

Best Quality, Customers First

Robex

225L Vs

Tier3 engine installed



*The sample may include optional equipment.

Net Power : 125kw(167HP)/1,900rpm | Operating weight : 22,570kg | Bucket capacity : 1.05m³

 **HYUNDAI**
CONSTRUCTION EQUIPMENT



Best Quality, Customers First

Hyundai VS Series Excavator is equipped with Tier 3 Engine, showing excellent performance and quality.

It has excellent safety, durability, comfort, work efficiency, contaminant exhaust reduction, and energy-saving effect. The noise level is very low.

Hyundai Construction Equipment established "Best Quality, Customers First" as the first goal based on an innovative mind. The company satisfies customers' needs through a standardized production process-having constructed an advanced customer service system-and values customer experiences as well as the best products in the world.



5%

Work efficiency
(vs 9T in Mode E)

5%

Swing motor efficiency
(vs 9T)

17%

Fuel consumption
(vs 9T in Mode P)



Creating values for customers!

Vs Series Excavator: Perfect harmonization of environment-friendliness, performance, and quality!



Environment-friendliness, more powerful engine, higher speed, and energy saving

- Application of “Diesel high-pressure common rail electronically controlled spray technology” to a new Tier 3 Engine
- Performance is significantly enhanced with sufficient combustion of diesel fuel.
- More environment-friendliness with the guaranteed durability of engines and reduced exhaust of harmful gases thanks to the multiple-fuel filter system
- Enhanced work speed and complex work capability with optimized design of mail control valve
- Increased per-hour work volume with enhanced loading operation efficiency
- Enhanced profit rate with reduced operation costs



IPC Intelligent power control VPC variable power control

- IPC system reduces fuel consumption with smart control of main pump flow by the operation lever.
- The VPC system guarantees work speeds in all work modes through the variable control of pilot pressure and when combined with high fuel efficiency, it ensures high performance and low fuel cost.



Durability of structures is enhanced.

- Boom and arm with enhanced durability are installed.
Cast steel products are used for higher strength, so durability is enhanced by 1.5 times.
- Hyundai Heavy Industries designed travel and swing motors for the enhancement of durability.
- The weld strength of the lower frame is increased by 20% by increasing the lower support thickness.



Enhanced cooling performance

- High-capacity, high-efficiency direct cooling fans are applied.
- Polyurethane sponge with high oil resistance and heat resistance is used for cooling module ceilings.



Durable shaft, cover, and gasket

- Durability is enhanced, and lubrication cycle is extended with the enhanced lubrication of shafts and covers.
- Resin gaskets are used for enhanced lateral lubrication and prevention of damage and noise caused by abrasion.
- Loosening of working parts is minimized.



Improved electric system performance

- Moisture inflow is prevented, and anti-vibration effect is obtained with the application of the CMCU silicon sealing method.
- Engine capacity is increased with corrosion-preventing processing.
- The durability and reliability of pressure sensors are enhanced.



Highly durable oil tank

- The fatigue lifetime of welding parts is extended with the application of "Plate + Support" structure. (Reduced relative strain by 35%)
- The fueling hole is enlarged ($\Phi 83 \rightarrow \Phi 104$) for convenience and avoidance of possible overflow during fueling.





Comfortable and safe operating space

A comfortable environment is provided with low-noise operation and enhanced visibility in order to reduce the operation fatigue of the operator.

- ① The lever distance is reduced (550→500mm).
- ② The lever angle is changed (19° →23°).
- ③ The operator seat is adjustable in a wide range of angles to meet the operator's physical condition.
- ④ Digital entertainment equipment and storage box, etc. are installed in the operation room.

