XL 5220 V
MINE SCALING MACHINE

SPECIFICATIONS

Engine
- Volvo TAD571 VE Tier 4f, 4 cycle, inline 4 cylinder, liquid cooled, electronic controlled
- Vertical canister style lube filter 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)

Boom
- Two piece triangular telescoping boom
- Adjustable boom rollers with eccentric shafts
- 220° continuous boom tilt
- 105° boom pivot angle
- Auxiliary hydraulics

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: 4.75" ID, 3.35" rod (121 mm x 85 mm), 310" (787 mm) stroke
- One telescope: 3.75" ID, 2.75" rod (95 mm x 70 mm), 14" (4.27 m) stroke

Four Hydraulic Motors
- Swing, 68 hp (51 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………………4,500 psi (310 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)

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)

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: 28’4” (8.6)
- **A1** Overall length without attachment: 26’3” (8.0)
- **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: 6’6” (2.6)
- **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” (2.8)
- **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)
- **K1** Width of crawler (optional): 9’10” (3.0)

**N** Ground clearance (per SAE J1234): 18” (454 mm)

- **V** Track gauge, roller centerline to roller centerline: 7’10” (2.4)
- **Y** Width of crawler track assembly (standard): 31’5” (800 mm)
- **AA** Maximum radius at groundline (Scaling Hook): 34’10” (10.6)
- **AB** Maximum depth: 26’2” (8.0)
- **AH** Minimum radius at groundline: 14’9” (4.5)
- **AK** Boom pivot to groundline: 5’8” (1.7)
- **AL** Boom pivot to axis of rotation: 1’11” (585 mm)
- **AP** Attachment tooth radius: 3’10” (1.2)
- **AQ** Boom pivot angle: 30° Up and 75° Down
- **AS** Attachment pivot angle: 165°
- **AU** Maximum telescoping boom length (boom pivot to attachment pivot): 29’6” (9.0)
- **AV** Minimum telescoping boom length (boom pivot to attachment pivot): 15’6” (4.7)
- **AW** Telescoping boom travel: 14’0” (4.3)
- **AX** Boom tilt angle (continuous): 360°
- **BA** Maximum radius of working equipment: 35’4” (10.8)
- **BB** Maximum height of working equipment: 26’0” (7.9)
- **BD** Minimum clearance of attachment with pivot at maximum height: 18’5” (5.6)
- **BF** Minimum clearance of attachment at maximum boom height: 11’5” (3.5)
- **BG** Maximum height of working equipment with attachment below groundline: 14’2” (4.3)
- **BH** Radius of attachment tooth at maximum height: 27’1” (8.2)

Specifications subject to change without notice.

### Swing

- Priority swing circuit with axial piston motor
- Planetary transmission

**Swing speed:** 70 rpm

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

### Weight

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

<table>
<thead>
<tr>
<th>Pad Size</th>
<th>Weight</th>
<th>Bearing Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>236” 600 mm</td>
<td>58,032 lbs (26,322 kg)</td>
<td>93 psi (641 kPa)</td>
</tr>
<tr>
<td>315” 800 mm</td>
<td>59,162 lbs (26,835 kg)</td>
<td>71 psi (489 kPa)</td>
</tr>
</tbody>
</table>

### Function Forces

- **Rated Boom Force:** 24,941 lbs (111 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

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.

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