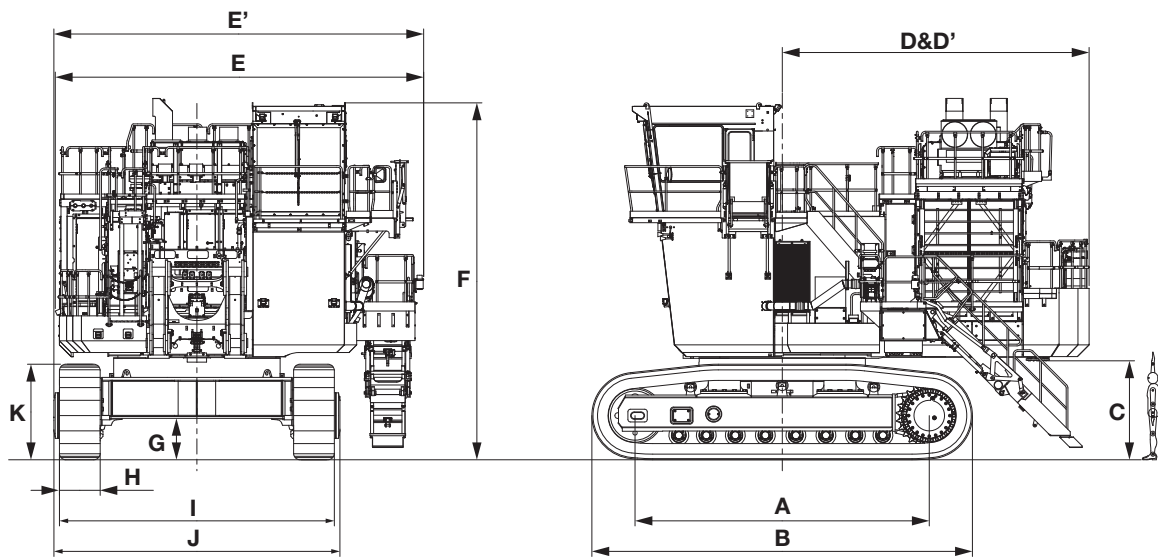


EX2000

SPECIFICATIONS



Illustrations show (T4F and EU Stage V) diesel engine type.

A	Distance between tumbler	5 780 mm
B	Undercarriage length	7 480 mm
C	Counterweight clearance	1 920 mm
D	Rear-end swing radius	6 115 mm
D'	Rear-end length	6 030 mm
E	Overall width of upperstructure	7 240 mm
E'	Overall width	7 265 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	1 860 mm

HYDRAULIC EXCAVATOR

EX2000-7B with Diesel Engine (Tier 4 Final and EU Stage V)	Engine Gross Power :	746 kW (1 000 HP)
	Operating Weight :	Loading Shovel : 194 000 kg
		Backhoe : 195 000 kg
EX2000-7 with Diesel Engine (FCO)	Engine Gross Power :	746 kW (1 000 HP)
	Operating Weight :	Loading Shovel : 192 000 kg
		Backhoe : 193 000 kg
EX2000-7E with Electric Motor	Power Output :	610 kW
Bucket Capacity	Loading Shovel Bucket : (ISO 7546 Heaped 2 : 1)	12.0 m³
	Backhoe Bucket : (ISO 7451: 2007 Heaped 1 : 1)	12.0 m³

SPECIFICATIONS

EX2000-7

ENGINE

Model	Cummins QST30-C
Emission certification	U.S. EPA Tier 4 Final and EU Stage V
Type	Water-cooled, 4-cycle, 12-cylinder turbo-charged and after-cooled, direct injection chamber-type diesel engine, urea SCR system
Rated power @1 800 min ⁻¹ (rpm)	
ISO 14396, gross.....	746 kW (1 000 HP)
Maximum torque	4 629 N·m at 1 300 min ⁻¹ (rpm)
Piston displacement	30.5 L
Bore and stroke	140 mm x 165 mm
Starting system	24 V electric motor
Batteries	4 x 12 V, 4 x 220 AH

Model	Cummins QST30-C
Emission certification	Fuel consumption optimized
Type	Water-cooled, 4-cycle, 12-cylinder turbo-charged and after-cooled, direct injection chamber-type diesel engine
Rated power @1 800 min ⁻¹ (rpm)	
ISO 14396, gross.....	746 kW (1 000 HP)
Maximum torque	4 629 N·m at 1300 min ⁻¹ (rpm)
Piston displacement	30.5 L
Bore and stroke	140 mm x 165 mm
Starting system	24 V electric motor
Batteries	4 x 12 V , 4 x 220 AH

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.
- Control valve with Individual pilot pressure control
- 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.
- Hydraulic drive cooling-fan system for radiator.
- Forced-lubrication and forced-cooling pump drive system.
- Regeneration circuit for boom down.

Main pumps	6 variable-displacement, axial piston pumps for front attachment, travel and swing
Max. oil flow	6 X 335 L/min
Pilot pump	2 gear pump
Max. oil flow	2 X 80.8 L/min

Relief Valve Settings

Implement circuit	29.4 MPa (300 kgf/cm²)
Swing circuit	29.4 MPa (300 kgf/cm²)
Travel circuit	29.4 MPa (300 kgf/cm²)
Pilot circuit	5.5 MPa (56 kgf/cm²)

Hydraulic Cylinders

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

Cylinder Dimensions Loading shovel

	Quantity	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

	Quantity	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.

	Quantity	
Full flow filter	3	10 µm
High pressure strainer (In main & swing pump delivery line)	3	120 µm
Drain filter (For all plunger type pumps & motors)	1	10 µm
By-pass filter (In oil cooler by-pass line)	1	5 µm
Pilot filter	2	10 µm

These filters are centralized in arrangement for facilitating maintenance.

