XL 5320 MINE SCALING MACHINE

SPECIFICATIONS

Engine

- Volvo 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)

- Variable viscous fan clutch system
 Vertical stacked hydraulic oil cooler.
- Vertical stacked hydraulic oil cooler charge air cooler and radiator

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: 99 gallons (375 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 conditioning
- Front window has heat resistant glass
- Rearview mirrors on right and left sides
- Seat belt
- Swing lights

Controls

- Two electronic joysticks (hoist and bucket, telescope and swing)
- One rocker switch (tilt) control
- Joysticks mounted on arm pods
- Quick change joystick pattern switch located on instrument panel
- Joysticks are self-centering; when controls are released, power for movement disengages and swing and tilt brake set automatically

- Tilting/telescoping steering column
- Hydraulic foot pedal controls braking functions
- Travel speed is regulated with an electronic foot pedal control
- Switch on the FWD/REV selector provides 1st/2nd gear selection
- Independent rocker switches control stabilizers, axle oscillation, park brake, and hazard lights

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.

Boom

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

Hydraulic System

Pump

- One load-sensing, axial piston pump; oil flow 0-110 gpm (0-435 L/min)
- Tandem gear pump (steering, brake/pilot) 10 GPM (38 L/min), 6 GPM (23 L/min)

System monitor

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

SYSTEM SPECIFICATIONS Six 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), 31.0" (787 mm) stroke
- One telescope: 3.75" ID, 2.75" rod (95 mm x 70 mm), 14' (4.27 m) stroke
- Two single-acting axle oscillation cylinders: 4.528" ID, 4.528" rod (115 mm x 115 mm), 6.25" (159 mm) stroke

Three Hydraulic Motors

- Swing, 68 hp (38 kW)
- Tilt, 50 hp (37 kW)
- Propel, 113 hp (84 kW)

Operating Pressures:

- Hoist......4,900 psi (331 BAR)
- Tilt4,900 psi (331 BAR)
- Swing 4,500 psi (310 BAR)
- Telescope 4,900 psi (331 BAR)
- Pilot System 550 psi (38 BAR)
- Braking & Steering.. 2,400 psi (165 BAR)Blade & Stabilizers.. 4,000 psi (207 BAR)

Oil Capacity

Reservoir system 65 gallons (246 L)
Pressurized reservoir with visual oil level aauges

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

Undercarriage

- Both axles are equipped with internal wet-disc type service brakes
- Steering axle is fitted with oscillation lock cylinders

Tires: 10 x 20 Super-Lug

Axles: ZF Model 3070 (FTF 2090)

Transmission: ZF Model HL 290

Drive Motor: Rexroth A6 Series, 160cc/Rev

Minimum Turning Radius: 25'5" (7.75 m)

- Variable displacement high torque piston motor powers the two-speed power shift transmission
- Speed mode selection can also be done while moving
- Electronically operated travel alarm signals excavator movement

Travel speed on flat surface - MPH (kmh):

Standard Mode

5.7 mph (9.2 kmh)

12 mph (19.3 kmh)

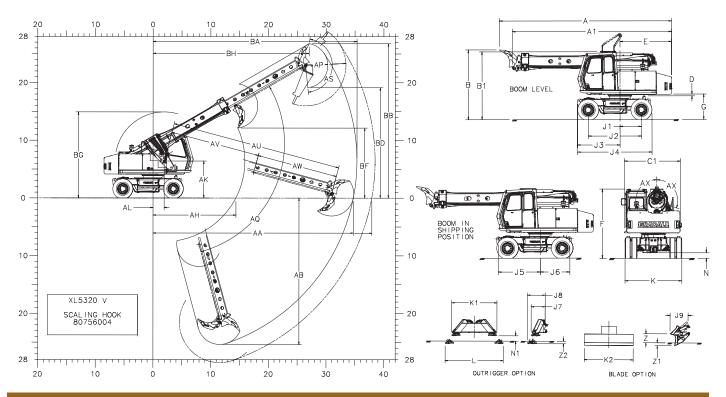
Creeper Mode

1.8 mph (2.9 kmh)

6.3 mph (10.1 kmh)

