

Volvo Construction Equipment
Building Tomorrow



A60H

Volvo Articulated Haulers 55 t 673 hp





1966: DR 631 GRAVEL CHARLIE WORLD'S FIRST SERIES-MANUFACTURED ARTICULATED HAULER

By today's standards Gravel Charlie was not a big machine – but its impact on transport operations in the construction sector was massive.

- The world's first series manufactured articulated hauler
- Pioneering solutions including articulated steering, all-wheel drive and differential locks
- Unrivalled manoeuvrability in off-road conditions

GRAVEL CHARLIE MARKED THE BEGINNING OF SOMETHING NEW AND SOMETHING WHICH WOULD CHANGE THE CONSTRUCTION SECTOR FOREVER.

10 000
ARTICULATED
HAULERS
PRODUCED
BY VOLVO
1981

25 000
ARTICULATED
HAULERS PRODUCED
BY VOLVO
1996



**DR 631
GRAVEL CHARLIE**

1966
World's first series-manufactured articulated hauler

**10 t
25 km/h**



DR 860

1967
Master of rough terrain: 3-axle machine with unique bogie concept, still going strong

**15 t
30 km/h**



5350

1979
"Terrain Express" expanded Volvo articulated hauler's global success

**20 t
50 km/h**

- Constant 4-wheel drive
- Higher average speed in combination with higher load capacity = **improved profitability**
- Fully automatic transmission
- Unique suspension system allows high average speed
- Top class, roomy cab with low noise level



A25C

1993
First articulated hauler with low emission engine as standard



A40

1995
A class bigger

36 t

A complete product range 20 - 40 ton class



A60H

2016

Launching the world's largest articulated hauler.

55 t



G-SERIES

2014

Wet, cooled brakes on all models



F-SERIES

2011

Further improving ease of operation and environmental care



**E-SERIES
A40E FS**

2007

World's first full suspension articulated hauler, boosting operator comfort and productivity

39 t



D-SERIES

2000

Built with the operator in focus

37 t

- Increased productivity
- Improved operator comfort
- Improved serviceability

2001

BEST INDUSTRIAL DESIGN AWARD FOR D-SERIES DESIGN



2012

BEST INDUSTRIAL DESIGN AWARD FOR THE A40F DESIGN



2017

75 000
ARTICULATED HAULERS PRODUCED BY VOLVO

2016: VOLVO A60H THE BEST JUST GOT BIGGER



Built on the proven Volvo technology of articulated steering, all-wheel drive and differential locks, the Volvo A60H has evolved to be bigger and bolder!

- The largest true articulated hauler on the market
 - 55 t payload capacity
- Meeting a growing demand for larger, higher payload haulers

BY EVOLVING OUR PRODUCT LINE-UP TO RESPOND TO CUSTOMER DEMANDS, THE VOLVO A60H CONTINUES OUR PROUD HERITAGE OF INNOVATION AND MARKET LEADERSHIP IN HAULER SOLUTIONS.

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.



Over 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.





UPTIME

Get ready to work with the all new A60H. 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.



PROFITABILITY

Reduce cost per tonne with a higher payload. The state-of-the-art design allows for more capacity while improving fuel efficiency so you can move more for less.

Move more, make more

Increase your business's profitability by moving more for less. Industry-leading fuel efficiency, innovative technology and vital operational data tools help to optimize production and control your maintenance costs, maximising your return on investment.

Fuel efficiency guarantee

The A60H, 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.



Maximize your investment

Meet your targets faster with the A60H. Increase your earnings with a higher payload and greater productivity for lower cost per tonne.



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.



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.



Bigger and bolder

Achieve astounding productivity with the A60H. This machine is the ultimate hauler, featuring 100% off-road performance, proven Volvo technology and impressive payload – contributing to sustainable operations, year after year.

Articulated hauler concept

Go where others can't. The A60H embodies the full articulated hauler concept and provides total versatility so you can access the entire jobsite and climb steeper gradients. Work in all seasons, terrains and applications using tailored machine configurations and tires, optimized for this 60 tonne machine.



