

**BID SUBMITTAL FORM**  
**Alabama County Joint Bid Program**  
**Heavy Equipment – Bid Item: Track Mount Excavator - Option A-2**

Company Name: Cowin Equipment Company Inc

Address: 4325 Northern Boulevard  
Montgomery Al 36110

Bid Submitted by: John Edwards  
(Name of company representative)

Title: Governmental Sales Manager E-mail address: jedwards@cowin.com

Phone: 850-685-7055 Fax: 334-834-2272

By submitting this bid, we agree:

The equipment model number identified below meets the bid specs for this bid item

Initials  
JE

That the bid price will be honored for all counties for the period from January 1, 2023 to December 31, 2023.

JE

The equipment will be delivered at the bid price to all counties participating in the joint bid program.

JE

The company acknowledges the freight preparation and delivery price is to be included in the total bid price for the standard machine.

JE

The company representative listed above will be the contact person for purchasing this bid item under the joint bid program.

JE

The bid is accompanied by a current catalog or model specification document for the model number identified below.

JE

The bid is accompanied by a copy of the manufacturer's standard warranty as required in the bid specifications.

JE

The bid includes the e-verify documentation required by Alabama law.

JE

If awarded the bid, a performance bond will be provided upon request.

JE

The bid documents include the **Manufacturer's Suggested Retail Price Sheet (MSRP) for the Standard Machine.**

JE

Total Bid Price for Standard Machine: \$ 247,487.<sup>00</sup>  
(Total Bid Price for Standard Machine Includes Freight Preparation, Delivery and Standard Warranty Costs) \*

Freight Preparation and Delivery: \$ 2,500.<sup>00</sup>  
(Included in Standard Machine Bid Price)

Manufacturer's Suggested Retail Price for Standard Machine: \$ 304,437.<sup>00</sup>

Equipment Model #: Volvo EC300E

Description: Track Mount Excavator

Signature of company representative submitting bid: John Edwards

Title: Governmental Sales Manager

**\*NOTE:** Award will be made based on the total cost of the **Standard Machine**. The total cost of the standard machine is to include the freight preparation, delivery and standard warranty cost. Freight preparation, delivery will be excluded from the total bid price of the standard machine in determining the percentage discount for any available options.

## BID SUBMITTAL FORM: OPTION COST SHEET

By submitting this bid, we agree:

To offer any available options at the percent difference between the Manufacturer's Suggested Retail Price Sheet and the actual bid price on the Standard Machine\*



The bid documents include the **Manufacturer's Suggested Retail Price Sheet (MSRP)** for the Standard Machine



Equipment Model #: Volvo EC300E

Description: Track Mount Excavator

Signature of company representative submitting bid: John Edwards

Title: Governmental Sales Manager

**\*NOTE:** The percent difference between the **Manufacturer's Suggested Retail Price Sheet (MSRP)** for the standard machine as specified by these **Bid Specifications** and the actual price bid by the vendor will be calculated to determine the percentage discount to be applied to any available options. The bid price of the freight preparation, delivery cost shall be excluded in determining the percentage discount to be applied to available options. Any individual county may choose to add any available option to the standard machine at the percentage discount at the time of purchase.

# INVITATION TO BID HEAVY EQUIPMENT

## NOTICE OF BID OPENING

**NOTICE IS HEREBY GIVEN** that the Association of County Commissions of Alabama, which administers the Alabama County Joint Bid Program on behalf of Alabama's county governing bodies, shall receive and open bids for the purchase of zero (0) or more items of heavy road equipment at its office located at 2 North Jackson Street, Montgomery, Alabama, at **10:00 a.m. on Friday, October 7, 2022**. Bid specifications are available at <http://www.alabamacounties.org/heavy-equipment/> for each of the following items:

Backhoes  
Tractors  
Track Mount Excavators  
Compact Track Mount Excavators  
Mini Track Excavator  
Wheeled Excavators  
Highway Speed Truck Excavators  
Motor Graders  
Heavy Duty Hydrostatic Bulldozers  
Mulching Dozer  
Wheel Loaders  
Heavy Duty Dump Chassis  
Lowboy Tractors  
Skid Steer Loader w/no Attachments  
Skid Steer Attachments

Ride-on Industrial Boom Mowers  
Asphalt Distributor Truck  
Chip Spreader  
Rubber Tire Roller  
7.5 Ton Single Drum Vibratory Roller  
One-man Pothole Patchers  
Trailer Mounted Patchers  
Trailer Mount Mastic Patcher/Crack Sealer  
Half Round End Dump Trailer  
Lowboy Trailers  
Road Wideners and Attachments  
16' Steel Dump Bodies (Automatic and Manual)

**Time is of the essence in submitting bids and only bids received in the Association office by 10:00 a.m. Central Time on Friday, October 7, 2022 will be opened and considered.** Bidders and any other interested individuals are invited to attend the bid opening.

## NOTICE OF BID OPENING PROCEDURES

All bids for **Heavy Equipment** will be opened and the name(s) of the bidders read aloud on the morning of the bid opening on Friday, **October 7, 2022 at 10:00 a.m.** at 2 North Jackson Street, Montgomery, AL. The specifics of each bid submitted will be compiled by the Association staff thereafter and will be available, **upon written or emailed request**, one week after the bid opening. Requests should be emailed to [jointbid@alabamacounties.org](mailto:jointbid@alabamacounties.org).

## THE INVITATION PACKAGE

The invitation package for each item to be bid includes: this invitation to bid, the written bid specifications for the particular item of heavy road equipment, and a Bid Submittal Form to be used in submitting a bid for that particular item. Bidders should verify that they have received all pages of the invitation package. If there are any omissions, the bidder should contact **Kenya Howard** in the Association office by mail, fax, or e-mail ([jointbid@alabamacounties.org](mailto:jointbid@alabamacounties.org)) to request missing pages. It is the responsibility of the bidder to make this request in sufficient time to prepare and submit the bid in time for the bid opening. Bidders should carefully read and comply with all parts of the invitation package, including all attachments and/or any addendum.

## **PREPARING AND SUBMITTING BIDS**

All bids must be typed or hand written in ink on the attached Bid Submittal Form. **The completed Bid Submittal Form shall be placed in front of and separated from all other documents included in the bid packet, such that it will be the first document viewed upon opening the bid packet.**

Bids submitted in pencil and bids not submitted on the Bid Submittal Form will **not** be considered. All bids shall include a current catalog or model specification document for the equipment model number being offered for consideration. Bids submitted without such documentation will **not** be considered. Only information contained on the attached Bid Submittal Form and in the model specification document will be considered in evaluating bids.

Each separate requirement in the bid specification includes a block for indicating whether or not the item bid meets the specification. The bidder shall indicate compliance with each requirement by checking "Yes" or "No" in the block to the right of each bid specification. In addition, the bidder shall indicate the page number in the supplied manufacturer's equipment literature on which compliance with the specification can be verified. Failure to complete this portion of the bid form may result in the subject bid not being considered.

Each bid for one of the heavy equipment items included in the bid package must be submitted on the Bid Submittal Form for that item and forwarded in a separate envelope with the bid item and item number clearly identified on the outside of the envelope. Envelopes containing a "no bid" shall also include the words "NO BID" on the outside of the envelope. Facsimiles and e-mails will not be accepted. Bids submitted by "Express/Overnight" services must be in a separate inner envelope or package sealed and identified as stated above. All bids must be received in the Association office prior to the bid opening. Bids received after the deadline will be returned unopened.

The County Joint Bid Program reserves the right to require a performance bond from successful bidders as permitted under Alabama law. However, **no bid bond is required for this bid offering.**

All bids should be mailed or hand-delivered to:

**ATTN: Joint Bid Program  
Association of County Commissions of Alabama  
2 North Jackson Street, FL 7, Montgomery, Alabama 36104 (Physical Address)  
P.O. Box 5040, Montgomery, Alabama 36103 (Mailing Address)**

## **BID SPECIFICATIONS**

Please note that each piece of heavy equipment available for bid may include several different sizes and categories of machines. You should read each set of specifications very carefully as the differences vary depending upon the piece and size of equipment.

The award will be based on the total cost of the **Standard Machine** bid by the lowest responsible bidder. Each Bid shall include a **Manufacturer's Suggested Retail Price Sheet (MSRP)** for each machine bid. The percent difference between the Manufacturer's Suggested Retail Price (MSRP) for the standard machine as specified by these bid specifications and the actual price bid by the vendor will be calculated and that percentage discount shall be applied to any options an individual county may choose to add to the machine.

Once the bids have been awarded, any county participant purchasing under this program may, at its discretion, add any of the vendor's available options at the same discount off the Manufacturer's Suggested Retail Price Sheet as was applied to the Standard Machine Price Bid.

Any use of specific names and/or model numbers in the attached specifications is not intended to restrict the bidder or any seller or manufacturer, but is included solely for the purpose of indicating the type, size, and quality of materials, product services, or equipment considered best adapted to the use of the counties participating in the joint bid program.

## **ACQUISITION AND FINANCING OPTIONS**

The awarded Vendor will provide the equipment, including any options required by the purchaser, at the awarded price as contracted through the Joint Bid Program. The purchaser may secure its own financing to acquire the equipment or execute any financial options available under Alabama law with the awarded Vendor in order to acquire the equipment.

## **BIDDER QUALIFICATIONS**

All bidders and all program participants must be in compliance with any applicable federal, state, county and municipal laws, regulations, resolutions and ordinances, including but not limited to, licensing, permitting, and taxation requirements. All bidders should be prepared to submit evidence or documentation as proof that they are properly licensed and permitted under any applicable laws upon request. Such evidence or documentation may be submitted with the bid. Additionally, all bidders shall provide proof that they are in compliance with the e-verify requirements of Alabama's Immigration Law (Ala. Code § 31-13-1 et seq., as amended by Act No. 2012-491).

