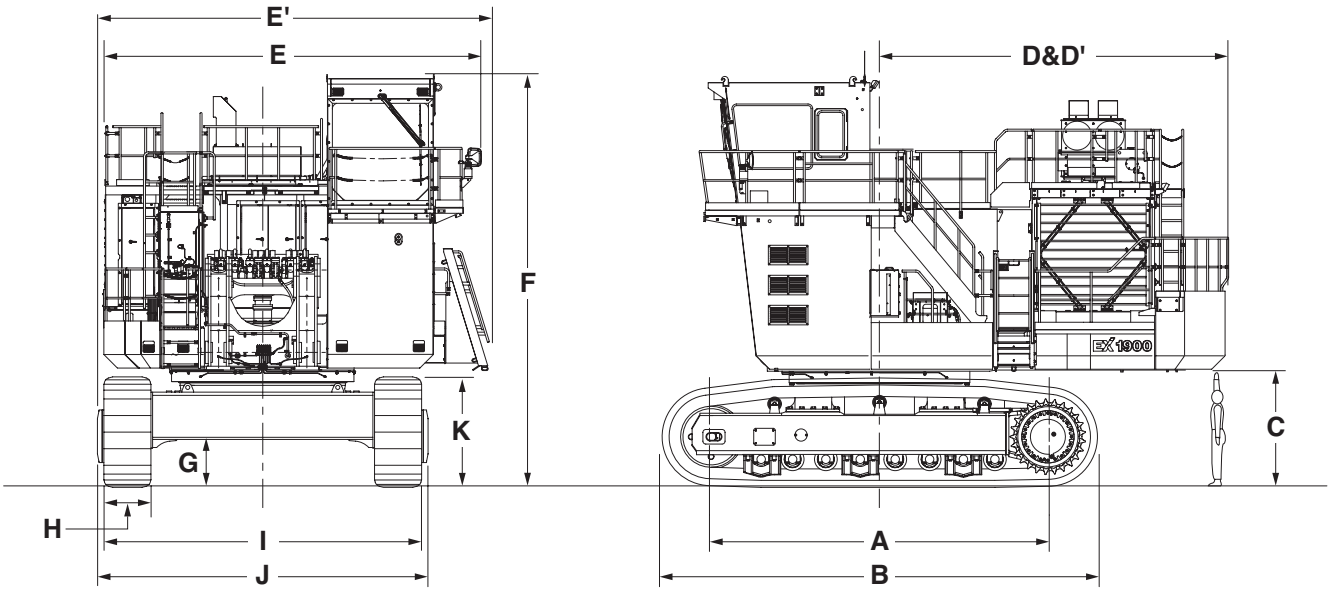
HITACHI

EX1900

Specifications



A	Distance between tumblers	5 780 mm
B	Undercarriage length	7 480 mm
C	Counterweight clearance	1 920 mm
D	Rear-end swing radius	6 035 mm
D'	Rear-end length	5 990 mm
E	Overall width of upperstructure	6 430 mm
E'	Overall width	6 660 mm
F	Overall height of cab	6 990 mm
G	Min. ground clearance	795 mm
H	Track shoe width	800 mm
I	Crawler width	5 400 mm
J	Undercarriage width	5 620 mm
K	Track height	1 880 mm

HYDRAULIC EXCAVATOR

- **Engine Gross Power :** 810 kW (1 086 HP)
- **Operating Weight :** EX1900-6
  Backhoe BE: 192 000 kg
  Loading Shovel: 191 000 kg
- **Loading Shovel Bucket :** PCSA Heaped:11.0 - 15.0 m^3
- **Backhoe Bucket :** PCSA Heaped:4.4 - 12.0 m^3
  CECE Heaped:3.8 - 10.6 m^3

SPECIFICATIONS

EX1900-6

ENGINE

Model ..... Cummins QSKTA38-CE
Type ..... Water-cooled, 4-cycle,V12-cylinder, turbo-charged and after cooled, direct injection chamber-type diesel engine
Rated power
DIN 6271,net ..... 775 kW (1 054 PS) at 1 800 min-1 (rpm)
SAE J1349,net ..... 775 kW (1 039 HP) at 1 800 min-1 (rpm)
SAE J1995, gross ..... 810 kW (1 086 HP) at 1 800 min-1 (rpm)
Maximum torque ..... 4 725 N·m (482 kgf·m) at 1 300 min-1 (rpm)
Piston displacement ..... 37.8 L
Bore and stroke ..... 159 mm X 159 mm
Starting system ..... 24 V electric motor
Batteries ..... 4 x 12 V , 4 x 220 AH
Cold starting ..... Ether aided

HYDRAULIC SYSTEM

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

- E-P Control (Computer-aided Engine-Pump Control system)
  Main pumps regulated by electric engine speed sensing control system.
- OHS (Optimum Hydraulic System)
  6 main pumps and 3 valves system enable both independent and combined operations of all functions.
- FPS (Fuel-saving Pump System)
  FPS minimizes energy loss with superior performance in fine control.
- Auto-idling system for saving fuel and reducing noise.
- Hydraulic drive cooling-fan system for oil cooler.
- Forced-lubrication and forced-cooling pump drive system.

Main pumps ..... 6 variable-displacement, piston pumps for front attachment travel and swing
Max.oil flow ..... 6 X 335 L/min
Pilot pump ..... 1 gear pump
Max.oil flow ..... 110 L/min

Relief Valve Settings

Boom/arm/bucket circuit ..... 29.4 MPa (300 kgf/cm)
Travel circuit ..... 29.4 MPa (300 kgf/cm²)
Swing circuit ..... 29.4 MPa (300 kgf/cm²)
Pilot circuit ..... 4.4 MPa (45 kgf/cm²)

Hydraulic Cylinders

High-strength piston rods and tubes adopted. Cylinder cushion mechanisms are provided for boom, arm bucket and dump (for loading shovel) cylinders.
Bucket cylinder of loading shovel is provided with protector.