Simply the best

The ground-breaking A60H is the best articulated hauler on the market and the latest innovation from Volvo. With matched drivetrain, automatic drive combinations including 100% differential locks, all-terrain bogie, hydro-mechanical steering and active suspension, this machine is unbeatable.



Comfort at speed

A60H is fitted with active hydraulic front suspension – permitting high hauling speeds in tough conditions. This optimizes operator comfort and stability during travel. Move more material in a shorter time for unmatched productivity.



Load optimization

The 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.





PRODUCTIVITY

The A60H can move more tonnes per hour and give a 100% in all conditions. The largest articulated hauler on the market has a bigger payload for your application, delivering up to 40% more productivity.

Simply the best and the biggest

PROFITABILITY

The state-of-the-art design allows for more capacity while improving fuel efficiency so you can move more for less.

Over fifty years strong

Over fifty years later, Volvo is still the world's leading manufacturer of articulated haulers.

Guaranteed durability

Increase your uptime using heavy-duty front and rear frames, hitch and wet disk brakes.

Simply the best

The ground-breaking A60H is the best articulated hauler on the market and the latest innovation from Volvo.

Maximize your investment

Meet your targets faster. Increase your earnings with higher payload and greater productivity for lower cost per tonne.



PRODUCTIVITY

The A60H can move more tonnes per hour and give a 100% in all conditions.

Load optimization

The On Board Weighing System guarantees the optimal load every cycle.

OPERATOR'S CHOICE

Its comfortable cab and ease of operation, even in adverse conditions, makes operators choose this machine.

Fuel efficiency guarantee

The A60H is powered by the world-renowned Volvo engine delivers excellent fuel efficiency without compromising on power or performance.

Service access

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

Articulated hauler concept

Go where others can't. The machine embodies the full articulated hauler concept and provides total versatility.

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.





OPERATOR'S CHOICE

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.

The ultimate operating environment

The A60H 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

Stay in control at all times. The dump support system, dynamic Volvo engine brake and load and dump brake, all help the operator to control the machine for extra productivity and safety.



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 A60H. The centrally positioned operator, superior steering, excellent suspension, low noise levels, climate control, space and visibility, reduce operator fatigue for more effective operations.



Safety

Whether its operators, trainers, technicians or site workers – safety on site is of fundamental importance. In the A60H superior visibility and efficient lighting combine with a number of safety features, such as the brake test and dump support, helping to keep the operator and people working around the machine safe, even in the most demanding working environments.



Volvo A60H 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
at engine speed	r/min	1 800
Flywheel power - ISO 9249, SAE J1349 Net	kW	492
	hp	669
at engine speed	r/min	1 800
Max torque - SAE J1995 Gross	Nm	3 200
Max torque - ISO 9249, SAE J1349 Net	Nm	3 177
at engine speed	r/min	1 050
Displacement	l	16.1

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	V	24
Battery	V	2x12
Battery capacity	Ah	2x225
Alternator	kW/A	2.264/80
Starter motor	kW	9

Drivetrain

Torque converter with built-in lock-up function.

Transmission: Fully automatic Allison planetary transmission with 6 forward gears and 2 reverse gears. Internal torsional damper in the torque converter.

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		1.85:1
Transmission	Volvo	6630 ORS
Dropbox	Volvo	IL3 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 fulfil 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

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 retractable 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.
Safety: ROPS/FOPS standards approved according to ISO3471, SAE J1040 / ISO3449, SAE J231.

Sound level in cab (ISO 6396) - LpA	dB(A)	72
External sound level (ISO 6395) - LwA	dB(A)	113

External sound level with sound kit: 111 dB(A)

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

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
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Dumping System

Patented Load and Dump Brake.
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

Specifications

REFILL CAPACITIES

Crankcase	l	55
Fuel tank	l	750
Cooling system	l	75
Brake cooling system	l	131
Transmission	l	58
Dropbox	l	12
Axles, front/bogie	l	74/147
Hydraulic tank	l	198

OPERATING WEIGHT UNLOADED

Tires		33.25R29
Front	kg	22 350
Rear	kg	21 050
Total	kg	43 400
Payload	kg	55 000

Operating weight includes all fluids and operator

SPEED

Forward		
1	km/h	7
2	km/h	10
3	km/h	13
4	km/h	19
5	km/h	26
6	km/h	55
Reverse		
1	km/h	5
2	km/h	8