## **BID AWARD**

The Houston County Commission will serve as the awarding authority for all bids and will award all contracts at a regular meeting of the Houston County Commission. Any and all bids submitted in compliance with this invitation to bid shall be considered, and award will be made to the lowest responsible bidder meeting bid specifications as determined by the awarding authority in compliance with Alabama law. All bids will be reviewed and evaluated by a committee created for that purpose, which committee will make comments and recommendations to the awarding authority regarding the award. All factors contained in each invitation package will be evaluated in determining the successful bidder, and any omissions of the stated requirements may be cause for rejection of the bid submitted. The awarding authority reserves the

right to reject any and all bids, to waive any informality in bids, and to accept in whole or in part such bid or bids solely at its discretion.

The contract period will be one year with an option to renew for a second and third year under identical price, terms, and conditions upon the mutual consent of the vendor and the awarding authority. Any renewal contract shall be approved in writing by the vendor and the awarding authority no later than 90 days prior to the expiration of the existing contract.

**CONTACT REGARDING BIDS AND INVITATION**

Contact initiated by a potential bidder with any county official, county employee, or member of the Association staff shall only be as specifically set out in this Invitation to Bid. Any questions related to the bid or the County Joint Bid Program shall be directed to Association staff in writing under the procedures set out in this Invitation to Bid. Additionally, a bidder may contact the Association in writing to request an appointment to review bid specifications following the bid opening. **However, there shall be no communication with any county official or county employee regarding this bid between the date of this invitation and the date of bid award.** Any contact other than as set out here shall be deemed as an attempt to unduly influence the bid award, and shall be grounds for rejection of the bid submitted by the bidder initiating such other contact.

Any questions or problems related to downloading or obtaining copies of this Invitation to Bid should be directed to **Kenya Howard** at [jointbid@alabamacounties.org](mailto:jointbid@alabamacounties.org) or **334-263-7594**.

Any other questions or requests for additional information regarding this invitation or the bid specifications shall be submitted **in writing** no later than five (5) days prior to bid opening to:

**ATTN: Patrick McDougald  
Association of County Commissions of Alabama  
P.O. Box 5040  
Montgomery, Alabama 36104**

**OR**

**Patrick McDougald  
E-mail: [barbeng@bellsouth.net](mailto:barbeng@bellsouth.net)**

# BID SPECIFICATIONS FOR TRACK-MOUNTED EXCAVATOR OPTION A-2

## GENERAL

These specifications shall be construed as the minimum acceptable standards for a track mounted hydraulic excavator with long undercarriage. Should the manufacturer's current published data or specifications exceed these standards, the manufacturer's standards shall be considered minimum and shall be furnished. All integral parts not specifically mentioned in the scope of these specifications that are necessary to provide a complete working unit shall be furnished. Additionally, the machine offered for bid shall include all standard manufacturers' equipment. The excavator must be a new current production model and shall meet or exceed all EPA and other applicable standards at the time of manufacture.

Use of specific names and numbers in the specifications is not intended to restrict the bidder or any seller or manufacturer, but is intended solely for the purpose of indicating the type, size and quality of equipment considered best adapted to the uses of the counties participating in this joint bid.

## BID SUBMITTAL FORM

Each bidder must submit his or her bid on the bid submittal form included in the invitation to bid package. All written warranties to be submitted shall be attached to the bid submittal form.

## BID PRICE

The price bid shall include all destination charges, delivery charges, title fees, rebates, and all other applicable costs and refunds.

## MANUALS

Each unit shall be provided with one (1) copy of the operator's manual, one [1] repair manual, and one (1) copy of the current parts manual. Units will not be accepted for delivery until the manuals as outlined above are received by the purchaser.

## REPLACEMENT PARTS AVAILABILITY

Parts must be available for 5 years or 7,500 hours of use for the piece of equipment. If any replacement parts are not delivered within three (3) working days of an order being placed, the bidder will deliver an equivalent machine for the county to use at no cost to the county until such time as the parts are delivered to the county so it can affect repairs to its machine.

## WARRANTY

Bidders shall submit a copy of the manufacturer's standard warranty. Warranty shall include service response time of maximum of 36 hours within notification by county.

Yes  No   
Page# \_\_\_\_\_  
or  
Attachment



**WEIGHT**

Minimum 69,000 lbs. equipped with minimum 31-inch-wide track shoes.

Yes  No   
Page # 20

**ENGINE**

Turbocharged, 6 cylinders with a minimum 400 cubic inch displacement diesel engine capable of a minimum 210 net horsepower.

Yes  No   
Page # 16

**Engine shall be manufactured by the equipment manufacturer.**

Yes  No   
Page # 16

**UNDERCARRIAGE**

Track length shall be minimum 15' 3".

Yes  No   
Page # 17

Track shoe width shall be minimum 31" (Triple grouser Shoes)

Yes  No   
Page # 16

Minimum eight (8) track rollers per side.

Yes  No   
Page # 16

Minimum two (2) carrier rollers per side.

Yes  No   
Page # 16

**STARTING SYSTEM**

24 volt system with a minimum 100 amp alternator.

Yes  No   
Page # 16

**CAPACITIES**

Fuel Tank Capacity – 105 gallon minimum

Yes  No   
Page # 16

Hydraulic Tank Capacity – 34 gallon minimum

Yes  No   
Page # 16

Engine Coolant – 6.6 gallon minimum

Yes  No   
Page # 16

**BOOM AND STICK**

One piece boom with minimum 19' length

Yes  No   
Page # 17

Stick shall be a minimum 9' long

Yes  No   
Page # 17

**DIMENSIONS**

Reach at ground level – 33' minimum

Yes  No   
Page # 19

Bucket breakout force (SAE) – minimum 37,000 lbs.

Yes  No   
Page # 19

Stick digging force (SAE) – minimum 28,000 lbs.

Yes  No   
Page # 19

**Bucket:**

**Standard with no bucket. Buckets will be considered optional attachments.**

**HYDRAULICS**

Hydraulic pump output shall be a minimum of 120 GPM

Yes  No   
Page # 16

**CAB**

Enclosed ROPS cab:

Yes  No   
Page # 26

Heater

Yes  No   
Page # 26

Factory installed air conditioning

Yes  No   
Page # 26

AM/FM radio

Yes  No   
Page # 26

Suspension seat

Yes  No   
Page # 26

Defroster

Yes  No   
Page # 26

Shall be equipped with a 12-volt converter capable of powering a two-way radio.

Yes  No   
Page # option

# VOLVO

## Volvo Construction Equipment North America Warranty – Disclaimers – Limitations Limited Warranty for Governmental / Municipalities

Volvo Construction Equipment North America (“Volvo CE”) hereby extends to its authorized dealers (“Dealer”) and the Dealer’s Governmental / Municipalities customers (“Customer”, and both Dealer and Customer are referred to herein as a “Buyer”), who purchase a new Volvo construction equipment machine (“Machine”) or new Volvo part (“Part”, both of which are referred to herein as a “Product”) from Volvo, the following limited warranty:

Subject to the exceptions and limitations set forth below, Volvo CE or Dealer will repair or replace any part of a new Machine or new Part which proves to be defective in material or workmanship during the following periods (the “Warranty Period”):

- Volvo wheel loaders: 12 months/2500 hours, whichever first occurs
- Volvo articulated haulers: 12 months/2500 hours, whichever first occurs
- Volvo hydraulic excavators: 12 months/2500 hours, whichever first occurs
- Volvo motor graders: 12 months/2500 hours, whichever first occurs
- Volvo compactors: 12 months/1500 hours, whichever first occurs  
24 months unlimited hours on DD90 and larger compactors
- Volvo pavers: 12 months/1500 hours, whichever first occurs  
24 months unlimited hours on 6000 / 7000 series pavers
- Volvo milling: 12 months/1500 hours, whichever first occurs
- Volvo compact wheel loaders (up to 100 net hp.): 12 months/unlimited hours
- Volvo skid steer loaders: 12 months/unlimited hours; Lifetime arm for one-sided
- Volvo compact hydraulic excavators (less than 11 metric tons): 12 months/unlimited hours
- Volvo backhoe loaders: 12 months/unlimited hours
- Volvo engines: 12 months/2500 hours, whichever first occurs
- Volvo parts: 6 months/1500 hours, whichever first occurs
- Volvo remanufactured components: 12 months/2500 hours, whichever first occurs
- Volvo Attachments: 12 months

The Warranty Period commences immediately following the delivery of said Product to the Buyer who first puts said Product into use. The foregoing limited warranty shall include the labor cost to accomplish the repair or replacement of the defective part provided that the repair or replacement was performed by a Dealer.

The foregoing warranty does not cover: (i) any Product found to have been damaged by abuse, accident, other casualty or a failure to maintain or use the warranted Product in accordance with the applicable manuals or instructions (Buyer is required to use only original equipment manufacturer filters during the Warranty Period); (ii) the labor costs to repair or replace defective Parts after the expiration of the Warranty Period of the Machine in which such Part is located; (iii) overtime labor premiums; (iv) costs and expenses associated with the transportation of Dealer’s service personnel to and from the location of the warranted Product; (v) any parts, components, attachments or accessories for which Buyer receives a separate warranty by the manufacturer or producer thereof (in specified cases said warranty may be administered by Volvo CE); (vi) maintenance items or ground engaging parts that have achieved their normal service life.

### **DISCLAIMER OF IMPLIED WARRANTIES AND LIMITATION OF REMEDIES**

THE FOREGOING WARRANTY TO BUYER IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

REMEDIES AVAILABLE TO BUYER ARE LIMITED TO MAKING A CLAIM UNDER THE FOREGOING WARRANTY AND ARE EXCLUSIVE AND EXPRESSLY LIMITED TO OBTAINING THE PARTS AND LABOR IN ACCORDANCE WITH THE TERMS OF SAID WARRANTY.

## **Warranty – Disclaimers – Limitations**

### **LIMITATIONS OF LIABILITY AND DAMAGES**

Regardless of whether a claim against Volvo CE or Dealer is based on the foregoing warranty or is an action in contract, tort (negligence or strict liability) or otherwise, their respective liability for losses, damages or expenses of any kind arising from the design, manufacture, repair or sale of the Products is limited, unless otherwise prohibited by law, to an amount not exceeding the cost performing the obligations contained in the foregoing warranty, and in no event shall their respective or joint liability exceed the value of the Product or part thereof giving rise to such liability.

