

GRADALL®

XL 4210_{II}

INDUSTRIAL MAINTENANCE MACHINE



XL 4210_{II}

SPECIFICATIONS

Upperstructure Engine

Deere 6068TF275 diesel, turbocharged, liquid cooled, 4 cycle, 6 cylinder, 414 cid (6.8 L) 4.19" bore x 5.00" stroke (106 mm x 127 mm) 170:1 compression ratio.

166 hp (124 kW) gross at 2,200 rpm, 146 hp (109 kW) net at 2,200 rpm. 429 ft-lb (582 Nm) gross torque at 1400 rpm.

Altitude capability: 10,000' (3,048 m). Derate 4% per 1,000' (305 m) above 10,000' (3,048 m).

Maximum slope: 45°

12 volt starter, 105 amp alternator, two SAE #C31-S 810 CCA batteries, two-stage dry type air cleaner with centrifugal precleaner and safety element. Evacuator valve and service indicator, spin-on oil filter, spin-on fuel filter/water separator.

Fuel tank capacity: 92 gallons (348 L).

Hydraulic System

PUMPS

One load-sensing, axial piston pump; oil flow 84 GPM (0-317 L/min).

SYSTEM MONITOR

Electronic monitor in cab indicates low hydraulic fluid level, high hydraulic fluid temperature, and condition of hydraulic suction and return filters.

SYSTEM SPECIFICATIONS

Four double acting cylinders

- 1 tool: 5.0" ID, 3.0" rod (127 mm x 76 mm), 22.5" (572 mm) stroke.
- 2 hoist: 4.25" ID, 3.15" rod (108 mm x 80 mm), 31.0" (787 mm) stroke.
- 1 telescope: 3.5" ID, 2.559" rod (89 mm x 65 mm), 126" (3.81 m) stroke.

Four hydraulic motors

Swing, 51Hp (38 kW); tilt, 50 Hp (37 kW); two crawler drives, 120 Hp (89 kW) each.

Operating pressures:

Hoist.....	4,900 psi (33,784 kPa)
Tilt.....	4,300 psi (29,647 kPa)
Swing.....	4,200 psi (28,958 kPa)
Tool.....	4,900 psi (33,784 kPa)
Telescope.....	4,900 psi (33,784 kPa)
Crawler.....	4,900 psi (33,784 kPa)
Pilot System.....	500 psi (3,448 kPa)

Oil Capacity

Reservoir 48 gallons (182 L), system 68 gallons (257 L). Pressurized reservoir with visual oil level gauges.

Filtration System

10 micron return filter with magnet and 100 mesh suction strainer in reservoir.

Fin and tube-type oil cooler with thermal by-pass and relief valves.

Pressure-compensated, load-sensing valves with circuit reliefs in all circuits.

Tractor type crawler with triple grouser heavy-duty pads.

Sealed track links, lubricated and sealed idlers and rollers, hydraulic track tension adjustment, track guides, motor and hose guards, front and rear tow eyes.

Track length:

13' 8" (4.2 m)

Track pads:

23.6" (600 mm) or 31.5" (800 mm)

Crawler width:

10' 6" (3.2 m) w/31.5" (800 mm) pads

9' 10" (3 m) w/23.6" (600 mm) pads

Ground clearance:

18" (457 mm)

Upperstructure Cab

All-weather cab with safety glass windows, acoustical lining, four-way adjustable suspension operator's seat, filtered fresh air heater and defroster. Front window heat resistant glass.

Controls

Two hydraulic joysticks (hoist & bucket, telescope & swing), one rocker switch (tilt) control upperstructure. Hydraulic joysticks are mounted on arm pods that are adjustable for individual operator comfort and convenience.

Two hydraulically damped foot pedals (with handles) control crawler steering, travel and brakes. Toggle switch on arm pod for selection of crawler speed range.

Joysticks are self-centering; when the controls are released, power for movement disengages and swing, tilt and crawler brakes set automatically.

Engine Controls and Instrumentation

Key operated ignition/starter switch, throttle, hour meter and air cleaner condition indicator. Electronic monitor indicates fuel level, low battery charge, coolant level, hydraulic oil level, lube oil pressure, high coolant temperature, and engine rpm. Fuel saving auto idle feature sends engine rpm to idle when control circuits are in neutral for seven seconds.

Swing

Priority swing circuit with axial piston motor. Planetary transmission.

Swing Speed: 8.0 rpm.

Swing Brake

Automatic spring-set/hydraulic release wet disc parking brake. Dynamic braking is provided by the hydraulic system.

Crawler Drive

Dual range, high torque piston motor powers each track. Three-stage planetary drive with integral speed limiting valve and automatic spring-set/hydraulic release wet disc parking brake.

Travel Speed on flat, level surface:

High Speed: 3.4 mph (5.5 km/h)

Low Speed: 1.9 mph (3.1 km/h)

Automatic two-speed control shifts crawler drive into low speed under difficult travel conditions. Manual override switch for loading the machine for transport.

Gradeability

100%, limited by engine lubrication requirements.

