

TOP RUNNING TRUCKS	24
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CT and CH end trucks are for single or double girder, top running cranes where the end trucks travel on rails mounted on top of runway beams.

Structure

The CT truck is steel structural tube type and the CH truck is welded box type construction. The CT14 end truck uses a wheel box for the drive wheel and the wheel box is welded integrally into the structural tube. End trucks are equipped with bolt on rail sweeps to facilitate wheel removal.

Wheels

Wheels are available in four diameters and are furnished with double flanges. The wheel material is ductile iron and with a hardness range of 241-302 BHN. Wheel bearings for structural tube trucks are deep groove ball type, shielded and lifetime lubricated. Bearings for welded box type construction trucks are spherical roller type and require a recharging of grease. The drive wheel is coupled to a rotating axle by splines. On CT14, 20 and 25 end trucks, the bearings are mounted in the idler wheel and the wheel rotates on a stationary axle. On CT32 truck the idler wheel is coupled to a rotating axle by splines. The groove width of the wheel is specified as part of the end truck ordering code.

Endtruck	Wheel ø mm	Groove width range, mm	Standard groove width, mm	Optional groove width, mm
CT09	90	50-65	65	50
CT11	110	65	65	None
CT14	140	65	65	None
CT20	200	65-95	65	80
CT25	250	65-95	65	80
CH25	250	65-100	65	80
CH32	320	65-100	80	Specify

Joint Plate

The joint plate is furnished as standard and is used to connect bridge beam to end trucks. The joint plate is bolted to end truck. The type of joint plate depends on the end truck selected, beam profile, and type of connection. In most cases, in QC2000 modular crane packages, the suggested beam has a wide flange profile and is designated by the letter P. The mounting of the WF beam to the joint plate is available in three connection types. These types are low, medium (MED) or standard (STD). The low connection is where the under side of the top flange of a WF beam is mounted to a U- shaped plate. A medium connection is where the beam is coped and mounted to the joint plate. The standard connection is where the bottom flange of the beam is mounted to the joint plate. Connection drawings illustrate the requirements for each type of connection.

End truck	Joint plate	Type of connection	Max. flange width of beam on joint plate mm	Connection drawing
CT11 CT14	B6	Standard Medium Low	555	P-STD-B6 P-MED-B6 P-LOW-B6
CT20 CT25 CH32	H2	Standard Medium	410	P-STD-H2 P-MED-H2
CT20 CT25 CH32	M3	Low	430	P-LOW-M3

TOP RUNNING TRUCKS	24
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Gear Motor

The gear motor (DS3, DS4) for the CT14 truck mounts to the wheel box of truck by a bolted connection and the output shaft of the gear motor couples directly to the wheel. The required motor horsepower for each crane application determines whether the gear type is DS3 or DS4. The motor for the DS gear is MF07 type with a plug junction box. The hollow shaft gear motor (TM4, TM5) for CT20, CT25 and CH32 trucks mounts to the output shaft from the wheel. The motor for the TM4 gear is a MF07 type with a plug junction box. Motors for the TM5 gear are MF09, MF10 or MF11 type with a standard junction box. On delivery the torque arm for the TM gear motor requires some assembly. The gear motor is always ordered separately.

Travel Speed – CT14 Truck

End truck	Crane Speed	
	CT14	
GEAR TYPE Type P output shaft	Motor 3000/750 RPM 50Hz M/MIN	Motor 3600/600 RPM 60Hz FPM
DS307 / DS407	---	---
DS309 / DS409	---	---
DS313 / DS413	---	---
DS315 / DS415	---	---
DS320 / DS420	63/16	250/63
DS325 / DS425	50/12	200/50
DS332 / DS432	40/10	160/40
DS340 / DS440	32/8	130/33
DS350 / DS450	25/6.3	100/25

Travel Speed – CT20 & CT25 Trucks

End truck	Crane Speed			
	CT20		CT25	
GEAR TYPE Type P output shaft	Motor 3000/750 RPM 50Hz M/MIN	Motor 3600/600 RPM 60Hz FPM	Motor 3000/750 RPM 50Hz M/MIN	Motor 3600/9000 RPM 60HZ FPM
TM428	63/16	250/63	80/20	315/19
TM436	50/12	200/50	63/16	250/63
TM445	40/10	160/40	50/12	200/50
TM456	32/8	130/33	40/10	160/40
TM470	25/6.3	100/25	32/8	130/33
TM490	20/5	80/20	25/6.3	100/25
TM412 (112)	16/4	60/15	20/5	80/20

TOP RUNNING TRUCKS	24
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Travel Speed – CH25 & CH32 Trucks

End truck	Crane Speed			
	CH25		CH32	
GEAR TYPE Type P output shaft	Motor 3000/750 RPM 50Hz M/MIN	Motor 3600/600 RPM 60Hz FPM	Motor 3000/750 RPM 50Hz M/MIN	Motor 3600/9000 RPM 60HZ FPM
TM522	100/25	400/100	---	---
TM528	80/20	315/79	100/25	400/100
TM536	63/16	250/63	80/20	315/79
TM545	50/12	200/50	63/16	250/63
TM556	40/10	160/40	50/12	200/50
TM570	32/8	130/33	40/10	160/40
TM590	25/6.3	100/25	32/8	130/33