### **CONSEQUENTIAL AND SIMILAR DAMAGES NOT RECOVERABLE**

Except for performing the obligations of the foregoing warranty in accordance with its terms, Volvo CE and Dealer shall have no liability for loss, damage, or expense, directly or indirectly, attributable to a loss of use of a Product, loss or damage to property other than the Product, loss or damage to the Product or any part thereof or any other economic or commercial loss, including, without limitation, lost profits or special or consequential damages (except liability for any type of consequential damages which by law may not be disclaimed). The parties intend that this prohibition against consequential and similar damages will survive and be effective even if the limitation of remedies in the foregoing sections is found to fail of its essential purpose under section 2-719 of the Uniform Commercial Code.

### **ALLOCATION OF RISK**

The foregoing warranty disclaimers, limitations of liability and limitation of remedies are bargained allocations of risks among (i) the Customer who purchased the Product; (ii) the Dealer who sold the Product, and (iii) Volvo CE, which is a third party beneficiary of the contract of sale between the Customer and the Dealer. The Buyer of the Product accepts the foregoing warranty and the other bargained for allocations of risk as part of the agreed price for the purchase of the Product to which the foregoing warranty applies. Volvo CE is prepared to offer different warranties and other allocations of risk for other prices. However, any such change in the warranty or the allocation of risks must be confirmed in writing by Volvo CE.

### **STATUTE OF LIMITATIONS**

Any action by a Buyer of a Product for breach of contract, for breach of warranty arising under, or for a cause of action arising out of the sale of a Product, whether based on contract, tort (negligence or strict liability) or otherwise, shall be commenced within one (1) year after the cause of action has accrued. Any such cause of action shall be deemed to have accrued at the earlier of (i) the discovery of the defect or breach, or (ii) the expiration of the applicable Warranty Period.

**Model: Volvo EC300EL Crawler Excavator**

Description	Article	MSRP
Volvo EC300EL Crawler Excavator	EC300EL	\$237,478
Boom, 20' 4" (6.2m), GP	XC10107	\$17,983
Arm, 10' 0" (3.05m), HD	XC10213	\$9,892
Linkage with lifting eye, GP	XC10403	\$512
Decal Kit NA	XC10503	\$0
Track Pads, 32" Triple Grouser	XC20106	\$13,289
Roller guard STD	XC20201	\$442
Lower frame - foldable steps	XC20302	\$0
Belly Cover HD, 10mm	XC20402	\$309
Engine NA MDE8	XC30112	\$0
Standard fan drive	XC30801	\$0
Air precleaner, Cyclone	XC30401	\$110
Quick Hyd Oil Fill connection	XC30910	\$0
Quick Engine Oil Change	XC30911	\$0
Delayed engine Shutdown	XC30902	\$150
Anti-vandal mounting brackets on cab	XC40112	\$0
CareCab w/ Opening Hatch	XC40103	\$447
Seat, Air suspension w/Heater & X-Isolator	XC40203	\$1,186
Seat Belt, 3 inch Retractable	XC41204	\$0
Volvo Active Control	XC40301	\$0
Air conditioning, ACC (automatic climate control)	XC40502	\$2,494
Universal key	XC40602	\$0
Radio with MP3, USB port & Bluetooth	XC40708	\$0
Guardrail	XC50801	\$0
Handrail, Foldable	XC50803	\$0
Work lights on deck & boom, Halogen	XC50000	\$0
Extra work lights on cab front/rear, CWT, boom & RH side, Halogens	XC50101	\$339
Travel alarm	XC50102	\$0
Battery switch protector	XC50132	\$0
Volvo Smart View on Instrument Cluster only	XC50144	\$0
Dig Assist Start	XC50155	\$0
CareTrack, GSM/Satellite	XC50402	\$0
CareTrack Connectivity 4 yr Subscription	XC50404	\$0
De-activate SAT	XC50406	\$0
Hydraulic oil ISO VG46	XC60102	\$592
Pre-setting for hyd. pressure (piping not installed for long reach boom and arm)	XC61301	\$179
X1 2 pump double acting piping (piping not installed for long reach boom and arm)	XC60203	\$3,712
X1 additional return filter (piping not installed for long reach boom and arm)	XC60301	\$369
X1 Roll switch control, proportional, double acting (piping not installed for long reach boom and ar	XC60602	\$296
X1 Pedal control, Proportional (piping not installed for long reach boom and arm)	XC60605	\$147
Quick fit piping, UQF (piping not installed for long reach boom and arm)	XC60805	\$2,007
Straight travel pedal	XC60904	\$1,263
Boom float function, w/o hose rupture valve	XC60907	\$816
Pattern change	XC60914	\$1,401
Manual, English	XC70302	\$0
Counterweight 13,669 lbs (6200kg), fabrication	XC80191	\$9,025
Under cover HD, 4.5mm superstructure	XC80202	\$0
Frame lifetime guarantee	XC70501	\$0
Less Bucket With Pins	XC8283909	\$0
<b>TOTAL PRICE STANDARD SPECIFICATION</b>		<b>\$304,437</b>

V O L V O



John Edwards  
Governmental Sales Manager  
jedwards@cowin.com  
850-685-7055



Volvo Excavators 31.3-36.8 t / 68,950-81,230 lb 253 hp

# EC300E

Volvo Construction Equipment



# Welcome to our world

Welcome to a world of industry leading machinery. A world where imagination, hard work and technological innovation will lead the way towards developing a future which is cleaner, smarter, and more connected. A world supported by the enduring values of the Volvo Group. A world of stability, sustainability and innovation. A world which we put our customers at the heart of.

Welcome to the world of Volvo Construction Equipment – we think you're going to like it here.

## Working harder, working smarter

For over 180 years Volvo has been a pioneer in the design and manufacture of machines which set the standard for efficiency, performance and uptime. Across our range of excavators, wheel loaders and haulers, our reputation for engineering excellence is unrivalled, which means whatever your operation or application, we can provide a total fleet solution to help you succeed.

Building on our proud history, the Volvo Concept Lab continues to create cutting-edge ideas and innovative concepts, to ensure we offer customers machines which work harder and smarter long into the future.



## Solutions for you

Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

### Designed for your business

Structured across nine blocks, our portfolio of products and services are designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today.

### There when you need us

Whether you're buying new or used, our global network of dealers and technicians offer around-the-clock support, including machine monitoring and world-class parts availability. It's the basis of everything offered by Volvo Services, so you can be confident we've got you covered right from the start.



# BUILDING TOMORROW



# Giving you more

The new and enhanced EC300E is packed with the latest technology to help you move more, for less. Features including the new Volvo engine, improved hydraulics, flow priority functions and optional Dig Assist apps deliver optimum productivity, efficiency and performance for a lower cost per ton.

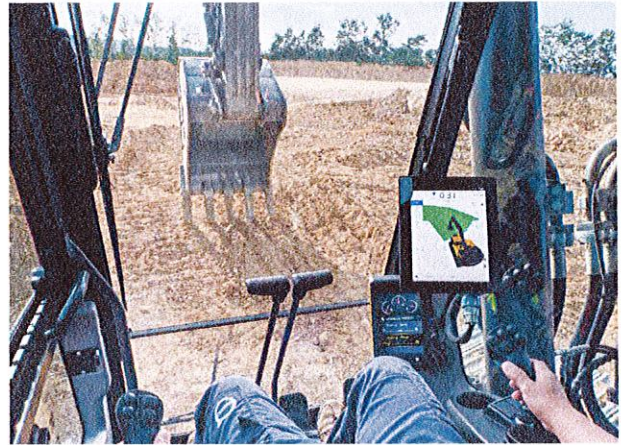
## More productivity

Get more done in the EC300E. An increase in engine power and improved hydraulic performance contributes to faster cycle times, while a 700 kg (1,542 lb) heavier counterweight provides superb stability and a 5% increase in across lifting capacity. Machine productivity is further enhanced by new motion priority functions, boom down speed control and improved jack up speed.



## More precision

Unlock the full potential of your machine's productivity with Dig Assist, powered by the 10" Volvo Co-Pilot display. Gain access to a set of smart apps, including Start, In-Field Design, 3D software packages, On-Board Weighing and Volvo Active Control, designed to optimize the digging process.



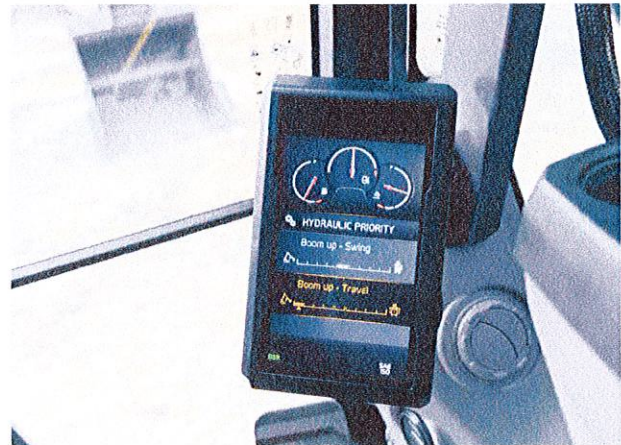
## More control

Double your productivity with Volvo Active Control functions. The working day just got easier with automated boom and bucket movements, making the digging process more accurate and twice as fast. Simply set the grade from the Volvo Co-Pilot display, push the button and get to work – all controlled using a single lever.



## More responsiveness

With electric control joystick and full electric travel pedals, operators benefit from an improved response time. Machine controllability is enhanced further by Boom/Swing and Boom/Travel priority functions which enable operators to prioritize one function over another. Operators can also easily adjust the boom down speed, ideal for precision tasks which require optimum control.





# MORE FUEL EFFICIENCY

A range of features combine in the EC300E to deliver up to 10% improvement in fuel efficiency. The new D8M Volvo engine reduces rated rpm from 1800 down to 1600, while also delivering a 5% increase in power, and the intelligent new generation electro-hydraulic system provides on-demand flow and reduces internal losses in the hydraulic circuit. Classic Volvo features such as ECO mode and selectable work modes further contribute to outstanding fuel efficiency.

# For your comfort and safety

With a host of new and proven features including enhanced machine access, superior visibility, bouncing reduction technology and customizable settings, the upgraded EC300E delivers all the safety and comfort you would expect from your Volvo machine.

