

V O L V O



Volvo Articulated Hauler 43.4 t 57 km/h 673 hp

A60

Volvo Construction Equipment

A60

With up to 15% more fuel efficiency and 5% more productivity compared to the previous generation, count on the Volvo A60 to deliver outstanding results in quarry, mining and heavy infrastructure projects.



Intuitive in-cab interface

- All essential in-cab information conveniently displayed on just two screens
- Interactive, integrated Volvo Co-Pilot display
- Dynamic instrument cluster in-front of steering wheel



5% more productivity, 15% more fuel efficiency

- New transmission and axles enabling full power to be utilized in all gears
- OptiShift
- Automatic traction control and the intelligent Terrain Memory (in markets with CareTrack)

The biggest and the best

The largest 6x6 articulated hauler in the industry, the Volvo A60 is a machine designed to deliver maximum productivity at the lowest cost per tonne. Featuring a new Volvo transmission, the A60 delivers up to 15% more fuel efficiency and 5% more productivity compared to the previous generation. Combine this with a host of features which deliver unrivalled off-road performance, exceptional operator comfort and maximum uptime, and the Volvo A60 Articulated Hauler is a machine ready to deliver outstanding results in quarry, mining and heavy infrastructure projects.

Unbeatable off-road performance



- Active hydraulic front suspension, enabling high hauling speeds in the toughest conditions
- Proven Volvo drivetrain
- Automatic drive combinations (including 100% differential locks)
- All-terrain bogie and hydro-mechanical steering
- Volvo Dynamic Drive
- Outstanding tipping stability

Enhanced visibility



- Redesigned hood and cab panels
- Wider wiper coverage
- Direct field of vision which exceeds industry standards
- Optional work lights located on the pillars
- Optional front and rear cameras; standard entrance camera
- Camera views easily managed using Volvo Co-Pilot

Ultimate operator experience



- Easy access/egress
- Ergonomic gear lever
- Enhanced storage options
- Easy cleaning
- Operator Training Program

Best in class braking and retarder systems



- Downhill speed control
- Volvo Engine Brake
- Wet brakes on all wheels

Total operator control



- Hill assist
- Cruise control
- Downhill speed control
- Load and dump brake
- Dump support system
- Dynamic Volvo Engine Brake

Designed for uptime



- Reinforced axles
- 250-hour greasing intervals
- Industry leading service access
- Remote monitoring and service alerts
- Enhanced electrical service center
- Harness anchor points

Smarter Solutions



- Haul Assist with On-Board Weighing
- Connected Map and Performance Indicator
- Future proofed software architecture
- CareTrack
- My Equipment app
- Site Optimization consultancy service

More productivity, more fuel efficiency

With a new Volvo powertrain, Volvo quality runs throughout every element of the A60, with the new transmission and axles enabling full power to be utilized in all gears. The result is up to 15% more fuel efficiency and 5% more productivity. With the addition of proven Volvo features such as OptiShift – which enables faster directional changes when moving between forwards and reverse – automatic traction control and the intelligent Terrain Memory* function, which identifies and remembers slippery road segments to ensure optimized traction control and outstanding off-road mobility. Get ready for more fuel efficiency, more productivity and Volvo-renowned quality and reliability throughout.

* In markets with CareTrack

Unbeatable off-road performance

Go where other 60-tonne machines cannot, in all seasons, terrains and applications, thanks to the unbeatable off-road performance of the A60. Fitted with active hydraulic front suspension, enabling high hauling speeds in the toughest conditions, the A60 features proven Volvo drivetrain, automatic drive combinations (including 100% differential locks), all-terrain bogie and hydro-mechanical steering for unmatched traction, stability and precision control. With Volvo Dynamic Drive, dynamic and predictive gear selection adapts to the operating conditions at hand, for improved comfort and fuel efficiency. What's more, the intelligent design is optimized for maximum efficiency in high payload applications, with outstanding tipping stability for safe and productive operations.

Intuitive operator interface

Operators can stay in-the-know and focussed on the task at hand thanks to all essential in-cab information conveniently displayed on two screens. The interactive, integrated Volvo Co-Pilot display offers easy control over essential functions such as media, camera settings, climate control, and machine status. This is combined with the dynamic instrument cluster, positioned in front of the steering wheel, which provides essential vehicle data at-a-glance.