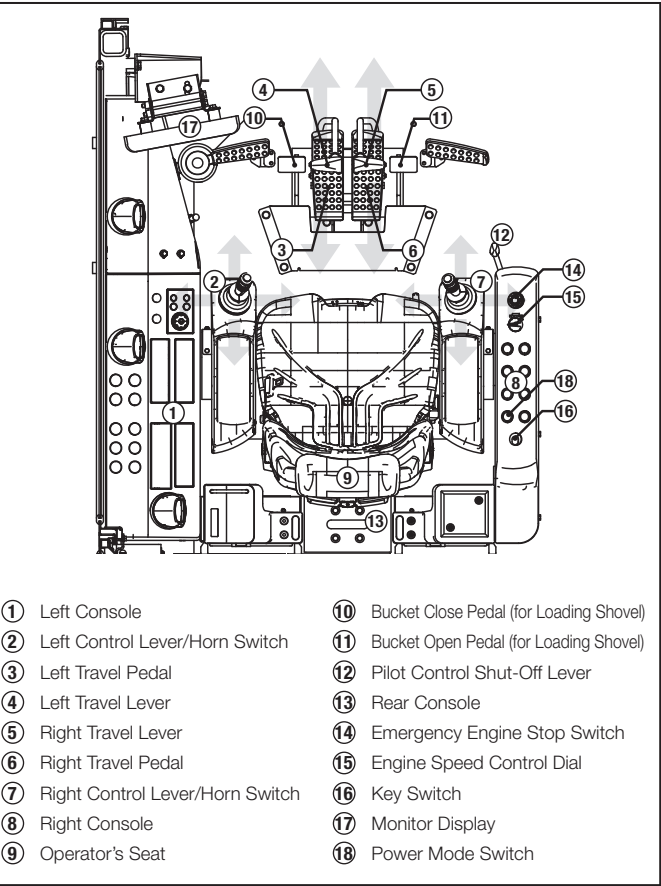
CONTROLS

2 Implement Levers

Electric joystick control levers. Right lever is for boom and bucket control, left lever for swing and arm control. For loading shovel, 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.



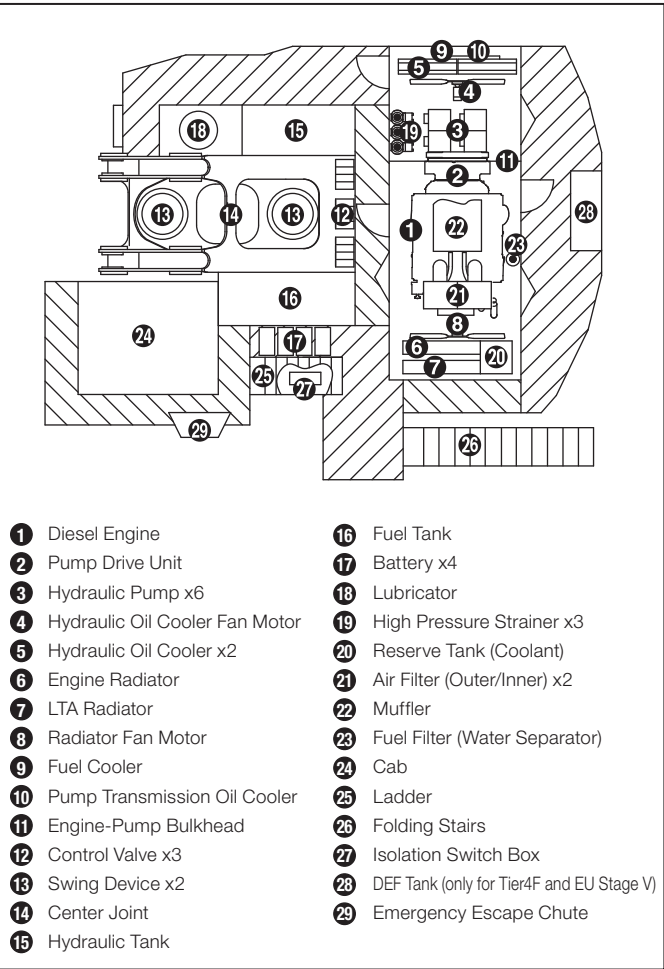
UPPERSTRUCTURE

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 layout of deck machinery. Sidewalks provide easy access to engine, hydraulic and electrical components. ISO-met stairs and handrails. Sidewalks and stairs are provided with skid-resistant plates.



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, sheartype ball bearing. Induction-hardened internal swing circle gear and pinion immersed in lubricant. Parking brake of spring-set/hydraulicreleased disc type. This parking brake is manually releasable.

Swing speed	4.7 min ⁻¹ (rpm)
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Operator's Cab

The sturdy cab, with OPG top guard level II (ISO), helps protect the operator from falling objects. Independent, pressurized, 1 800 mm wide, 2 150 mm high, roomy 7.5 m³ 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. Instruments and control panel are within easy reach of the operator. 3 air conditioner system.

Noise level	72 dB(A) in the cab; on max. engine speed under no-load condition (Tier 4 Final and EU Stage V Model)
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Eye level height	6 030 mm
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SPECIFICATIONS

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 N2 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 (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

WEIGHTS AND GROUND PRESSURE

Loading Shovel

Equipped with 12.0 m³ (ISO heaped) bottom dump bucket

Shoe type	Shoe width		Operating weight	Ground pressure
Triple grousers	800 mm	FCO	192 000 kg	185 kPa (1.88 kgf/cm²)
		T4F and EU Stage V	194 000 kg	187 kPa (1.90 kgf/cm²)

Ground pressures are based on ISO 16754

Backhoe

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

Shoe type	Shoe width		Operating weight	Ground pressure
Triple grousers	800 mm	FCO	193 000 kg	186 kPa (1.89 kgf/cm²)
		T4F and EU Stage V	195 000 kg	188 kPa (1.91 kgf/cm²)

Ground pressures are based on ISO 16754

SERVICE REFILL CAPACITIES

EX2000-7

	liters
Fuel tank	3 690
Engine coolant (T4F and EU Stage V / FCO)	375 / 375
Engine oil pan	132
Pump drive	26
Swing drive device	2 x 67
Travel drive device	2 x 70
Hydraulic system	2 200
Hydraulic oil tank	1 050
Grease tank	200 (Opt 415)
DEF tank (only Tier 4 final and EU Stage V specification)	241

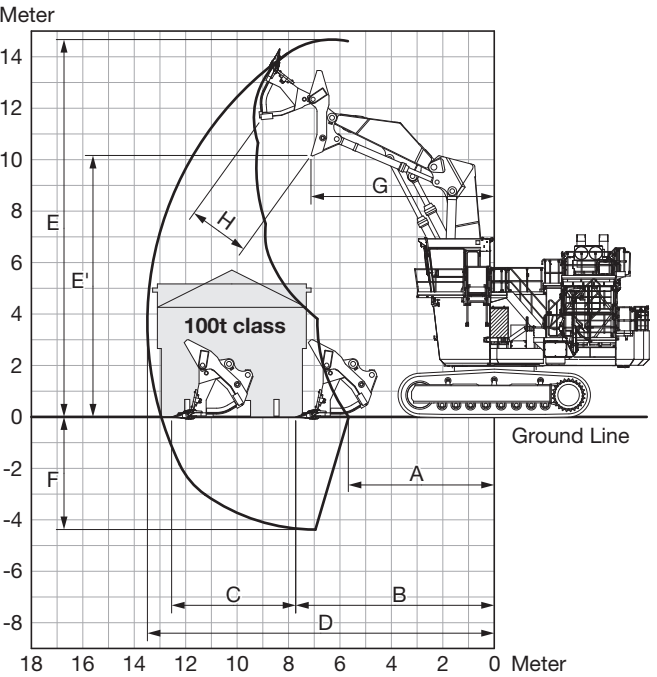
LOADING SHOVEL ATTACHMENTS

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

Bucket

Capacity ISO 7456 (Heaped 2:1)	Cutting width	No.of teeth	Weight	Type	Materials density
12.0 m³	3 450 mm	6	16 800 kg	Bottom dump type general purpose bucket	1 800 kg/m³ or less