## Know your limits

With Volvo Active Control, operators can easily set swing fence, height limit and depth limit from the Volvo Co-Pilot. This helps to avoid contact with side obstacles, overhead obstacles such as power lines and underground hazards such as pipes and cables.



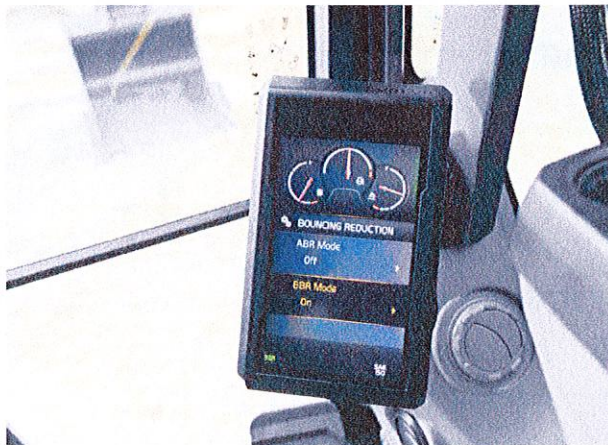
## See it all

Operators can work in complete confidence thanks to Volvo Smart View. The system uses front, rear and side cameras to provide a real-time, overhead view of the machine during operation on the colour monitor. The result is safer machine rotation while working, especially in confined spaces.



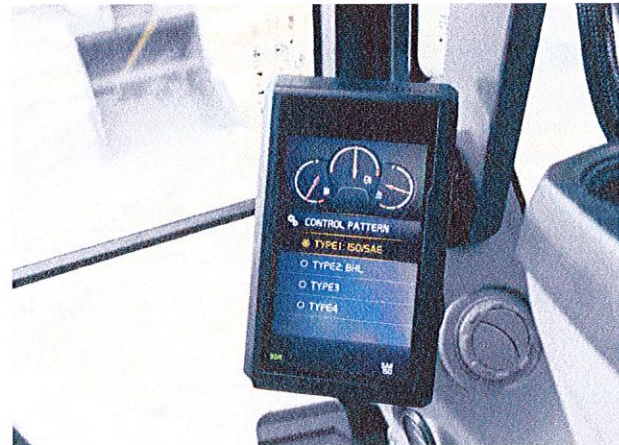
## A smoother shift

New boom and arm bouncing reduction technology reduces machine shock, resulting in a more comfortable and productive operator performance. Comfort Drive Control further helps to reduce fatigue by enabling operators to steer the machine using the joystick rollers instead of the pedals.



## How you like it

Get ready for the working day in no time with customizable settings, including preferred control patterns easily selected from the monitor. New 'long push' functionality on the joystick allows operators to set an additional shortcut function, and with the L8 joystick operators can create a shortcut to hydraulic priority functions.





# SAFETY, INSIDE AND OUT

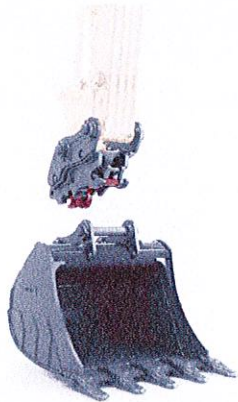
Operators can access the upper structure with safety and confidence thanks to the new 3-point right-hand side access. Industry renowned features such as bolted anti-slip steps, high visibility handrails and spacious, ergonomic and low-noise Volvo Care Cab ensure the highest levels of operator comfort and safety.

# Boost versatility

Get the most out of your excavator with our range of purpose-built attachments, designed to work in perfect harmony with your machine. Customize your EC300E with quality Volvo attachments, matched to your needs, to form one solid and reliable unit that delivers improved cycle times and increased fuel efficiency.

## Buckets of productivity

Volvo buckets are the perfect tool to achieve maximum productivity when digging and re-handling in all conditions. Whether you are working with soft, medium or hard materials, our buckets deliver long life and feature original Volvo wear parts. Heavy-Duty variants provide optimum performance when digging in compact materials.



## Take a break

Available with a full range of tools, the hydraulic breakers are designed to be a perfect match for your Volvo. Powered by the machine's constant auxiliary hydraulic flow, the breakers are configured to the specific weights of Volvo machines and are fully compatible with Volvo quick couplers for swift, safe and simple attachment changes.



## Dig at any angle

Boost productivity and dig at any angle. Compatibility with Steelwrist®, Engcon® and Rototilt® tiltrotators provides the flexibility needed for precise construction jobs. The factory-fitted preparation system gives you the power to control both the excavator and tiltrotator using the original joysticks, with the information presented on the main display.



## Stay cool

A new cooling layout increases hydraulic attachment cooling capacity by 10%, resulting in an improved attachment performance.



Steelwrist® : Steelwrist is a registered trademark of Steelwrist AB / Engcon® : Engcon is a registered trademark of Engcon Holding AB / Rototilt® : Rototilt is a registered trademark of Rototilt Group AB



# EASILY ATTACH

Discover our range of Volvo quick couplers, including the new Steelwrist® Auto Connect Quick Coupler – enabling the quick and easy connection of hydraulic attachments from the comfort and safety of the cab. The quick coupler delivers 300 liters per minute of hydraulic flow directly to the attachment.

# Lower maintenance costs

Durable by design, the new EC300E is ready to take on the toughest applications. The machine delivers outstanding levels of reliability and with features including engine auto-regeneration, reinforced components and reduced maintenance requirements, you can count on the EC300E to maximize uptime while keeping maintenance costs to a minimum.

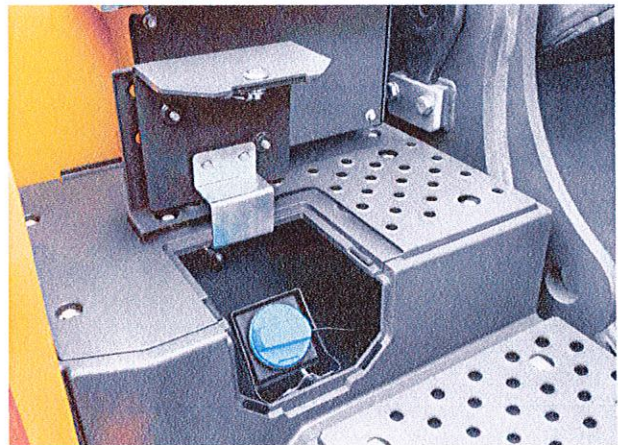
## Less service requirements

The new electro-hydraulic system requires less hoses, therefore reducing the need for couplings, minimizing maintenance requirements and increasing reliability. Engine oil and engine oil filter change intervals have been doubled to 1000 hours, further ensuring the time and cost spent on maintenance is kept to a minimum.



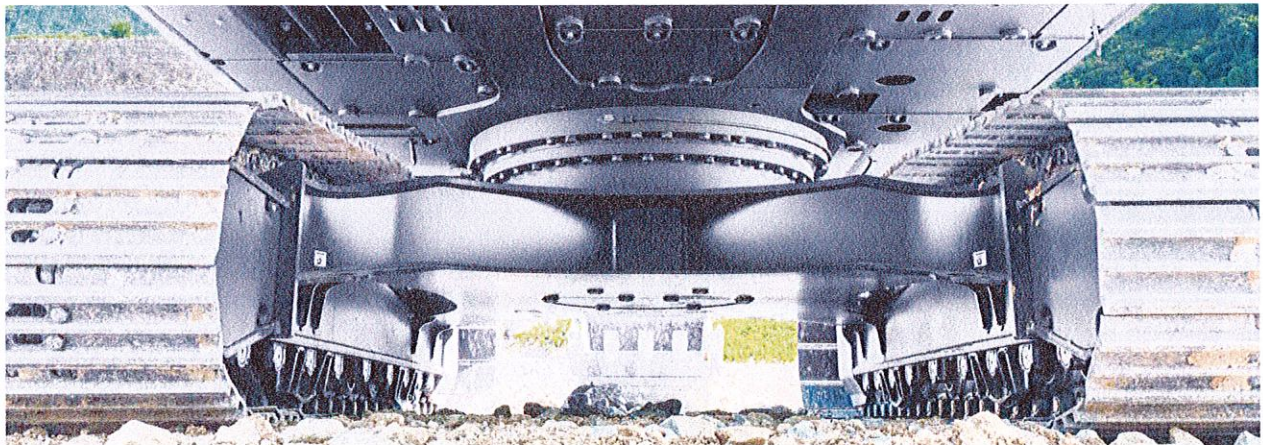
## Easier UREA filling

The new splash guard on the UREA tank makes filling quicker and easier, while also reducing the risk of spillage and subsequent corrosion.



## Up to the challenge

Built to deliver outstanding strength and durability, this heavy-duty production machine features a robust undercarriage with reinforced idle frame, track links and bottom rollers. Reinforced bucket linkage with steel strip, optional heavy-duty superstructure undercover and easily replaced bolt-on wear plates at the arm end ensure the excavator succeeds even on the toughest of jobsites.





# POWERED BY EXCELLENCE

With impressively high torque at low rpm, the new D8M Volvo engine builds on generations of proven Volvo engine technology to deliver superior reliability and performance. The engine features auto-regeneration technology, while auto-engine idle and auto-engine shutdown reduce unnecessary fuel consumption and wear.



# Boost your profits

A world-class machine is just the start of how Volvo strives to add value you to your operation. Our portfolio of services is designed to complement your machine's performance and boost your profitability.

## Every part counts

Maintain productivity and machine uptime with our range of readily available, tested and approved parts – all backed by Volvo warranty. Only by using Genuine Volvo Parts, can you protect your investment, extend machine life and guarantee long-lasting performance.



## Maintain performance

Stay on track with planned servicing and keep your asset covered with our range of flexible maintenance and repair options.



## Powerful reporting

Keep track of your fleet with a comprehensive portfolio of reports, designed to help you take action and boost the profitability of your business. Powered by the CareTrack telematics system, Productivity Report, Fuel Efficiency Report & Summary Report each provide an easy-to-digest overview of your machine's condition and performance.



## Machine monitoring made easy

Maximize machine uptime and reduce repair costs with the CareTrack telematic system. Choose to keep track of your machine yourself or let us take care of it with ActiveCare Direct. Our Volvo Uptime Center will provide 24/7 machine monitoring, supplying weekly reports and notifying you should preventive maintenance action be required.





