### TATA HITACHI

Reliable solutions



#### Tata Hitachi Construction Machinery Company Private Limited

Registered Office: Jubilee Building, 45 Museum Road,

Bengaluru 560 025, India.

Telephone: +91 80 6695 3301 / 02 / 03 / 04 / 05

Fax: +91 80 6695 3309 / 2532 5792

Email: info@tatahitachi.co.in | Website: www.tatahitachi.co.in

Toll Free: 1800 121 6633













With the gigantic Tata Hitachi EX1200V, you will find all the essentials that make a truly outstanding machine. Rest assured that like all Tata Hitachi machines, the EX1200V has been designed for safety, productivity, durability and comfort. Tata Hitachi has blended the latest technology with tough performance to create what it calls the "New Giant" that is ready to take on the excavating needs of today and tomorrow. Tata Hitachi makes this possible for you with the amazing power of this machine.

With Tata Hitachi EX1200V, you can handle

Computer-Aided

Engine-Pump

**Control System** 

ANYTHING. ANYWHERE. ANYTIME.

Unmatched Productivity and Reliability

Strong Front Attachment and Undercarriage

Easy Maintenance and Reduced Total Lifetime Cost



## HIGHER PRODUCTION

#### More Powerful Engine

#### Your source for high production.

The EX1200V is equipped with a powerful large-displacement engine. An intercooler is used to provide optimal fuel efficiency: helping to keep total running costs down.

#### More Powerful **Excavations**

#### Increased power for excavation.

The powerful engine is combined with a highly efficient hydraulic system to offer excavating power for even the toughest sites.

#### **Auto Idle** and Quick Idle

With the help of Auto Idle and Quick Idle you can reduce fuel consumption even more.

#### **Larger Bucket**

#### Provides high work capacity.

The large capacity bucket offers an increased excavating power-to-width ratio. The result is increased work efficiency for higher production.

#### **Combined Front Operations**

#### Fast and efficient operation.

The popular Optimum Hydraulic System (OHS) is used along with the newly developed arm regenerative and boom regenerative mechanism for smooth and efficient front operations.

#### **Environmental Friendly**

Cleaner Operating Engine. Steps have been taken to reduce harmful exhaust gas emissions. This engine is equipped with an Electronic Governor and meets strict EPA\* Tier II standards. (\*Environmental Protection Agency of the United States of America).

#### **E/P Control**

Provides a balance between economical operation and power. Speed sensing control is used to efficiently control engine output. This system incorporates a micro-computer to regulate engine and hydraulic pump output to the level of work being performed.

- S/P Mode increases productivity choose the S/P Mode to boost power during strenuous operations
- E Mode reduces fuel consumption this mode lowers fuel consumption during light-duty operations

## E/P Control



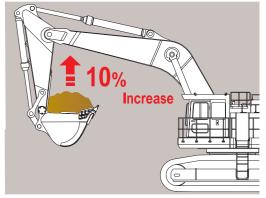
Quick Idle Switch





#### **Heavy Lifting Function**

Increases boom lift performance by 10%. A touch of the button gives the added power for breaking up rocks or working under harsh conditions.





## DEVICES FOR SAFETY

#### **Strong Undercarriage**

#### Giant Undercarriage.

Forming the base for powerful operations, the large undercarriage — 4,610 mm wide and 6.410 mm long — provides stability.

#### **Rugged Travel Device**

This damage-resistant travel device keeps the giant moving. The shape of the frame has been changed and thicker steel plates have been used to boost durability and reduce downtime from damage.

#### **Track Centre Frame**

Built for high reliability, the mounting section for the track centre frame swing gear has an integral cast steel design to reduce the concentration of stress forces; thereby boosting reliability.

#### **Rock Bucket**

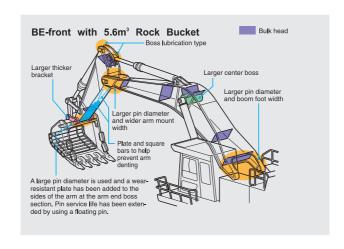
This has been **designed for harsh work conditions.** The reinforced bucket has been specially designed to withstand the impact encountered when handling crushed rock.

