



LIFTING CHARTS - All Terrain Cranes

DEMAG MODEL AC 400 - 500 TON CAPACITY

Technical description

Carrier

Drive/Steering:	14 x 6 x 12.
Frame:	Demag-built special main frame, fabricated from high-grade fine-grain structural steel, with central pot to accommodate front outriggers.
Outriggers:	Four hydraulic outriggers with telescopic beams and jack legs, permit 360° continuous rotation.
Engine:	Daimler-Benz OM 442 LA water-cooled 8 cylinder Diesel Engine. Output to DIN: 405 kW. Fuel-tank capacity: 158 gallons.
Transmission:	ZF-Transmatic.
Axles:	Drive axles: 2, 3, 6. Steering axles: 1-4, 6+7, all axles hydro-pneumatically suspended and hydraulically blockable.
Wheels and tires:	14 disk-type wheels; 17.5 R 25 tires, plus one spare.
Steering:	Dual-circuit semiblock mechanical steering with hydraulic booster.
Brakes:	to EC standards.
Electrical equipment:	24-volt system.
Cab:	Rubber-mounted low-line three-man steel cab.

Superstructure

Engine:	Daimler-Benz OM 366 LA water-cooled 6-cylinder Diesel Engine. Output to DIN: 171 kW. Fuel-tank capacity: 79 gallons.
Hydraulic system:	Two variable-displacement axial-piston pumps with automatic power control and one fixed-displacement pump (enable the operator to engage three motions at the same time). One fixed-displacement pump for low-pressure servo-control.
Hoist 1:	Variable-displacement axial-piston motor with planetary reduction, spring-loaded multiple-disk brake, hoist rope.
Hoist 2:	Variable-displacement axial-piston motor with planetary reduction, spring-loaded multiple-disk brake, hoist rope.
Slewing:	Axial-piston hydraulic motor with planetary reduction. Foot-pedal operated service brake and spring-loaded holding brake.
Boom elevation:	Two differential cylinders with pilot-controlled lowering brake valve.
Control:	Electric pilot control by two 4-position self-centering hand levers.
Crane cab:	Spacious all-steel comfortable cab with sliding door, large folding-out windscreen, and armoured glass roof window, controls and instrumentation for all crane movements, working light. Water-type heater, operation self-contained or engine-dependent, with engine preheating and 7-day programmable timer, thermostat controlled. Windshield washer and intermittent control wiper.
Main boom:	Five-section telescopic boom, fabricated from high-grade close-grained structural steel, featuring the familiar DEMAG »ovaloid« design, telescoping with partial load, with diagonal self-centering plastic shoes. Boom head designed to accommodate boom extension, fixed and luffing fly jib.
Counterweight:	211,500 lb, divided.
Safety devices:	Standard: electronic safe load indicator with digital read-out for hook load, rated load, boom length, boom angle, load radius; monitoring devices to assist in trouble shooting; analog display to indicate the capacity utilization; limit switches on hoist and lowering motions, pressure-relief and safety holding valves.

Optional Equipment

Drive/Steering:	14 x 8 x 12, additional drive of axle 7.
Superlift attachment:	The Superlift attachment is a means to increase the lifting capacity of the normal crane. It essentially consists of the boom-suspension mast with guy ropes, which provides for an automatic rope-length adjustment for boom telescoping, and a 57,500 lb Superlift counterweight. The suspension mast is lowered to the main boom when not needed, or for road transport. The Superlift mast is guyed by bars which fold automatically into transport position when lowered.
Fold-away jib:	39 – 62 ft lattice-type folding jib; offsettable at 0° and 20°.
Fixed fly jib:	Non-folding fixed fly jib of 26 – 177 ft length, using components of the luffing fly jib (0° and 20° offset).
Luffing fly jib:	65 – 256 ft length, with luffing mast, guy bars, electrical equipment, and safety devices (the 2nd hoist is required when using the luffing fly jib).
Additional counterweight:	57,500 lb, attachable to standard counterweight, hydraulic assembly and disassembly without an auxiliary crane.
Additional jack leg:	For special duties on 49 ft main boom.
Heavy-lift attachment:	Possibility of additional reeving on boom head for duties up to 506,000 lb. Possibility of additional reeving on boom head for duties up to 880,000 lb.
Rooster sheave:	Sheave folds to side of boom head.
Auxiliary reeving winch	
Aircraft warning light	
Anemometer	