WORKING RANGES



	Unit: mm
Bucket capacity ISO 7456 (Heaped 2:1)	12.0 m³
A Min. digging distance	5 660
B Min. level crowding distance	7 720
C Level crowding distance	4 830
D Max. digging reach	13 490
E Max. cutting height	14 670
E' Max. dumping height	10 160
F Max. digging depth	4 380
G Working radius at max. dumping height	7 130
H Max. bucket opening width	2 380
Arm crowding force on ground	700 kN (71 320 kgf)
Bucket digging force	737 kN (75 120 kgf)

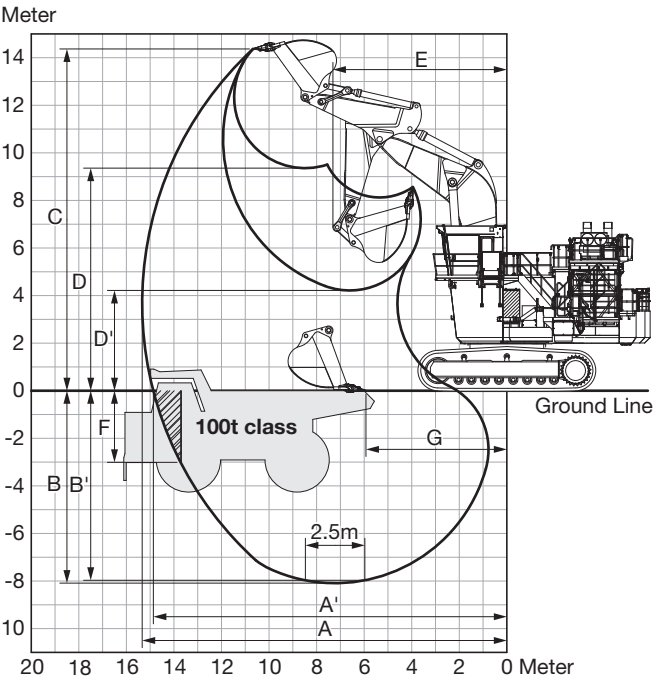
BACKHOE ATTACHMENTS

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. Autolubrication system for all pins is standard.

Bucket

Capacity ISO 7451: 2007 (Heaped 1:1)	Cutting width	No.of teeth	Weight	Type	Materials density
12.0 m³	3 130 mm	6	13 900 kg	General purpose bucket	1 800 kg/m³ or less

WORKING RANGES



	Unit: mm
BE-boom length	8.3 m
BE-arm length	3.6 m
Bucket capacity ISO 7451: 2007 (Heaped 1:1)	12.0 m³
A Max. digging reach	15 340
A' Max. digging reach (on ground)	14 870
B Max. digging depth	8 090
B' Max. digging depth (2.5 m level)	7 970
C Max. cutting height	14 370
D Max. dumping height	9 360
D' Min. dumping height	4 220
E Min. swing radius	7 310
F Max. vertical wall	3 010
G Min. level crowding distance	5 910
Bucket digging force (ISO 6015: 2006)*	701 kN (71 500 kgf)
Arm crowd force (ISO 6015: 2006)*	628 kN (64 700 kgf)

*This is the calculated value at the loading point (Cutting Edge) conforming to ISO.

EX2000-7

STANDARD EQUIPMENT

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

ENGINE

- Auto-idle system
- Cartridge-type engine oil filter
- Cartridge-type fuel filter
- Emergency engine stop system
- Fan guard
- Heavy-duty type air cleaner with dust ejector
- Hydraulic drive cooling-fan system
- Isolation-mounted engine
- Power mode switch control (ECO/PWR/HP)
- Pre-lubrication system
- Radiator reserve tank
- Water filter
- 140 A alternator

HYDRAULIC SYSTEM

- Bypass filter
- Control valve with Individual pilot pressure control
- Control valve with main relief valve
- Drain filter
- E-P control system
- Forced-lubrication and forced-cooling pump drive system
- FPS (Fuel-saving Pump System)
- Full-flow filter
- High-pressure strainer
- Hydraulic drive cooling-fan system
- OHS (Optimum Hydraulic System)
- Pilot filter
- Regeneration circuit for boom down function
- Suction filter

CAB

- Adjustable reclining seat with air suspension
- Air conditioner* with defroster
- Air horn with electric compressor
- Auto-tuning AM-FM radio with digital clock
- Evacuation hammer
- Floor mat
- Fluid-filled elastic mounts
- Footrest
- Front windshield washer
- Hot & cool-box
- Laminated glass windshield (Front)
- OPG top guard level II (ISO 10262: 1998)
- Parallel-link-type intermittent windshield wiper
- Pilot control shut-off lever
- Rearview mirror
- Reinforced/tinted (Green color) glass side and rear windows
- Roll screens
- Seat belt
- Storage spaces
- Trainer's seat

MONITOR SYSTEMS

- Meters:
 - Ambient temperature
 - Clock
 - DEF gauge (only for Tier4F and EU Stage V)
 - Engine coolant temperature gauge
 - Engine oil pressure gauge
 - Engine oil temperature gauge
 - Fuel gauge
 - Hour meter
 - Hydraulic oil temperature gauge
 - Inclinometer
 - Tachometer

DATA LOGGING SYSTEM

- DLU (Data-Logging Unit) continuously records performance of the engine and the hydraulic system. The record can be downloaded by PC.
And for Fleet management system (Provided by Wenco etc.) connection**
- WIU (Wireless Interface Unit)**

LIGHTS

- 2 entrance halogen light
- 4 maintenance halogen light
- 8 working LED light

UPPERSTRUCTURE

- Cab riser pressurizer
- Dual isolator switch
- Electronic cylinder stroke control system
- Emergency escape device
- Folding stairs with wide steps
- Folding stairs (slope 45°)
- Hydraulic drive grease gun with hose reel
- Lockable machine covers
- Swing parking brake
- 26 300 kg counterweight (Inc. bolt etc.)