Cylinder Dimensions
Loading shovel

	Quan.	Bore	Rod diameter
Boom	2	280 mm	200 mm
Arm	1	240 mm	180 mm
Bucket	2	225 mm	170 mm
Dump	2	190 mm	110 mm
Level	1	280 mm	200 mm

Backhoe

	Quan.	Bore	Rod diameter
Boom	2	280 mm	200 mm
Arm	2	250 mm	170 mm
Bucket	2	200 mm	150 mm

Hydraulic Filters

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

	Qty.	
Full flow filter	3	10 µm
High pressure strainer (In main & swing pump delivery line)	3	80 meshes
Drain filter (For all plunger type pumps & motors)	1	10 µm
Pilot filter	1	10 µm
By-pass filter	1	5 µm

These filters are centralized in arrangement for facilitating maintenance.

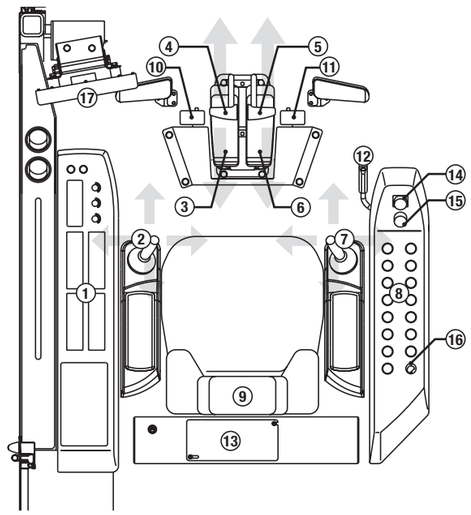
CONTROLS

2 Implement Levers

Wrist control type electric lever. Right lever is for boom and bucket control, left lever for swing and arm control. 2 pedals provided for opening/closing the bottom dump bucket.

2 Travel Levers with Pedals

Remote-controlled hydraulic servo system. Independent drive at each track allows counter rotation of tracks.



① Left Console
② Left Control Lever/Horn Switch
③ Left Travel Pedal
④ Left Travel Lever
⑤ Right Travel Lever
⑥ Right Travel Pedal
⑦ Right Control Lever/Horn Switch
⑧ Right Console
⑨ Operator's Seat
⑩ Bucket Close Pedal (For Loading Shovel)
⑪ Bucket Open Pedal (For Loading Shovel)
⑫ Pilot Control Shut-Off Lever
⑬ Rear Console
⑭ Emergency Engine Stop Switch
⑮ Engine Speed Control Dial
⑯ Key Switch
⑰ Monitor Display

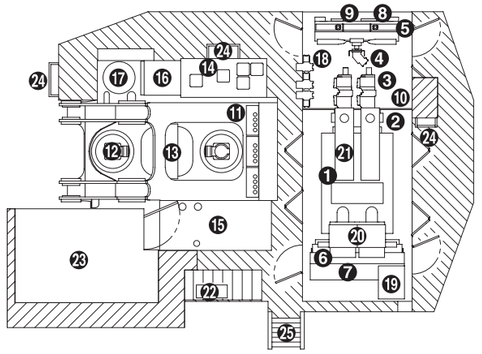
UPPERSTRUCTURE

Revolving Frame

A deep, full-reinforced box section. Heavy-gauge steel plates used for ruggedness.

Deck Machinery

Maintenance accessibility is the major feature in the lay-out of deck machinery. Sidewalks provides easy access to engines, hydraulic and electrical components. ISO-meet stairs and handrails. Sidewalks and stairs are provided with skid-resistant plates.



① Diesel Engine
② Pump Drive Unit
③ Hydraulic Pump x 6
④ Hydraulic Oil Cooling Fan Motor
⑤ Hydraulic Oil Cooler
⑥ Engine Radiator
⑦ LTA Radiator
⑧ Fuel cooler
⑨ Pump Trannsmission Oil Cooler
⑩ Engine-Pump Bulkhead
⑪ Control Valve x 3
⑫ Swing Device x 2
⑬ Center Joint
⑭ Hydraulic Tank
⑮ Fuel Tank
⑯ Battery Unit
⑰ Lubricator
⑱ High-Pressure Strainer x 3
⑲ Reserve Tank (coolant)
⑳ Air Filter x 2 (Outer/Inner)
㉑ Muffler
㉒ Fuel Filter (Water Separator)
㉓ Cab
㉔ Ladder
㉕ Retractable-Type Ladder

Swing Device

2 high-torque, axial-piston motors with two-stage planetary gear run in oil. Diametrically-opposed,well-balanced arrangement of 2 swing devices. Swing circle with dirt seals is a heavy-duty, single-row, sheer-type ball bearing. Induction-hardened internal swing circle gear and pinion immersed in lubricant. Parking brake of spring-set/hydraulic-released disc type. This parking brake is manually releasable.

Swing speed ..... 4.7 min-1 (rpm)

Operator's Cab

The sturdy cab, with the top guard conforming to OPG Level II (ISO), helps protect the operator from falling objects. Independent, pressurized, 1 800 mm wide, 2 150 mm high, roomy 7.5m³ cab with tinted-glass windows features all-round visibility. Air-suspension type, fully adjustable reclining seat with armrests; movable with or without front & swing control levers by slide. Instrument and control panel are built in cab wall is in easy range of the operator. 3 air conditioner system.

Noise level ..... 72 dB(A) in the cab; on max. engine speed under no-load
Eye level height ..... 6 030 mm

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Dual-flanged-type bolt linkage for side frame and X-form center frame assures durability. Heavy-duty track frame of all-welded, stress-relieved structure. Top-grade materials used for toughness. Lifetime-lubricated induction-hardened track rollers, idlers and sprockets with floating seals. Track shoes of durable box-type cast steel with triple grousers. Durable strut-reinforced track links with track guards. Hydraulic track adjuster provided with N_2 gas accumulator with relief valve. Track adjuster provided with protection device against abnormal tension. Travel motion alarm device.