Reinforced axles

Take on the most challenging work environments and off-road conditions in the A60 thanks to the reinforced axles, which withstand heavier loads, higher levels of torque and stress. The added strength and stability provided by the axles contributes to higher uptime, reduced wear, longer service intervals and lower maintenance costs.

Total operator control

Features including hill assist, cruise control, downhill speed control, load and dump brake and dynamic Volvo Engine Brake help operators achieve optimum results all day, every day.



Lower maintenance costs

Keep service costs to a minimum thanks to simplified servicing, longer change intervals and easy component access. Servicing your machine is quick and easy thanks to industry leading service access and essential maintenance points accessible from the ground. What's more, eliminate daily or weekly greasing thanks to industry leading greasing intervals of 250 hours for maximum uptime.

5% reduction in service costs

Reduce service costs by up to 5% over 12 000-hours of operation thanks to simplified servicing, longer change intervals and easy component access. Benefit from industry leading greasing intervals of 250 hours for maximum uptime.



Volvo A60 in detail

Engine

16 liter, 6-cylinder straight turbocharged diesel engine with 4 valves per cylinder, overhead camshaft and electronically controlled unit injectors. The engine has wet replaceable cylinder liners and replaceable valve guides and valve seats

| | | |
|--|------------|-------|
| Engine Model | Volvo D16F | |
| Max power - SAE J1995 Gross | kW | 495 |
| | hp | 673 |
| Flywheel power - ISO 9249, SAE J1349 Net | kW | 492 |
| | hp | 669 |
| at engine speed | rpm | 1 800 |
| Max torque - SAE J1995 Gross | Nm | 3 200 |
| Max torque - ISO 9249, SAE J1349 Net | Nm | 3 177 |
| at engine speed | rpm | 1 050 |
| Displacement | lit | 16.1 |

Electrical System

All cables, sockets and pins are identified. Cables are enclosed in plastic conduits and secured to main frame. LED head- and work lights. Prewired for options. Connectors meet IP67 standard for water-proofing as necessary.

| | | |
|------------------|------|------------|
| Voltage | V | 24 |
| Battery | V | 2 x 12 |
| Battery capacity | Ah | 2 x 225 |
| Alternator | kW/A | 2.264 / 80 |
| Starter motor | kW | 9 |

Drivetrain

Torque converter with built-in lock-up function.

Transmission: Fully automatic Volvo planetary transmission with 9 forward gears and 3 reverse gears. Internal torsional damper in the torque converter.

Dropbox: Volvo, in-line design with high ground clearance and 100% longitudinal "dog clutch" type differential lock.

Axles: Heavy duty, purpose built Volvo design with fully floating axle shafts, planetary type hub reductions and 100% dog clutch type diff-lock. Automatic traction control system (ATC).

| | | |
|------------------|-------|---------|
| Torque converter | 2,0:1 | |
| Transmission | Volvo | PT3209 |
| Dropbox | Volvo | IL4 ATC |
| Axles | Volvo | AHW80 |

Brake System

Fully hydraulic, wet multiple disc brakes with enclosed, forced oil-cooled multiple discs on all wheels. Two circuit brake system. Complies with ISO 3450 at total machine weight.

Circuit division: One circuit for front axle and one for bogie axles.

Parking brake: Spring-applied disc brake on the propeller shaft, designed to hold a loaded machine on a grade of up to 18%. When the parking brake is applied, the longitudinal differential is locked.

Retarder: Service brake retarder function and Volvo Engine Brake (VEB).

Steering System

Hydro-mechanical articulated steering, self compensating design. Two double-acting steering cylinders.

Steering angle: 3,4 steering wheel turns lock-to-lock, $\pm 45^\circ$.

Steering system: including secondary steering fulfills ISO 5010.

Chassis

Frames: box type, heavy duty. High strength steel, robot welded.

Rotating hitch: 100% maintenance free, fully sealed, with permanently greased tapered roller bearings.

Cab

The Volvo cab features excellent all-around visibility created by a centrally positioned operator station, sloping hood, large rear-view mirrors and entrance camera. The one piece wide front windshield with large swipe area further enhances visibility.