Reliable durability with further strengthening



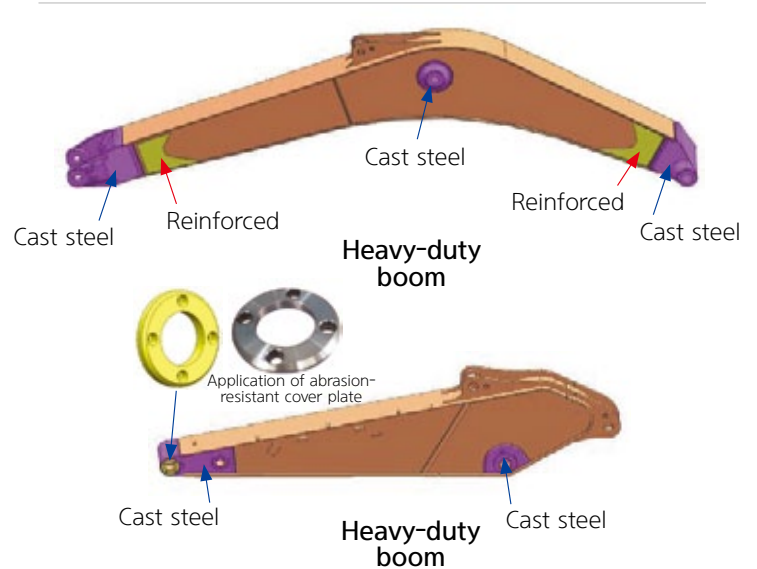
Cooler

Durability test in poor environment was conducted with the installation of a durable cooler in VS Series. The cooling performance of the VS Series was excellent even in a poor environment.



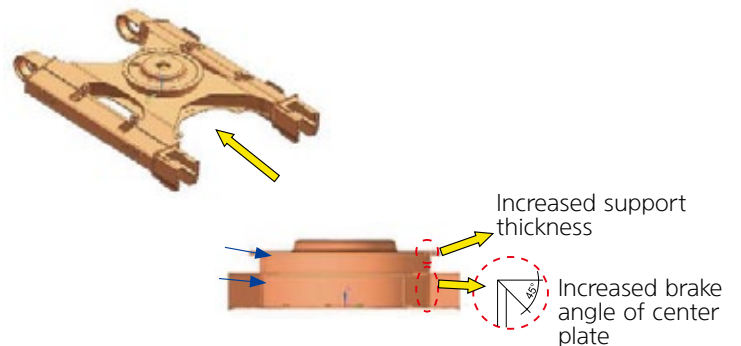
Standard arrangement of strengthened bucket

Strengthened bucket is applied to the VS Series to save users' costs by extending the lifetime by **2 times** or more. The resistance of excavator is reduced by reducing strain with reduced width and increased length of large-stone loading bucket of the new VS Series. The bottom is welded in fish tail shape to distribute strain and enhance durability.



Standard arrangement of large boom and arm

The lifetime of the VS Series has been extended by **1.5 times** with equipment of highly durable Heavy-duty boom and arm in consideration of the poor construction sites in China. The boom and arm are made of cast steel. Reinforcing bars are increased to distribute the strain of front/rear supports and lateral weld connection part. The end of arm is equipped with abrasion-resistant guard to reduce bucket shaking by enhancing the abrasion resistance of the lateral sides of arm and bucket.



Enhanced durability of lower frame

In the case of the VS Series, strength is increased by **20%** with increased support thickness and increased brake angle between the center plate and lateral plate.

Highly efficient work performance and fuel consumption saving



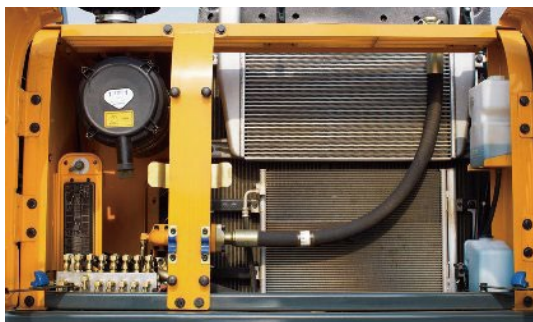
CUMMINS QSB7 Engine

Six-cylinder, four-stroke turbocharged air-cooled engine Application of "Diesel high-pressure common rail electronically-controlled spray technology" as the most advanced type in the world. Oil pressure in the common rail reaches a maximum of 20,000psi.