UNDERCARRIAGE

- Grease-less center joint
- Hydraulic track adjuster with N2 gas accumulator with relief valve
- Travel motion alarm device
- Travel parking brake
- Swing circle excess grease scraper
- 800 mm triple grouser shoes

MISCELLANEOUS

- Auto-lubrication system (Lincoln Flow Master) for front-attachment pins, swing bearing.
- Recirculation air filter for air conditioner
- Stairs and handrails (Meeting ISO)
- Stop valve for transport and reassembly
- Ventilation air filter for air conditioner
- 12 V power terminal board

FAST-FILLING SYSTEM

- Fast-filling system for fuel, hydraulic oil coolant, swing device oil, pump transmission oil, engine oil, and grease (Couplers not included).
DEF (only for Tier4F and EU Stage V)

OPTIONAL EQUIPMENT

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

- Additional Fuel Filter (PARKER FBO-14)
- Aerial Angle
- Auto-lubrication system (Lincoln Power Master & Refill type remaining grease tank) for front-attachment pins, swing bearing
- Cold weather package
- Communication system (Alternative)** GPRS communication system Satellite data transmitting system
- Fast-filling couplers (Wiggins)
- Full track guard
- Standard tool kit
- Travel motor guard
- Travel transmission guard
- Truck under cover
- 4 color monitor cameras ; 2 front and 2 rear
- Grease gauge

* Contains fluorinated greenhouse gases, Refrigerant type: HFC-134a, GWP: 1430, Amount: 2.80 kg, CO2e: 4.00 ton.

** The availability of the system depends on licensing regulations in each country.
Please contact Hitachi dealer for more information.

TRANSPORTATION

Illustrations show (Tier 4 Final and EU Stage V) diesel engine type.

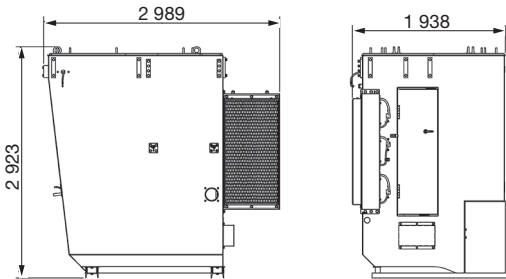
- Easily assembled owing to local assembling system requiring no welding.

