A45G
Volvo Articulated Haulers  41 t / 90,390 lb  469 hp
Pure uptime

Get continuous production with this bigger, durable and superior machine – always available and ready to work. Count on superb reliability thanks to the machine’s robust design, easy service access and outstanding Volvo dealer network. Guarantee pure uptime.

Guaranteed durability
Increase your uptime using heavy-duty front and rear frames, hitch and wet disk brakes. Volvo proven durability and the support of extensive warranty options means you never need to worry about getting the job done. Strength and durability are hallmarks of the Volvo articulated hauler.

Fifty years strong
Fifty years and fifty tonnes later, Volvo is the world’s leading manufacturer of articulated haulers. We invented the concept and have been developing and building these machines for over 50 years – it has come a long way from its original 10 tonne articulated hauler. With proven success over the years, the machines include innovative technology and the renowned Volvo engine.

Service access
With industry-leading access, servicing your machine is quick and easy. The front grill swings down, opening a service platform with anti-slip steps. The electric hood opens to 90 degrees, allowing full and safe access to the engine compartment.

Volvo dealer network
The exclusive Volvo dealer network is there to support you whenever you need it. Volvo offers a number of services, local knowledge and global experience, including telematics machine monitoring – CareTrack™ and MATRIS™ – as well as superb parts availability.
Get ready to work with the all new A45G. Designed for heavy hauling in severe off-road operation, the machine’s long service life, quality, reliability and durability is everything you expect from a Volvo. Hauling is easier and more efficient.
Fuel efficiency guaranteed

The A45G powered by the world-renowned Volvo engine delivers excellent fuel efficiency without compromising on power or performance. With guaranteed fuel efficiency, this machine will increase your profitability and improve your return on investment.
World-renowned efficiency

Improve your efficiency and move more for less. Excellent fuel efficiency, innovative technology and useful operational data tools help to control your maintenance costs and maximize your investment.

Move more for less

The machine is optimized for efficiency featuring higher payload capabilities. Its smart design allows for more capacity while reducing fuel consumption so you can move more for less.

Operational data

Receive valuable data to improve onsite efficiency and save costs. With intelligent systems from Volvo such as MATRIS™, CareTrack™ and the On Board Weighing system, you will optimize your production and minimise your operational costs.

Control your maintenance costs

The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.

Volvo dynamic drive

Dynamic and predictive gear selection adapts to operating conditions, for improved comfort and fuel efficiency.
Hit the targets
Hit your targets with the A45G. This machine features 100% off-road performance, proven Volvo technology and increased payload – contributing to sustainable operations, year after year.

Articulated hauler concept
Go where others can’t. The articulated hauler concept provides total versatility so you can access the entire jobsite and climb steeper gradients. Work in all seasons, terrains and applications. With body building solutions and different chassis options you can tailor the machine to your jobsite.

The best articulated hauler
The A45G machine delivers unbeatable off-road performance in its class with features including matched Volvo drivetrain, Automatic Traction Control including 100% differential locks, all-terrain bogie, hydro-mechanical steering.

The right speed for the job
Ensure the right speed for your job using the retarders, Volvo Engine Brake and new Downhill Cruise Control to adapt your speed for maximum productivity and safety.

Load optimization
The optional On Board Weighing System guarantees the optimal load every cycle. This maximizes production, boosts fuel efficiency and reduces machine wear in all site conditions and operations.
THE BEST JUST GOT BIGGER

Bigger means better when loading more tonnes per hour, with an extra two tonne payload you can carry more in one go. The A45G articulated hauler is built to improve your cycle times and productivity.
The ultimate hauler

**New dump support system**
The new dump support system increases stability and control in tough environments.

**Operator’s choice**
Its comfortable cab and ease of operation, even in adverse conditions, makes operators choose this machine.

**Service access**
With industry-leading access, servicing your machine is quick and easy.

**Fifty years strong**
Fifty years and fifty tonnes later, Volvo is the world’s leading manufacturer of articulated haulers.

**Uptime**
Designed for heavy hauling in severe off-road operation, its long service life, quality, reliability and durability is everything you expect from a Volvo.

**New gradient controls**
New hill start and downhill cruise control features give you more control over your machine, whether travelling up or down steep gradients.

**New econometer**
The new econometer help the operator to control the machine for extra productivity.
Powered by the world-renowned Volvo engine delivers excellent fuel efficiency without compromising on power or performance.