#### **Under Plate Protection**

A special plate and square bars are used to **help prevent the arm from denting.** The damage prevention plate — fitted with reinforcing square bars — is the standard fitment installed on the arm. This protects the bottom of the arm from damage caused by loaded rocks.

#### H-Boom and Arm

Designed for durability, the Boom and Arm is a box-section structure that has been adopted on the front attachment for its large cross-sectional area. In addition, the bulkheads arranged inside the front attachment increase rigidity to resist torsion, further strengthening the structure. The enhanced durability will be especially welcome for extended operations at tough work sites, such as mines.



#### LARGE DISPLACEMENT ENGINE WITH LOW OPERATING RPM

Provides a reliable power source. This large-displacement engine with power to spare, will provide a long service life.

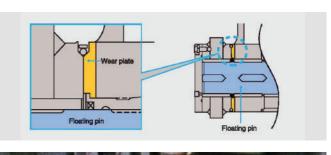
#### **Reinforced Pin Section**

To provide a long service life to the arm end.

- Replaceable wear-resistant plate at the arm tip boss
- Arm tip pin converted from fixed type to floating pin, extending service life

#### **Independently Mounted Oil Cooler**

Reduced heat helps increase hydraulic component durability. The oil cooler and the radiator have been mounted in separate locations to reduce the build-up of heat and increase cooling efficiency. A lower hydraulic oil temperature helps to increase the durability of the hydraulic components.





## UNCOMPROMISING SAFETY

#### Rugged Pressurised Cab with Integrated Head Guard

Offers solid protection to the operator. The operator's cab meets strict ISO Operator Protective Guards (OPG) standards\*. The cab structure is formed from an integral internal frame that is designed to resist operating vibrations. It stands ready to protect the operator from falling objects. (\*Front guard is optional).



## Wide Sidewalks and Large Handrails

Wide sidewalks with handrails are provided at key locations for easy access to the cab, and simplified servicing. Handrails conform to EN (European Norm), a world-class safety standard.

#### Adjustable Headlights and step light

#### Provides bright illumination where needed.

Headlights above the cab can be adjusted downward to shine light on the work area.





#### Safety:

- AFDSS (Automatic fire detection & suppression system)
- Hammer
- Fire extinguisher
- · Travel motion alarm
- Automatic centralized lubrication system



# COMFORT THAT ENHANCES PRODUCTIVITY

#### Large Comfortable Cab

Provides comfort to reduce operator fatigue. It has been **designed to offer clear visibility of the work area.** The fluid-filled elastic mounts help reduce fatigue-causing vibrations.

#### **Air Conditioner**

Keeps the operator's cab at a comfortable temperature.

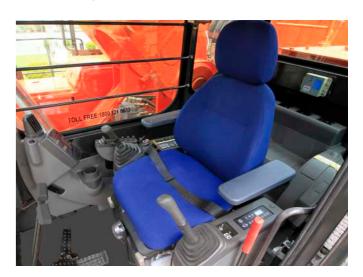
#### **One-Glance Instrument Panel**



The panel is aptly positioned within the natural line of sight so as to ensure that all key operating conditions can be monitored with just a glance.

## Well-Positioned Levers and Switches

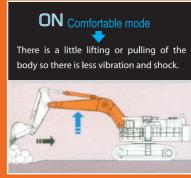
Levers and switches are near the operator to reduce the need to reach for them. The levers and switches have been strategically located to reduce the amount of operator movement required to operate them. Frequently used switches have been centralised at a location next to the operator.



#### **Boom Mode Selector**

Helps reduce shaking and jerking of the body during scraping operations. The amount the body can lift or pull by the front of the machine, can be selected. This helps to provide for more comfortable operations, and contributes to longer component service life.



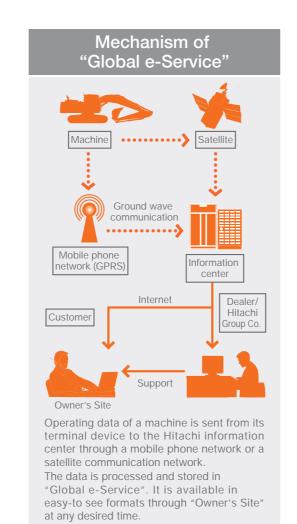






#### DATA LOGGING SYSTEM

The DLU (Data Logging Unit) continuously records performance of the engine and the hydraulic systems. The record can be downloaded by a PC.