UPPERSTRUCTURE

Unit: mm

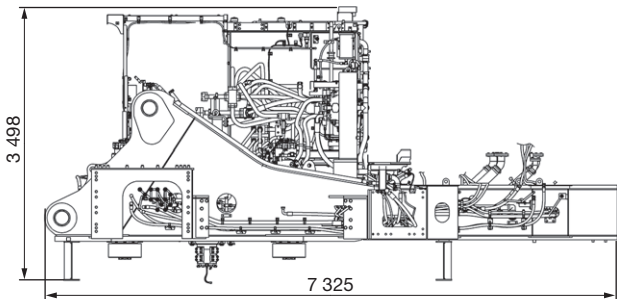
Cab bed assembly

Weight : 2 860 kg



Base machine

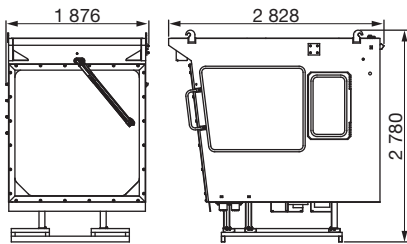
Weight : 25 400 kg



Width : 3 586

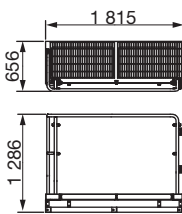
Cab assembly

Weight : 1 940 kg



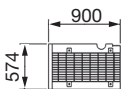
Step assembly

Weight : 73.6 kg



Step

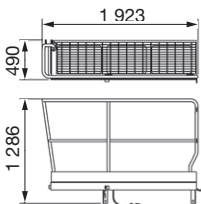
Weight : 15.1 kg



Width : 125

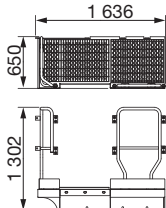
Step assembly

Weight : 77.6 kg



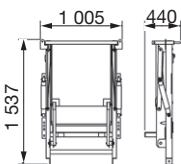
Step assembly

Weight : 116 kg



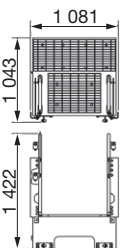
Escape device assembly

Weight : 192 kg



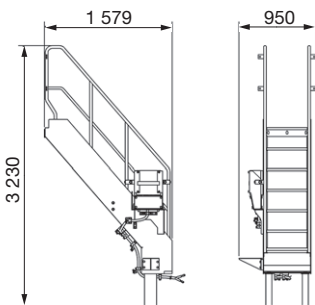
Step assembly

Weight : 208 kg



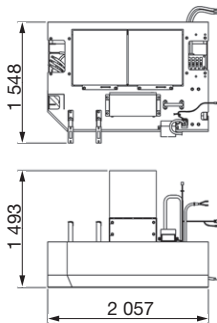
Step assembly

Weight : 235 kg



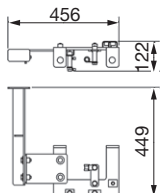
Fender assembly

Weight : 815 kg



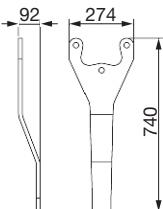
Bracket assembly

Weight : 6.78 kg



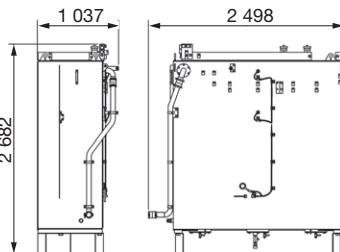
Stopper

Weight : 10.3 kg



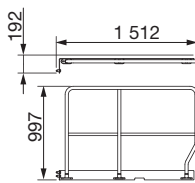
Fuel tank assembly

Weight : 1 720 kg



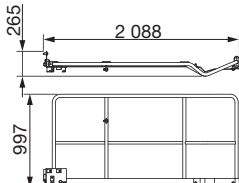
Handrail assembly

Weight : 20.4 kg



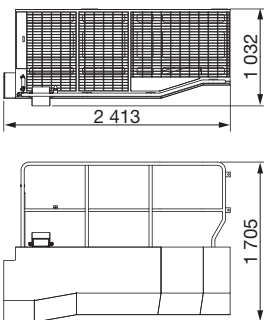
Handrail assembly

Weight : 31.5 kg