# GET THE MOST FROM YOUR MACHINE

While reliable and efficient machines of course play a vital role in reducing costs, enhancing safety and maximizing productivity, it is ultimately the performance of the operator that really makes the difference. We offer a wide range of training initiatives to help operators unlock the full capability of their Volvo excavator.

# Move more for less

## Boost your productivity

- 700kg (1,542 lb) heavier counterweight: 5% increase in across lifting capacity **NEW**
- Improved response time **NEW**
- Boom/Swing and Boom/Travel priority **NEW**
- Adjustable boom down speed **NEW**
- Dig Assist apps, powered by Volvo Co-Pilot
- Volvo Active Control: double your productivity

## Comfortable operation

- Boom and arm bouncing reduction **NEW**
- Comfort Drive Control: joysticks steering **NEW**
- Additional 'long push' shortcut button **NEW**
- Selectable control pattern
- Volvo Care Cab: highest levels of comfort

## Safety, inside and out

- 3-point right-hand side access to the upper structure **NEW**
- Bolted anti-slip steps, high visibility handrails
- ROPS cab, low-noise/vibration
- Rear and side cameras, Volvo Smart View
- Swing fence, height/depth limits functions (Volvo Active Control)

## Boost versatility

- Steelwrist® Auto Connect Quick Coupler **NEW**
- Factory-fitted preparation for Steelwrist®, Engcon®, Rototilt® tiltrotator control systems **NEW**
- 10% more hydraulic attachment cooling capacity **NEW**
- Range of matched Volvo buckets and breakers
- Attachment Management System: 32 attachments stored

## Lower maintenance costs

- Less hydraulic hoses: reduced need for couplings/oil **NEW**
- Splash guard on the UREA tank **NEW**
- 1000hr engine oil and engine oil filter change intervals **NEW**
- Engine auto-regeneration **NEW**
- Grouped filters, accessed from ground-level
- Reinforced idle frame, track links, bottom rollers

## Volvo Services: boost your profits

- Operator training program
- Productivity Report, Fuel Efficiency Report, Summary Report
- ActiveCare Direct: 24/7 machine monitoring
- Genuine Volvo Parts, with 24-hour delivery guarantee
- Maintenance and repair agreements



For a dramatic improvement in fuel efficiency, look no further than the EC300E Hybrid.

## Up to 10% better fuel efficiency

- Volvo D8M engine **NEW**
- New generation electro-hydraulic system **NEW**
- ECO mode
- Selectable work modes
- Boom float function
- Auto-engine idle and shutdown



# Volvo EC300E in detail

## Engine

The next-generation Volvo diesel engine uses Volvo Advanced Combustion Technology (V-ACT) to deliver lower emissions, superior performance and fuel efficiency. The engine uses precise, highpressure fuel injectors, turbo charger and intercooler, and electronic engine controls to optimize machine performance.

Engine	Volvo	D8M
Max power at	r/min (r/s)	1,600 (26.7)
Net, ISO 9249/SAE J1349	kW (hp)	188 (252)
Gross, ISO 14396/SAE J1995	kW (hp)	189 (253)
Max torque	Nm (ft lbf)	1,290 (951)
at engine speed	r/min (r/s)	1,400 (23.3)
No. of cylinders		6
Displacement	l (in <sup>3</sup> )	7.7 (470)
Bore	mm (in)	110 (4.33)
Stroke	mm (in)	135 (5.3)

## Electrical system

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	170
Alternator	V/A	28 / 120
Start motor	V - kW	24 - 5.5

## Undercarriage

The undercarriage has a robust X-shaped frame. Greased and sealed track chains are standard.

Track shoes		2 x 50
Link pitch	mm (in)	203.2 (7.9)
Shoe width	mm (in)	600 / 700 / 800 / 900 (23.6 / 27.6 / 31.5 / 35.4)
Shoe width, triple grouser	mm (in)	600 / 700 / 800 / 900 (23.6 / 27.6 / 31.5 / 35.4)
Shoe width, triple grouser (HD)	mm (in)	600 (23.6)
Shoe width, double grouser	mm (in)	700 (27.6)
Bottom rollers		2 x 9
Top rollers		2 x 2

## Swing system

The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and anti-rebound valve are standard.

Max. slew speed	r/min	11
Max. slew torque	kNm (ft lbf)	114.8 (84,655)

## Travel System

Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released. The travel motor, brake and planetary gears are well protected within the track frame.

Max. drawbar pull	kN (lbf)	248 (55,663)
Max. travel speed (low)	km/h (mi/h)	3.6 (2.2)
Max. travel speed (high)	km/h (mi/h)	5.4 (3.4)
Gradeability	°	35

## Cab

The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the side door.

Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t CO<sub>2</sub>-eq.

## Hydraulic system

The hydraulic system, also known as the "Automatic Sensing Work Mode," is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, boom, arm and swing priority along with boom, arm and bucket regeneration provides optimum performance.

### Main pump, Type 2 x Variable displacement axial piston pumps

Maximum flow	l/min (gal/min)	2 x 276 (2 x 72.9)
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### Pilot pump, Type Gear Pump

Maximum flow	l/min (gal/min)	20.3 (5.4)
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### Relief valve setting pressure

Implement	MPa (psi)	33.3 / 36.3 (4,830 / 5,265)
Travel circuit	MPa (psi)	36.3 (5,265)
Slew circuit	MPa (psi)	28.9 (4,192)
Pilot circuit	MPa (psi)	3.9 (566)

## Hydraulic Motors

**Travel:** Variable displacement axial piston motor with mechanical brake

**Swing:** Fixed displacement piston motor with mechanical brake

## Hydraulic Cylinders

Mono boom		2
Bore x Stroke	ø x mm (ø x in)	140 x 1 480 (5.5 x 58.3)
2 piece boom		2
Bore x Stroke	ø x mm (ø x in)	140 x 1 480 (5.5 x 58.3)
Arm		1
Bore x Stroke	ø x mm (ø x in)	150 x 1 745 (5.9 x 68.7)
Bucket		1
Bore x Stroke	ø x mm (ø x in)	140 x 1 140 (5.5 x 44.9)
Bucket for LR boom		1
Bore x Stroke	ø x mm (ø x in)	100 x 865 (3.9 x 34.1)

## Service Refill

Fuel tank	l (gal)	472 (124.7)
DEF/AdBlue® tank	l (gal)	50 (13)
Hydraulic system, total	l (gal)	385 (101.7)
Hydraulic tank	l (gal)	215 (56.8)
Engine oil	l (gal)	30 (7.9)
Engine coolant	l (gal)	44 (12)
Slew reduction unit	l (gal)	6.1 (1.6)
Travel reduction unit	l (gal)	2 x 6 (2 x 1.6)

## Sound Level

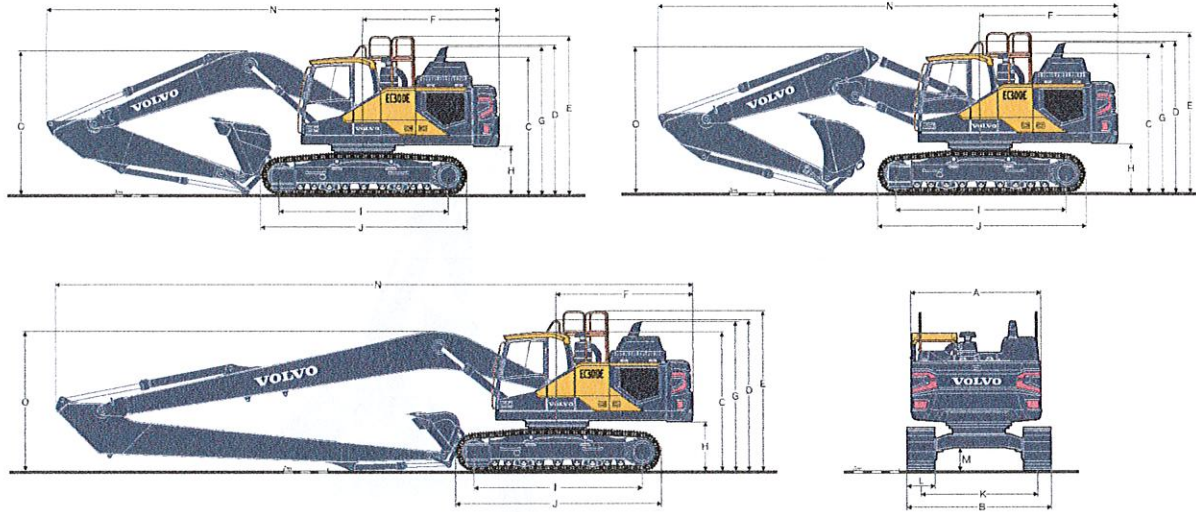
Sound pressure level in cab according to ISO 6396

L <sub>pA</sub>	dB	70
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External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC

L <sub>WA</sub>	dB	104
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# Specifications