The central instrument cluster, the integrated Co-pilot, gearshift lever, tipping lever and easy to reach switches ensure ease of operation.

The spacious cab meets the ROPS/FOPS safety standards according to ISO3471, SAE J1040 / ISO3449, SAE J231. Controls are ergonomically designed and easy to understand. Large storage compartments and a cooled/heated box improves the operator comfort.

| | | |
|---------------------------------------|----|-----|
| Sound level in cab (ISO 6396) - LpA | dB | 72 |
| External sound level (ISO 6395) - LWA | dB | 113 |
| Internal sound level with sound kit | dB | 70 |
| External sound level with sound kit | dB | 111 |



Hydraulic System

Pumps: Five variable displacement piston pumps driven by the flywheel PTO.
One ground-dependent piston pump for secondary steering mounted on the dropbox.
Two return oil filters with magnetic cores provide effective oil filtration.

| | | |
|-----------------------------|-----|----|
| System max working pressure | MPa | 28 |
|-----------------------------|-----|----|

Dumping System

Patented Load and Dump Brake. Dump system with auto rpm.
Dumping Cylinders: two single stage double acting cylinders.

| | | |
|------------------------|---|----|
| Tipping angle | ° | 70 |
| Tipping time with load | s | 13 |
| Lowering time | s | 10 |

Body

Plate thickness

| | | |
|--------|----|----|
| Front | mm | 8 |
| Sides | mm | 14 |
| Bottom | mm | 16 |
| Chute | mm | 16 |

Material HB400 steel

| | | |
|------------------|-------------------|-------|
| Yield strength | N/mm ² | 1 000 |
| Tensile strength | N/mm ² | 1 250 |

Load Capacity

Standard Body

| | | |
|------------------|----------------|--------|
| Load capacity | kg | 55 000 |
| Body, struck | m ³ | 25.8 |
| Body, heaped 2:1 | m ³ | 33.6 |

With overhung tailgate

| | | |
|------------------|----------------|------|
| Body, struck | m ³ | 26.5 |
| Body, heaped 2:1 | m ³ | 35.1 |

Suspension

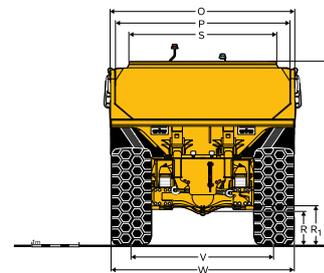
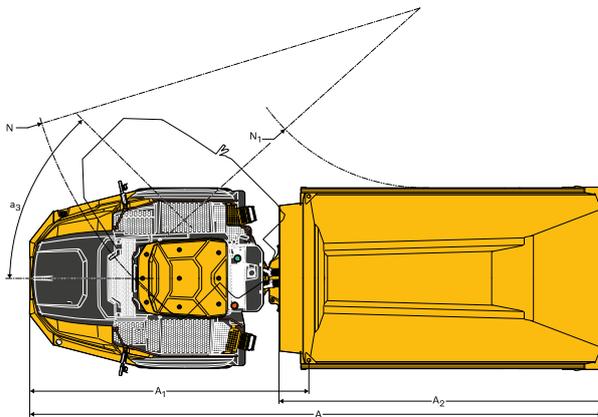
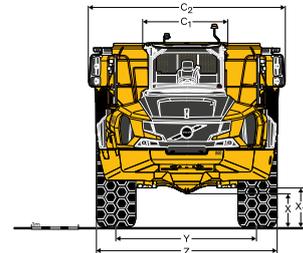
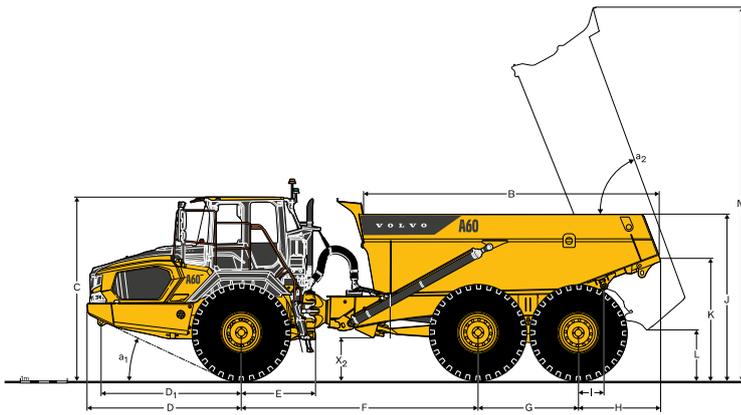
Front suspension: Unique, full hydraulic, with automatic leveling and stabilizer.