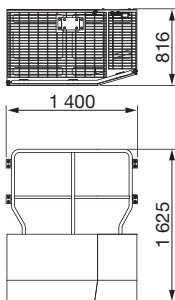
Fender assembly

Weight : 268 kg



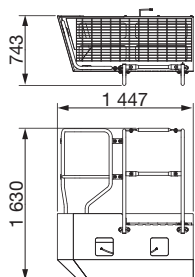
Fender assembly

Weight : 171 kg



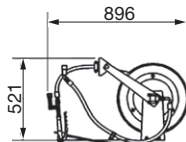
Fender assembly

Weight : 153 kg



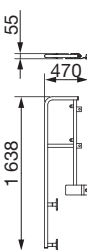
Hose reel assembly

Weight : 53.6 kg



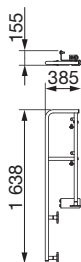
Handrail assembly

Weight : 11.6 kg



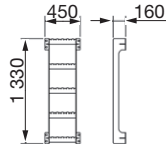
Handrail assembly

Weight : 13.2 kg



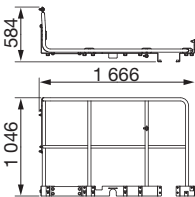
Ladder

Weight : 16.6 kg



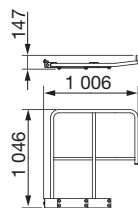
Handrail assembly

Weight : 32.2 kg



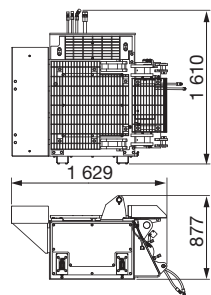
Handrail assembly

Weight : 15.0 kg



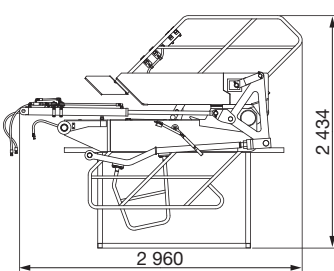
Box

Weight : 807 kg



Step assembly

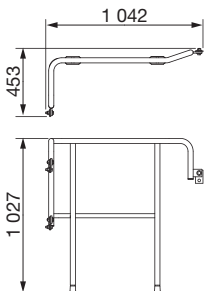
Weight : 791 kg



Width : 1 100

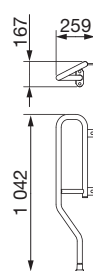
Handrail

Weight : 13.9 kg



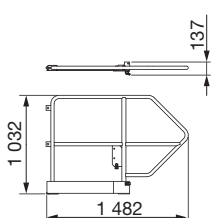
Handrail

Weight : 5.47 kg



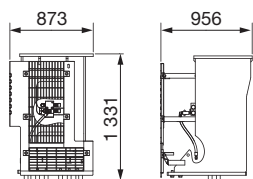
Handrail

Weight : 24.8 kg

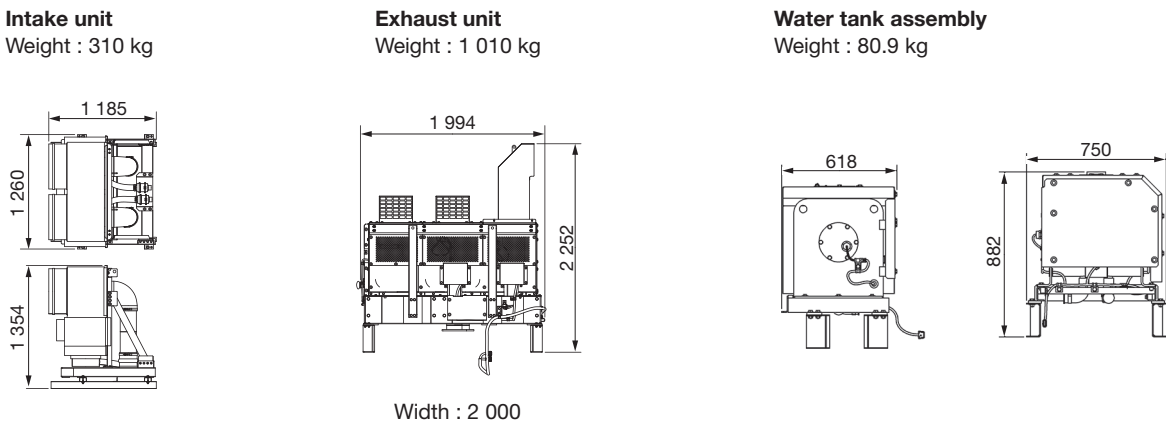
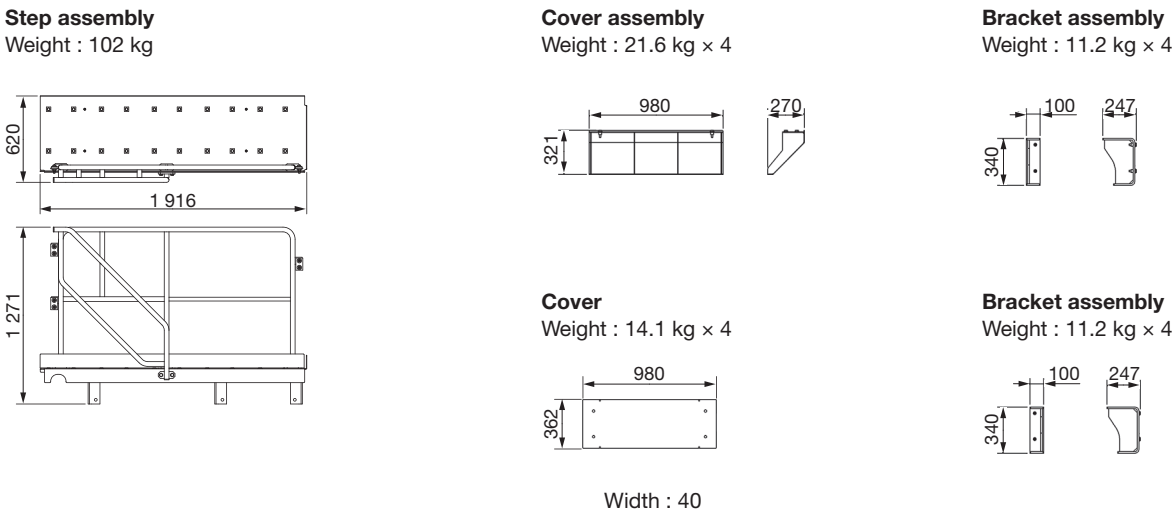
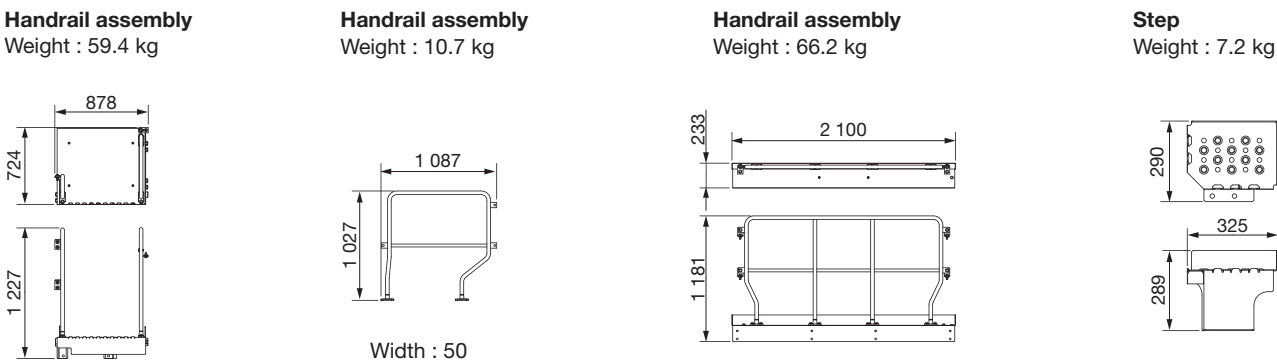
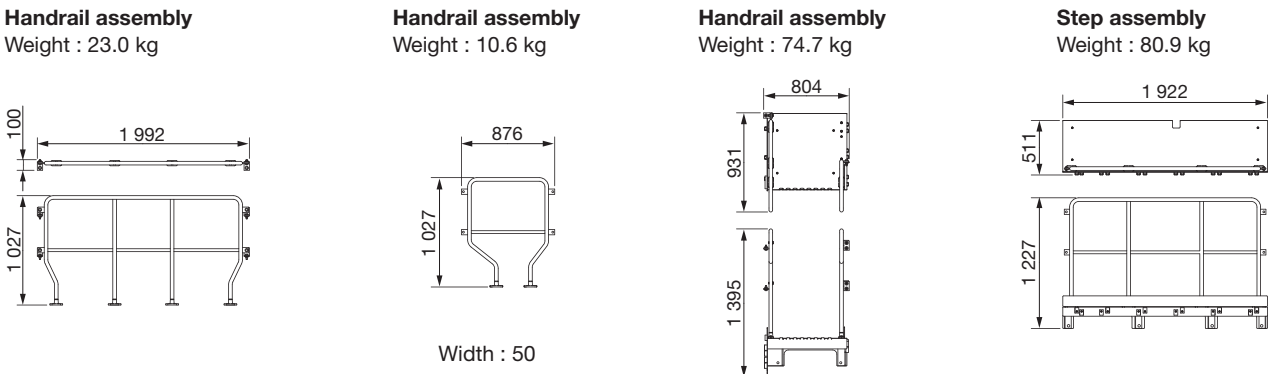
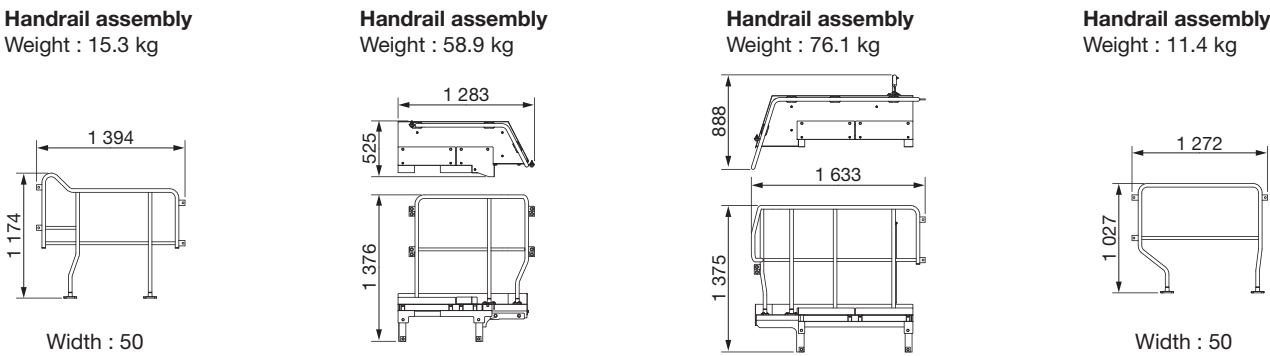
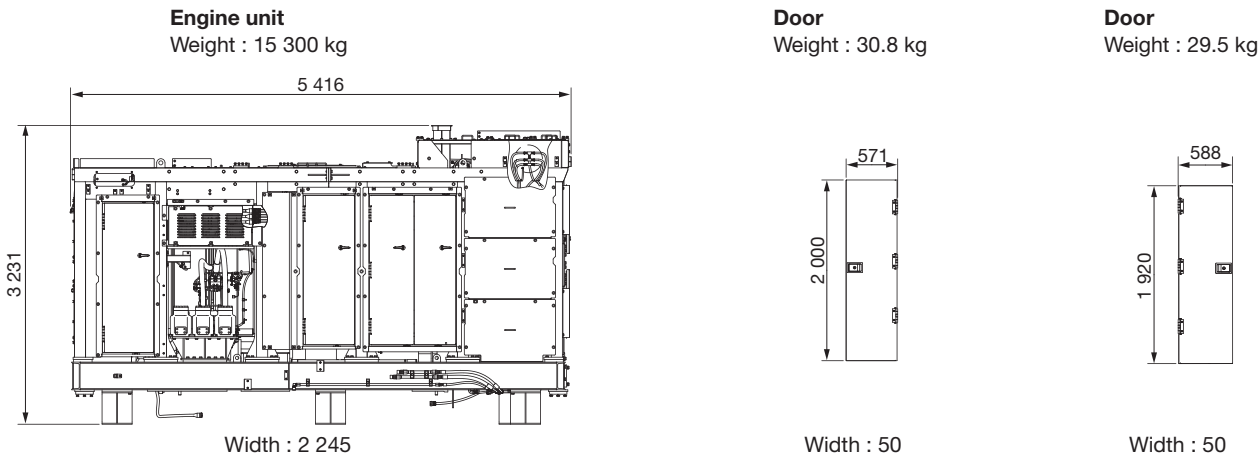