Drawbar Pull

38,324 lb (170 kN)

Individual Track Control

Tracks counter-rotate to pivot machine about the swing centerline.

Electronically operated travel alarm signals crawler movement in either direction.

Function Forces

Rated Boom Force:

22,075 lb (98.2 kN)

Rated Ripper Tooth Force:

20,650 lb (91.8 kN)

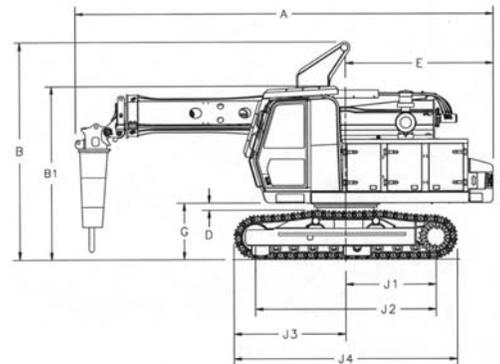
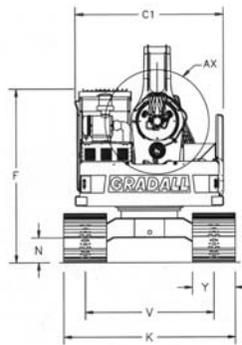
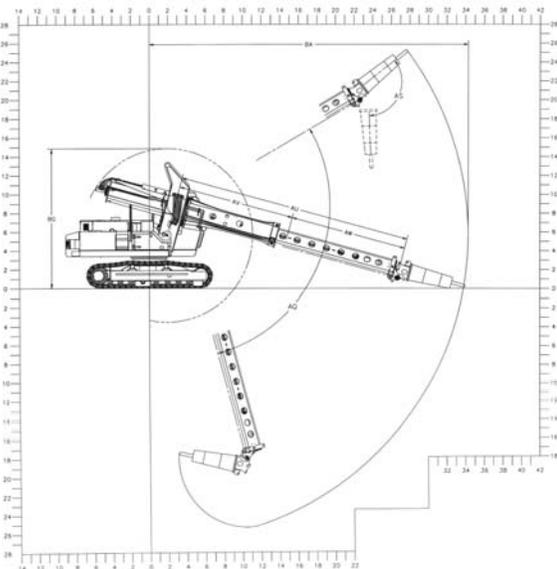
Boom Rotating Torque: 310,000 In.lbs. 35.1 kNm

Boom Rotating Speed: 8.7 RPM

Weight

Approximate working weight with hammer, fuel tank half full, and no operator:

Pad Size	Weight	Bearing Pressure
31.5" 800mm	49,116 lb (22,299 kg)	5.3 psi (36.9kPa)
23.6" 600mm	48,000 lb (21,792 kg)	6.9 psi (478 kPa)



It is Gradall Policy to continually improve its products. Therefore designs, materials and specifications are subject to change without notice and without incurring any liability on units already sold. Units shown may have optional equipment.

Shown with Rammer S 29 Hammer and 8045-6046 Hammer Bracket (Meters shown in parentheses)

- A** Overall length with hammer: 25'5" (7.8)
- B** Overall height with optional lift hook: 13'2" (4.0)
- B₁** Overall height without optional lift hook: 10'4" (3.1)
- C₁** Width of upperstructure: 9' (2.7)
- D** Minimum clearance, upperstructure to undercarriage: 5" (0.2)
- E** Swing clearance, rear of upperstructure: 9'0" (2.7)
- F** Top of cab guard to groundline: 10'4" (3.1)
- G** Clearance, upperstructure to groundline: 3'5" (1.0)
- J₁** Axis of rotation to centerline of drive sprockets: 5'6" (1.7)
- J₂** Nominal distance between centerlines of drive sprockets and idlers 11' (3.4)
- J₃** Axis of rotation to end of track assembly: 6'10" (1.9)
- J₄** Nominal overall length of track assembly: 13'8" (4.2)
- K** Width of crawler with 31.5" (800mm) pads: 10'6" (3.2)
- K** Width of crawler with 24" (600mm) pads: 9'10" (3.0)
- N** Ground clearance (per SAE J1234): 18" (.5)
- V** Track gage, roller centerline to roller centerline: 7'10" (2.2)
- Y** Width of crawler track assembly (standard): 31.5" (0.9)
- Y** Width of crawler track assembly (optional): 23.6" (0.6)
- AQ** Boom pivot angle: 30° Up & 75° Down
- AS** Attachment pivot angle: 125°
- AU** Maximum telescoping boom length (boom pivot to attachment pivot): 25'0" (7.6)
- AV** Minimum telescoping boom length (boom pivot to attachment pivot): 12'6" (3.8)
- AW** Telescoping boom travel: 12'6" (3.8)
- AX** Boom tilt angle (continuous): 360°
- BA** Maximum radius of working equipment (165° pivot): 34'2" (10.4)
- BG** Maximum height of working equipment with hammer below groundline: 14'8" (4.5)

GRADALL®

406 Mill Ave. SW, New Philadelphia, Ohio 44663
Phone: 330-339-2211 Fax: 330-339-8468
www.gradall.com