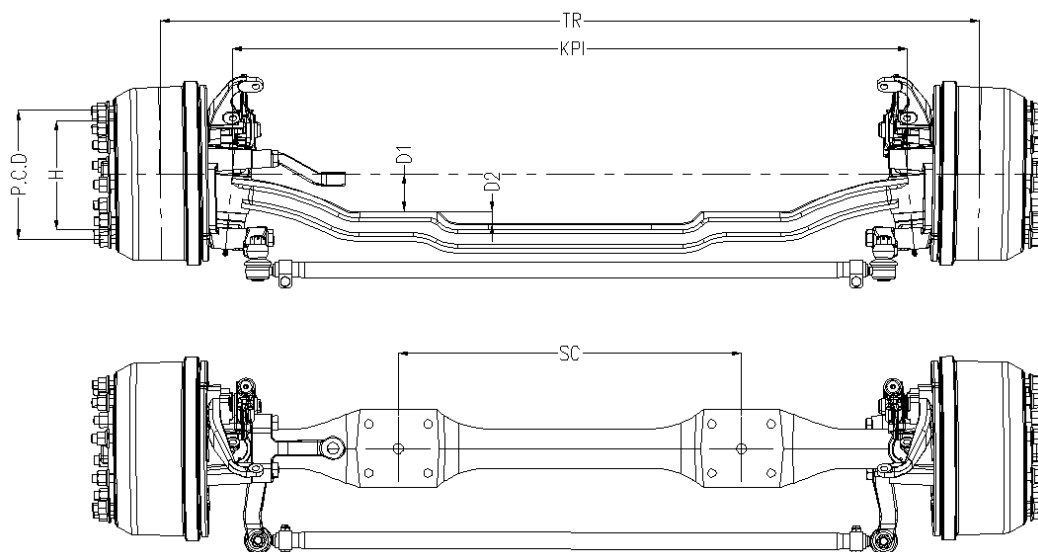


## Axle specifications

Axle Type	Max. Loading Capacity at 60km/h (kg)	LP Total Length (mm)	TR Track Length (mm)	L1 Kingpin Distance (mm)	Beam Type (mm)	Brake (mm)	Wheel Fixing			Max. Steering Angle
							Studs (mm)	P.C.D (mm)	H (mm)	
AL0000S150.3000T03	12,000	3348	3000	2299	□150	None	10-M22×1.5	ø335	ø281	26°

Notes: 1. Specified track length is available.  
2. Braked axle is available.

## Front steering axle



## Axle specifications

Axle Type	Max. Loading Capacity (kg)	TR Track Length (mm)	KPI Kingpin Intersection (mm)	SC Centre Distance of Spring Seats (mm)	D1 Beam Drop I (mm)	D2 Beam Drop II (mm)	Brake (mm)	Wheel Fixing			Recommend -ed Wheel
								Studs (mm)	P.C.D (mm)	H (mm)	
AL4118H110.2101C01	7,500	2101	1813	1180	75	130	Ø410×180	10-M22×1.5	Ø335	Ø281	8.0V-20

- Notes:
1. Specified track length is available.
  2. ABS and automatic slack adjuster are available.
  3. Max. steering angle: inside 41°, outside 33°
  4. Disc brake is available.