## EASY MAINTENANCE REDUCES TOTAL LIFETIME COST

## **Easy Inspection and Maintenance**

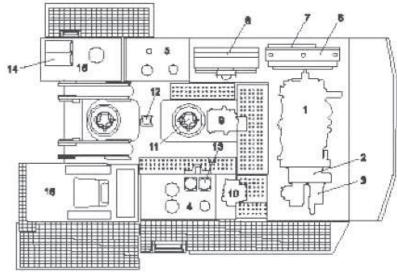
Wide access helps speed-up essential inspection time and reduce maintenance costs. Key components have been centrally positioned and walkways have been provided to make inspection and maintenance as easy as possible.

Engine
 Engine Radiator
 Pump Drive Unit
 Engine Air Cooler

3. Hydraulic Pump x 3 8. Oil Cooler

4. Hydraulic Tank 9. Main Control Valve

5. Fuel Tank 10. Swing Control Valve



11. Swing Device x 2

13. Filters

15. Batteries and Lubricator Box

12. Centre Joint 14. Batteries 16. Operator Cab

#### **High Cab**

(optional for Backhoe)

#### **Auto-Grease Lubricator**

## Reduces the time and effort needed for lubrication

It dramatically reduces the work required for lubrication.

#### **Longer Filter Life**

## Reduces the overall time and expense for replacement.

The service life of the engine oil filter and the fuel filter have been increased to 250 and 1,000 hours respectively

#### **Wide Inspection Doors**

## Easy access to engine and pump compartments

The inspection doors open wide to provide easy access to the engine and pump compartments





## SPECIFICATIONS

#### **ENGINE**

#### Model

Cummins QSK23-C

#### **Type**

Water-cooled; 4 cycle, 6 cylinder; in line, turbo-charged, direct injection, chamber-type diesel engine.

#### **Rated Power**

DIN 6271, net ----- 538 kW (731 PS) at 1,650 min-1 (rpm) SAEJ1995, gross ----- 567 kW (760 HP)

at 1,650 min-1 (rpm)

#### **Piston Displacement**

23.15 L (1,412 in<sup>3</sup>)

#### **Maximum Torque**

3,580 N-m @ 1,350 (rpm)

#### **Hydraulic System**

Hitachi's ETS (Electronic Total Control System) can achieve maximum job efficiency by reducing fuel consumption and noise levels, while maximising productivity through the optimisation of engine-pump functions with excellent controllability that increases the operator's comfort.

E-P Control (Computer-Aided Engine-Pump Control System) — Main pumps are regulated by an electronic engine-speed sensing control system.

Optimum power mode is selectable among three power modes, depending on the type of the job.

- OHS (Optimum Hydraulic System) assures fully independent and combined operations
- FPS (Fuel Saving Pump System)

- Auto idling system
- · Quick auto idling system
- High-pressure, 2-speed travel system for high traction force and travel speed
- Forced cooling pump drive system

**Main pumps:** 3 variable displacement, swash plate type axial piston pumps

Maximum oil: 3 x 495 L/min

Pilot pump: Gear Pump

Maximum oil flow: 63.0 L /min

#### **Relief Valve Settings**

Implement Circuit 320 kgf/cm<sup>2</sup>
Swing Circuit 300 kgf/cm<sup>2</sup>
Travel Circuit 320 kgf/cm<sup>2</sup>
Pilot Circuit 40 kgf/cm<sup>2</sup>

#### **Hydraulic Filters**

All hydraulic circuits have high-quality hydraulic filters for protection against oil contamination and ensure longer life of hydraulic components.

The filters are centralised in arrangement for facilitating maintenance.

	Quantity	
Full flow filter	2	10 μm
Drain filter*	1	10 μm
Suction filter	2	177 μm
Pilot filter	1	10 μm

<sup>\*</sup>For all plunger type pumps and motors.

#### **Hydraulic Cylinders**

High-strength piston rods and tubes are adopted, and cylinder cushion mechanisms are provided for boom, arm, bucket and dump cylinders. The bucket cylinder of the loading shovel is provided with a protector.

#### **Backhoe**

	Quantity	Bore	Rod Diameter
Boom	2	230	160
Arm	1	260	180
Bucket	1	230	160

<sup>\*</sup>All dimensions are in mm.

