

STEEL MILL MAINTENANCE



SPECIFICATIONS

Upperstructure Engine

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

Gross Rating: 173HP @ 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, 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. Evacuator valve and service indicator.

Fuel tank capacity: 82 gallons (310 L).

Hydraulic System

PUMPS

One load-sensing, axial piston pump; oil flow 0-110 GPM (0-416 L/min).

Tandem gear pump (steering, brake/pilot) 10 GPM (38 L/min), 6GPM (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

Six cylinders

- 1 tool: 5.0" (127 mm) ID, 3.0" (76 mm) rod, 25.9" (658 mm) stroke.
- 2 hoist: 4.25" (108 mm) ID, 3.0" (76 mm) rod, 53.43" (1357 mm) stroke.
- 1 telescope: 5.0" (127 mm) ID, 3.25" (83 mm) rod, 13'6" (3.94 m) stroke.
- 2 single-acting axle oscillation cylinders.

Three hydraulic motors

Swing, 68hp (51 kW); tilt, 28 hp (21 kW); propel motor, 113 hp (84 kW).

Operating pressures:

Hoist4,900 psi	
Tilt2,400 psi	(165 BAR)
Swing4,500 psi	
Tool4,900 psi	(331 BAR)
Telescope3,300 psi	(228 BAR)
Propel4,900 psi	(331 BAR)
Pilot System550 psi	(38 BAR)
Braking & Steering2,400 psi	(165 BAR)

Oil Capacity

Reservoir system 61 gallon (231 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.

Operator Cab

All-weather cab with tinted safety glass windows, acoustical lining, four-way adjustable operator's seat, AM/FM radio, filtered fresh air heater, defroster and A/C. Front window has heat resistant glass. Rearview mirrors on right and left sides. Standard equipment includes operator's seat belt and swing lights.

Controls

Two electronic joysticks (hoist and bucket, telescope and swing), one rocker switch (tilt) control upperstructure. Joysticks mounted on arm pods, independently adjustable for individual operator comfort and convenience. 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.

A tilting/telescoping steering column provides smooth, comfortable steering. Hydraulic foot pedal controls braking functions, giving smooth performance with infinite control. Travel speed is regulated with an electronic foot pedal control. A switch on the FWD/REV selector provides 1st/2nd gear selection. Independent rocker switches control 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.

Undercarriage

Full-time 4 x 4 drive with 2-speed Powershift transmission. Rigid mount rear axle. Oscillating front steer axle with automatic lock-out cylinders. Four-wheel enclosed sealed wet disc brakes. Access ladders on both sides and both ends of machine. Locking toolboxes on each side.

Maximum Travel Speed: 11 mph (17.7 kph).

Maximum Gradeability: 47%.

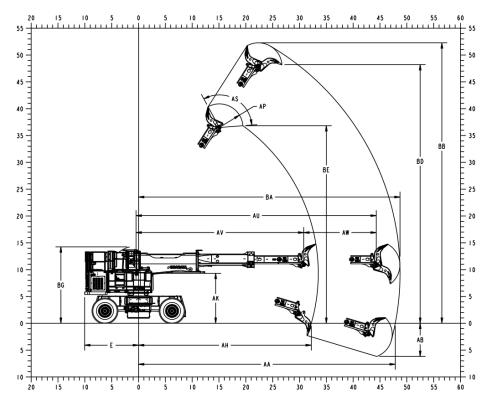
Minimum Turning Radius: 38 ft (11.6 m).

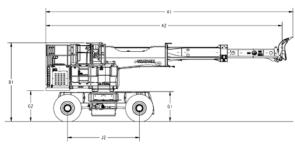
Tires: 16.00 x 25 (28 ply).

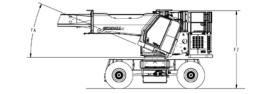
Weight

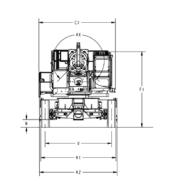
Approximate working weight:

77,500 lbs (35,153 kg).









Dimensions

- A1 Overall length (boom level) with scaling hook: 43'0" (13.1)
- A2 Overall length (boom level) without scaling hook: 41'1" (12.5)
- **B1** Overall height (boom level): 13'8" (4.2)
- C1 Width of upperstructure: 13'4" (4.1)
- E Swing clearance, rear of upperstructure: 10'0" (3.0)
- F1 Top of cab guard to groundline (cab level): 13'2" (4.0)
- F2 Top of cab guard to groundline (cab at full tilt): 13'6" (4.1)
- FA Cab tilt: 23° (optional)
- G1 Clearance, upperstructure to groundline: 5'2" (1.6)
- G2 Clearance, counterweight to groundline: 5'4" (1.6)
- Nominal distance between centerlines of front and rear axles: 12'6" (3.8)
- K1 Width of chassis, toolboxes in inner position: 13'1" (4.0)
- K2 Width of chassis, toolboxes in outer position: 13'6" (4.1)
- N Ground clearance: 1'4" (0.4)
- **V** Wheel centerline to wheel centerline: 11'7" (3.5)
- **AA** Maximum radius at groundline: 47'10" (14.6)
- AB Maximum depth: 6'2" (1.9)

- **AH** Minimum radius at groundline: 32'2" (9.8)
- **AK** Boom pivot to groundline: 9'4" (2.8)
- AP Scaling hook tooth radius: 4'5" (1.3)
- AS Attachment pivot angle: 114°
- **AU** Maximum telescoping boom length (boom pivot to attachment pivot): 44'9" (13.6)
- **AV** Minimum telescoping boom length (boom pivot to attachment pivot): 31'3" (9.5)
- AW Telescoping boom travel: 13'6" (4.1)
- **AX** Standard boom tilt angle: 360° continuous
- BA Maximum radius of working equipment: 48' 9" (14.9)
- BB Maximum height of working equipment: 52'3" (15.9)
- **BD** Minimum clearance of scaling tooth, with attachment pivot at maximum height: 48'2" (14.7)
- **BE** Minimum clearance of scaling tooth at maximum boom height: 36'10" (11.2)
- **BG** Maximum height of working equipment with boom below groundline: 14'3" (4.3)

Metric units are meters (m) unless noted



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