Description	Unit	EC300EL												EC300ELR	
		6.2, 20'4"						6.2, 20'4" 2-piece						10.2, 33'6"	
Boom	m, ft in	2.55	8'4"	3.05	10'0"	3.7	12'2"	2.55	8'4"	3.05	10'0"	3.7	12'2"	7.9	25'11"
A. Overall width of upper structure	mm ft in	2,890 9'6"	2,890 9'6"	2,890 9'6"	2,890 9'6"	2,890 9'6"	2,890 9'6"	2,890 9'6"	2,890 9'6"	2,890 9'6"	2,890 9'6"	2,890 9'6"	2,890 9'6"	2,890 9'6"	2,890 9'6"
B. Overall width	mm ft in	3,190 10'6"	3,190 10'6"	3,190 10'6"	3,190 10'6"	3,190 10'6"	3,190 10'6"	3,190 10'6"	3,190 10'6"	3,190 10'6"	3,190 10'6"	3,190 10'6"	3,190 10'6"	3,190 10'6"	
C. Overall height of cab	mm ft in	3,110 10'2"	3,110 10'2"	3,110 10'2"	3,110 10'2"	3,110 10'2"	3,110 10'2"	3,110 10'2"	3,110 10'2"	3,110 10'2"	3,110 10'2"	3,110 10'2"	3,110 10'2"	3,110 10'2"	
D. Overall height of handrail	mm ft in	3,360 11'0"	3,360 11'0"	3,360 11'0"	3,360 11'0"	3,360 11'0"	3,360 11'0"	3,360 11'0"	3,360 11'0"	3,360 11'0"	3,360 11'0"	3,360 11'0"	3,360 11'0"	3,360 11'0"	
E. Overall height of guardrail (Unfolded)	mm ft in	3,570 11'9"	3,570 11'9"	3,570 11'9"	3,570 11'9"	3,570 11'9"	3,570 11'9"	3,570 11'9"	3,570 11'9"	3,570 11'9"	3,570 11'9"	3,570 11'9"	3,570 11'9"	3,570 11'9"	
E'. Overall height of handrail/guardrail (Folded)	mm ft in	3,090 10'2"	3,090 10'2"	3,090 10'2"	3,090 10'2"	3,090 10'2"	3,090 10'2"	3,090 10'2"	3,090 10'2"	3,090 10'2"	3,090 10'2"	3,090 10'2"	3,090 10'2"	3,090 10'2"	
F. Tail swing radius	mm ft in	3,120 10'3"	3,120 10'3"	3,120 10'3"	3,120 10'3"	3,120 10'3"	3,120 10'3"	3,120 10'3"	3,120 10'3"	3,120 10'3"	3,120 10'3"	3,120 10'3"	3,155 10'4"	3,155 10'4"	
G. Overall height of diffuser	mm ft in	3,200 10'6"	3,200 10'6"	3,200 10'6"	3,200 10'6"	3,200 10'6"	3,200 10'6"	3,200 10'6"	3,200 10'6"	3,200 10'6"	3,200 10'6"	3,200 10'6"	3,200 10'6"	3,200 10'6"	
H. Counterweight clearance *	mm ft in	1,105 3'8"	1,105 3'8"	1,105 3'8"	1,105 3'8"	1,105 3'8"	1,105 3'8"	1,105 3'8"	1,105 3'8"	1,105 3'8"	1,105 3'8"	1,105 3'8"	1,105 3'8"	1,105 3'8"	
I. Tumbler length	mm ft in	4,015 13'2"	4,015 13'2"	4,015 13'2"	4,015 13'2"	4,015 13'2"	4,015 13'2"	4,015 13'2"	4,015 13'2"	4,015 13'2"	4,015 13'2"	4,015 13'2"	4,015 13'2"	4,015 13'2"	
J. Track length	mm ft in	4,865 16'0"	4,865 16'0"	4,865 16'0"	4,865 16'0"	4,865 16'0"	4,865 16'0"	4,865 16'0"	4,865 16'0"	4,865 16'0"	4,865 16'0"	4,865 16'0"	4,865 16'0"	4,865 16'0"	
K. Track gauge	mm ft in	2,590 8'6"	2,590 8'6"	2,590 8'6"	2,590 8'6"	2,590 8'6"	2,590 8'6"	2,590 8'6"	2,590 8'6"	2,590 8'6"	2,590 8'6"	2,590 8'6"	2,590 8'6"	2,590 8'6"	
L. Shoe width	mm ft in	600 24"	600 24"	600 24"	600 24"	600 24"	600 24"	600 24"	600 24"	600 24"	600 24"	600 24"	600 24"	600 24"	
M. Min. ground clearance *	mm ft in	475 1'7"	475 1'7"	475 1'7"	475 1'7"	475 1'7"	475 1'7"	475 1'7"	475 1'7"	475 1'7"	475 1'7"	475 1'7"	475 1'7"	475 1'7"	
N. Overall length	mm ft in	10,605 34'10"	10,500 34'5"	10,540 34'7"	10,605 34'10"	10,535 34'7"	10,535 34'7"	10,535 34'7"	10,535 34'7"	10,535 34'7"	10,535 34'7"	10,535 34'7"	14,565 47'9"	14,565 47'9"	
O. Overall height of boom	mm ft in	3,470 11'5"	3,345 11'0"	3,580 11'9"	3,385 11'1"	3,325 10'11"	3,605 11'10"	-	-	-	-	-	-	-	

\* Without shoe grouser

† 2-piece boom

## DIMENSIONS

### Boom

Description	Unit	mono				2-piece		Long-Reach	
		6.2, 20'4" GP		6.2, 20'4" HD		6.2, 20'4"		10.2, 33'6"	
Length	mm ft in	6,425 21'1"	6,425 21'1"	6,425 21'1"	6,425 21'1"	10,425 34'2"	-	-	
Height - Hose	mm ft in	1,780 5'10"	1,780 5'10"	1,595 5'3"	-	-	-	-	
Height - Pipe	mm ft in	1,665 5'6"	1,665 5'6"	1,550 5'1"	1,580 5'2"	-	-	-	
Width	mm ft in	765 2'6"	765 2'6"	770 2'6"	765 2'6"	-	-	-	
Weight	kg lb	2,505 5,520	2,735 6,030	3,375 7,440	3,380 7,450	-	-	-	

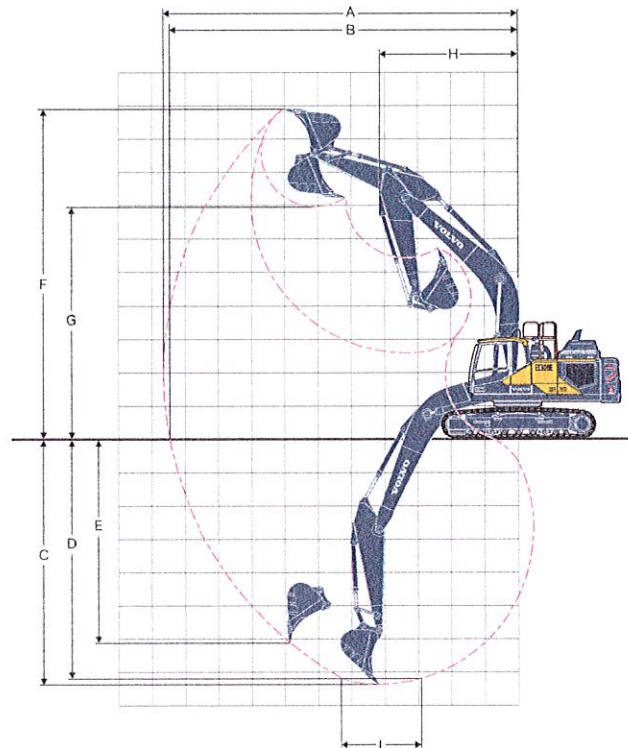
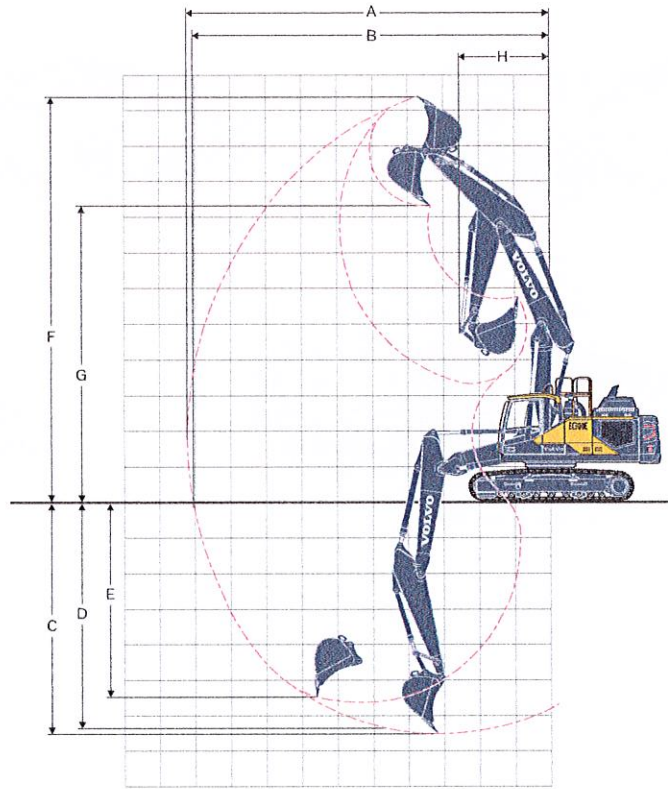
\* Includes cylinder, piping and pin, excludes boom cylinder pin

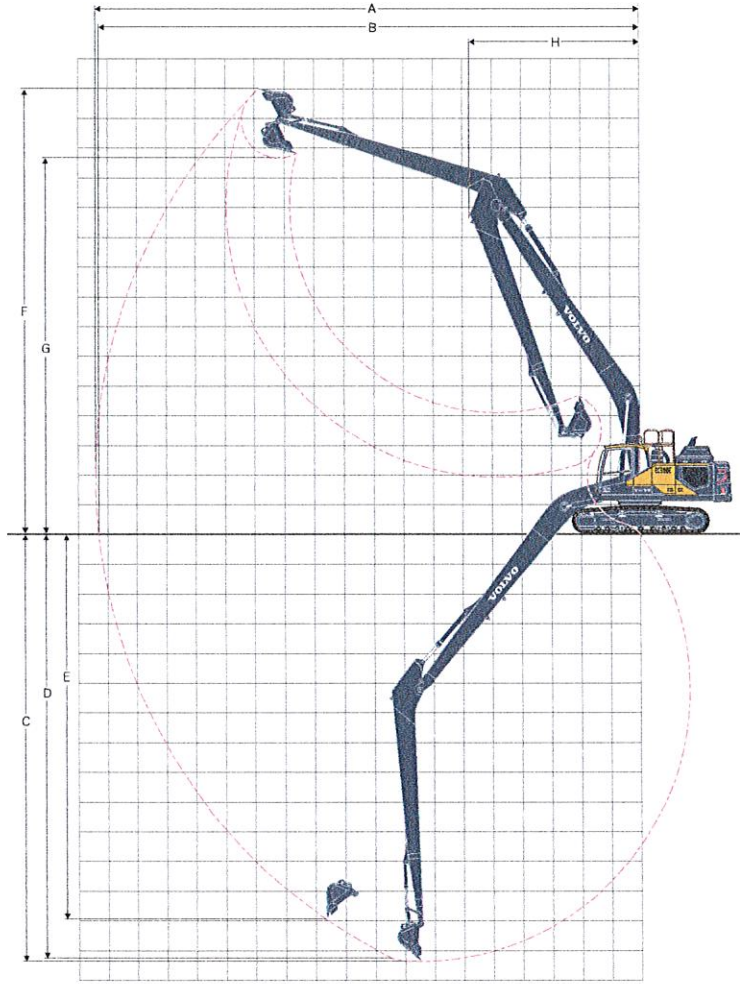
### Arm

Description	Unit	mono				2-piece		Long-Reach	
		2.55, 8'4" HD		3.05, 10'0" GP		3.05, 10'0" HP		3.7, 12'2" GP	
Length	mm ft in	3,720 12'2"	4,145 13'7"	4,145 13'7"	4,800 15'9"	9,055 29'8"	-	-	
Height	mm ft in	1,005 3'4"	1,010 3'4"	1,010 3'4"	1,005 3'4"	1,095 3'7"	-	-	
Width	mm ft in	560 1'10"	560 1'10"	560 1'10"	560 1'10"	435 1'5"	-	-	
Weight	kg lb	1,450 3,200	1,510 3,330	1,570 3,460	1,630 3,590	1,770 3,900	-	-	