Guaranteed durability
With body building solutions and different chassis options you can tailor the machine to your jobsite.

Volvo dynamic drive
Gear shifting adapts dynamically to operating conditions, for improved comfort and fuel efficiency.

The best just got bigger
Move more tonnes per hour and give a 100% in all conditions with an increase two tonne payload.

The best articulated hauler
The ground-breaking A60H is the best articulated hauler on the market and the latest innovation from Volvo.
When many other machines are onsite, most operators prefer the Volvo. Its comfortable cab and ease of operation, even in adverse conditions, makes operators choose this machine.
Control in comfort

The A45G is the number one operator’s choice because of its industry-leading spacious cab and comfortable work environment. Its superior comfort, control, ease of operation and safety appeals to operators, maintaining productivity all day, every day.

Total operator control
The new dump support system, hill start assist, downhill cruise control and econometer as well as load and dump brake, help the operator control the machine for extra productivity and safety in all conditions.

Ease of operation
The ergonomic, comfortable controls are easy to understand and suit all operators, combined with automatic functions for increased ease of operation.

Operator comfort
Feel comfortable and spend more time in the A45G. The centrally positioned operator, superior steering, excellent suspension, low noise levels, climate control, space and visibility, reduce operator fatigue for more effective operations.

Safety
A number of safety features such as superior visibility and efficient lighting help to keep the operator and people working around the machine safe in the most demanding working environments – whether it's the operator, trainers, mechanics or site workers.
Volvo A45G 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 injection pump. 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 LUS (Use Dosing System). T4f/Stage IV after treatment system features passive DPF regeneration with an AHI (After treatment Hydro carbon Injection) device as back up.

<table>
<thead>
<tr>
<th>Engine model</th>
<th>Volvo D16J</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max power - SAE J1995 Gross</td>
<td>kW (hp) 350 (469)</td>
</tr>
<tr>
<td>at engine speed</td>
<td>r/min (r/s) 1,800 (30)</td>
</tr>
<tr>
<td>Flywheel power - ISO 9249, SAE J1349 Net</td>
<td>kW (hp) 347 (465)</td>
</tr>
<tr>
<td>at engine speed</td>
<td>r/min (r/s) 1,800 (30)</td>
</tr>
<tr>
<td>Max torque - SAE J1995 Gross</td>
<td>Nm (ft lb) 2,525 (1,862)</td>
</tr>
<tr>
<td>at engine speed</td>
<td>r/min (r/s) 1,050 (17.5)</td>
</tr>
<tr>
<td>Displacement</td>
<td>l (in³) 9</td>
</tr>
</tbody>
</table>

**Electrical System**

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

- Voltage: 24 V
- Battery: 2x12 V
- Battery capacity: Ah 2x225
- Alternator: kW/A 3.396/120
- Starter motor kW 9

**Drivetrain**

- Torque converter with built-in lock-up function.
- Transmission: Fully automatic Volvo PowerTronic planetary transmission with nine forward gears and three reverse gears. The transmission has the ability to skip gears for fast and accurate gear selection.
- Dropbox: Volvo-developed, 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: 2.1:1
- Transmission: Volvo PT 2519
- Dropbox: Volvo IL2 ATC
- Axles: Volvo ARB H40

**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 acting on the trailer unit propeller shaft. When the parking brake is applied, the longitudinal differential 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 full IS ISO 5010.

**Cab**

- Mounted on rubber pads. Ergonomically designed. Easy entry and exit. Wide angle forward view.
- Operator centrally positioned above the front axle. Adjustable operators seat with retractor seat belt.
- Tilt/Telescopic steering wheel. Ergonomically positioned controls. Filtered air.
- Optional climate control system.
- Operator communication system: Contronics.
- Large color display, user-friendly and easy-to-understand information, all vital machine functions are constantly monitored.
- Instructor seat with seat belt.

