LIFTING CHARTS - Crawler Cranes

DEMAG MODEL CC 8800 - 1375 TON CAPACITY

Technical description

Crawler carrier

5-section carrier comprising carbody, two cross axles and two split-type crawler side frames. Carbody, cross axles and side frames are pin-connected hydraulically. Track width: 10.5 m.

Carbody	Bending- and torsion-resistant welded structure fabricated from high-strength fine grain structural steel. Quick-disconnect fittings (optional) facilitate removal of slew ring from carbody to minimise weight for transportation.
Cross axles	Bending- and torsion-resistant welded structure fabricated from high-strength fine grain structural steel incl. hydraulic jack legs.
Crawlers	Bending- and torsion-resistant welded structure fabricated from high-strength fine grain structural steel. Split-type side frames to minimise weight for transportation. Crawler pads made of heat-treated high-strength cast steel. 15 rollers per crawler with hardened rolling surfaces. Centralised lubrication included as standard.
Drive	Each crawler is powered by two hydraulic motors through closed planetary gear reduction units running in oil bath, equipped with spring-applied, hydraulically released holding brakes. As a result of their extremely compact design, the gear units fit into the width of the crawlers. Each crawler provides independent, infinitely variable control and counter-rotation capability.
Slew unit	Four slew gearboxes in carbody powered by hydraulic motors through closed planetary gear units running in oil bath. Spring-applied, hydraulically released holding brake and non-wearing hydraulic braking.

Superstructure

Counterweight	220 t (280 t with 100 t central ballast in place).
Frame	Torsion-resistant welded structure fabricated from high-strength fine grain structural steel. Longitudinal beam construction to accommodate 3 rope drums and boom hoist. Split-type superstructure for ease of transportation. Hoists H1, H2 and optional H3 are pin-connected hydraulically to facilitate removal. Quick-connect capability and radial pinning between superstructure and carbody.
Power and control module	Two independent drive units incl. pump distribution gearbox and pumps are contained in a separate module which is attached to the side of the superstructure. Power comes from a DaimlerChrysler diesel engine type OM 502 LA. Output to DIN 70020: 380 kW (516 HP) at 2000 ^{1}/min, torque 2400 Nm at 1080 ^{1}/min. The engine meets EUROMOT II and EPA standards. Pump distribution gearbox with five variable displacement axial piston pumps and gear pumps. The power and control module includes cabin, complete electrics and electric generators as standard.
Rope drums	Standard superstructure equipment includes three rope drums – hoist 1, hoist 2 and boom hoist. Rope drums powered by hydraulic motors through closed planetary gear units running in oil bath. All rope drums have spring-applied, hydraulically released multi-disc brakes and non-wearing hydraulic braking for load lowering. Rope ends of all drums provided with quick-connect rope end fittings. Hoists H1 and H2 (optional H3) are removable to minimise weight for transportation.
Control system	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.
Cabin	Spacious comfortable cab located at front end of power module. Large safety glazing for front and roof windows, computerised airconditioner and self-contained hot air heater. Front console includes instrumentation and crane controls as well as two graphic displays (touchscreen type). Camera systems to monitor the rope drums, hourmeter, load moment indicator, 2 working lights, bunk bed, storage cabinets and refrigerator are included as standard.
Electrical equipment	24 V system (2 batteries 12 V / 180 Ah) 3-phase alternator 24 V, 80 A plus 3-phase generator 400 V 20 kVA for airconditioner, heater, lighting and multiple use on the job site. Emergency generator 400 V 16 kVA

Optional equipment

Counterweight carrier	max. weight 640 t (carrier deadweight is 100 t).
Quick-disconnect fittings	Quick-disconnect fittings for fast removal of slew ring from carbody.
Superlift counterweights	
Hoist H3	Mounts on superstructure.

Technical description

Boom combinations

General	Tubular chord lattice structure of high-strength fine grain structural steel. All boom combinations available together with Superlift mast only! Main boom and jib sections have same system dimensions.
SSL	Main boom: 10 m boom butt (used to mount drum W1), 12 m and 6 m inserts, 2 m boom head. 42 m mast, 22 m radius (16 m only with 0 t SL c/wt), 0 - 600 t Superlift counterweight (at 100 t increments). Main boom lengths: 48 - 108 m.
SSL / LSL	Main boom: same as 108 m SSL, extended by jib inserts, 42 m mast, 22 m radius (16 m only with 0 t SL c/wt), 0 - 600 t Superlift counterweight (at 100 t increments). Main boom lengths: 114 - 150 m.
SWSL (SFSL)	Main boom: same as SSL but with adapter head. Jib: 10 m jib butt, 12 m and 6 m inserts, 2 m boom head. 42 m mast, 19 - 25 m radius (16 m, 0 t SL c/wt), 0-600 t Superlift counterweight (at 100 t increments). Main boom lengths: 48 - 108 m (Main boom angle with SWSL: 88° - 60°). Jib lengths: 36 - 108 m.
SFVL	Main boom: same as SSL but with adapter head. Jib: 10 m jib butt, 2 m boom head, lower luffing mast. Lengths: 60 - 108 m.
Safety devices	Electronic load moment limiter, hoist limit switch, limit switches for boom movements, hydraulic boom backstops, anemometer.

Optional attachment

3 m runner	Mounts on boom head