Tractor-type Undercarriage

Triple grouser track shoes of induction-hardened cast steel.
Shoe width ..... 800 mm

Numbers of Rollers and Shoes on Each Side

Upper rollers 3
Lower rollers 8
Track shoes 49

Travel Device

Each track driven by high-torque, axial piston motors, allowing counter rotation of tracks. 2-stage planetary gear plus spur gears reduction device. Parking brake of spring-set/hydraulic-released disc type. This parking brake is manually releasable.

Travel speeds ..... High : 0 to 2.8 km/h
Low : 0 to 2.1 km/h
Maximum traction force ..... 941.5 kN (96 000 kgff)
Gradeability ..... 60 % (30 degree) max.

WEIGHTS AND GROUND PRESSURE

Loading Shovel

Equipped with 11.0 m³ (PCSA heaped) bottom dump bucket

Shoe Type	Shoe Width	Operating weight	Ground pressure
Triple grousers	800 mm	191 000 kg	183 kPa (1.87 kgf/cm²)

Backhoe

Equipped with 8.3 m boom, 3.6 m and 12.0 m³ (PCSA heaped) bucket

Shoe type	Shoe Width	Operating weight	Ground pressure
Triple grousers	800 mm	192 000 kg	184 kPa (1.88 kgf/cm²)

SERVICE REFILL CAPACITIES

	litters
Fuel tank	4 140
Engine coolant	395
Engine oil	166
Pump drive	26
Swing device (2 units)	2 x 67
Travel device (2 units)	2 x 70
Hydraulic system	2 200
Hydraulic oil tank	1 050

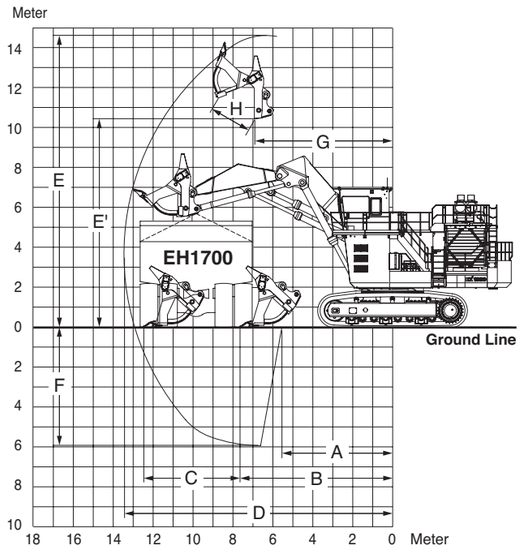
SPECIFICATIONS

LOADING SHOVEL ATTACHMENTS

Boom and arm are of all-welded, low-stress, high-tensile strength steel full-box section design. Efficient, automatic level crowding achieved by one-lever control because parallel link mechanism keeps the bucket digging angle constant, and level cylinder circuit maintains the bucket height constant (Auto-Leveling Crowd Mechanism).

- 110 kgf/mm² tensile strength steel bucket bottom plate
- Dual-support-type boom/arm/bucket pin linkage
- Pin seals (in all portions) plus O-ring at arm top

WORKING RANGES



Unit: mm

Bucket Capacity (PCSA 2:1)		11.0 m³
A	Min. digging distance	5 550
B	Min. level crowding distance	7 650
C	Level crowding distance	4 820
D	Max. digging reach	13 430
E	Max. cutting height	14 610
E'	Max. dumping height	10 440
F	Max. digging depth	5 920
G	Working radius at max. dumping height	6 890
H	Max. bucket opening width	2 100
Arm crowding force	Bucket	710 kN (72 400 kgf)
	11.0 m³	
	12.0 m³	706 kN (72 000 kgf)
	15.0 m³	719 kN (73 300 kgf)
Breakout force	Bucket	660 kN (67 300 kgf)
	11.0 m³	
	12.0 m³	606 kN (61 800 kgf)
	15.0 m³	612 kN (62 400 kgf)

Note : Data in ▭ are those of the coal bottom dump bucket.

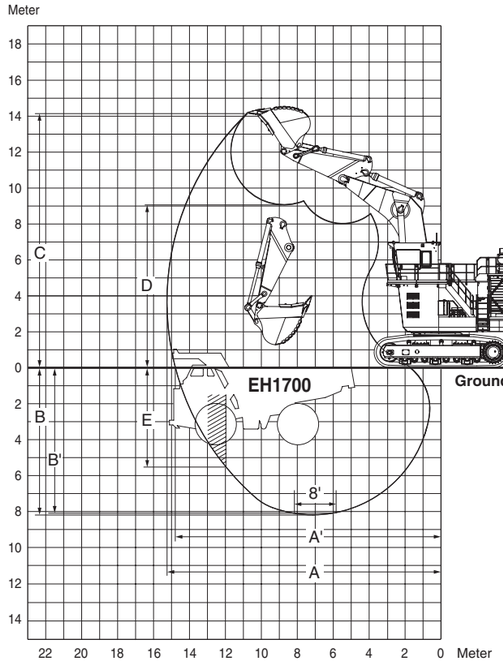
Bucket (PCSA heaped 2:1)

Capacity	Width	No.of teeth	Weight	Type
11.0 m³	3 260 mm	6	15 100 kg	Bottom dump type general purpose bucket
12.0 m³	3 260 mm	6	15 520 kg	Bottom dump type light duty bucket
15.0 m³	4 260 mm	8	16 820 kg	Bottom dump type coal handling bucket

BACKHOE ATTACHMENTS

Boom and arm are of all-welded, low-stress, full-box section design. Bucket of all-welded, high-strength steel structure. Bucket/arm joint pins are floating type.
Replaceable thrust plates are provided with bucket/arm joint part. Auto-lubrication system for all pins is standard.