**Sound level in cab (ISO 6396) - LpA dB(A) 72**

**External sound level (ISO 6395) - LwA dB(A) 112**

**Internal sound level with sound kit. 70 dB(A)**

**Dumps and Fan**

- External sound level with sound kit. 110 dB(A)

**Hydraulic System**

- Pumps: Four variable displacement piston pumps driven by the flywheel PTO.
- Two load-sensing used for steering and tipping and two electrical controlled used for fan, brake cooling and brake power supply.
- One ground-dependent pump for secondary steering mounted on the dropbox.
- Two return oil filters with magnetic cores provide effective oil filtration.
- System max working pressure MPa (psi) 26 (3,771)

**Dumper System**

- Patented Load and Dump Brake.
- Dumper Cylinders: two single stage double acting cylinders.
- Tipping angle ° 70
- Tipping time with load s 12
- Lowering time s 10

**Body**

- Plate thickness
  - Front mm (in) 8 (0.31)
  - Sides mm (in) 11 (0.43)
  - Bottom mm (in) 14 (0.55)
  - Chute mm (in) 16 (0.63)

**Material**

- Yield strength N/mm² (psi) 1,150 (166,783)
- Tensile strength N/mm² (psi) 1,350 (195,801)

**Load Capacity**

<table>
<thead>
<tr>
<th>Standard Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load capacity kg (sh tn) 41,000 (45.2)</td>
</tr>
<tr>
<td>Body, struck m³ (yd³) 19.7 (25.8)</td>
</tr>
<tr>
<td>Body, heaped 2:1 m³ (yd³) 25.1 (32.8)</td>
</tr>
</tbody>
</table>

**With overhung tailgate**

| Body, struck m³ (yd³) 20.2 (26.4) |
| Body, heaped 2:1 m³ (yd³) 26.2 (34.3) |
Specifications

REFILL CAPACITIES

<table>
<thead>
<tr>
<th>Component</th>
<th>Capacity (l gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crankcase</td>
<td>55 14.5</td>
</tr>
<tr>
<td>Fuel tank</td>
<td>480 126.8</td>
</tr>
<tr>
<td>Cooling system</td>
<td>49 12.9</td>
</tr>
<tr>
<td>Brake cooling system</td>
<td>1 gal 49.7</td>
</tr>
<tr>
<td>Transmission</td>
<td>43 11.4</td>
</tr>
<tr>
<td>Drop box</td>
<td>9 2.4</td>
</tr>
<tr>
<td>Axles, front/bogie</td>
<td>26/52 6.9/13.7</td>
</tr>
<tr>
<td>Hydraulic tank</td>
<td>174 46</td>
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<tr>
<td>DEF</td>
<td>39 10.3</td>
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TOTAL WEIGHT

<table>
<thead>
<tr>
<th>Tires</th>
<th>A45G</th>
<th>EC480</th>
<th>EC750</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front kg</td>
<td>16,400</td>
<td>20,600</td>
<td>29,525</td>
</tr>
<tr>
<td>Rear kg</td>
<td>13,700</td>
<td>16,000</td>
<td>20,500</td>
</tr>
<tr>
<td>Total kg</td>
<td>30,100</td>
<td>36,600</td>
<td>49,525</td>
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<tr>
<td>Payload kg</td>
<td>4,100</td>
<td>5,500</td>
<td>8,000</td>
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GROUND PRESSURE

<table>
<thead>
<tr>
<th>Tires</th>
<th>A45G</th>
<th>EC480</th>
<th>EC750</th>
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</thead>
<tbody>
<tr>
<td>Front kPa</td>
<td>113 16.4</td>
<td>121 18.2</td>
<td>142 20.6</td>
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<tr>
<td>Rear kPa</td>
<td>47 7.0</td>
<td>50 7.7</td>
<td>61 8.5</td>
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SPEED

<table>
<thead>
<tr>
<th>Speed (km/h)</th>
<th>mph</th>
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<tbody>
<tr>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td>2</td>
<td>3.7</td>
</tr>
<tr>
<td>3</td>
<td>4.3</td>
</tr>
<tr>
<td>4</td>
<td>5.3</td>
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<tr>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>6</td>
<td>7.3</td>
</tr>
<tr>
<td>7</td>
<td>8.4</td>
</tr>
<tr>
<td>8</td>
<td>9.4</td>
</tr>
<tr>
<td>9</td>
<td>10.4</td>
</tr>
<tr>
<td>Reverse</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>2</td>
<td>5.8</td>
</tr>
<tr>
<td>3</td>
<td>7.8</td>
</tr>
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</table>

Excavator PASS MATCHING

<table>
<thead>
<tr>
<th>EC480</th>
<th>EC750</th>
</tr>
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<tbody>
<tr>
<td>8</td>
<td>5</td>
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</table>