First Gear

Second Gear



Dimensions

- A Overall length with attachment open (Travel Position): 28'4" (8.6)
- A1 Overall length without attachment (Travel Position): 26'3" (8.0)
- **B** Overall height with attachment open (Travel Position): 11'6" (3.5)
- **B1** Overall height without attachment (Travel Position): 11'2" (3.4)
- C1 Width of upperstructure: 9'0" (2.7)
- D Minimum clearance, upperstructure to undercarriage: 3" (78 mm)
- **E** Swing clearance, rear of upperstructure: 8'6" (2.6)
- **F** Top of cab guard to groundline: 11'1" (3.4)
- **G** Clearance, upperstructure to groundline: 4'2" (1.3)
- H1~ Height of optional folding lift yoke lowered: 1'9" (0.5)
- H2 Height of pin of optional folding lift yoke: 3'7" (1.1)
- H3 Overall height of optional folding lift yoke: 4'0" (1.2)
- H4 Height to pin of optional rigid lift yoke: 2'8" (0.8)
- **H5** Overall height of optional rigid lift yoke: 3'0" (0.9)
- **J1** Axis of rotation to centerline of drive sprockets: 3'6" (1.1)
- J2 Wheelbase of undercarriage: 8'9" (2.7)
- J3 Axis of rotation to front of undercarriage: 7'0" (2.1)

Specifications subject to change without notice. Metric units are meters (m) unless noted. Machines shown may have optional equipment.

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- **J4** Nominal overall length of undercarriage: 12'3" (3.7)
- J5 Axis of rotation to front option attachment pin: 6'9" (2.1)
- J6 Axis of rotation to rear option attachment pin: 4'9" (1.4)
- J7 Outrigger length, attachment pin to pad in up position: 2'7" (0.8)
- J8 Outrigger length, attachment pin to pad in down position: 3'3" (1.0)
- J9 Blade length, attachment pin across blade in up position: 3'4" (1.0)
- K Overall width of undercarriage: 9'1" (2.8)
- K1 Overall width outrigger (up position): 8'4" (2.5)
- K2 Overall width blade: 9'0" (2.7)
- L Overall width outrigger (down position): 10'8" (3.3)
- N Ground clearance (per SAE J1234): 11" (275 mm)
- N1 Ground clearance (outrigger option): 12" (300 mm)
- **Z** Blade above ground (option): 1'8" (505 mm)
- **Z1** Maximum lift of blade (option): 7'0" (166 mm)
- **Z2** Maximum lift of outrigger (option): 6'0" (142 mm)
- AA Maximum radius at groundline (Scaling Hook): 34'9" (10.6)
- Maximum radius at groundline (S-29 Hammer): 37'11" (11.6)

· Priority swing circuit with axial piston motor

Automatic spring-set/hydraulic release

Dynamic braking is provided by the

AB Maximum depth: 25'5" (7.7)

Planetary transmission

wet-disc parking brake

Swing speed: 7.0 rpm

hydraulic system

Swing

Swing Brake

- **AH** Minimum radius at groundline: 14'4" (4.4)
- **AK** Boom pivot to groundline: 6'5" (2.0)
- AL Boom pivot to axis of rotation: 1'11" (585 mm)
- AP Attachment tooth radius (scaling hook): 3'10" (1.2)
- Attachment bit radius (S-29 Hammer): 7'0" (2.1) 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** Attachment tilt angle (continuous): 360°
- **BA** Maximum radius of working equipment: 35'4" (10.8)
- BB Maximum height of working equipment: 26'9" (8.2)
- **BD** Minimum clearance of attachment with pivot at maximum height: 19'2" (5.8)
- **BF** Minimum clearance of attachment at maximum boom height: 12'2" (3.7)
- **BG** Maximum height of working equipment with attachment below groundline: 14'11" (4.5)
- **BH** Radius of attachment tooth at maximum height: 27'1" (8.2)

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

Weight

- Approximate working weight with 36" (914 mm) excavating bucket, fuel tank half full
 - 55,926 lbs (25,368 kg)

Outriggers: 2,720 lbs (1,234 kg) **Blade:** 1,529 lbs (694 kg)