WORKING RANGES



Unit: mm

Boom length		8.30 m	8.70 m		11.80 m		
Arm length		3.60 m	4.00 m	5.50 m	4.00 m	5.50 m	7.00 m
Bucket Capacity (PCSA 1:1)		12.0 m³	9.6 m³	8.0 m³	6.0 m³	4.8 m³	4.4 m³
A Max. digging reach		15 250	16 070	17 500	19 390	20 860	21 850
A' Max. digging reach (on ground)		14 770	15 630	17 090	19 020	20 520	21 530
B Max. digging depth		8 180	9 230	10 730	11 780	13 280	14 430
B' Max. digging depth (8' level)		8 070	9 120	10 640	11 670	13 190	14 350
C Max. cutting height		14 140	14 480	15 010	17 380	18 140	17 900
D Max. dumping height		9 060	9 200	9 810	11 820	12 660	13 200
E Max. vertical wall		5 520	6 630	7 430	10 050	11 010	11 260
Bucket digging force kN (kgf)	ISO	671 (68 400)	649 (66 200)	651 (66 400)	649 (66 200)	663 (67 600)	489 (49 900)
	SAE: PCSA	617 (62 900)	588 (60 000)	588 (60 000)	588 (60 000)	588 (60 000)	435 (44 300)
Arm crowd force kN (kgf)	ISO	620 (63 200)	575 (58 600)	545 (55 600)	575 (58 600)	546 (55 700)	425 (43 300)
	SAE: PCSA	609 (62 100)	559 (57 000)	534 (54 400)	559 (57 000)	534 (54 400)	416 (42 400)

Bucket

Capacity		Width	No.of teeth	Weight	Recommendation					
					8.30 m boom	8.70 m boom		11.80 m boom		
PCSA (1:1) heaped	CECE (2:1) heaped	Without side cutters			3.60 m arm	4.00 m arm	5.50 m arm	4.00 m arm	5.50 m arm	7.00 m arm
4.4 m³	3.8 m³	2 070 mm	5	4 830 kg						◎
4.8 m³	4.2 m³	1 650 mm	5	5 180 kg					◎	
6.0 m³	5.3 m³	1 950 mm	5	6 390 kg				◎		
8.0 m³	7.0 m³	2 325 mm	5	7 430 kg			◎			
9.6 m³	8.4 m³	2 710 mm	5	8 080 kg		◎				
12.0 m³	10.6 m³	3 050 mm	6	13 200 kg	◎					

◎ : General purpose for materials with density of 1 800 kg/m³ or less

EQUIPMENT

STANDARD EQUIPMENT

Standard equipment may vary by country, so please consult your Hitachi dealer for details.

ENGINE
- 140 A alternator
- Heavy-duty type air cleaner with dust ejector
- Cartridge-type engine oil filter
- Cartridge-type engine oil bypass filter
- Cartridge-type fuel filter
- Water filter
- Fan guard
- Isolation-mounted engine
- PRELUB system
- Auto-idle system
- Emergency engine stop system

HYDRAULIC SYSTEM
- E-P control system
- OHS (Optimum Hydraulic System)
- FPS (Fuel-saving Pump System)
- Hydraulic drive cooling-fan system
- Forced-lubrication and forced cooling pump drive system
- Control valve with main relief valve
- Suction filter
- Full-flow filter
- Bypass filter
- Pilot filter
- Drain filter
- High-pressure strainer

CAB
The sturdy cab, with the top guard conforming to OPG Level II (ISO), helps protect the operator from falling objects. Fulid-filled elastic mounts. Laminated glass windshield. Reinforced/ tinted (bronze color) glass side and rear windows. Parallel-link-type intermittent windshield wiper. Front windshield washer. Adjustable reclining seat with air suspension. Footrest. Air horn with electric compressor. Auto-tuning AM-FM radio with digital clock. Seat belt. Storage spaces. Floor mat. Air conditioner with defroster. Rearview mirror. Evacuation hammer. Emergency escape device. Trainer's seat. Pilot control shut-off lever.

MONITOR SYSTEMS
- Meters:
  Hourmeter. Fuel gauge. Hydraulic oil temperature gauge. Engine coolant temperature gauge. Tachometer. Engine oil pressure gauge. Engine oil temperature gauge. Battery voltage gauge. Ambient temperature.
- Pilot lamps (Green):
  Prelub. Auto-Idle. Travel Mode.
- Warning lamps (Red):
  Allternator. Engine stop. Coolant overheat. Hydraulic oil level. Auto-Lubrication. Fast-filling. Tension. Electric lever. Emergency engine stop. Top valve. Engine over run. Coolant level. Engine oil pressure. Pump transmission oil level indicator.
- Warning lamp (Yellow):
  Exhaust temperature. Fuel temperature. Engine warning. Hydraulic oil overheat. Stairway position. Electrical equipment box. Pump contamination. Air cleaner restriction.
- Alarm buzzers:
  Overheat. Engine coolant pressure. Engine coolant level. Fuel temperature. Engine oil pressure. Engine oil temperature. Air intake manifold temperature. Crank case pressure. Pump transmission oil level. Hydraulic oil level. Stop valve close. Fast-fill system panel position (option) Ladder position. Electric lever fault.

LIGHTS
- 6 working lights. 2 entrance light. 3 maintenance lights. 2 cab lights.

UPPERSTRUCTURE
- Lockable machine covers
- 25 300 kg counterweight
- Hydraulic drive grease gun with hose reel
- Retractable ladder with spring-type balancer
- Swing parking brake

UNDERCARRIAGE
- Travel parking brake
- Travel motion alarm device
- Hydraulic track adjuster with N2 gas accumulator and relief valve
- 800 mm (31") triple grouser shoes

MISCELLANEOUS
- Standard tool kit
- Stairs and handrails (Meeting ISO)
- Recirculation air filter for air conditioner
- Ventilation air filter for air conditioner
- 12 V power terminal board
- Stop valve for transport and reassembly
- Auto-lubrication system (Lincoln) for front-attachment pins, swing bearing, and center joint

OPTIONAL EQUIPMENT

Optional equipment may very by country, so please consult your Hitachi dealer for details.

- High brightness working lights.
- Back and right side color monitor camera.
- Folding stairs with wide steps.
- Wiggins couplers.
- Satellite data transmitting system.
- Travel motor guard.
- Travel device guard.