\* Includes cylinder, linkage and pin

# Specifications





**WORKING RANGES**

Description	Unit	EC300EL												EC300ELR	
		6.2, 20'4" mono						6.2, 20'4" 2-piece						10.2, 33'6"	
Boom	m, ft in														
Arm	m ft in	2.55	8'4"	3.05	10'0"	3.7	12'2"	2.55	8'4"	3.05	10'0"	3.7	12'2"	7.9	25'11"
A. Max. digging reach	mm ft in	10,180	33'5"	10,710	35'2"	11,310	37'1"	10,250	33'8"	10,780	35'4"	11,390	37'4"	18,590	60'12"
B. Max. digging reach on ground	mm ft in	9,970	32'9"	10,520	34'6"	11,130	36'6"	10,040	32'11"	10,580	34'9"	11,210	36'9"	18,480	60'8"
C. Max. digging depth	mm ft in	6,840	22'5"	7,340	24'1"	7,990	26'3"	6,210	20'4"	6,730	22'1"	7,370	24'2"	14,750	48'5"
D. Max. digging depth (l = 2.44 m / 8'0" level)	mm ft in	6,600	21'8"	7,150	23'5"	7,830	25'8"	6,100	20'0"	6,630	21'9"	7,280	23'11"	14,650	48'1"
E. Max. vertical wall digging depth	mm ft in	5,320	17'5"	6,080	19'11"	6,680	21'11"	5,040	16'6"	5,630	18'6"	6,240	20'6"	13,630	44'9"
F. Max. cutting height	mm ft in	9,560	31'4"	9,980	32'9"	10,260	33'8"	11,550	37'11"	12,070	39'7"	12,570	41'3"	14,940	49'0"
G. Max. dumping height	mm ft in	6,680	21'11"	7,040	23'1"	7,330	24'1"	8,360	27'5"	8,850	29'0"	9,360	30'9"	12,600	41'4"
H. Min. front swing radius	mm ft in	4,220	13'10"	4,180	13'9"	4,240	13'11"	2,750	9'0"	2,580	8'6"	2,770	9'1"	6,190	20'4"

**DIGGING FORCES WITH DIRECT FIT BUCKET**

Bucket radius		mm	in	1,624	64"	1,624	64"	1,624	64"	1,624	64"	1,624	64"	1,624	64"	1,248	49"	
Breakout force	Normal	kN	lb	165	37,050	165	37,050	165	37,040	165	37,050	165	37,050	165	37,040	69	15,580	
	Power boost	SAE J1179	kN	lb	179	40,320	179	40,320	179	40,310	179	40,320	179	40,320	179	40,310	69	15,580
	Normal	ISO 6015	kN	lb	190	42,680	190	42,680	190	42,670	190	42,680	190	42,680	190	42,670	78	17,600
	Power boost	ISO 6015	kN	lb	207	46,450	207	46,450	207	46,440	207	46,450	207	46,450	207	46,440	78	17,600
Tearout force	Normal	SAE J1179	kN	lb	158	35,500	133	29,790	116	26,090	158	35,500	133	29,790	116	26,090	51	11,550
	Power boost	SAE J1179	kN	lb	172	38,630	144	32,420	126	28,400	172	38,630	144	32,420	126	28,400	51	11,550
	Normal	ISO 6015	kN	lb	163	36,580	136	30,550	118	26,630	163	36,580	136	30,550	118	26,630	52	11,660
	Power boost	ISO 6015	kN	lb	177	39,810	148	33,250	129	28,980	177	39,810	148	33,250	129	28,980	52	11,660
Rotation angle, bucket		°		179		179		179		179		179		179		178		



# Specifications

## MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe width		Operating weight		Ground pressure		Overall width		Operating weight		Ground pressure		Overall width	
	mm	in	kg	lb	kPa	psi	mm	in	kg	lb	kPa	psi	mm	in
<b>EC300EL</b>														
			6.2 m (20'4") boom (GP), 3.05 m (10'0") arm (GP), 1,209 kg (2,670 lb) / 1.32 m <sup>3</sup> (349 gal) bucket, 6,200 kg (13,670 lb) counterweight					6.2 m (20'4") boom (HD), 3.05 m (10'0") arm (HD), 1,209 kg (2,670 lb) / 1.32 m <sup>3</sup> (349 gal) bucket, 6,200 kg (13,670 lb) counterweight						
Triple grouser	600	24	30,640	67,560	59.1	8.6	3,190	10'6"	30,940	68,220	59.7	8.7	3,190	10'6"
	600 (HD)	24	30,860	68,050	59.5	8.6	3,190	10'6"	31,150	68,690	60.1	8.7	3,190	10'6"
	700	28	31,230	68,860	51.6	7.5	3,290	10'10"	31,520	69,500	52.1	7.6	3,290	10'10"
	800	31	31,590	69,660	45.7	6.6	3,390	11'1"	31,880	70,300	46.1	6.7	3,390	11'1"
Double grouser	900	35	31,950	70,450	41.1	6.0	3,490	11'5"	32,240	71,090	41.5	6.0	3,490	11'5"
	700	28	31,420	69,280	52.0	7.5	3,290	10'10"	31,710	69,920	52.4	7.6	3,290	10'10"
			6.2 m (20'4") boom (2-piece), 3.05 m (10'0") arm (GP), 1,209 kg (2,670 lb) / 1.32 m <sup>3</sup> (349 gal) bucket, 6,200 kg (13,670 lb) counterweight					6.2 m (20'4") boom (2-piece), 3.05 m (10'0") arm (HD), 1,209 kg (2,670 lb) / 1.32 m <sup>3</sup> (349 gal) bucket, 6,200 kg (13,670 lb) counterweight						
Triple grouser	600	24	31,230	68,860	60.3	8.7	3,190	10'6"	31,610	69,700	61.0	8.8	3,190	10'6"
	600 (HD)	24	31,450	69,350	60.7	8.8	3,190	10'6"	31,820	70,160	61.4	8.9	3,190	10'6"
	700	28	31,820	70,160	52.6	7.6	3,290	10'10"	32,190	70,980	53.2	7.7	3,290	10'10"
	800	31	32,180	70,960	46.6	6.7	3,390	11'1"	32,550	71,770	47.1	6.8	3,390	11'1"
Double grouser	900	35	32,540	71,750	41.9	6.1	3,490	11'5"	32,910	72,570	42.3	6.1	3,490	11'5"
	700	28	32,010	70,580	52.9	7.7	3,290	10'10"	32,380	71,400	53.5	7.8	3,290	10'10"
<b>EC300ELR</b>														
			10.2 m (33'6") boom (LR), 7.9 m (25'11") arm (LR), 478 kg (1,050 lb) / 0.57 m <sup>3</sup> (150 gal) bucket, 6,900 kg (15,210 lb) counterweight											
Triple grouser	600	24	31,770	70,050	61.3	8.9	3,190	10'6"						
	600 (HD)	24	31,980	70,520	61.7	8.9	3,290	10'10"						
	800	31	32,710	72,130	47.3	6.9	3,390	11'1"						
	900	35	33,080	72,940	42.5	6.2	3,490	11'5"						