#### Shovel

	Quantity	Bore	Rod Diameter
Boom	2	230	160
Arm	1	215	150
Bucket	2	200	150
Dump	2	140	85
Level	1	230	160

<sup>\*</sup>All dimensions are in mm.

#### **Controls**

#### **Two Implement Levers**

This is a remote-controlled joystick hydraulic servo system. The right lever is for the boom and bucket control, and the left lever is for the swing and arm control. For the loading shovel, two pedals are provided to open and close the bottom dump bucket.

#### **Two Travel Levers with Pedals**

This remote-controlled hydraulic servo system has an independent drive at each track that allows for the counter rotation of tracks.

#### Superstructure

#### **Revolving Frame**

This is a deep, fully reinforced box section with heavy-gauge steel plates that used for ruggedness.

#### **Swing Mechanism**

This consists of two high-torque, axial piston motors with a planetary reduction gear bathed in oil. The swing circle is a single row, shear-type ball bearing, with induction-hardened internal gear. Both, the internal gear and pinion gear are immersed in lubricant. The swing parking brake is spring set with a hydraulic release disc type.

Swing speed ----- 5.8 min-1 (rpm)

#### **Operator's Cab**

This is a steel construction with an integrated, falling-object-protective structure (FOPS ISO 3449). The independent, pressurised, 1,110 mm wide, 1,900 mm high, roomy, 3.46 m³ cab with glass windows features all-round visibility. The spring suspension type, fully adjustable reclining seat with armrests is movable with or without the front and swing control levers by slide. The instrument and control panel is built in the cab wall, and is within easy range of the operator. The air conditioner is standard. There is a fluid-filled, elastic-mounting and sound-proofing structure to reduce noise level and vibration.

#### Undercarriage

#### Tracks

This is a tractor-type undercarriage with a bolt linkage for the side frame which assures durability. It comes with a heavy-duty track frame of all-welded, stress-relieved structure, and top-grade materials are used to provide toughness. The tracks come with lifetime-lubricated, induction-hardened track rollers, idlers and sprockets with floating seals, and track shoes come with double grousers. Double strut reinforced track links with track guards, and hydraulic (grease) track adjusters with shock absorbing recoil springs are used.

#### **Tractor-Type Undercarriage**

Double grouser track shoes of induction-hardened cast steel.

Shoe width: 710 mm standard

#### Number of Rollers and Shoes (each side)

Upper rollers: 3 Lower rollers: 8 Track shoes: 52

#### **Traction Device**

Each track is driven by a high-torque, axial piston motor through planetary reduction gears that allow for the counter rotation of the tracks. The tracks have easily replaceable sprockets, a parking brake of spring set and hydraulic release disc type.

Travel speed Low: 0 to 2.5 kmph Travel speed High: 0 to 3.6 kmph Maximum traction force: 63,000 kgf Gradeability: 35° (70%) max.

#### **Service Refill Capacities**

	Litres
Fuel tank	1,400
Engine coolant	113
Engine oil	70
Pump drive	15
Swing device (each side)	25
Travel final device (each side)	43
Hydraulic tank	610
Hydraulic system	1,350

#### **Weights and Ground Pressure**

#### **Backhoe**

EX1200V: Equipped with 9.1 m boom, 3.4 m arm and 5.0 m<sup>3</sup> (PCSA heaped) bucket.

Shoe type	Shoe width	Operating wt.	Ground pressure
Double	710 mm	1,08,000 kg	1.39 kgf/cm <sup>2</sup>
Grousers	900 mm	1,10,000 kg	1.11 kgf/cm <sup>2</sup>

EX1200V BE-Front: Equipped with 7.55 m BE-boom, 3.4 m BE-arm and 6.5  $\rm m^3$  (PCSA heaped) bucket.

Shoe type	Shoe width	Operating wt.	Ground pressure
Double	710 mm	1,09,000 kg	1.40 kgf/cm <sup>2</sup>
Grousers	900 mm	1,11,000 kg	1.12 kgf/cm²

#### **Loading Shovel**

Equipped with 6.5 m<sup>3</sup> (PCSA heaped) bottom dump bucket.