Rear suspension: 100% maintenance free. Straddle mounted bogie beam. Independent wheel movement via a 3-point mounting system.

| | |
|--|-----|
| Hydraulic cylinders (struts), front/rear | 2/0 |
| Accumulators, oil-nitrogen, high pressure, front | 2 |
| Levelling sensors | 2 |



Specifications



DIMENSIONS

| Pos | Unit | A60J |
|----------------|------|--------|
| A | mm | 12 224 |
| A* | mm | 12 333 |
| A ₁ | mm | 5 872 |
| A ₂ | mm | 6 893 |
| B | mm | 6 309 |
| C | mm | 3 860 |
| C ₁ | mm | 1 819 |
| C ₂ | mm | 4 348 |
| D | mm | 3 288 |
| D ₁ | mm | 2 986 |
| E | mm | 1 439 |
| F | mm | 5 050 |
| G | mm | 2 140 |
| H | mm | 1 745 |
| I | mm | 543 |
| J | mm | 3 507 |
| K | mm | 2 654 |
| L | mm | 1 026 |
| M | mm | 7 957 |
| N | mm | 10 014 |

DIMENSIONS

| Pos | Unit | A60J |
|----------------|------|-------|
| N ₁ | mm | 4 761 |
| O | mm | 3 989 |
| O* | mm | 4 112 |
| P | mm | 3 673 |
| R | mm | 686 |
| R ₁ | mm | 807 |
| S | mm | 3 126 |
| U | mm | 3 839 |
| V | mm | 3 010 |
| W | mm | 3 874 |
| X | mm | 611 |
| X ₁ | mm | 734 |
| X ₂ | mm | 850 |
| Y | mm | 3 010 |
| Z | mm | 3 874 |
| a ₁ | ° | 25.4 |
| a ₂ | ° | 70 |
| a ₃ | ° | 45 |

A60J: Unloaded machine with 33.25R29 tires.

*Dimension with overhung tailgate

| REFILL CAPACITIES | | |
|----------------------|---|----------|
| | | A60J |
| Crankcase | l | 51 |
| Fuel tank | l | 750 |
| Cooling system | l | 80 |
| Brake cooling system | l | 210 |
| Transmission | l | 65 |
| Dropbox | l | 11 |
| Axles, front/bogie | l | 76 / 158 |
| Hydraulic tank | l | 173 |

| SPEED | | |
|----------------|------|------|
| | | A60J |
| Forward | | |
| 1 | km/h | 6.0 |
| 2 | km/h | 9.0 |
| 3 | km/h | 13 |
| 4 | km/h | 18 |
| 5 | km/h | 23 |
| 6 | km/h | 28 |
| 7 | km/h | 38 |
| 8 | km/h | 49 |
| 9 | km/h | 57 |
| Reverse | | |
| 1 | km/h | 6.0 |
| 2 | km/h | 9.0 |
| 3 | km/h | 17 |

| OPERATING WEIGHT UNLOADED | | |
|---------------------------|----|-----------------|
| | | A60J |
| Tires | | 33.25R29 |
| Front | kg | 22 700 |
| Rear | kg | 21 000 |
| Total | kg | 43 700 |
| Payload | kg | 55 000 |

| TOTAL WEIGHT | | |
|--------------|----|-----------------|
| | | A60J |
| Tires | | 33.25R29 |
| Front | kg | 28 800 |
| Rear | kg | 69 850 |
| Total | kg | 98 650 |

Operating weight includes all fluids and operator

| GROUND PRESSURE | | |
|-----------------|-----|-----------------|
| | | A60J |
| Tires | | 33.25R29 |
| Unloaded | | |
| Front | kPa | 125 |
| Rear | kPa | 58 |
| Loaded | | |
| Front | kPa | 160 |
| Rear | kPa | 193 |