Model of environment protection and highly efficient engine

The Electronic Control System (ECM) of the engine measures the work parameters of the engine using various sensors of the engine air-suction system, fuel system, cooling system, etc. in order to calculate them accurately, have the control process set by ECM, and control the fuel spray volume minutely. The engine is independently controlled for optimum work environment and effective control of exhaust state.

Simple and rapid maintenance



Open lateral structure makes maintenance convenient.



Hydraulic oil filter chip replacement cycle is extended (1,000 hours).



Integrated electric control box



Main pump flow control system



The wide lateral side has the advantage of convenient maintenance and repair.

Specification



Engine

Model		Cummins QSB7	
Type		6-cylinder, 4-stroke Intercooler turbo charged	
SAE	J1995(Total)	HP(kW)/rpm	167(125) / 1,900
	J1349(Net)		159 (119) / 1,900
DIN	6271/1(Total)	HP(kW)/rpm	170 (125) / 1,900
	6271/1(Net)		162 (119) / 1,900
Max. torque	kgf.m/rpm	67 / 1,500	
Max. torque	11	107 X 124	
Bore x stroke	cc	67 / 1,500	
Piston displacement		2 X 12V X 120AH	
Batteries		24V, 7.5kW	
Starting motor alternator		24V, 90A	



Hydraulic system

Main pump	
Type	Two variable displacement piston pumps
Max. flow l/min	2 X 222
Sub-pump for pilot circuit	Gear pump
	Sensor-type fuel-saving pump
Hydraulic motor	
Travel	Two-stage axial piston motor with brake valve and parking brake
Swing	Axial piston motor with automatic brake
Relief valve setting	
	kgf/cm ²
Work system circuit	350
Travel	350
Swing system	265
Pilot valve circuit	40
Spare vale	Installed
Hydraulic oil cylinder	
Quantity of oil cylinders - Cylinder diameter x Lever diameter x Stroke	mm
Boom	2-Ø120 X Ø85 X Ø1,290
Arm	1-Ø140 X Ø100 X Ø1,510
Bucket	1-Ø120 X Ø85 X Ø1,055



Driving and braking

Driving type	Hydraulic
Driving motor	Axial piston motor
Deceleration system	Oil decelerator
Max. traction power	20.2 ton
Max. travel speed (high) (low)	5.5 km/h / 3.4 km/h
Gradeability	35°(70%)
Brake	Hydraulic locking type
Parking brake	Multi-disc wet braking



Operation

Easy and convenient operation with pedals for pilot-mode control and detachable control rod

Pilot Control	Two control rods equipped with safe lock levers (Left) rotation, arm (right) boom, and bucket
Travel and Swing	Two operation levers with pedal
Engine accelerator	Electric rotation type
External lamps	Two lamps (One under the cabin, another under the tool box)



Swing system

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing system lubrication	Grease-bathed
Swing brake	Multi-disc brake (with lock pin)
Swing speed	11 rpm



Coolant and lubrication

Capacity	Liter
Fuel tank	400
Engine coolant	35
Engine oil	24
Rotation device	6.2
Lateral electric devices (each lateral side)	4.5
Hydraulic system	275
Hydraulic oil tank	160



Undercarriage

X-leg type center frame and high-strength track support frame are welded to form a body. Support wheels, cable drag chain tires, guide wheels, anti-vibration springs, driving wheels, and tridentate track plates are mounted.

Middle frame	X-type
Crawler support frame	Pentagonal box type
Quantity of crawler shoes (each lateral side)	49
Quantity of chain wheels (each lateral side)	2
Quantity of track rollers (each lateral side)	9
Quantity of crawler supports (each lateral side)	2



Service weight

Service weight includes 5680mm of boom, 2920mm of arm, 1.05m³ of SAE backhoe bucket, lubricating oil, coolant, full oil tank, hydraulic oil tank, and standard equipment.