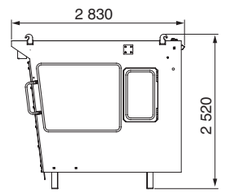
TRANSPORTATION

- Easily assembled owning to local assembling system requiring no welding.

UPPERSTRUCTURE

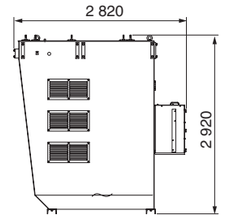
Unit: mm

Cab assembly
Weight : 1 740 kg



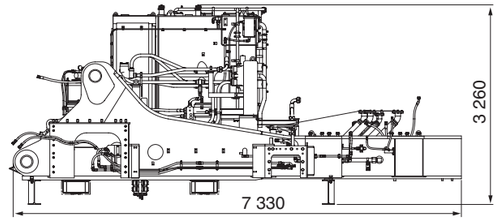
Width : 1 880

Cab bed
Weight : 2 560 kg



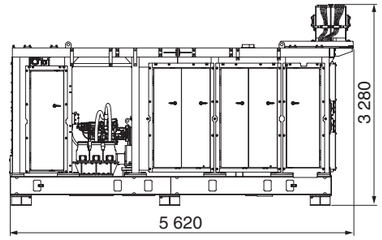
Width : 1 860

Main frame assembly
Weight: 26 900 kg



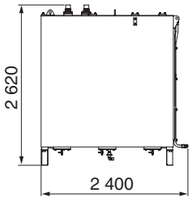
Width : 3 500

Engine unit
Weight : 14 600 kg



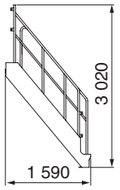
Width : 2 230

Fuel tank
Weight : 2 060 kg



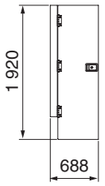
Width : 1 170

Step
Weight : 147 kg



Width : 634

Door
Weight : 38 kg

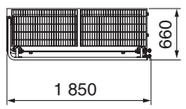


Width : 153

Door
Weight : 31 kg

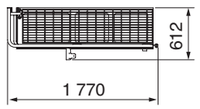
Width : 153

Sidewalk
Weight : 74 kg



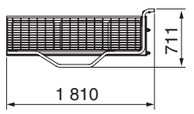
Width : 1 290

Sidewalk
Weight : 70 kg



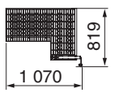
Width : 1290

Sidewalk
Weight : 77 kg



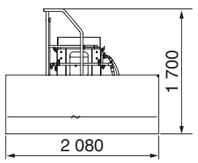
Width : 1 290

Step
Weight : 70 kg



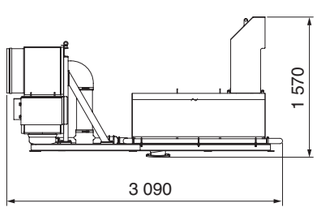
Width : 1 330

Sidewalk
Weight : 357 kg



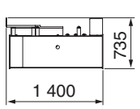
Width : 1 150

Air cleaner and muffler
Weight : 613 kg



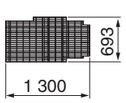
Width : 1 210

Bracket
Weight : 236 kg



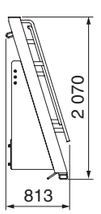
Width : 748

Step
Weight : 25 kg



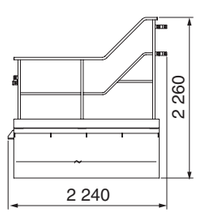
Width : 31

Ladder
Weight : 292 kg



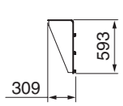
Width : 748

Sidewalk
Weight : 153 kg



Width : 695

Bracket
Weight : 15 kg

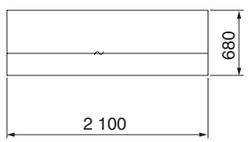


Width : 55

TRANSPORTATION

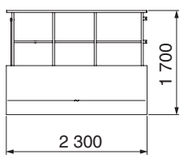
Unit: mm

Fender
Weight : 96 kg



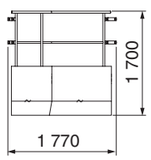
Width : 950

Sidewalk
Weight : 272 kg



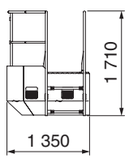
Width : 944

Sidewalk
Weight : 209 kg



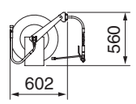
Width : 950

Sidewalk
Weight : 157 kg



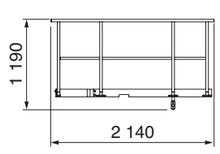
Width : 965

Hose reel
Weight : 51 kg



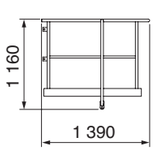
Width : 204

Handrail
Weight : 33 kg



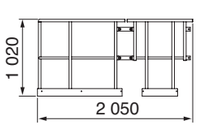
Width : 322

Handrail
Weight : 32 kg



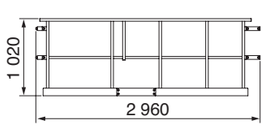
Width : 374

Handrail
Weight : 37 kg



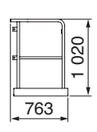
Width : 413

Handrail
Weight : 47 kg



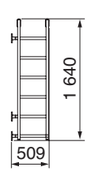
Width : 281

Handrail