Beam

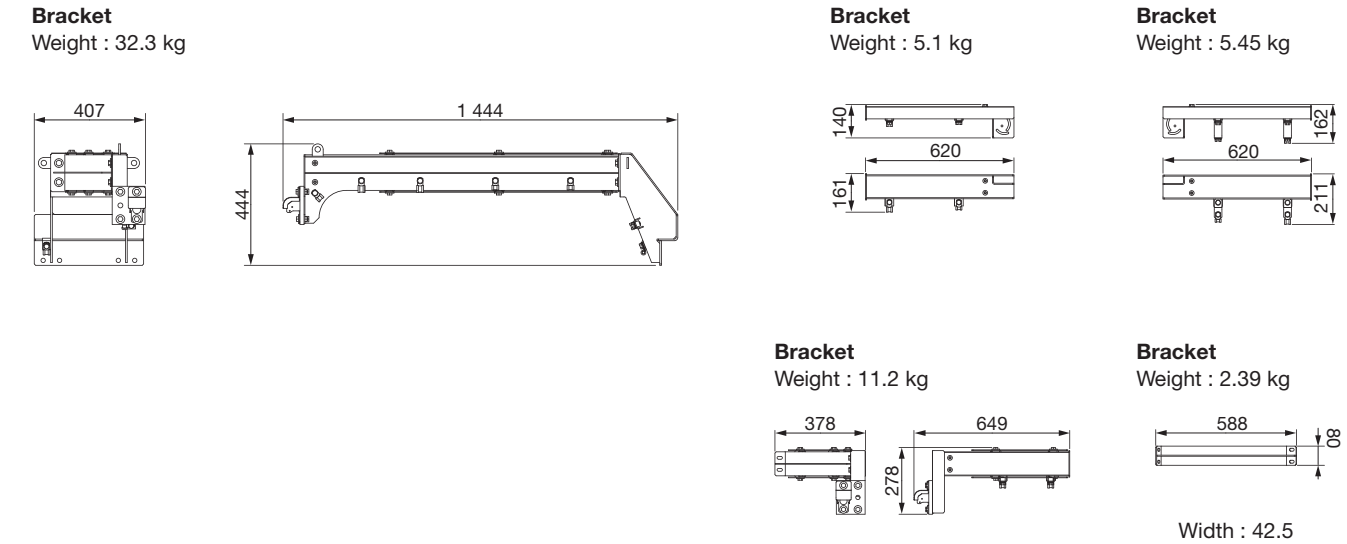
Weight : 658 kg



Unit: mm

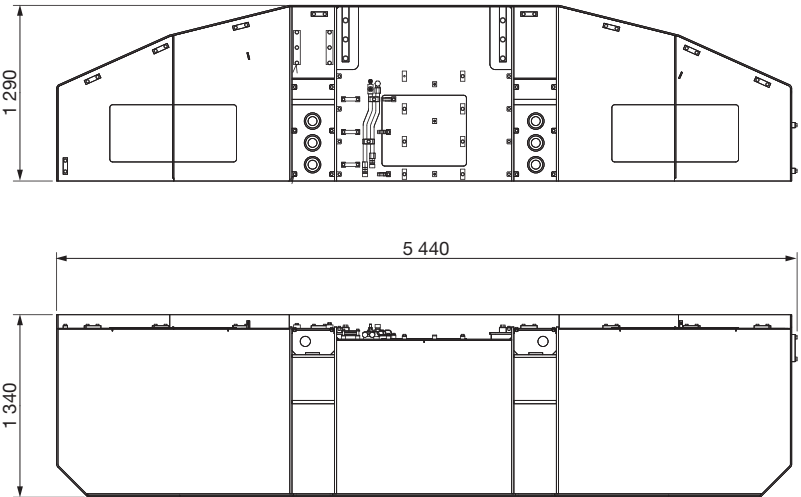


☐ **Rear monitor/Aerial angle (Option)**

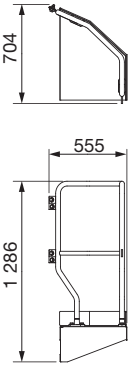


Unit: mm

Counterweight
Weight : 26 313 kg



Step assembly
Weight : 34.2 kg



Handrail assembly
Weight : 29.1 kg

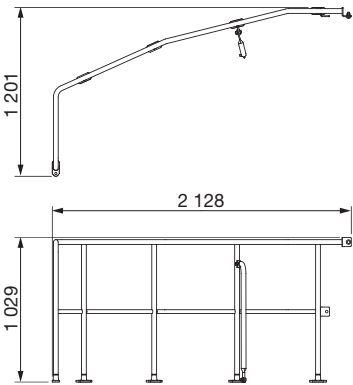
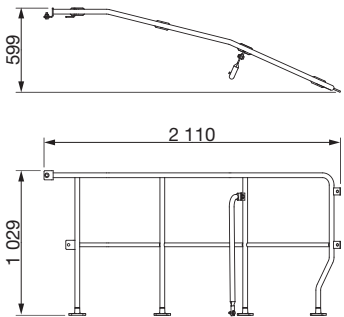