**BUCKET SELECTION GUIDE**

Bucket type		Capacity		Cutting width		Weight		Teeth		EC300EL					
										600 mm (24") shoe, 6,200 kg (13,670 lb) counterweight					
										6.2 m (20'4") GP Boom			5.95 m (19'6") 2-piece Boom		
										L	yd <sup>3</sup>	mm	in	kg	lb
Direct fit bucket	General purpose	550	0.72	600	23.6	883	1,946	3	C	C	C	C	C	C	
		660	0.86	750	29.5	867	1,912	3	C	C	C	C	C	C	
		770	1.01	900	35.4	996	2,197	4	C	C	C	C	C	C	
		950	1.24	1,090	42.9	1,025	2,260	4	C	C	C	C	C	C	
		1,140	1.49	1,240	48.8	1,192	2,629	5	C	C	C	C	C	C	
		1,320	1.73	1,390	54.7	1,209	2,666	5	C	C	C	C	C	C	
		1,450	1.90	1,490	58.7	1,270	2,799	5	C	C	C	C	C	C	
		1,510	1.98	1,540	60.6	1,314	2,897	5	C	C	C	C	C	C	
		1,760	2.30	1,740	68.5	1,448	3,193	6	C	C	B	C	C	B	
	1,930	2.52	1,840	72.4	1,529	3,370	6	C	C	B	C	B	A		
	2,060	2.69	1,950	76.8	1,590	3,506	6	C	B	A	C	B	A		
	Heavy duty	550	0.72	600	23.6	881	1,942	3	D	D	D	D	D	D	
		660	0.86	750	29.5	920	2,029	3	D	D	D	D	D	D	
		1,140	1.49	1,240	48.8	1,214	2,677	5	D	D	D	D	D	D	
		1,270	1.66	1,405	55.3	1,336	2,945	5	D	D	D	D	D	D	
		1,320	1.73	1,390	54.7	1,301	2,868	5	D	D	D	D	D	D	
		1,510	1.98	1,540	60.6	1,387	3,058	5	D	D	D	D	D	C	
		1,690	2.21	1,690	66.5	1,485	3,274	5	D	D	B	D	D	B	
1,930		2.52	1,840	72.4	1,623	3,578	6	C	B	A	C	B	A		
Direct fit bucket (UQC interface)		General purpose	550	0.72	600	23.6	883	1,946	3	C	C	C	C	C	C
	660		0.86	750	29.5	867	1,912	3	C	C	C	C	C	C	
	770		1.01	900	35.4	996	2,197	4	C	C	C	C	C	C	
	950		1.24	1,090	42.9	1,025	2,260	4	C	C	C	C	C	C	
	1,140		1.49	1,240	48.8	1,192	2,629	5	C	C	C	C	C	C	
	1,320		1.73	1,390	54.7	1,209	2,666	5	C	C	C	C	C	C	
	1,450		1.90	1,490	58.7	1,270	2,799	5	C	C	C	C	C	B	
	1,510		1.98	1,540	60.6	1,314	2,897	5	C	C	B	C	C	B	
	1,760		2.30	1,740	68.5	1,448	3,193	6	C	B	A	C	B	A	
	1,930	2.52	1,840	72.4	1,529	3,370	6	B	B	A	B	A	x		
	2,060	2.69	1,950	76.8	1,590	3,506	6	B	A	x	B	A	x		
	Heavy duty	550	0.72	600	23.6	881	1,942	3	D	D	D	D	D	D	
		660	0.86	750	29.5	920	2,029	3	D	D	D	D	D	D	
		1,140	1.49	1,240	48.8	1,214	2,677	5	D	D	D	D	D	D	
		1,320	1.73	1,390	54.7	1,301	2,868	5	D	D	C	D	D	C	
		1,510	1.98	1,540	60.6	1,387	3,058	5	D	D	B	D	C	B	
		1,690	2.21	1,690	66.5	1,485	3,274	5	D	B	A	C	B	A	
		1,930	2.52	1,840	72.4	1,623	3,578	6	B	A	x	B	A	x	

For long reach boom and arm configuration, Volvo recommends to use 0.57 m<sup>3</sup> (0.75 yd<sup>3</sup>) bucket  
 Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.  
 The recommendations are given as a guide only, based on typical operation conditions.  
 Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.

**Maximum material density**

	kg/m <sup>3</sup>	lb/yd <sup>3</sup>	
A	1,200~1,300	2,000~2,200	Coal, Caliche, Shale
B	1,400~1,600	2,300~2,700	Wet earth and clay, Limestone, Sandstone
C	1,700~1,800	2,800~3,100	Granite, Wet sand, Well blasted rock
D	> 1,900	> 3,200	Wet mud, Iron ore
X	Not recommended		









# Equipment

## STANDARD EQUIPMENT

### Engine

Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Stage V requirements  
 Air filter with indicator  
 Air intake heater  
 Cyclone precleaner  
 Electric engine shutoff  
 Fuel filter and water separator  
 Delayed engine shutdown  
 Alternator, 80 A

### Electric / Electronic control system

Advanced mode control system  
 Selfdiagnostic system  
 Machine status indication  
 Engine speed sensing power control  
 Automatic idling system  
 Onetouch power boost  
 Safety stop/start function  
 Adjustable LCD color monitor  
 Master electrical disconnect switch  
 Engine restart prevention circuit  
 Highcapacity halogen lights:  
 - Frame-mounted 2  
 - Boom-mounted 1  
 Extra work lights(Halogen) :  
 Cab-mounted 3  
 Boom-mounted 1  
 Batteries, 2 x 12 V / 170 A  
 Start motor, 24 V / 5.5 kW  
 Travel alarm  
 Quick engine oil change system

### Frame

Access way with handrail  
 Tool storage area  
 Punched metal antislip plates  
 Counterweight:  
 13,670 lb  
 15,210 lb Long Reach

### Undercarriage

Undercover (heavyduty)  
 Hydraulic track adjusters  
 Greased and sealed track link  
 Track Guard

### Hydraulic system

Boom up swing priority function  
 Boom travel priority function (Creep)  
 Boom down speed control  
 Attachment management system (up to 32 programmable memories)  
 - Variable flow and pressure pre-setting  
 Hammer & shear, 2 pump flow  
 Additional return filter (Hammer & shear piping)  
 Boom float function without HRV  
 Straight travel pedal  
 Automatic sensing hydraulic system  
 Summation system  
 Boom priority  
 Arm priority  
 Swing priority  
 ECO mode fuel saving technology  
 Boom, arm and bucket regeneration valves  
 Swing antirebound valves  
 Boom and arm holding valves  
 Multistage filtering system  
 Cylinder cushioning  
 Cylinder contamination seals  
 Auxiliary hydraulic valve  
 Automatic twospeed travel motors  
 Hydraulic oil, ISO VG 46  
 Quick hydraulic oil fill connection  
 Quick coupler piping

## STANDARD EQUIPMENT

### Cab and interior

ROPS (ISO121172) certified cab  
 Opening top hatch  
 Silicon oil and rubber mounts with spring  
 Travel pedals and hand levers  
 Adjustable operator seat and joystick control console  
 Heater & airconditioner, automatic  
 Flexible antenna  
 Radio with MP3 & USB Jack with bluetooth  
 Hydraulic safety lock lever  
 Cab, allweather sound suppressed, includes:  
 Cup holders  
 Door locks  
 Tinted glass  
 Floor mat  
 Horn  
 Large storage area  
 Pullup type front window  
 Removable lower windshield  
 Seat belt  
 Safety glass  
 Sun screens, front, roof, rear  
 Rain shield  
 Windshield wiper with intermittent feature  
 Volvo smart view  
 Master key

### Track shoes

32" with triple grousers

### Digging equipment

Linkage with lifting eye  
 Boom: 20'4" monoblock  
 Arm: 10'0"  
 Boom: 33'6" monoblock, Long Reach  
 Arm: 25'11", Long Reach  
 Manual centralized lubrication

### Machine controls

Dig Assist  
 Volvo Active Control (Semi-autonomous)

## OPTIONAL EQUIPMENT

### Engine

Block heater: 120 V, 240 V  
 Oil bath pre-cleaner  
 Diesel coolant heater, 10 kW  
 Water separator with heater  
 Auto engine shutdown  
 Reversible fan  
 Fuel filler pump: 13.2 gpm, with automatic shutoff

### Electric

Extra work lights(LED):  
 Cab-mounted 3  
 Boom-mounted 1  
 Counterweight-mounted 1  
 Green light beacon  
 Anti-theft system  
 Rotating warning beacon  
 Smart connect for tilt rotator  
 Tilt rotator 3rd gen  
 Dig assist, smart connect

### Undercarriage

Full track guard  
 Track shoes  
 24/28/36" with triple grousers  
 24" HD with triple grousers  
 24/28" with double grousers  
 High walker undercarriage

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**OPTIONAL EQUIPMENT**

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**Hydraulic system**

CDC, Comfort Driving Control  
Hose rupture valve: boom & arm  
Overload warning device  
Boom float function with HRV  
Hydraulic piping:  
- Slope & rotator  
- Grapple  
- Oil leak (drain) line  
Volvo hydraulic quick coupler S2  
Volvo hydraulic quick coupler U30 / U35  
Volvo hydraulic quick coupler SQ70 55  
Volvo hydraulic quick coupler SQ70  
Hydraulic oil, biodegradable 46  
Hydraulic oil, longlife oil 32  
Hydraulic oil, longlife oil 46  
Fuel tank-fast fuel fill prep  
Hammer & shear, 1 pump flow  
3-way selection valve

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**OPTIONAL EQUIPMENT**

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**Cab and interior**

High visibility cabin  
Fabric seat with heater  
Fabric seat with heater and air suspension  
Deluxe seat  
High-strength one piece front windshield (P5A)  
Falling object guard, FOG (fixed type or hinge type)  
Frame-mounted  
Cab-mounted  
Cab-mounted falling object protective structure (FOPS)  
Side view camera  
Smoker kit (ashtray and lighter)  
Safety net for front window  
Lower wiper with intermittent control  
Anti-vandalism kit  
Air pressure supply in cabin  
Rear view camera  
Control joysticks with 4 switches  
Proportional joysticks with 3 switches

**Digging equipment**

Arm: 8'4" HD, 10'0" HD, 12'2"  
Arm: 25'11", long reach

**Service**

Tool kit, daily maintenance  
Tool kit, full scale

**Other**

Hybrid: Please refer to separate Brochure for more details

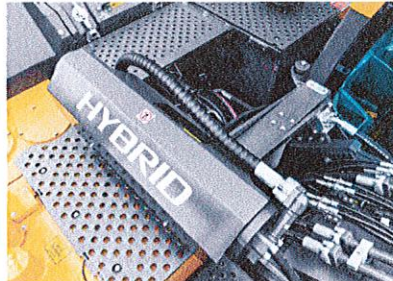
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**SELECTION OF VOLVO OPTIONAL EQUIPMENT**

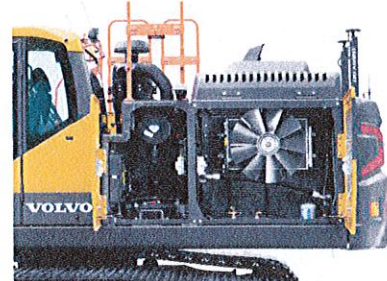
Deluxe seat



Hybrid



Reversible cooling fan



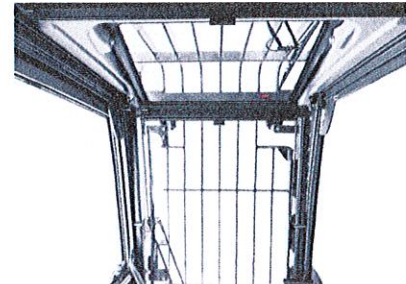
TiltRotator



Oil drain line



High-visibility cab



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.