Weight : 20 kg



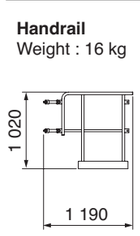
Width : 373

Handrail
Weight : 18 kg



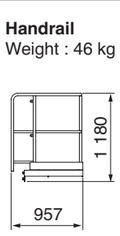
Width : 373

Handrail
Weight : 16 kg



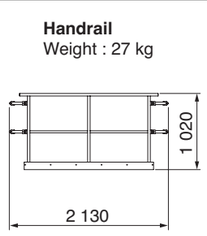
Width : 233

Handrail
Weight : 46 kg



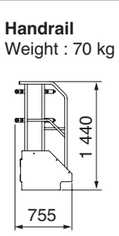
Width : 489

Handrail
Weight : 27 kg



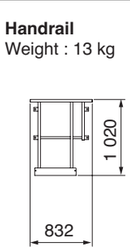
Width : 223

Handrail
Weight : 70 kg



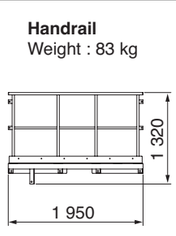
Width : 851

Handrail
Weight : 13 kg



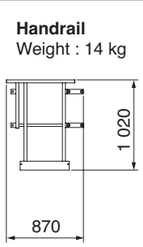
Width : 55

Handrail
Weight : 83 kg



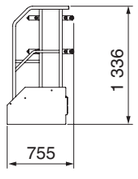
Width : 461

Handrail
Weight : 14 kg



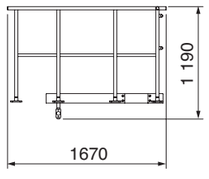
Width : 55

Handrail
Weight : 65 kg



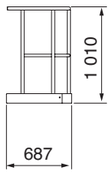
Width : 887

Handrail
Weight : 31 kg



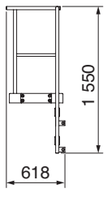
Width : 517

Handrail
Weight : 18 kg



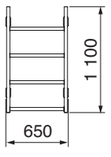
Width : 637

Handrail
Weight : 19 kg



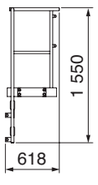
Width : 339

Handrail
Weight : 16 kg



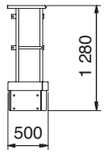
Width : 258

Handrail
Weight : 19 kg



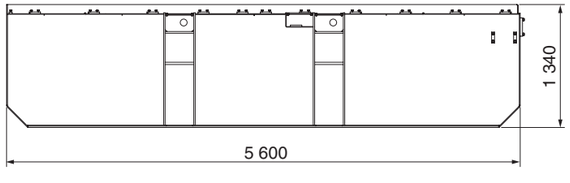
Width : 339

Handrail
Weight : 24 kg



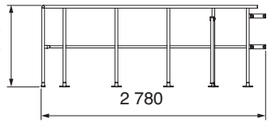
Width : 240

Counterweight
Weight : 25 300 kg



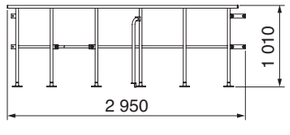
Width : 1 220

Handrail
Weight : 36.1 kg



Width : 1 260

Handrail
Weight : 35.7 kg

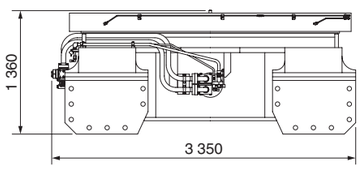


Width : 855

UNDERCARRIAGE

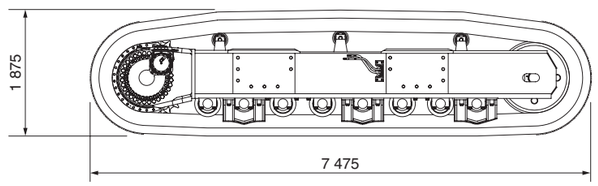
Unit: mm

Track center frame assembly
Weight : 16 800 kg



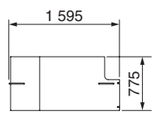
Width : 4 740

Track side frame assembly
Weight: 22 100 kg x 2



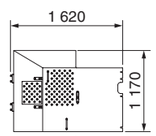
Width : 1 630

A : Center cover
Weight: 30 kg x 2



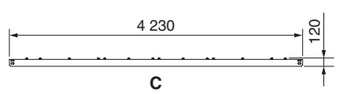
Width : 440

B : Side cover
Weight: 78 kg x 2



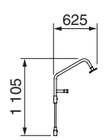
Width : 380

C : Stay
Weight: 79 kg



Width : 100

Step
Weight: 14 kg

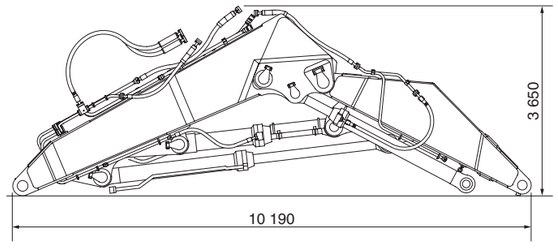


Width : 530

LOADER ATTACHMENT

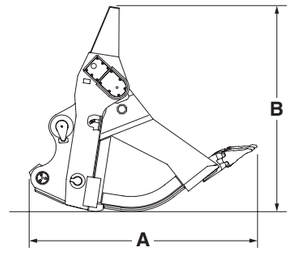
Unit: mm

Boom & Arm assembly
Weight : 25 260 kg

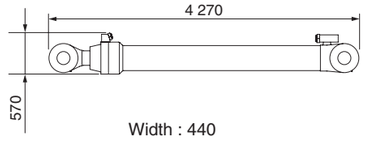


Width : 2 160

Bucket



Boom cylinder
Weight : 2 270 kg



Width : 440

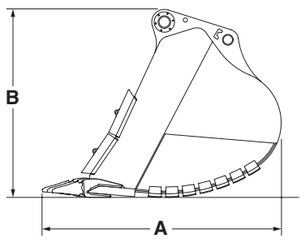
Bucket capacity	A	B	Width	Weight
11.0 m³	3 480 mm	3 130 mm	3 440 mm	15 100 kg
12.0 m³	3 730 mm	3130 mm	3 440 mm	15 520 kg
15.0 m³	3 690 mm	3 130 mm	4 140 mm	16 820 kg