Shoe type	Shoe width	Operating wt.	Ground pressure
Double Grousers	710 mm	1,11,000 kg	1.40 kgf/cm <sup>2</sup>

#### **Standard Equipment**

#### **Engine**

- S/P mode control
- E mode control
- 75A alternator
- Dry-type air filter with clean dust cap
- Cartridge-type fuel filter
- Water filter
- Radiator and air cooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto idle system
- Quick idle system
- Overheat prevention device

#### **Hydraulic System**

- E-P control system
- OHS (Optimum Hydraulic System)
- FPS (Fuel Saving Pump System)
- Heavy lifting system
- Boom mode selector system
- Forced lubrication and forced cooling, pump drive system
- · Control valve with main relief valve
- Suction filter
- Full flow filter
- · Pilot filter
- · Pump drain filter

#### Cab

- All-weather, sound-suppressed, steel integrated cab with head guard (meeting SAE FOPS)
- Intermittent wiper interlocked with front windshield washer
- Foot rest
- Electrical horn
- Floor mat
- · Engine control dial
- · Pilot control shut-off lever
- Air conditioner

#### Lights

- Two headlights, Two cab lights
- One entrance light

#### **Monitor Systems**

#### Meters

Hour meter engine coolant temperature gauge and fuel gauge, auto idle, quick idle indicator

#### Warning indicators

Radiator water level, engine oil level, hydraulic oil level, fuel level, auto lubrication, air filter restriction, pump transmission oil pressure, alternator, exhaust temperature, overheat, engine oil pressure, engine stop, work light, preheat and engine warming

- · Hour meter select switch
- Reset switch

#### **Data Logging System**

 DLU (Data Logging Unit) - Continuously records performance of the engine and the hydraulic systems. The record can be downloaded on a laptop / computer

#### **Superstructure**

- Undercover
- 17,500 kg counterweight
- Control valves with main relief valves and port relief valves
- Slow return orifices and make up valves for cylinder circuits

#### **Undercarriage**

- Spring set / hydraulic released disc type parking brake
- Hydraulic (grease) track adjuster with shock absorbing recoil spring
- Travel motor cover
- · Track and idler guards

#### **Miscellaneous**

- Standard tool kit
- ISO compliant stairs and handrails
- Wide sidewalk
- Slip resistance tapes
- Elevated cab (for loading shovel)
- · Auto-lubrication system

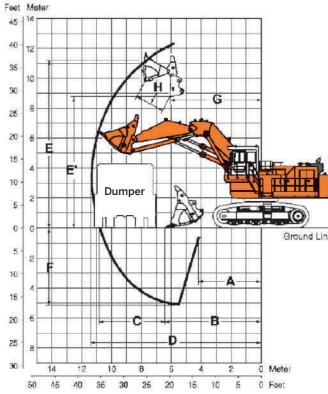
#### **Optional Equipment**

- High cab kit (for backhoe) Battery cut-off switch
- Fire suppression system
   Swing lock mechanism
- Fuel feed pump
- · Rear view camera

#### **Loading Shovel Attachments**

Boom and Arm are an all-welded, low-stress, high-tensile strength, steel, full-section design. Efficient, automatic level crowding is achieved by a one-lever control because parallel link mechanism keeps the bucket digging angle constant, and level cylinder circuit maintains the bucket height at a constant (auto-levelling crowd mechanism).

#### **Working Ranges**



- Dual support type boom / arm / bucket pin linkage
- Double lip pin seals plus O-ring with a protector ring at arm top

		Boom dump type
Α	Min. digging distance	4,460
В	Min. level crowding distance	6,520
С	Level crowding distance	4,340
D	Max. digging reach	11,440
E	Max. cutting height	12,350
E'	Max. dumping height	8,740
F	Max. digging depth	5,240
G	Working radius at max. dumping height	6,090
Н	Max. bucket opening width	1,880