Wheel loader PASS MATCHING

<table>
<thead>
<tr>
<th>L220</th>
<th>L250</th>
<th>L350</th>
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</thead>
<tbody>
<tr>
<td>4</td>
<td>5</td>
<td>3</td>
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</table>

DIMENSIONS

<table>
<thead>
<tr>
<th>Component</th>
<th>Unit</th>
<th>A45G</th>
</tr>
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<tbody>
<tr>
<td>O</td>
<td>mm</td>
<td>3,430</td>
</tr>
<tr>
<td>P</td>
<td>mm</td>
<td>3,118</td>
</tr>
<tr>
<td>Q</td>
<td>mm</td>
<td>2,920</td>
</tr>
<tr>
<td>R</td>
<td>mm</td>
<td>613</td>
</tr>
<tr>
<td>R1</td>
<td>mm</td>
<td>701</td>
</tr>
<tr>
<td>S</td>
<td>mm</td>
<td>2,651</td>
</tr>
<tr>
<td>T</td>
<td>mm</td>
<td>3,427</td>
</tr>
</tbody>
</table>

* *) A45G with tires 875/65R29, add 300 kg (660 lb)/axle
Equipment

**STANDARD EQUIPMENT**

**Safety**
- Anti-slip steps and platforms
- Dump body lock
- Handrails on steps and platforms
- Hazard lights
- Horn
- Protective grill for cab rear window
- Retractable 3-inch safety belt
- ROPS/ FOPS protected Care Cab

**Secondary steering**
- Secondary steering
- Windshield washers
- Windshield wipers with interval function
- Dump support system

**Drivetrain**
- 6x4 and 6x6 automatically engaged drive modes
- Dog clutch type 100% diff-locks in all axles
- Full automatic transmission
- Two stage dropbox with longitudinal diff-lock
- Torque converter with automatic lock-up

**Engine**
- Direct injected, electronically controlled, turbocharged, intercooled
- Grouped oil filters, for ease of change
- Preheater for easier cold starts
- VEB (exhaust retarder EPG + compression brake)

**Electrical system**
- 80 A alternator
- Battery disconnect switch
- Extra 24 V socket for lunch cooler
- Lights:
  - Back-up light
  - Brake lights
  - Cab lighting
  - Direction indicators
  - Headlights
  - Instrument lighting
  - Parking lights
  - Rear lights

**Brake system**
- Hill assist
- Load & Dump Brake
- Retarder pedal
- Parking brake on propeller shaft
- Two circuit, fully hydraulic, wet discs on all axles

**Comfort**
- ACC control panel
- Ashtray
- Cab heater with filtered fresh air and defroster
- Can holder /storage tray
- Cigarette lighter
- Instructor seat with seat belt
- Overhead console for radio
- Sliding window
- Space for lunch cooler
- Storage box
- Sun visor
- Tilt/telescopic steering wheel
- Tinted glass

**STANDARD EQUIPMENT**

**Operator information interface**
- Gauges:
  - Brake pressure
  - Fuel
  - Speedometer
  - Tachometer
- Wet disc brakes cooling oil temperature

**Central positioned information display**
- Automatic pre-start checks
- Clock
- Hour meter
- Operational information, easy-to-navigate menu
- Troubleshooting diagnostics

**Body**
- Body prepared for exhaust heating and optional equipment

**Exterior**
- Front mudguard wideners and rear mudflaps
- Tires

**Service and maintenance**
- Electrical engine hood and belly plate
- Machine Tracking Information System MATRIS
- Service platform integrated in the front grill
- Tool box

**OPTIONAL EQUIPMENT**

**Safety**
- Fire suppression system
- Warning triangle
- First aid kit and fire extinguisher
- Fire extinguisher
- Wheel chocks

**Engine**
- Air filter, heavy duty, EON
- Engine heater, 120 V, USA
- Engine heater, 240 V
- Engine heater, diesel (Eberspächer)
- Engine auto shutdown
- Engine shutdown timer
- External emergency engine stop
- Fuel filter, extra
- High engine idle speed

**Electrical system**
- Headlights, LED
- Warning beacon, LED
- Working lights, halogen
- Working lights, LED
- Entrance light
- Anti-theft system (pin code)
- Rear view camera
- Reverse alarm
- CAN-BUS interface, extra
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.