TOTAL WEIGHT

Tires		33.25R29
Front	kg	28 700
Rear	kg	69 700
Total	kg	98 400

GROUND PRESSURE

Tires		33.25R29
Unloaded		
Front	kPa	125
Rear	kPa	58
Loaded		
Front	kPa	159
Rear	kPa	193

Excavator PASS MATCHING

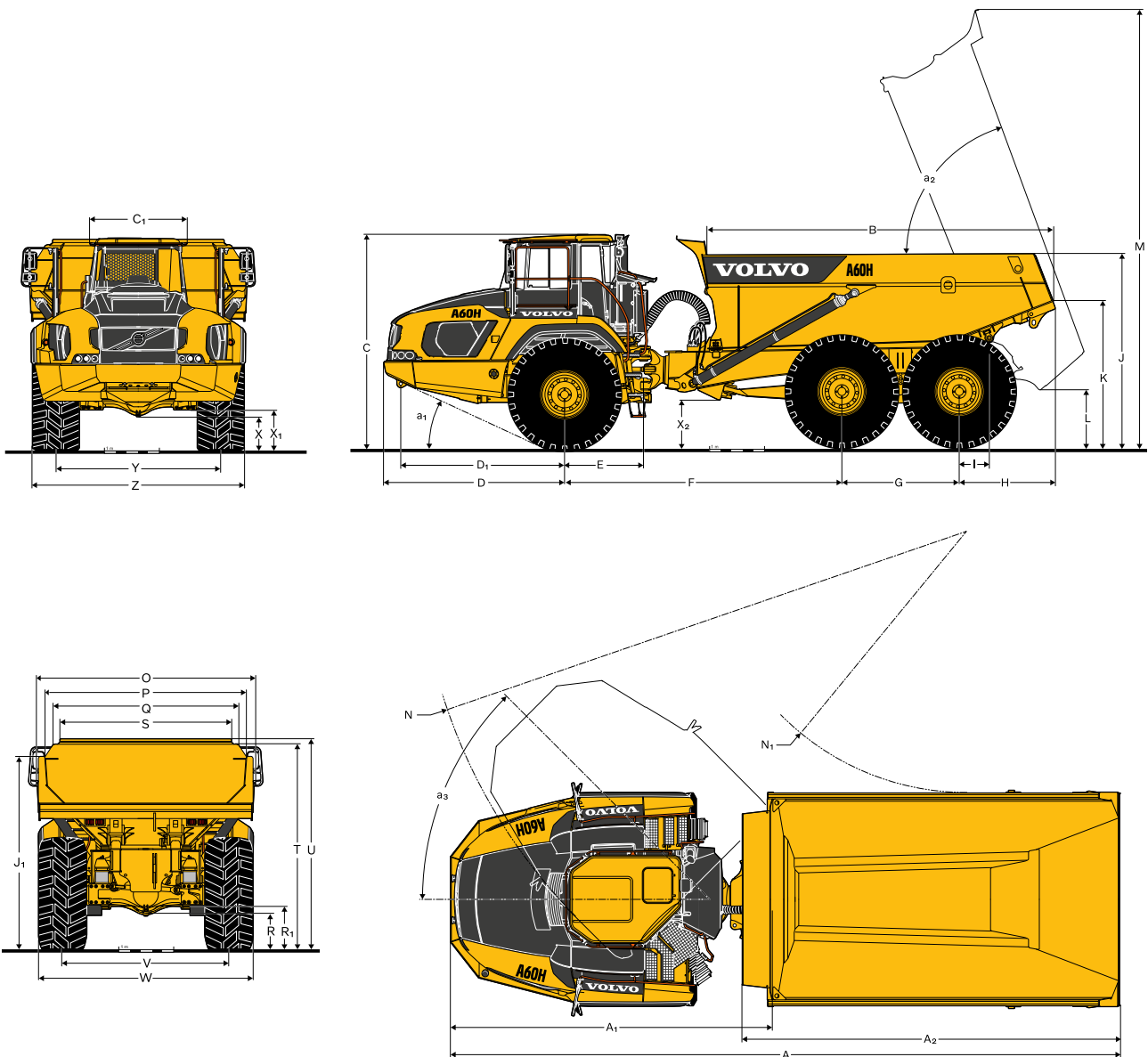
	EC480	EC750	EC950
	Number of passes		
A60H	11	7	6

Well matched, 4-6 buckets.
Excavator under capacity, 7 buckets or more.
Excavator undersized for optimum match.