<sup>\*</sup>All dimensions are in mm

Crowding force kgf	59,400
Breakout force kgf	60,100

#### **Bucket (PCSA Heaped 2:1)**

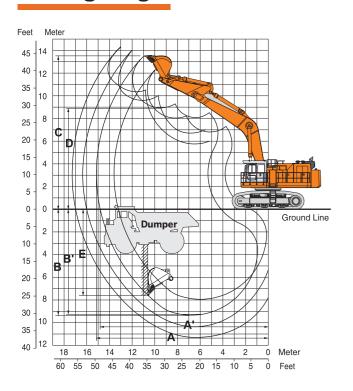
Capacity	Width	No. of Teeth	Weight	Туре
5.9 m³	2,500 mm	6	9,910 kg	-
6.5 m <sup>3</sup>	2,700 mm	6	9,960 kg	•

- Bottom dump type rock bucket
- Bottom dump type general purpose bucket

Boom and arm have an all-welded, low-stress, full-box section design. A side clearance adjust mechanism is provided on the bucket joint brackets

- Two-point support type boom cylinder pin linkage
- Double lip pin seals (in all portions) plus an O-ring with a protector ring at the arm top and link A
- Flexible pin at the arm tip
- Wear-resistant plate at the arm tip boss

#### **Working Ranges**



#### **BE (Bulk Excavation) front**

BE Front: The EX1200V BE front is designed and manufactured as a production-oriented machine. Its features include a short arm and a boom, a large capacity bucket, large-digging force and superb digging / loading capability.

	Boom length	7.55 m BE-Boom	9.1 m
	Arm length	3.4 m BE-Arm	3.4 m
А	Max. digging reach	13,760	15,340
A'	Max. digging reach (on ground)	13,380	15,000
В	Max. digging depth	7,940	9,340
B'	Max. digging depth (8' level)	7,820	9,210
С	Max. cutting height	12,300	13,490
D	Max. dumping height	8,020	8,920
E	Max. vertical wall depth	5,080	7,620

\*All dimensions are in mm

Bucket digging force kgf	56,100	46,600
	i	
Arm crowd force kgf	42,000	41,900

#### **Buckets**

Capacity	Wic	dth	No. of Teeth	Weight	Туре	Material den	sity in kg/m³
PCSA heaped (1:1)	Without shroud	With shroud				7.55 m BE - boom 3.4 m BE - arm	9.1 m boom 3.4 m arm
5.0 m <sup>3</sup>	1,860 mm	1,960 mm	5	5,460 kg	•	1,800	1,800
5.6 m <sup>3</sup>	2,020 mm	2,121 mm	5	6,540 kg		1,800	
6.0 m <sup>3</sup>	2,106 mm	2,206 mm	6	6,172 kg	•	2,100	
6.5 m <sup>3</sup>	2,210 mm	2,310 mm	6	6,769 kg	•	1,800	

■ Rock bucket • General purpose bucket

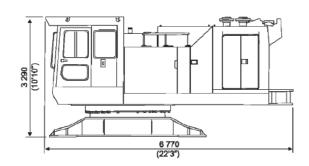
#### **Transportation**

• Easily assembled owing to the local assembling system, requiring no welding

#### Superstructure

#### **Upper structure**

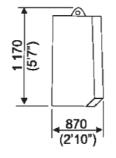
Weight: 33,900 kg Width: 3,500 mm (11'6")



• Overall width below 3,500 mm (11'6") during transportation

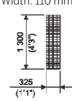
#### Counterweight

Weight: 17,500 kg Width: 3,450 mm (11'4")



#### Side step

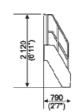
Weight: 21 kg Width: 110 mm (4")



Weight: 217 kg

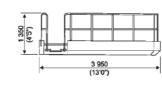
#### **Step for loading** shovel

Weight: 145 kg Width: 1,050 mm (3'5")



#### Side walk

Weight: 253 kg Width: 796 mm (2'7")

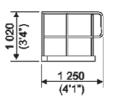


Side walk for backhoe

Width: 1,020 mm (3'4")

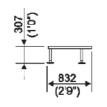
#### Handrail

Weight: 264 kg Width: 680 mm (2'3")



#### Handrail

Weight 46 kg Width: (0'2")



#### Side walk for **Loading Shovel**

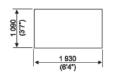
Weight: 180 kg Width: 1,050 mm ('35")



#### loading shovel Weight: 590 kg

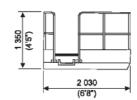
High cab kit for

Width: 1,100 mm (3'7") (optional equipment for backhoe)



#### Side walk

Weight: 181 kg Width: 835 mm (2'9")



