XL 4220 V
MINE SCALING MACHINE

SPECIFICATIONS

Engine
- Volvo TAD551 VE, Tier III (optional TAD571 VE, Tier 4f), 4 cycle, inline 4 cylinder, liquid cooled, electronic controlled
- Vertical canister style lube and main fuel filters and fuel/water separation with manual feed pump attached to engine
- Water in fuel indicator and alarm

Gross Rating: 173 hp @ 2200 rpm (129kW)
590 ft lb Torque @ 1100-1500 rpm (800Nm)

Net Rating: 153 hp @ 2200 rpm (114kW)

• Volvo TAD551 VE, Teir III (optional TAD571 VE Tier 4f), 4 cycle, inline 4 cylinder, liquid cooled, electronic controlled
• Vertical canister style lube and main fuel filters and fuel/water separation with manual feed pump attached to engine
• Water in fuel indicator and alarm

Maximum slope: 30°

- 24 volt starter
- 100 amp alternator
- Two SAE #C31-S 1000 CCA batteries
- Two-stage dry type air cleaner with centrifugal pre-cleaner and safety element
- Vacuator valve and service indicator

Fuel tank capacity: 82 gallons (310 L)

Operator Cab
- All-weather cab
- Tinted safety glass windows
- Acoustical lining
- Four-way adjustable seat
- AM/FM radio
- Filtered fresh air heater
- Defroster
- Air conditioner
- Front window slides to overhead storage
- Rearview mirrors on right and left sides
- Swing lights
- Non tinted sky light
- Windshield wiper and washer

Controls
- Two electronic joysticks; when controls are released, power for movement disengages and swing and tilt brake set automatically
- Two electric foot pedals (with handles) control crawler travel speed and direction, crawler steering and crawler brakes
- Toggle switch on arm pod allows selection of two crawler speed ranges

• Self-centering joysticks; when controls are released, power for movement disengages and swing and tilt brake set automatically
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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

Engine Controls and Instrumentation
- Key operated ignition/starter switch, throttle and main battery disconnect switch
- Air cleaner condition indicator
- Electronic monitor indicates fuel level, low battery charge, lube oil pressure, high coolant temperature, engine rpm and engine hours
- Fuel saving auto idle feature sends engine rpm to idle when control circuits are in neutral for seven seconds

Hydraulic System

Pumps
- One load-sensing, axial piston pump; oil flow 0-110 gpm (0-435 L/min)
- Gear pump, 6 gpm (23 L/min)

System Monitor
- Electronic monitor in cab indicates
  - Low hydraulic fluid level
  - High hydraulic fluid temperature
  - System working pressure
  - System pilot pressure

SYSTEM SPECIFICATIONS

Four Cylinders
- One tool: 5.0” ID, 3.0” rod (127 mm x 76 mm), 25.9” (658 mm) stroke
- Two hoist: 4.25” ID, 3.15” rod (108 mm x 80 mm), 31.0” (787 mm) stroke
- One telescope: 3.5” ID, 2.559” rod (89 mm x 65 mm), 126” (3.81 m) stroke

Four Hydraulic Motors
- Swing, 64 hp (48 kW)
- Tilt, 50 hp (37 kW)
- Two propel motors, 120 hp (89 kW) each

Operating Pressures:
- Hoist..........................4,900 psi (331 BAR)
- Tilt..........................4,900 psi (331 BAR)
- Swing..........................4,200 psi (290 BAR)
- Tool..........................4,900 psi (331 BAR)
- Telescope.................4,900 psi (331 BAR)
- Propel.....................4,900 psi (331 BAR)
- Pilot System.............550 psi (38 BAR)

Oil Capacity
- Reservoir system 65 gallons (246 L)
- Pressurized reservoir with visual oil level gauges

Filtration System
- 10 micron return filter
- 10 micron pilot filter
- Fin and tube-type oil cooler with thermal by-pass and relief valves
- Pressure-compensated, load-sensing valves with circuit reliefs in all circuits

Gradeability:
- 58%, limited by engine lubrication requirements

Drawbar Pull
- 38,324 lbs (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
Dimensions

A Overall length with attachment open: 25'11" (7.9)
A1 Overall length without attachment: 23'10" (7.3)
B Overall height with attachment open: 10'9" (3.3)
B1 Overall height without attachment: 10'5" (3.2)
C1 Width of upperstructure: 9'0" (2.7)
D Minimum clearance, upperstructure to undercarriage: 5' (130 mm)
E Swing clearance, rear of upperstructure: 8'0" (2.4)
F Top of cab guard to groundline: 10'5" (3.2)
G Clearance, upperstructure to groundline: 3'5" (1.0)
J1 Axis of rotation to centerline of drive sprockets: 51" (1.7)
J2 Nominal distance between centerlines of drive sprockets and idlers: 110" (3.4)
J3 Axis of rotation to end of track assembly: 6'10" (2.1)
J4 Nominal overall length of track assembly: 13'8" (4.2)
K Width of crawler (standard): 10'6" (3.2)

Weight

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

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<tr>
<th>Pad Size</th>
<th>Weight</th>
<th>Bearing Pressure</th>
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<tr>
<td>31.5&quot; 800 mm</td>
<td>48,862 lbs (22,163 kg)</td>
<td>58 psi (402 kPa)</td>
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Function Forces

Rated Boom Force: 22,075 lbs (98.2 kN)
Rated Ripper Tooth Force: 25,405 lbs (113 kN)
Boom Rotating Torque: 25,800 ft lb (34,980 Nm)
Boom Rotating Speed: 7.0 rpm