



LIFTING CHARTS - Crawler Cranes

DEMAG MODEL CC 2500 - 500 TON CAPACITY

Technical description

Crawler carrier

3-section carrier comprising of carbody and two crawlers. Hydraulic pin connections between crawlers and carbody provide for easy assembly and removal to minimise width and weight for transportation.

- Carbody:** Bending- and torsion-resistant welded structure of box type construction, fabricated of high-strength fine-grain structural steel.
- Crawlers:** Side frames: bending-resistant welded structure of high-strength fine-grain structural steel. Track shoes and idler tumblers are fabricated of heat-treated high-strength cast steel. 14 rollers on each side frame with hardened rolling surfaces. Automatic centralized lubrication is included as standard.
- Power train:** The tracks are powered by two hydraulic motors each through closed planetary gear reduction units running in oil bath, equipped with spring-applied hydraulically released holding brakes; the gear units are of very compact design to fit within the width of the crawlers. Each crawler is infinitely variable controlled, both independently and in opposite direction.

Superstructure

- Counterweight:** 265,000 lb / 309,000 lb + 66,000 lb central ballast on carrier.
- Frame:** Torsion-resistant welded structure fabricated of high-strength fine-grain structural steel. Connected to carrier by triple-row roller bearing slew ring.
- Drive:** DaimlerChrysler diesel engine type OM 501 LA, 315 kW (420 hp) at 2000 ¹/min, torque 2000 Nm at 1080 ¹/min. The engine complies with EURO II/EPA regulations. Pump distribution gearbox with five variable displacement axial piston pumps incl. electronic control system, and gear pumps.
- Rope drums:** The standard superstructure equipment includes three rope drums – hoist 1, hoist 2 and boom hoist. The drums are powered by hydraulic motors through closed planetary gear units running in oil bath. All rope drums have spring-applied, hydraulically released multi-disk brakes and non-wearing hydraulic braking for load lowering. Rope ends H 1, 2, 3 and W 1, 2 equipped with quick-connect rope end fittings. Hoists H 1 + 2 are removable to minimise weight for transportation.
- Slew unit:** Powered by hydraulic motor through closed, planetary gear unit running in oil bath. Spring-applied, hydraulically released holding brake and non-wearing hydraulic braking.
- Control:** Electronic proportional valve pilot-control integrated into stored-program control system with fault diagnosis. Automatic power control giving optimal utilisation of engine output.
- Cabin:** Comfortable cab with large windscreen. Safety-glazing all around, roof window, self-contained hot air heater, full instrumentation and crane controls, air-conditioning. The cab can be tilted back for improved operator view of boom point. A camera system is installed to monitor the rope drums. For transportation, the cab swings in front of the superstructure to minimise width.
- Electrical equipment:** 24 V d. c. system.

Optional equipment

Hydraulic raising system for A-frame

- Assembly jacks:** Four hydraulic jacking cylinders on carbody (folding within 3 m width) for easy assembly of crawlers.
- Counterweight carrier:** On request.
- Quick-connection:** Hydraulic quick-disconnect fittings on carrier and superstructure facilitate removal to minimise weight for transportation.
- Cylinder on A-frame:** For self-assembly of crawler side frames.
- Track shoes:** 4.9 ft.

Boom configurations S and L

SH:	Main boom: foot section 34.4 ft (used to install drums W1/H3), inserts 39.4 ft and 19.7 ft (type 2721) and tapered insert 39.4 ft, head with sheave assembly 881,800 lb 4.9 ft. Main boom lengths: 78.7-236.2 ft.
SH/LH:	Main boom: SH/LH with variable heavy base length. Extended by type 2317 from the fly jib and by top section 24.6 ft. Main boom lengths: 177.2-334.6 ft.
SW:	Main boom: same as SH. Fly jib: foot section 14.8 ft, inserts 39.4 ft and 19.7 ft (type 2317) and top section 24.6 ft. Main boom lengths: 98.4-196.9 ft. Fly jib lengths: 78.7-236.2 ft.
SSL:	Main boom: same as SH. Mast 98.4 ft, radius 49.2 ft (other radii on request), Superlift counterweight 0-507,100 lb (at 132,300 lb increments). Main boom lengths: 118.1-236.2 ft.
SSL/LSL:	Main boom: same as SH 236.2 ft, extended by type 2317 from the fly jib and by top section 24.6 ft. Mast 98.4 ft, radius 49.2 ft (other radii on request), Superlift counterweight 0-507,100 lb. Main boom lengths: 255.9-413.4 ft.
SWSL: (SFSL)	Main boom: same as SH. Fly jib: same as SW. Mast 98.4 ft, radius 49.2 ft (other radii on request), Superlift counterweight 0-507,100 lb. Main boom lengths: 118.1-236.2 ft. (SFSL: 157.5-236.2 ft) Fly jib lengths: 78.7-275.6 ft.
LF:	Main boom: same as SH, SH/LH. Fly jib: foot section 19.7 ft, inserts 39.4 ft (type 1813), top section 19.7 ft. Main boom lengths: 78.7-315.0 ft. Fly jib lengths: 39.4 ft, 78.7 ft, 118.1 ft.
LFSL:	same as LF, but in conjunction with SL-attachment. Main boom lengths: 118.1-413.4 ft. Fly jib lengths: 39.4 ft, 78.7 ft, 118.1 ft.
Safety devices:	Electronic safe load indicator, hoist limit switch, limit switches for boom movements, hydraulic boom back-stops, anemometer.
Ancillary equipment	
Hoist H3:	Additional rope drum on main boom (for LF or runner operation). Line pull same as H1, rope length 2.300 ft.
Reeving winch:	mounted on superstructure
Runner:	approx. 6.6 ft for installation on boom head or top section (not in conjunction with LF).