

Telescopic Boom Handler Drivelines

Carraro offers its renewed and complete range of Drivelines for Telescopic Handlers, which includes additional axle variants and a series of new transmission models, both for hydrostatic and torque converter machines.

The **Axle Range** covers machines with lifting capacities ranging from 1 to 5 tonnes. The configuration options, for both lighter and more compact machines as well as heavier and larger machines, include the axle structure in multiple flange-to-flange dimensions for each axle model, numerous ratio and differential lock configurations, multiple brake configurations (from the dry disc to wet inboard types, both for service and parking), and various sensor arrangements (steering, load, speed).

All Axles enable a tight steering radius, while ensuring precise handling, high manoeuvrability, and minimum tyre wear. All Rear Axles are available with multiple differential configurations, from open to 100% locked, to ensure optimal traction under any ground conditions. Moreover, every axle model has been designed and tested for use under the severest conditions, with a high load capacity and robust gear design to ensure an extended service life with improved durability.

The **Torque Converter Transmissions** are all in Full Powershift configuration both for Speed Shifting and Forward/Reverse Shuttling. They're available in Centre and Side Drive configurations, and with 4 to 6 speeds to accommodate all vehicle lay-outs and uses. These units have been developed with electro-hydraulic control or with full Electronic Control through Carraro's proprietary ECU. Torque Converter Lock-up solutions are also available as an option to improve the vehicle's fuel efficiency and productivity. All of these transmissions guarantee smooth, precise, and reliable response for all typical machine jobs, even under severe working conditions.

The **Hydrostatic Transmissions** span from compact Gearboxes, which are perfectly suited to the installation requirements in smaller machines, to fully electronically-controlled, on-the-fly shifting (**Speedshift**) versions, which are designed for the larger

and higher performance machines. All the Hydrostatic Units are designed to minimise power loss and for easy installation in every vehicle lay-out, mounted either directly or remotely on the axles. The large number of available ratios allows for optimised speed/torque values with almost every application.

In the 2 Speed Unit Range, Carraro has developed **Speedshift Technology**, which combines the Auto-Shift function (through the simultaneous electronic control of Hydrostatic and Gearbox Shifting), with the best possible efficiency. As with all of its models, Carraro can provide complete control systems (SW & HW) for these units as well.