Wheel loader PASS MATCHING

	L220	L250	L350
	Number of passes		
A60H	6	5	4

Well matched, 2-4 buckets.
Loader under capacity, 5 buckets or more.
Loader undersized for optimum match, reach might be an issue.



DIMENSIONS

Pos	Unit	A60H
A	mm	12 225
A1	mm	5 872
A2	mm	6 900
B	mm	6 310
C	mm	3 852
C1	mm	1 772
D	mm	3 293
D1	mm	2 986
E	mm	1 440
F	mm	5 050
G	mm	2 140
H	mm	1 743
I	mm	541
J	mm	3 510
K	mm	2 658
L	mm	1 030
M	mm	7 960
N	mm	10 014
N1	mm	4 761

DIMENSIONS

Pos	Unit	A60H
O	mm	3 989
P	mm	3 673
Q	mm	3 370
R	mm	677
R1	mm	778
S	mm	3 126
T	mm	3 734
U	mm	3 833
V	mm	3 010
W	mm	3 884
X	mm	601
X1	mm	727
X2	mm	845
Y	mm	3 010
Z	mm	3 884
a1	°	24.9
a2	°	70
a3	°	45

A60H: Unloaded machine with 33.25R29 tires.

Equipment

STANDARD EQUIPMENT

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)

Tires

33.25R29
 800/80R29

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

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

Body

Body prepared for exhaust heating and optional equipment
 On board weighing (OBW)

Safety

Anti-slip steps and platforms
 Dump body lock
 Handrails on steps and platforms
 Hazard lights
 Horn
 Protective grill for cab rear window
 Rear-view mirrors
 Retractable 3-inch safety belt
 ROPS/ FOPS protected Care Cab
 Secondary steering
 Steering joint lock
 Windshield washers
 Windshield wipers with interval function
 Dump support system

STANDARD EQUIPMENT

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

Operator information interface

Gauges:
 Brake pressure
 Fuel
 Speedometer
 Tachometer
 Wet disc brakes cooling oil temperature

Warning lights grouped and easy to read

Central warning (3 levels) for all vital functions

Central positioned information display

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

Exterior

Front mudguard wideners and rear mudflaps

Service and maintenance

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

OPTIONAL EQUIPMENT

Engine

Air pre-cleaner, cyclone type
 Air pre-cleaner, oil-bath type
 Air filter, heavy duty, EON
 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

OPTIONAL EQUIPMENT

Electrical system

- Headlights, LED
- Warning beacon, LED
- Working lights, LED
- Entrance light
- Seat belt indicator, external
- Anti-theft system (pin code)
- Rear view camera
- Reverse alarm
- CAN-BUS interface, extra

Cab

- Noise reduction kit (fulfils 2000/14/EC)
- Anchorage, operator's manual
- Cab heating/ventilation timer
- Cable kit, for cab heater
- HEPA cab air filter
- Bluetooth radio kit
- Rear view mirrors, adjustable, el.heated
- Seat belt XXL, non-retractable
- Sun blinds, side windows
- Universal key
- Air suspended, heated, fully adjustable seat
- Armrest for operator seat
- Headrest for operator seat
- Air blow gun

OPTIONAL EQUIPMENT

Body

- Body exhaust heating
- Front spillguard, extra
- Side extension, light material
- Tailgate, overhung, wire-operated
- Wear plates