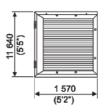
#### Side walk

Weight: 18 kg Width: 192 mm (7.6")



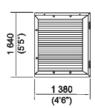
#### **Radiator cover**

Weight: 93 kg Width: 100 mm (3.9")



#### Oil cooler cover

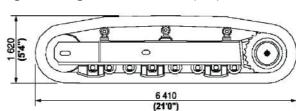
Weight: 85 kg Width: 100 mm (3.9")



#### **Undercarriage**

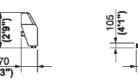
#### **Side frame**

Weight: 14,600 kg x 2 Width: 710 mm (2'4")



#### **Traction device** cover

Weight: 24 kg x 2 Width: 330 mm (1'1")



#### **Steps** Ladder

Weight: 18 kg x 2 Weight: 20 kg x 2 Width: 125 mm (2'9") Width: 300 mm (11'9")

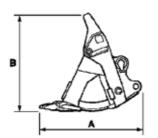






#### **Loading Shovel Attachments**

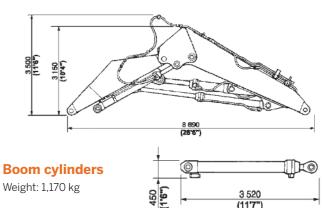
#### **Bucket**



Bucket Capacity	A (mm)	B (mm)	Max width (mm)	Weight (kg)
5.9 m <sup>3</sup>	2,770	2,480	2,690	9,780
6.5 m <sup>3</sup>	2,770	2,680	2,890	9,200

#### **Boom and arm assembly**

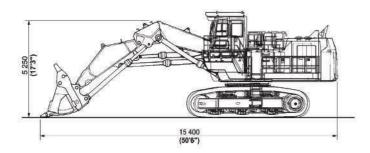
Weight: 15,200 kg Width: 1,620 mm (5'4")



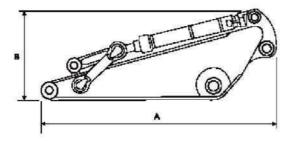
#### **Overall**

#### **Loading Shovel**

Weight: 1,11,000 kg Width: 5,470 mm (17'11")

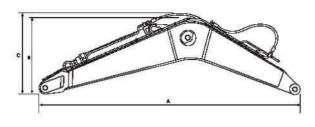


#### Arm



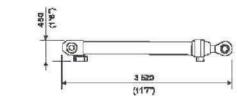
	Arm length	A (mm)	B (mm)	Width (mm)	Weight (kg)
EX1200V	3.4 m	4,830	1,850	960	5,670
EX1200V BE-Arm	3.4 m	4,880	1,850	960	6,100

#### **Backhoe Attachments**

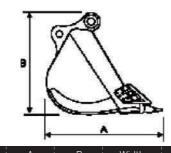


	Boom length	A (mm)	B (mm)	C (mm)	Width (mm)	Weight (kg)
EX1200V	9.1 m	9,500	2,810	3,100	1,460	9,660
EX1200V BE-Boom	7.55 m	7,960	3,150	3,400	1,460	9,080

#### **Boom Cylinders** Weight: 1,170 kg x 2



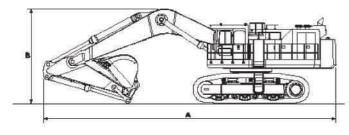
#### **Bucket**



Capacity	A (mm)	(mm)	Width (mm)	¦ Weight ¦ (kg)	Туре
PCSA heaped	1 1 1			 	
5.0 m <sup>3</sup>	2,560	2,280	1,960	5,460	•
5.6 m <sup>3</sup>	2,460	2,250	2,240	4,720	0
6.0 m <sup>3</sup>	2,710	2,240	2,280	6,170	0
6.5 m <sup>3</sup>	2,710	2,240	2,310	6,350	0

• Rock bucket • General purpose bucket

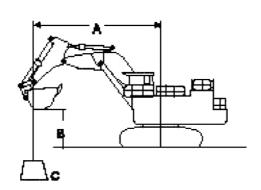
#### **Overall**



	A (mm)	B (mm)	Width (mm)
EX1200V	16,170	5,720	5,470
EX1200V BE-Boom	14,620	6,400	5,470

