



## LIFTING CHARTS - Crawler Cranes

### DEMAG MODEL CC2400-1 - 440 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.
<b>Carbody</b>	Bending- and torsion-resistant welded structure of box type construction, fabricated of high-strength fine-grain structural steel.
<b>Crawlers</b>	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.
<b>Power train</b>	The tracks are powered by one hydraulic motor each through closed planetary gear reduction units running in oil bath, equipped with spring-applied hydraulically released holding brakes; the gear units are of extremely compact design to fit within the width of the crawlers. Each crawler is infinitely variable controlled, both independently and in opposite direction.

##### SUPERSTRUCTURE

<b>Counterweight</b>	352,800 lb in combination with 88,200 lb central ballast on carrier.
<b>A-frame</b>	Hydraulic raising system for A-frame as standard.
<b>Frame</b>	Torsion-resistant welded structure fabricated of high-strength fine-grain structural steel. Connected to carrier by triple-row roller bearing slew ring.
<b>Drive</b>	DaimlerChrysler diesel engine type OM 501 LA, 260 kW (353 hp) at 2000 <sup>1</sup> /min, torque 2000 Nm at 1080 <sup>1</sup> /min. The engine complies with EUROMOT 3a, EPA T3 and Carb regulations. Pump distribution gearbox with five variable displacement axial piston pumps incl. electronic control system, and gear pumps.
<b>Rope drums</b>	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 and W 1, 2 equipped with quick-connect rope end fittings. Hoist H 1 (and optionally H 2) is removable to minimise weight for transportation.
<b>Reeving winch</b>	Mounted on superstructure.
<b>Slew units</b>	Powered by two hydraulic motors through closed, planetary gear unit running in oil bath. Spring-applied, hydraulically released holding brake and non-wearing hydraulic braking.
<b>Control system</b>	Demag IC-1: Electronic proportional valve pilot control integrated in stored-program control system incl. diagnostics. 2 colour monitors, safe load indicator operated via a touchscreen. Working speeds infinitely variable controlled by the lever position. Automatic power control for optimal utilisation of engine output.
<b>Cabin</b>	Comfortable cab with large windscreen and air-conditioning. Safety-glazing all around, roof window, self-contained hot air heater, full instrumentation and crane controls. 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.
<b>Electrical equipment</b>	24 V d. c. system.

##### OPTIONAL EQUIPMENT

<b>Hydraulic cylinder A-frame</b>	For self-assembly of crawlers.
<b>Assembly jacks</b>	Four hydraulic jacking cylinders on carbody (folding within 9'11" width) for easy assembly of crawlers.
<b>Sideways outriggers</b>	For erection of long boom systems.
<b>Counterweight carrier</b>	Drive 4 x 2, total weight max. 440,925 lb.
<b>Quick-connection</b>	Hydraulic quick-disconnect fittings on carrier and superstructure facilitate removal to minimise weight for transportation.
<b>Track shoes</b>	Optional width of 3'3" and 4'11".

## TECHNICAL DESCRIPTION

### BOOM CONFIGURATIONS

<b>SH:</b>	Main boom: foot section 34'5", inserts 39.4 ft and 19.7 ft (type 2721) and tapered insert 39.4 ft, boom head 4'11". Main boom lengths: 78.7 - 275.6 ft.
<b>SH / LH: (SGL variable)</b>	Main boom: foot section 34'5", inserts 39.4 ft and 19.7 ft (type 2721), tapered insert 39.4 ft, extended by inserts 39.4 ft and 19.7 ft (type 2317), top section 24'7". Main boom lengths: 137.8 - 354.3 ft.
<b>SH / LH: (SGL max.)</b>	Main boom: foot section 34'5", inserts 39.4 ft and 19.7 ft (type 2721), extended by additional inserts 39.4 ft (type 2721), tapered insert 39.4 ft, top section 24'7". Main boom lengths: 275.6 - 334.6 ft.
<b>SW:</b>	Main boom: same as SH. Offset 87° to 65°. Luffing fly jib: foot section 14'9", inserts 39.4 ft and 19.7 ft (type 2317), jib top section 24'7". Main boom lengths: 98.4 - 236.2 ft. Fly jib lengths: 78.7 - 236.2 ft.
<b>SSL:</b>	Main boom: same as SH. Superlift equipment. Main boom lengths: 98.4 - 315.0 ft.
<b>SSL / LSL: (SGL 231')</b>	Main boom: foot section 34'5", inserts 39.4 ft and 19.7 ft (type 2721), tapered insert 39.4 ft, extended by additional inserts 39.4 ft and 19.7 ft (type 2317), top section 24'7". Superlift equipment. Main boom lengths: 255.9 - 413.4 ft.
<b>SSL / LSL: (SGL max.)</b>	Main boom: foot section 34'5", inserts 39.4 ft and 19.7 ft (type 2721), extended by additional inserts 39.4 ft (type 2721), tapered insert 39.4 ft, top section 24'7". Superlift equipment. Main boom lengths: 255.9 - 374.0 ft.
<b>SWSL:</b>	Main boom: same as SH. Offset 87° to 45°. Luffing fly jib: same as SW. Superlift equipment. Main boom lengths: 118.1 - 315.0 ft. Fly jib lengths: 78.7 - 275.6 ft.
<b>+LF2:</b>	Addition to SH, SH/LH, SSL or SSL/LSL. Fixed fly jib: foot section 19.7 ft, inserts 39.4 ft (type 1813), jib top section 19.7 ft. Fly jib lengths: 39.4 ft, 78.7 ft, 118.1 ft. Offset: 10°, 15°, 20° and 30°.
<b>Runner</b>	
<b>Safety devices</b>	Electronic safe load indicator, hoist limit switch, limit switches for boom movements, hydraulic boom backstops, anemometer.
<b>Hydraulic pinning</b>	The boom sections are prepared for hydraulic pinning.

### SUPERLIFT CONFIGURATIONS

<b>Standard-SL</b>	Mast 98.4 ft (type 2116), counterweight tray for max. 529,110 lb. Superlift radii 36'1", 42'8", 49'3" (29'6" without tray).
<b>Vario-SL</b>	Mast 98.4 ft (type 2116), counterweight tray for max. 529,110 lb. Superlift radius infinitely variable during operation 29'6" to 49'3".
<b>Tele-SL</b>	Mast 98.4 ft (type 2116), counterweight carrier for max. 529,110 lb. Superlift radius infinitely variable during operation 36'1" to 49'3".