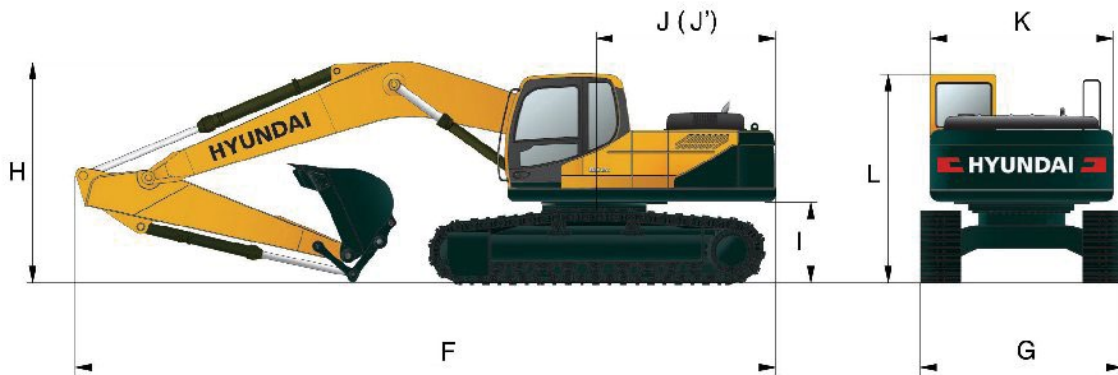
Service weight

Crawler shoe (3-step) mm	Service weight kg	Grounding pressure kgf/cm ²
※600	22,570	0.48
700	22,920	0.42
800	23,185	0.37

※Standard equipment

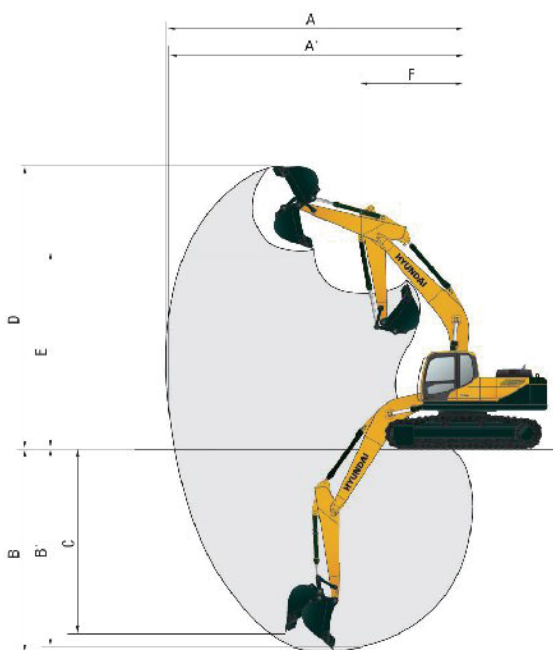
Weight of main parts	kg
Upperframe	9,396
Counter weight	4,200
Boom (including arm oil cylinder)	1,950

Dimensions & working range



Unit: mm

F Overall length	9,550
G Overall width	2,990
H Overall height	3,080
I Counterweight clearance	1,060
J Tail length	2,770
K Upperframe width	2,740
L Cabin height	2,920
J' Rear-end turning radius	2,840



Unit: mm

	Standard type	Extended type
Boom	Standard	※ Large loading type 6,300mm
Arm	Standard	※ Large loading type Arm
Bucket	Standard	※ General large loading type 1.05m ³
	Stone	0.52m ³
A Max. digging reach	9,980mm	15,220mm
A' Max. digging reach on ground	9,820mm	15,120mm
B Max. digging depth	6,730mm	11,760mm
B' Max. effective digging depth	6,560mm	11,650mm
C Max. vertical wall digging depth	6,280mm	9,610mm
D Max. digging height	9,600mm	12,550mm
E Max. dumping height	6,780mm	10,280mm
F Min. swing radius	3,740mm	4,870mm

※

※ Standard arrangement

▲ If you have any additional requirements for optional equipment, please contact Hyundai Dealership.



▲ HYUNDAI CONSTRUCTION EQUIPMENT

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※ This published document and specification could be changed without prior notice.
For more information, please contact our dealer.

PLEASE CONTACT