TRANSPORTATION

BACKHOE ATTACHMENT

Unit: mm

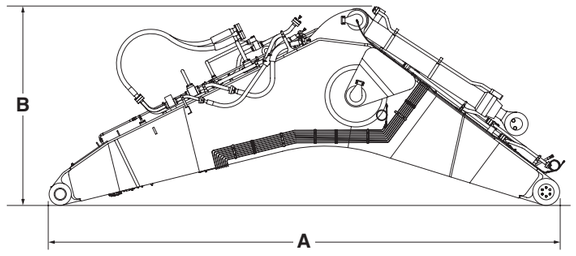
Bucket



Bucket capacity		A	B	Width	weight
PCSA heaped	CECE heaped				(with bucket pins)
4.4 m³	3.8 m³	2 630 mm	2 180 mm	2 070 mm	4 830 kg
4.8 m³	4.2 m³	2 950 mm	2 470 mm	1 650 mm	5 180 kg
6.0 m³	5.3 m³	2 950 mm	2 470 mm	1 950 mm	6 390 kg
8.0 m³	7.0 m³	3 090 mm	2 480 mm	2 325 mm	7 430 kg
9.6 m³	8.4 m³	3 090 mm	2 480 mm	2 710 mm	8 080 kg
12.0 m³	10.6 m³	3 410 mm	2 680 mm	3 050 mm	12 900 kg*

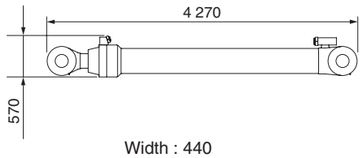
Note : * with wear plate

Boom assembly



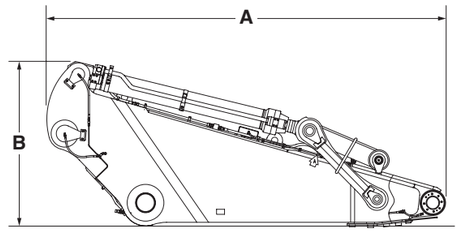
Boom length	A	B	Width	Weight
8.30 m	8 720 mm	3 400 mm	2 050 mm	18 700 kg
8.70 m	9 120 mm	3 500 mm	2 050 mm	19 100 kg
11.80 m	12 220 mm	3 700 mm	2 050 mm	22 700 kg

Boom cylinder
Weight : 2 270 kg



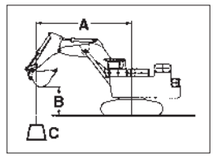
Width : 440

Arm assembly



Arm length	A	B	Width	Weight
3.60 m	5 000 mm	2 060 mm	1 720 mm	10 600 kg
4.00 m	5 280 mm	1 950 mm	1 720 mm	10 500 kg
5.50 m	6 780 mm	1 700 mm	1 720 mm	11 500 kg
7.00 m	8 370 mm	2 140 mm	1 780 mm	10 900 kg

LIFTING CAPACITIES



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

METRIC MEASURE

Rating over-side or 360 degrees Rating over-front Unit: 1 000 kg

Conditions	Load point height	Load radius 6 m		8 m		10 m		12 m		14 m		16 m		18 m		20 m		At max. reach		
																				meter
	10 m																			
	8 m							*17.2	*17.2									*7.7	*7.7	14.5
BE-boom 8.30 m	6 m					*25.5	*25.5	*22.1	*22.1									*8.1	*8.1	14.8
BE-arm 3.60 m	4 m					*29.4	*29.4	*23.7	*23.7									*8.9	*8.9	14.7
Bucket	2 m					*32.9	*32.9	22.9	*25.4									*10.2	*10.2	14.3
PCSA : 12.0 m³	0 (Ground)					31.1	*34.8	21.9	*26.3									*10.5	*10.5	13.6
CECE : 10.6 m³	-2 m			45.8	*46.8	30.4	*34.3	21.5	*25.3											
Shoes 800 mm	-4 m	*53.1	*53.1	*41.4	*41.4	*30.5	*30.5													
	-6 m			*30.3	*30.3															
	10 m							*16.1	*16.1									*9.84	*9.84	14.4
	8 m							*21.9	*21.9									*9.69	*9.69	15.1
BE-boom 8.70 m	6 m					*26.7	*26.7	*23.2	*23.2									*9.90	*9.90	15.4
BE-arm 4.00 m	4 m			*41.9	*41.9	*30.9	*30.9	*25.3	*25.3	*17.0	*17.0							*10.4	*10.4	15.5
Bucket	2 m					*34.7	*34.7	26.4	*27.4	19.6	*19.7							*11.4	*11.4	15.2
PCSA : 9.6 m³	0 (Ground)			49.7	*50.6	34.5	*37.0	25.3	*28.7									*13.0	*13.0	14.5
CECE : 8.4 m³	-2 m			49.1	*49.5	33.6	*37.1	24.7	*28.5									*14.9	*14.9	13.4
Shoes 800 mm	-4 m	*48.6	*48.6	*45.4	*45.4	33.7	*34.5	25.0	*25.3											
	-6 m	*46.7	*46.7	*36.8	*36.8	*26.8	*26.8													
	10 m																	*10.1	*10.1	15.9
	8 m									*17.6	*17.6							*10.0	*10.0	16.6
BE-boom 8.70 m	6 m							*19.6	*19.6	*18.2	*18.2							*10.2	*10.2	16.9
BE-arm 5.50 m	4 m			*34.7	*34.7	*26.6	*26.6	*22.2	*22.2	*19.5	*19.5							*10.8	*10.8	16.9
Bucket	2 m			*42.9	*42.9	*31.2	*31.2	*24.8	*24.8	20.0	*20.9							*11.7	*11.7	16.6
PCSA : 8.0 m³	0 (Ground)			*48.0	*48.0	*34.7	*34.7	25.6	*27.0	19.1	*22.1							*13.1	*13.1	16.0
CECE : 7.0 m³	-2 m	*52.3	*52.3	48.7	*49.7	33.5	*36.5	24.5	*28.1	18.5	*22.3							*15.4	*15.4	15.1
Shoes 800 mm	-4 m	*56.4	*56.4	*48.2	*48.2	32.9	*36.0	24.1	*27.5									*14.1	*14.1	13.7
	-6 m	*58.3	*58.3	*43.3	*43.3	*32.5	*32.5	*23.5	*23.5											
	-8 m	*43.6	*43.6	*32.9	*32.9	*22.8	*22.8													

Notes:
1.Ratings are based on SAE J1097.
2.Lifting capacity of the EX Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3.The load point is a hook (not standard equipment) loaded on the back of the bucket.
4.*Indicates load limited by hydraulic capacity.

