

GROVE
COLES

TMS250E_B

Truck-mounted hydraulic crane

- 24.40 metres (80ft) main boom
- Maximum on-board tip height
42 metres (138 ft)
- 6 × 4 drive
- Optional* 9.30 to 16.40 metres (30.5 to 54ft)
telescopic offsettable Swingaway



Superstructure specifications

Boom 10.10 to 24.40m (33 to 80ft), three section full-power fully synchronised Trapezoidal boom. Telescope sections slide on adjustable and replaceable Nylatron wear pads. Maximum tip height 27m (88ft).

Swingaway 9.30m (30ft 6in) lattice Swingaway extension which can be offset 0°, 15°, or 30°. Stows alongside boom when not in use. Maximum tip height 36m (118ft).

Optional *telescopic Swingaway 9.30m (30ft 6in) telescoping to 12.80m (42ft) or 16.40m (54ft) with a rectangular roller-mounted section extended from within the 9.30m (30ft 6in) lattice extension. Offsettable at 0°, 15° or 30°. Stows alongside boom when not in use. Maximum tip height 42m (138ft).

Boom nose Four sheaves, mounted on heavy duty tapered roller bearings, with removable pin-type rope guards.

Boom elevation One double-acting hydraulic cylinder with integral holding valve provides elevation from -4° to +75°.

Control lever lockout For use with optional *safeload or optional load-moment indicator.

Cab Full vision, all-steel fabricated with safety glass throughout. Hinged skylight and sliding side window. Length adjustable combination hand-foot crane controls. Complete instrumentation including hoist drum rotation indicator. Outrigger controls and site-level bubble.

Swing Ball-bearing swing circle with 360° continuous rotation. Grove planetary Glideswing with multi-disc swing brake. Spring-applied, hydraulically released park brake and two-position plunger-type house lock. Maximum swing speed 2.7 rpm.

Counterweight Fixed position, 3400kg (7496lb) pin mounted.

HYDRAULIC SYSTEM

Pumps One three section gear pump, with manual disconnect. Combined capacity 507 litres/minute (134 US gallons/minute). Maximum pressure 175.8 kg/cm² (2500 PSI).

Valves Precision, four-way, double-acting control valves. Three individual valve banks permit simultaneous control of multiple crane functions.

Filter Return line type, full flow with by-pass protection and indicator. 25 micron rated cartridge.

Reservoir 409 litres (108 US gallons) capacity. Internal baffles, particle magnet and exterior oil level gauge.

Oil cooler Thermostatically controlled, electric fan motor.

HOIST SPECIFICATIONS

Power up and down, equal speed, planetary reduction with integral, automatic, spring-applied multi-disc brake.

Make/model	Main hoist Grove H030B-16		*Auxiliary hoist Grove H015B-16
	Low Speed	High Speed	Single Speed

Maximum single line speed

Bare drum	60.6 m/min (199 fpm)	122 m/min (400 fpm)	47 m/min (154 fpm)
	68.2 m/min (224 fpm)	137 m/min (450 fpm)	54 m/min (177 fpm)
Full drum	77.7 m/min (255 fpm)	154 m/min (505 fpm)	62 m/min (203 fpm)

Maximum single line pull

Bare drum	6584kg (14,512lb)	3291 kg (7255lb)	3950kg (8708lb)
	5987kg (13,199lb)	2987kg (6585lb)	3327kg (7335lb)
Full drum	5474kg (12,068lb)	2735kg (6029lb)	3143kg (6929lb)

Maximum usable rope storage

225m of 16mm diameter (738ft x 5/8in)	111 m of 16mm diameter (364ft x 5/8in)
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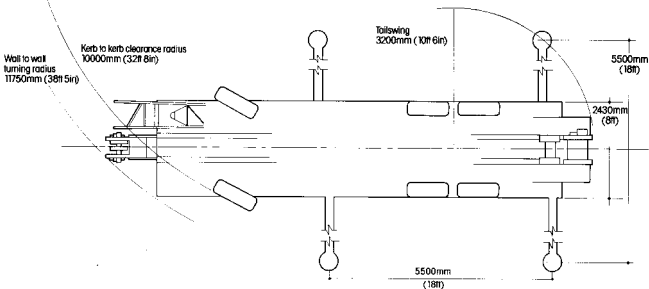
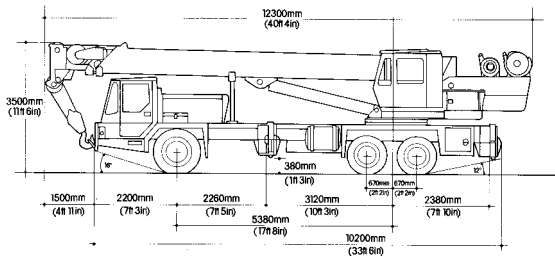
Optional *equipment Anti-two block system, safeload/load-moment indicator, hoist-drum cable follower, hoist-drum rotation indicator (on main or *auxiliary hoist), cab heater, spotlights, rotating beacon, hookblocks.