Safety

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

Service and maintenance

- Lube system, standard machine
- Tool kit

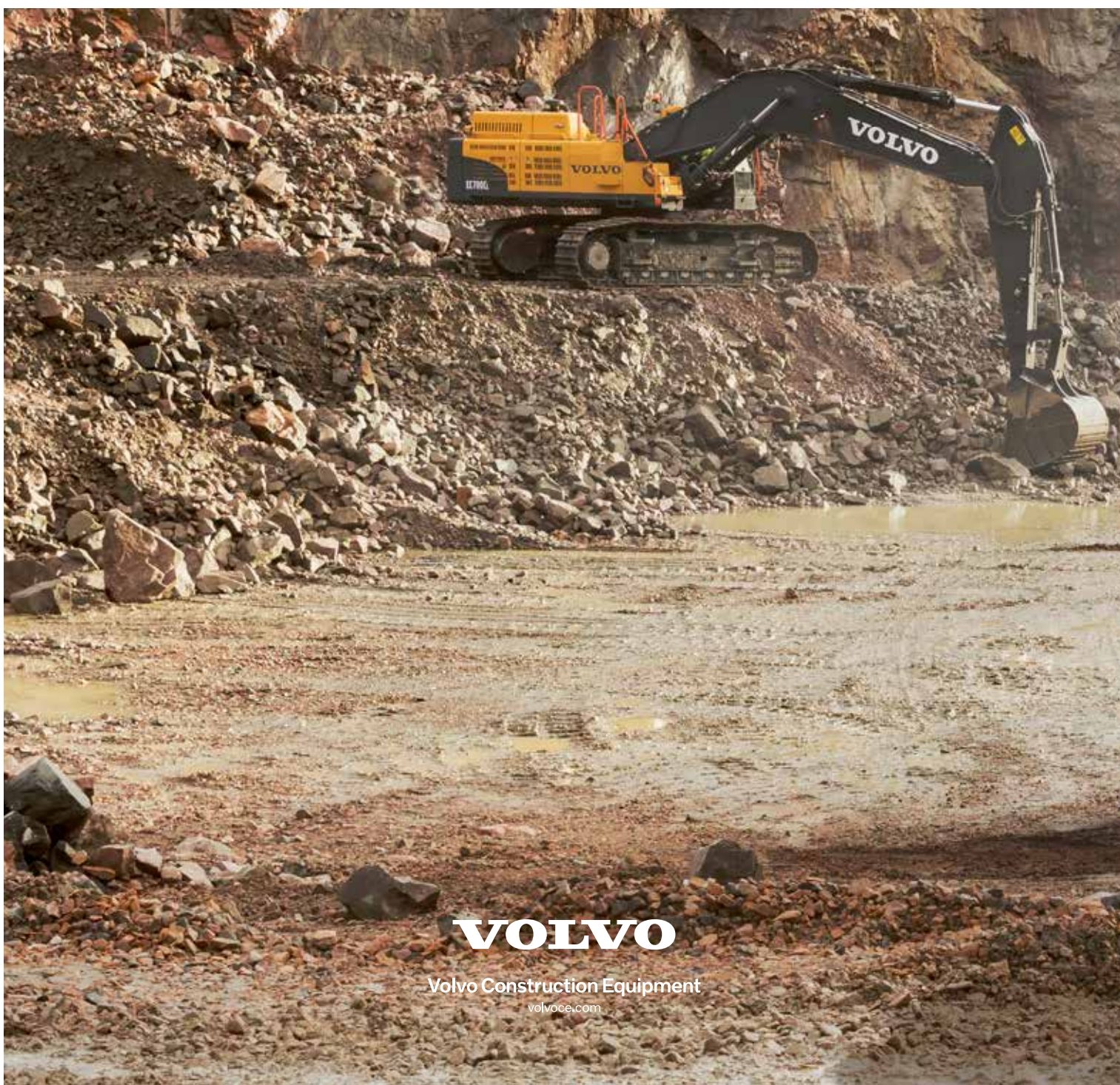
Other

- Siberian kit -40°C
- Arctic oil kit
- CareTrack
- Fast fuelling system
- Jump start connector, NATO -type

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Rear view camera and monitor**Tailgate****Oil bath pre-cleaner****Fast fuelling****Volvo fire suppression system****Light material kit**

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.



VOLVO

Volvo Construction Equipment
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