EX1900

Rating over-side or 360 degrees Rating over-front Unit: 1 000 kg

Conditions	Load point height	Load radius 6 m		8 m		10 m		12 m		14 m		16 m		18 m		20 m		At max. reach		
																				meter
BE-boom 11.80 m BE-arm 4.00 m Bucket PCSA : 6.0 m³ CECE : 5.3 m³ Shoes 800 mm	12 m									*13.6	*13.6							*12.3	*12.3	17.0
	10 m									*13.6	*13.6							*12.1	*12.1	17.9
	8 m							*16.8	*16.8	*14.5	*14.5	*13.5	*13.5					11.3	*11.9	18.5
	6 m							*19.2	*19.2	*15.9	*15.9	*14.0	*14.0					10.5	*11.9	18.8
	4 m							*21.7	*21.7	*17.4	*17.4	14.4	*14.8					10.1	*12.1	18.8
	2 m							22.9	*23.7	17.7	*18.7	13.7	*15.7					10.2	*12.5	18.6
	0 (Ground)							21.9	*24.9	16.8	*19.7	13.1	*16.3					10.7	*13.2	18.1
	-2 m							21.5	*25.3	16.4	*20.1	13.0	*16.4					12.0	*13.8	17.3
	-4 m					*29.8	*31.1	21.6	*24.7	16.5	*19.7							*13.6	*13.6	16.2
	-6 m			*34.7	*34.7	*28.6	*28.6	22.2	*22.9	17.2	*17.9							*12.7	*12.7	14.6
	-8 m			*29.5	*29.5	*24.3	*24.3	*18.9	*18.9											
BE-boom 11.80 m BE-arm 5.50 m Bucket PCSA : 4.8 m³ CECE : 4.2 m³ Shoes 800 mm	14 m																	*10.0	*10.0	17.6
	12 m											*10.8	*10.8					*9.91	*9.91	18.7
	10 m											*10.4	*10.4					*9.93	*9.93	19.5
	8 m									*12.0	*12.0	*10.9	*10.9	*10.7	*10.7			*10.0	*10.0	20.0
	6 m							*16.2	*16.2	*13.4	*13.4	*11.7	*11.7	*10.9	*10.9			9.39	*10.2	20.2
	4 m							*18.8	*18.8	*15.1	*15.1	*12.8	*12.8	*11.4	*11.4			9.05	*10.5	20.3
	2 m							*21.1	*21.1	*16.7	*16.7	*13.8	*13.8	11.4	*12.0			9.08	*10.8	20.1
	0 (Ground)							*22.9	*22.9	*18.0	*18.0	14.1	*14.7	10.9	*12.5			9.49	*11.1	19.6
	-2 m							22.6	*23.9	17.4	*18.8	13.6	*15.3	10.8	*12.6			10.3	*11.3	18.9
	-4 m					30.5	*31.1	22.3	*24.1	17.1	*19.1	13.4	*15.3					*11.4	*11.4	17.9
	-6 m	*34.8	*34.8	*38.0	*38.0	*29.7	*29.7	22.6	*23.3	17.3	*18.4	13.9	*14.2					*11.1	*11.1	16.5
	-8 m	*42.4	*42.4	*33.9	*33.9	*26.9	*26.9	*21.1	*21.1	*16.2	*16.2							*10.0	*10.0	14.6
	-10 m			*27.4	*27.4	*21.8	*21.8	*16.2	*16.2											
BE-boom 11.80 m BE-arm 7.00 m Bucket PCSA : 4.4 m³ CECE : 3.8 m³ Shoes 800 mm	14 m																	*8.11	*8.11	18.8
	12 m																	*7.68	*7.68	19.8
	10 m													*9.95	*9.95			*7.44	*7.44	20.5
	8 m											*10.6	*10.6	*10.2	*10.2			*7.37	*7.37	21.0
	6 m									*13.2	*13.2	*11.7	*11.7	*10.8	*10.8	*9.62	*9.62	*7.45	*7.45	21.3
	4 m							*18.2	*18.2	*15.0	*15.0	*12.9	*12.9	*11.6	*11.6	10.5	*10.9	*7.68	*7.68	21.3
	2 m							*20.9	*20.9	*16.8	*16.8	*14.2	*14.2	*12.4	*12.4	10.1	*11.3	*8.07	*8.07	21.1
	0 (Ground)							*23.2	*23.2	*18.4	*18.4	*15.3	*15.3	12.5	*13.2	9.87	*11.2	*8.64	*8.64	20.8
	-2 m							24.5	*24.7	19.0	*19.7	15.0	*16.2	12.0	*13.7			*9.46	*9.46	20.1
	-4 m					31.9	*33.0	23.8	*25.5	18.4	*20.4	14.6	*16.7	11.8	*13.9			*10.6	*10.6	19.2
	-6 m	*27.4	*27.4	*33.0	*33.0	31.9	*32.5	23.6	*25.5	18.3	*20.4	14.6	*16.6	12.1	*13.0			*12.0	*12.0	18.0
	-8 m	*29.7	*29.7	*37.2	*37.2	*30.8	*30.8	24.0	*24.3	18.6	*19.4	15.1	*15.1					*11.9	*11.9	16.4
	-10 m	*34.6	*34.6	*34.8	*34.8	*27.4	*27.4	*21.5	*21.5	*16.4	*16.4									
	-12 m			*26.8	*26.8	*20.9	*20.9	*15.1	*15.1											

These specifications are subject to change without notice.
Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in color and features.
Before use, read and understand the Operator's Manual for proper operation.

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KS-EN052Q 07.11 (KA/KA,MT3)

Printed in Japan