

<b>UNDER RUNNING END TRUCKS</b>	<b>23</b>
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End trucks UC and UT are for single girder, under running cranes where the wheels of the end trucks travel on the lower flange of the runway beams.

**Structure**

Side rails of UC trucks are structural steel tubes. The side plates for wheels are plate steel.

**Wheels**

The UC truck is equipped with four wheels where wheel side plates are rigidly attached to truck side rails. The UT truck is equipped with two four-wheel arrangements where side plates are connected to the truck beam using a pivot joint. The wheel is a single flange type and the material is ductile iron. The diameter of wheel tread is available in three sizes and tread is crown type suitable for flat or tapered beam flange. Wheel bearings are deep groove ball type and shielded. Bearings are lifetime lubricated. A pinion drives the drive wheels.

**Joint Plate**

The joint plate is used to connect the bridge beam to the end trucks. Joint plates are furnished as standard on UC type end trucks only. Joint plate is a bolted connection to end truck and it is available in two sizes, C10 (A) and C10 (B), to accommodate two ranges of runway beam flange widths. Both joint plates will accommodate bridge beams with flange widths up to 330mm (13”) maximum. The joint plate for UT type end trucks is not available and is furnished by the crane fabricator.

**End truck Dimensions**

UC end trucks will allow for flange adjustments through two flange width ranges.

Truck	Wheel base mm	Wheel ø mm	Flange Adjust. Range mm (inch)	Flange thickness mm (inch)	Joint plate type	Wgt/truck Kg (lbs)	DI wheel Hardness BHN
UC10-22	2200	100	82-199 (3.25-7.81)	40 (1.57)	C10(A)	150 (331)	187-255
			200-330 (7.88-13)	40 (1.57)	C10(B)	167 (368)	187-255
UC13-22	2200	125	82-199 (3.25-7.81)	40 (1.57)	C10(A)	306 (675)	187-255
			200-330 (7.88-13)	40 (1.57)	C10(B)	322 (709)	187-255
UC16-22	2200	160	98-199 (3.88-7.81)	35 (1.38)	C10(A)	316 (695)	187-255
			200-330 (7.88-13)	35 (1.38)	C10(B)	332 (731)	187-255

**Gear Motor**

The gear motor (DS3, DS4) for UT or UC truck mounts to the wheel side plate of the truck by a bolted connection and the output shaft of the gear motor is fitted with a pinion. The horsepower requirement of the motor for each crane application determines whether the gear type is DS3 or DS4. In either case a MF07 type motor with plug junction box is used.

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Travel Speed

End truck	Crane Speed			
	UC10, 13, 16		UT16	
GEAR TYPE Type C output shaft Ø25 mm 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
DS307 / DS407	40/10	160/40	50/12	200/50
DS309 / DS409	32/8	130/33	40/10	160/40
DS313 / DS413	25/6.3	100/25	32/8	130/33
DS315 / DS415	20/6	80/20	25/6.3	100/25
DS320 / DS420	16/4	60/15	20/5	80/20
DS325 / DS425	12/3	50/13	16/4	60/15
DS332 / DS432	10/2.5	40/10	12/3	50/13
DS340 / DS440	---	---	10/2.5	40/10