Carrier specifications

Frame	High strength steel, all-welded box section design, with integral outrigger housings.
Outrigger system	Hydraulic single stage telescopic beam and jack outriggers with integral holding valves. Steel fabricated quick release outrigger floats 610mm (24 in diameter), stowable on carrier.
Front stabilizer	Fifth hydraulic vertical cylinder, with quick release outrigger float. Permits full 360° lifting.
Outrigger controls	Situated in superstructure cab. Push button electric controls requiring two-handed operation. Site level bubble located adjacent to controls.
Engine	Deutz F6L413FR, six-cylinder, air cooled diesel. 9.57 litres, 142 kw (192 bhp) at 2500 rpm, maximum torque 613 Nm (452 lb ft) at 1600 rpm.
Fuel tank capacity	227 litres (60 US gallons).
Electrical system	24v including starting.
Drive	6 x 4.
Steering	Power assisted, heavy duty semi-integral type.
Transmission	Nine forward, two reverse speeds. PTO drive for hydraulic pumps.
Axles	Front: Steering, non-driving. Rear: Non-steering, driving tandem with lockable interaxle differential.
Suspension	Front: Multi-leaf spring. Rear: Leaf spring over equalising beam.
Tyres	11.00 x 20 x 16PR radials, twins on rear axles. Tyre inflation kit.
Brakes	Dual-line air system, acting on all wheels. Spring-applied air-released, emergency/park brake on rear axles. Engine exhaust brake.
Lights	Full lighting, including head, tail braking, reversing, directional, hazard warning and fog lights.

Cab	Two-man, full width design left or right hand drive, GRP fabricated, acoustically treated, with safety glass. Windscreen washers and wipers dual rearview mirrors, heater and demister. Full travel controls and comprehensive instrumentation.
Maximum speed	80 kph (50 mph).
Gross vehicle weight and axle loads	Front: 6500kg (14,330lb) Rear tandem: 20,500kg (45,195lb). GVW: 27000kg (59,525lb) Above weights for TMS250E ₆ to standard specification.
Optional *equipment	Spare tyre and wheel assembly, diesel cab heater, rotating beacon, comprehensive tool kit.

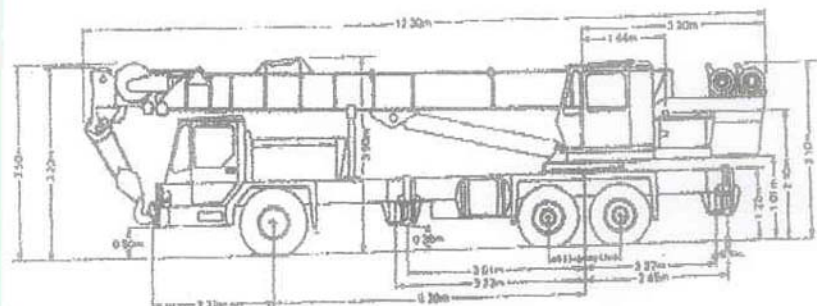
*Indicates optional item.



GROVE COLES

Constant improvement in old engineering progress make it necessary that the company reserves the right to make specification, equipment and price changes without notice. Illustrations shown may include optional equipment and accessories and may not include all standard equipment. Optional equipment is designated by (*) in specifications folder.

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DIMENSIONS


CRANE WIDTH	2.48M	MAX. BOOM	24.3M
OUTRIGGER SPREAD	5.5M	GROSS WEIGHT	24.8T

LIFTING CAPACITIES IN TONNES

Radius (m)	Boom Fully Retracted	Main Boom Capabilities on Outriggers - 30° Slew								
		8.0m	11.0m	13.4m	15.2m	17.1m	18.0m	20.7m	22.6m	24.3m
3.0	30.00	23.59	23.13							
3.6	27.95	23.58	23.12	20.88	18.87					
4.0	24.92	23.58	22.56	19.50	17.55					
4.5	22.55	22.55	21.47	18.37	16.48	14.06	11.79			
5.0	20.77	20.77	20.87	17.82	16.40	13.01	11.43			
6.0	17.02	17.02	17.02	16.47	13.74	11.20	10.56	8.78	8.07	
7.0	13.06	13.06	13.06	13.06	12.85	10.11	9.52	8.75	8.39	
8.0	10.18	10.19	10.20	10.20	10.20	8.98	8.67	7.95	7.71	
9.0		8.14	8.14	8.14	8.15	7.98	7.68	7.25	6.95	
10.0			6.77	6.77	6.77	6.77	6.65	6.57	6.17	
10.8			6.36	6.36	6.36	6.36	6.36	6.30	5.98	
12.0				4.81	4.81	4.81	4.81	4.81	4.82	
14.0					3.71	3.71	3.71	3.71	3.71	
16.0						2.71	2.71	2.71	2.71	
18.0							2.03	2.03	2.03	
20.0								1.68	1.68	
22.0									1.38	
24.0										
26.0										
28.0										
30.0										
32.0										

**Main Boom +
Swingaway Extension**

Radius (m)	Outriggers fully extended	
	24.3 Main Boom +	
	0m Swingaway 2° Offset	14m Swingaway 2° Offset
3.0		
3.6		
4.0		
4.5		
5.0		
6.0		
7.0		
8.0		
9.0	4.25	
10.0	4.11	
10.0	3.73	
10.8	3.68	1.47
12.0	3.13	1.40
14.0	2.67	1.31
16.0	2.30	1.21
18.0	2.01	1.12
20.0	1.77	1.04
22.0	1.45	0.97
24.0	1.11	0.92
26.0	0.81	0.86
28.0		0.82
30.0		0.68
32.0		0.62