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 both: a proprietary synchronized (with or without pre-synchronization) transmission architecture, and a full Powershift one. Both transmission configurations can be electronically managed with the simultaneous electronic control of Hydrostatic and Gearbox Shifting, thus obtaining the best possible efficiency. As with all of its models, Carraro can provide complete control systems (SW & HW) for these units as well.

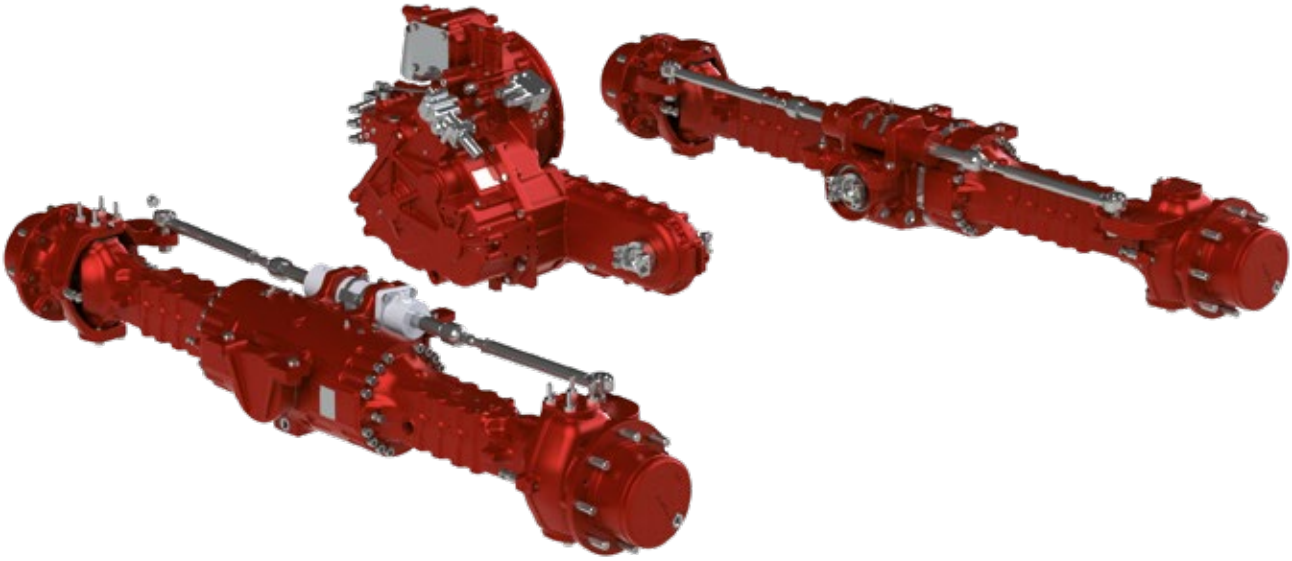
Augmented Contents

Direct Drive

ECOlogy Mode

Lift capacity kg	Front axle	Rear axle	Hydrostatic Transmissions	Torque Converter Transmissions	ECU
Up to 1,500	46.08M 46.12M	46.08M 46.12M	TB135C TB172C		
From 1,500 to 2,500	46.16M 46.18M	46.16M 46.18M	TB135C TB172C TB172-2C Stop&Go TB172-2C Servo Power Synchro FLS3.2		 Yes Yes
From 2,500 to 3,000	26.20M	26.20	TB172 TB172-2 Stop&Go TB172-2 Servo Power Synchro FLS3.2		 Yes Yes
From 3,000 to 3,500	26.25M	26.25	TB172 TB172-2 Stop&Go TB172-2 Servo Power Synchro FLS3.2	TCH90 Center Drive TCH90 Side Drive	Yes
From 3,500 to 4,000	26.27M	26.27M	TB172 TB172-2 Stop&Go TB172-2 Servo Power Synchro FLS3.2	TCH90 Center Drive TCH90 Side Drive	Yes
From 4,000 to 4,500	26.32M	26.32M	TB172 TB172-2 Stop&Go TB172-2 Servo Power Synchro FLS3.2	TCH90 Center Drive TCH90 Side Drive	Yes
From 4,500 to 5,000	26.43M	26.43M	TB172 TB172-2 Stop&Go TB172-2 Servo Power Synchro FLS3.2	TCH90 Center Drive TCH90 Side Drive	Yes

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



		46.08	46.12	46.16	46.18
Overall Width	**kg**	1,311 1,441 1,571	1,490 1,620 1,750 1,880	1,496 1,626 1,756 1,886	1,528 1,658 1,788 1,918
Flange to Flange	**mm**	1206 1336 1466	1270 1400 1530 1660 1790	1270 1400 1530 1660 1790	1270 1400 1530 1660 1790
Whell 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**	11 16	22 25	22 25	22 25
Dynamic Load Capacity	**kN**	50	55	55	55
Static Load Capacity	**kN**	125	137	137	137

		26.20	26.25	26.27	26.32	26.43
Unladen vehicle weight	**kg**	7000	8500	8500	10500	12500
Flange to Flange	**mm**	1580 1680 1800 1900	1580 1680 1800 1900	1920 2050 2180	1950	1950
Whell Mounting dimension		n° 8 M18x1.5 on ø 275 mm	n° 8 M18x1.5 on ø 275 mm	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**	29,4	34	34	45	50
Dynamic Load Capacity	**kN**	70	75	88	105	120
Static Load Capacity	**kN**	175	187.5	220	262.5	300