



LIFTING CHARTS - All Terrain Cranes

DEMAG MODEL AC 160-1 - 200 TON CAPACITY

Technical description

Carrier

Drive / Steering	10 x 8 x 8.
Frame	Torsion-resistant box girder frame fabricated from high-strength fine grain structural steel.
Outriggers	4 telescopic outriggers, fabricated from fine grain structural steel, fully hydraulic horizontal and vertical extension.
Engine	Water-cooled 8 cylinder DaimlerChrysler diesel engine OM 502 LA, rating 380 kW (510 HP) at 1800 1/min, torque 2400 Nm at 1200 1/min, fuel tank capacity 132 gallons.
Transmission	ZF AS-Tronic, electronically automated transmission with automatic clutch, 16 forward and 2 reverse speeds with integrated retarder, 2-range transfer case, cruise control.
Axles	Axles 2, 3, 4, and 5: driven, 1, 2, 4, and 5: steered. Transverse differential lockout control on axles 2, 3, 4, and 5. Longitudinal lockout control on axles 3 and 4.
Suspension	Hydro-pneumatic suspension on all axles, hydraulically lockable for on-site travel.
Wheels and tires	10 wheels fitted with 14.00 R 25 tires (Michelin or Bridgestone).
Steering	10 x 8, ZF dual-circuit semiblock mechanical steering with hydraulic booster and mechanical steering limiter, speed-dependent steering, 4th and 5th axles provide for independent rear axle steering.
Brakes	To EC directives, sustained action brake: hydraulic retarder integrated into gearbox. Exhaust brake and constant choke valve.
Electrical equipment	24 V system.
Driver's cab	Highly comfortable ergonomic cab with clearly arranged dashboard, rubber mounted steel cab, corrosion-resistant powder coating with 2-pack top coat. 9.8 ft wide, 2 comfortable seats, with pneumatically sprung and heated driver's seat incl. head and arm rests, and three-point seat belts, vertically adjustable steering wheel, safety glass used throughout, electric windows, heated and electrically adjustable mirrors, windscreen defroster fans, engine-dependent hot water heater, electric windscreen washer and wiper, roller blinds, radio with CD player, stowage compartment, air-conditioning as standard.

Superstructure

Engine	Water-cooled 4 cylinder DaimlerChrysler diesel engine OM 904 LA, rating 130 kW (174 HP) at 2200 1/min, torque 675 Nm at 1200 1/min, fuel tank capacity: 60 gallons.
Hydraulic system	Two variable displacement axial piston pumps with automatic power control enabling the operator to engage four independent working movements simultaneously, separate pump for slewing. Hydraulic oil cooler included as standard. Reservoir capacity: 264 gallons.
Hoist	Fixed displacement axial piston hydraulic motor, hoist drum with integrated planetary gear reducer, and spring-applied multi-disk brake. Hydraulic brake, drum rotation indicator.
Slew unit	Hydraulic motor with planetary gear reducer, pedal-operated brake, joystick-actuated free swing, spring-applied holding brake.
Boom elevation	1 differential cylinder with automatic lowering brake valve.
Crane cab	Newly highly comfortable cab with sliding door, roof window and large hinged windscreen, safety glass used throughout, sprung and hydraulically damped operator's seat with head and arm rests, wiper for windscreen and roof window, self-contained hot water heater with timer and automatic heating system for sensitive heat flow control, dashboard with instrumentation and crane controls, e.g. drum rotation indicator for hoists I and II, load moment limiter, outrigger loading indicator, 2 working lights. The crane cab can be tilted back hydraulically 18°, air-conditioning as standard.
Main boom	Boom base and 5 telescopic sections fabricated from fine grain structural steel; anti-deflection Demag Ovaloid profile.
Counterweight	109,800 lb, divisible, hydraulically stowable on carrier.
Safety devices	Electronic safe load indicator with graphic display and touchscreen, digital readout for hook load, rated load, boom length and angle, radius, monitoring code to assist in trouble shooting, and analog display to indicate capacity utilization in %, integrated control system for boom telescoping, display for duty charts and theoretical and actual outrigger loading. Working range limitation to certain, pre-defined slew angles, heights and radii („virtual walls“) included as standard.

Optional equipment

Runner	5.4 ft, 2-sheaves.
Twist arrestor	To untwist the hoist ropes.
Heavy lift attachment	The max. lifting capacity of the standard crane without heavy lift attachment is 208,900 lb (5 sheaves on boom head).
Emergency control	Interface for emergency control to recover small loads, incl. transformer. With hydraulic motor and hydraulic pump available on request.
Warning light	For boom and attachments.
Rooster sheave	Sheave on boom head folding to the side of the boom, for single-line operation.
Wheels and tires	16.00 R 25, 17.5 R 25 and 20.5 R 25.
Hoist 2	Fixed displacement axial piston hydraulic motor, hoist drum with integrated planetary gear reducer, and spring-applied multi-disk brake. Hydraulic brake, drum rotation indicator.

Notes to lifting capacity

Ratings are in compliance with ISO 4305 and DIN 15019.2 (test load = 1.25 x suspended load + 0.1 x dead weight of boom head).
Weight of hook blocks and slings is part of the load, and is to be deducted from the capacity ratings.


Crane operation with main boom is permissible up to a
wind pressure of 1.25 lb/ft²
wind speed of 32 ft

Consult operation manual for further details.

Note: Data published herein is intended as a guide only and shall not be construed to warrant applicability for lifting purposes.
Crane operation is subject to the computer charts and operation manual both supplied with the crane.

Key

 Counterweight

 Lifting capacities on outriggers 360°