Augmented Contents

Direct Drive

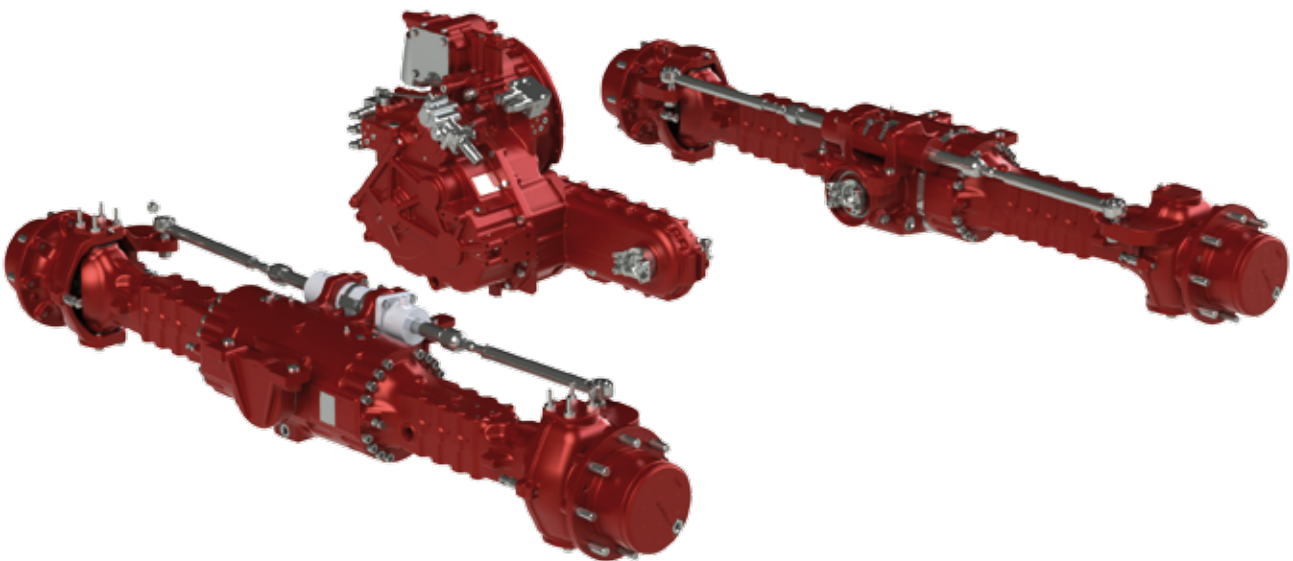


ECOlogy Mode



Lift capacity	Front axle	Rear axle	Hydrostatic Transmissions	Torque Converter Transmissions	ECU
Up to 1,500	26.09M	26.09M	TB135 TB138-2	-	-
From 1,500 to 2,500	26.16M	26.16	TB135 TB138-2	-	-
From 2,500 to 3,000	26.20M	26.20	TB172 TB172-2 Speedshift	-	Yes
From 3,000 to 3,500	26.25M	26.25	TB172 TB172-2 Speedshift	TCH100 Center Drive TCH90 Side Drive	Yes
From 3,500 to 4,000	26.27M	26.27M	TB172 TB172-2 Speedshift	TCH100 Center Drive TCH90 Side Drive	Yes
From 4,000 to 4,500	26.32M	26.32M	TB172 TB172-2 Speedshift	TCH100 Center Drive TCH90 Side Drive TCH110 Side Drive	Yes
From 4,500 to 5,000	26.43M	26.43M	TB172 TB172-2 Speedshift	TCH100 Center Drive TCH90 Side Drive TCH110 Side Drive	Yes

All specifications can be subject to changes without prior advice by Carraro



AXLES – TELESCOPIC HANDLERS

		26.09	26.16	26.20	26.25
Unladen vehicle weight	kg	3500	4400	7000	7500
Flange to Flange	mm	1270	1270	1580	1580
		1400	1400	1680	1680
		1530	1530	1800	1800
		1640	1900	1900	
Wheel Mounting dimension		n° 6 M18x1.5 on ø 205 mm	n° 8 M18x1.5 on ø 275 mm	n° 8 M18x1.5 on ø 275 mm	n° 8 M18x1.5 on ø 275 mm
Wheel Peak Drive Torque	kNm	12	22	29,4	34
Dynamic Load Capacity	kN	45	50	70	75
Static Load Capacity	kN	112.5	125	175	187.5
Differential		Open Limited slip 100% Hydraulic lock	Open Limited slip 100% Hydraulic lock	Open Limited slip 100% Hydraulic lock	Open Limited slip 100% Hydraulic lock
Max. Steering Angle		40°	40°	45°	45°
Service Brakes		Dry Caliper at Axle Input Wet Disc	Dry Caliper at Axle Input Wet Disc	Dry Caliper at Axle Input Wet Disc	Dry Caliper at Axle Input Wet Disc
Parking Brake		Dry Caliper at Axle Input Wet Disc SAHR	Dry Caliper at Axle Input Wet Disc SAHR	Dry Caliper at Axle Input Wet Disc SAHR	Dry Caliper at Axle Input Wet Disc SAHR
Vehicle Frame Mounting		Pads Trunnion ACP	Pads Trunnion ACP	Pads Trunnion ACP	Pads Trunnion ACP

		26.27	26.32	26.43
Unladen vehicle weight	kg	8500	10500	12500
Flange to Flange	mm	1920	1950	1950
		2050		
Wheel Mounting dimension		n° 8 M18x1.5 on ø 275 mm	n° 10 M22x1.5 on ø 335 mm	n° 10 M22x1.5 on ø 335 mm
Wheel Peak Drive Torque	kNm	34	45	50
Dynamic Load Capacity	kN	88	105	120
Static Load Capacity	kN	220	262.5	300
Differential		Open Limited slip 100% Hydraulic lock	Open Limited slip 100% Hydraulic lock	Open Limited slip 100% Hydraulic lock
Max. Steering Angle		55°	55°	55°
Service Brakes		Wet Disc	Wet Disc	Wet Disc
Parking Brake		Dry Caliper at Axle Input Wet Disc SAHR	Dry Caliper at Axle Input Wet Disc SAHR	Dry Caliper at Axle Input Wet Disc SAHR
Vehicle Frame Mounting		Pads Trunnion ACP	Pads Trunnion ACP	Pads Trunnion ACP