Equipment

STANDARD EQUIPMENT

Engine

Preheater for easier cold starts

VEB (exhaust retarder EPG + compression brake)

Wheels and tires

33.25R29

Drivetrain

6x4 and 6x6 Automatic Traction Control (ATC)

Dog clutch type 100% diff-locks in all axles

Cruise Control

Dropbox with longitudinal diff-lock

Torque converter with automatic lock-up in all gears

Electrical system

Service battery disconnect switch, (LOTO)

Electrical Interface

Charging studs

Power outlets

USB-C 2.0 (2)

USB-A 3.0 (1)

12V (1) / 24V (1)

Exterior and Interior lights (all LED)

On Board Weighing

Brake system

Two circuit, fully hydraulic, wet discs on all axles (externally cooled)

Down Hill Speed Control

Hill assist

Load & Dump Brake

Retarder pedal

Parking brake on propeller shaft

Body

Body prepared for exhaust heating and optional equipment

Safety

Anti-slip steps and platforms with handrails

Dump body lock

Steering joint lock

Harness anchor points

Rear-view mirrors

Retractable 3-inch 2-point safety belt

ROPS/ FOPS protected cab

Secondary steering

Dump support system

Positioning indicators

Entrance camera

STANDARD EQUIPMENT

Cab/Operator environment

Operator seat with head restraint (air suspended and heated)

Electronic Climate Control

Cup holder / storage tray

Cell phone holder

Instructor seat with seat belt

Overhead console for CC Radio, Tachograph, etc.

Sliding window

Cooled / Heated storage box

Front sun visor

Tilt/telescopic steering wheel

Loud speakers (4)

Dynamic instrument cluster and integrated Co-Pilot

Automatic pre-start checks

Troubleshooting diagnostics

Service and Maintenance

Grouped service points and filters

Electrical fuel priming pump

Prepared for fast fueling equipment

Ambient and service lights (LED)

Electrically operated engine hood

Electrically operated belly plate

Drainage hose

Tool box

Front service ladder

| OPTIONAL EQUIPMENT |
|--|
| Engine |
| Air filter, heavy duty |
| Engine heater, electric |
| Engine heater, diesel |
| Engine auto shutdown |
| Engine shutdown timer |
| External emergency engine stop |
| High engine idle speed |
| Fuel filter, electrically heated (-25°C) |
| Fuel filter, electrically and coolant heated (-35°C) |
| Drivetrain |
| Speed limiter (25/30 km/h) |
| Electrical system |
| Warning beacon, LED |
| Seatbelt indicator, external |
| Work lights front and rear, LED |
| Rear view camera |
| Front view camera |
| Reverse alarm |
| PDS (Proximity Detection System) interface, Safemine |
| Tire Pressure Monitoring System |
| Operator Environment |
| Noise reduction kit (fulfils 2000/14/EC) |
| Anchorage, operator's manual |
| Cab heating / ventilation timer |
| Cable kit, for cab heater |
| Cab air filter (Asbestos dust protection) |
| Cab air filter (Carbon) |
| Rear view mirrors, adjustable, el.heated |
| Sun blinds, side windows |
| Universal key |
| Premium ISRI seat with head restraint (air suspended, cooled/heated), 2-point belt |
| Premium ISRI seat with head restraint (air suspended, cooled/heated), 3-point belt |
| Armrest for operator seat |
| Hands-free microphone |
| Radio AM/FM/DAB |

| OPTIONAL EQUIPMENT |
|-------------------------------------|
| Dumping System |
| Standard body without wear plates |
| Body exhaust heating |
| Front spillguard, extra |
| Side extension, 200 mm |
| Side extension, 400 mm |
| Side extension, light material |
| Tailgate, overhung, wire-operated |
| Wear plates, 450 HB |
| Wear plates heavy duty, 450 HB |
| Safety |
| Fire suppression system |
| Warning triangle |
| First aid kit and fire extinguisher |
| Fire extinguisher, external |
| Wheel chocks |
| Service and Maintenance |
| Auto Lube system |
| Centralized greasing |
| Tool kit |
| Other |
| Arctic oil kit |
| Fast fuelling system |
| Jump start connector, ISO-type |
| Anti-theft system (pin code) |

Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

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