#### **Lifting Capacities**

A: Load radius **B: Load point height** C: Lifting capacity



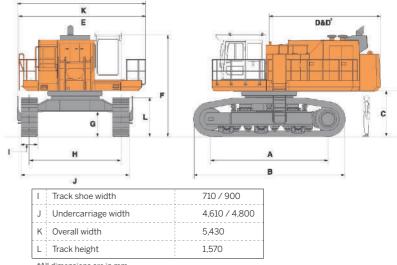
#### \*14.6 6.19 \*16.1 \*16.1 6.19 \*15.5 | \*15.5 5.48 5.48 EX1200V 13.1 6 m \*17.1 \*17.1 6.21 6.21 BE-boom \*22.4 | \*22.4 \*17.2 5.81 5.81 7.55 mm \*24.5 | \*24.5 17.2 6.56 BE-arm 6.47 6.47 16.1 3.4 mm 2 m 16.1 7.27 Bucket \*28.3 7.61 6.53 0 (Ground) 21.4 \*31.0 15.2 Shoes 21.0 \*27.7 14.8 9.60 \*31.4 \*31.4 9.60 11.2 710 mm \*33.4 | \*33.4 | 21.0 | \*30.4 21.3 15.1 \*17.1 \*32.3 | \*32.3 | 22.2 \*24.3 \*35.4 \*35.4 22.2 \* 26.8 15.1 \*19.0 \*22.0 \*22.0 \*15.5 \*15.5 \*24.4 | \*24.4 | \*17.3 | \*17.3

							Load	radius								
Conditions	Load point height	3	3 m	4	m	6	m	8	m	10	) m	12	2 m	A.	t max. rea	ach
	Height	<b>©</b> 1	8	<b>©</b>	8	<b>©</b> 1	占	© <sub>1</sub>	8	<b>©</b>	<u> </u>	© <sub>1</sub>	占		占	meter
	8 m				1						1			*8.88	*8.88	14.1
	0111				1									9.64	*9.75	14.1
	6 m									*15.2	*15.2			8.54	*8.92	14.6
EX-1200-V	0111									*16.8	*16.8			8.54	*9.77	14.0
Boom	4 m				 					*17.2	*17.2			8.01	*9.21	14.8
9.1 m	4111									17.5	*19.0			8.01	*10.1	.1
Arm	2 m									16.3	*19.1			7.97	*9.78	14.6
3.4 m	2111		<u>.</u>							16.3	*21.1			7.97	*10.7	14.0
Bucket	0 (Ground)		<u> </u>		! !		<u> </u>		<u> </u>	15.5	*20.3		<u> </u>	8.44	*10.7	14.1
5.03	o (dround)									15.5	21.5			8.44	*11.7	17.1
	-2				! !			21.9	*27.4	15.1	20.5			9.64	*12.2	13.3
Shoes	-2							21.9	*30.1	15.1	21.5			9.64	*13.3	15.5
710 mm	-4		1			*33.5	*33.5	22.1	*25.6	15.2	19.4			*11.9	*11.9	11.9
	-4					*36.8	*36.8	22.1	*28.2	15.2	21.2		<u> </u>	12.2	*13.3	11.5
	-6				 	*28.3	*28.3	*21.8	*21.8	*15.5	*15.5					
						*31.1	*31.1	*21.8	*21.8	15.9	17.3					

- 1. Ratings are based on SAEJ1097
- 2. Lifting capacity of the EX Series does not exceed the 75% of tipping load with the machine on firm, level ground or at 87% of the full hydraulic capacity
- 3. The load point is a hook (not standard equipment) load on the back of the bucket
- 4. \*Indicates load limited by hydraulic capacity

## **Dimensions**

Α	Distance between tumblers	5,000
В	Undercarriage length	6,410
С	Counterweight clearance	1,790
D	Rear-end swing radius	4,850
D'	Rear-end length	4,740
Ε	Overall width of upper structure	5,380
F	Overall height of cab - Low cab	4,320
	- High cab	5,410
G	Min. ground clearance	990
Н	Track gauge	3,900



These specifications are subject to change without prior notice. The machine depicted may vary from the actual machine. Please contact our nearest office for latest specifications. Accessories shown here are not part a part of the standard equipment. Performance of the machine may vary with site and operating conditions encountered.