VOLVO

Volvo Articulated Hauler 55 t 57 km/h 639 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

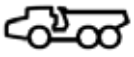
- Easy access/egress
- Ergonomic gear lever
- Enhanced storage options
- Easy cleaning
- Operator Training Program

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
- 1 000-hour engine service 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, along with Volvo Engine Oil and High Performance Filters which offer 1 000 hour engine service intervals.

Volvo A60 in detail

Engine

V-ACT, 16 liter, 6-cylinder straight VGT (Variable Geometry Turbocharged) diesel engine with 4 valves per cylinder, overhead camshaft and electronically controlled unit injectors.
It has wet replaceable cylinder liners and replaceable valve guides and valve seats.
The engine has cooled EGR (Exhaust Gas Recirculation) and exhaust after treatment with EAT-Muffler (Exhaust After treatment) including DOC (Diesel Oxidation Catalyst), DPF (Diesel Particulate Filter) and SCR (Selective Catalytic Reduction) with an electronically controlled UDS (Urea Dosing System).
After treatment system features passive DPF regeneration with an AHI (After treatment Hydro carbon Injection) device as back up.

Engine Model		Volvo D16J
Max power - ECE R120 Net/ (ISO 14396 GROSS)	kW	470
	hp	639
at engine speed	rpm	1 910
Max torque - ECE R120 Net/(ISO 14396 GROSS)	Nm	2 960
at engine speed	rpm	980
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 longitudal 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, ±45°.
Steering system, including secondary steering fulfi lls 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) - L_{pA}	dB	72
External sound level (ISO 6395) - L_{WA}	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 fi lters with magnetic cores provide effective oil filtration.		
System max working pressure	MPa	28

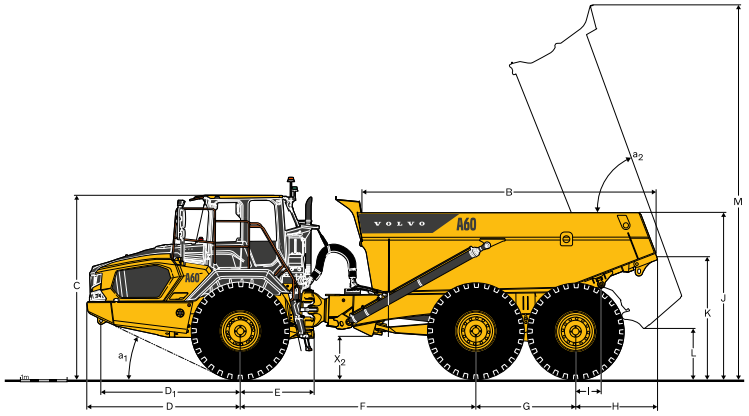
Dumping System		
Patented Load and Dump Brake. Dump system with auto rpm. **Dumping Cylinders:** two single stage double acting cylinders.		
Tipping angle	°	70
Tipping time with load	s	13
Lowering time	s	10

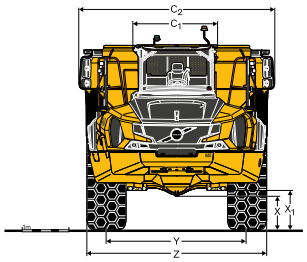
Body		
Plate thickness		
Front	mm	8
Sides	mm	14
Bottom	mm	16
Chute	mm	16
Material		
Yield strength	N/mm²	1 000
Tensile strength	N/mm²	1 250

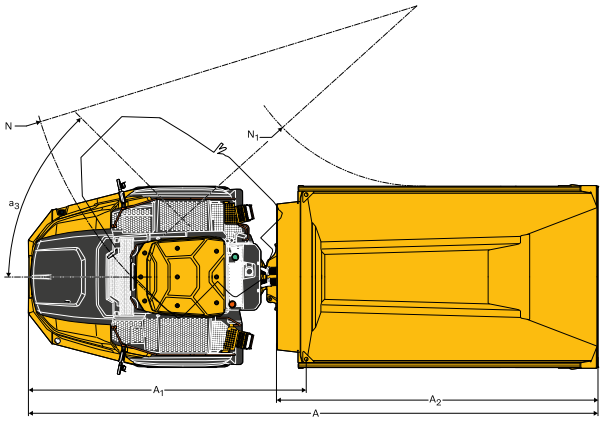
Load Capacity		
Standard Body		
Load capacity	kg	55 000
Body, struck	m³	25.8
Body, heaped 2:1	m³	33.6
With overhung tailgate		
Body, struck	m³	26.5
Body, heaped 2:1	m³	35.1

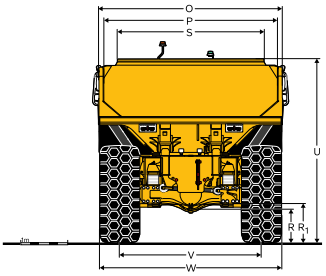
Suspension	
Front suspension: Unique, full hydraulic, with automatic leveling and stabilizer. **Rear suspension:** 100% maintenance free. Straddle mounted bogie beam. Independent wheel movement via a 3-point mounting system.	
Hydraulic cylinders (struts), front/rear	2/0
Accumulators, oil-nitrogen, high 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	8 50
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
DEF/AdBlue®	l	60

®registered trademark of the Verband der Automobilindustrie e.V. (VDA)

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	22 800
Rear	kg	21 000
Total	kg	43 800
Payload	kg	55 000

Operating weight includes all fluids and operator

TOTAL WEIGHT		
		A60J
Tires		**33.25R29**
Front	kg	28 900
Rear	kg	69 850
Total	kg	98 750

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 enviroment
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.