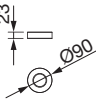
Plate
Weight : 3.22 kg



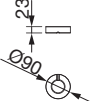
Handrail assembly
Weight : 24.1 kg



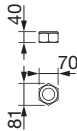
Washer
Weight : 0.85 kg × 6



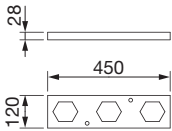
Washer
Weight : 0.85 kg × 6



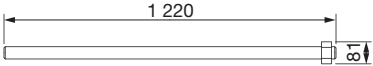
U nut
Weight : 0.75 kg × 6



Stopper
Weight : 8.44 kg × 2

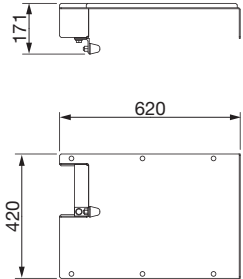


Bolt
Weight : 16.0 kg × 6

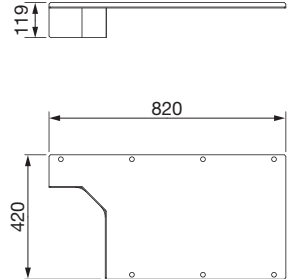


Unit: mm

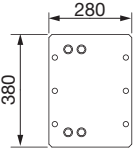
Cover assembly
Weight : 9.24 kg



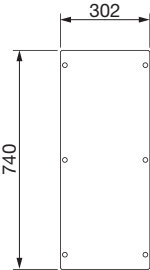
Cover assembly
Weight : 9.16 kg



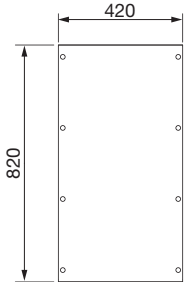
Bracket
Weight : 6.43 kg



Cover
Weight : 5.58 kg × 2



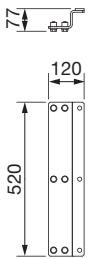
Cover
Weight : 9.77 kg



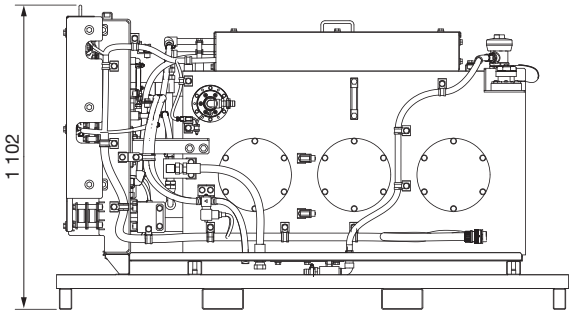
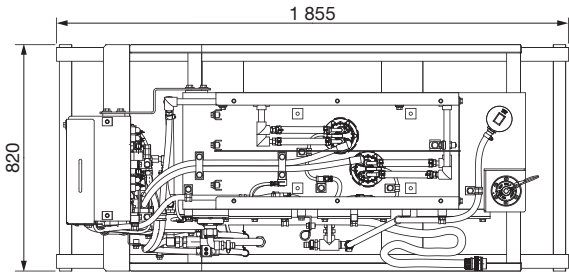
Bracket assembly
Weight : 6.33 kg



Bracket assembly
Weight : 4.34 kg

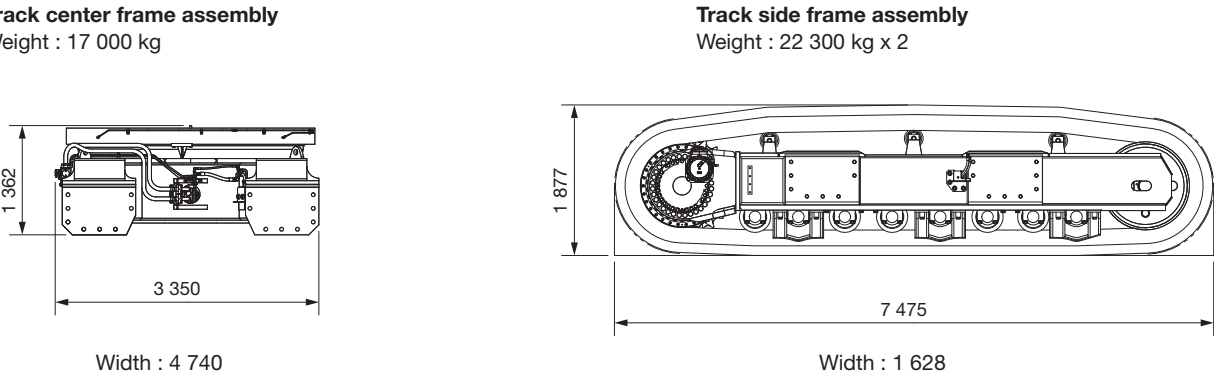
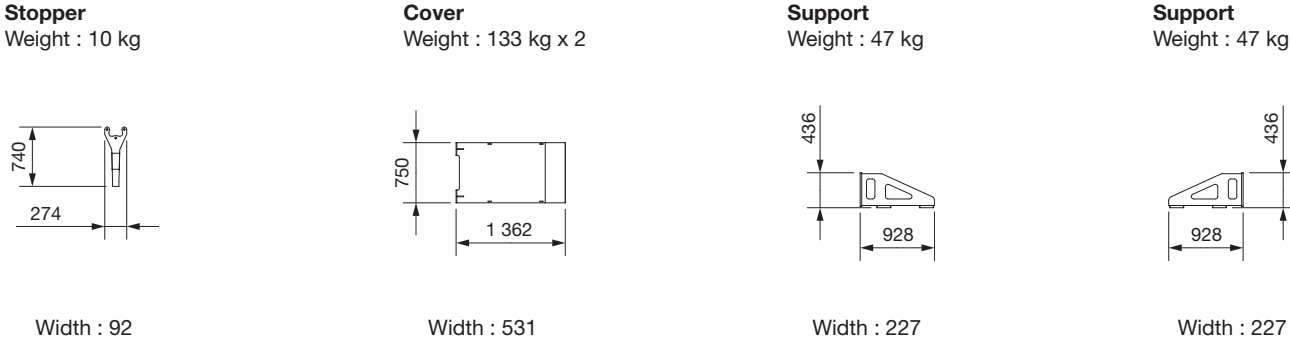


DEF Tank assembly
Weight : 391 kg



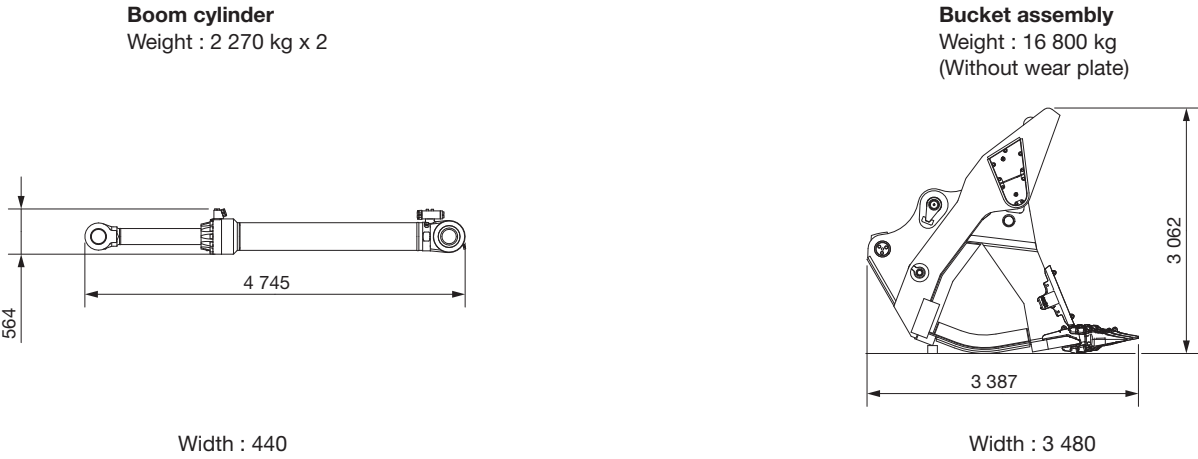
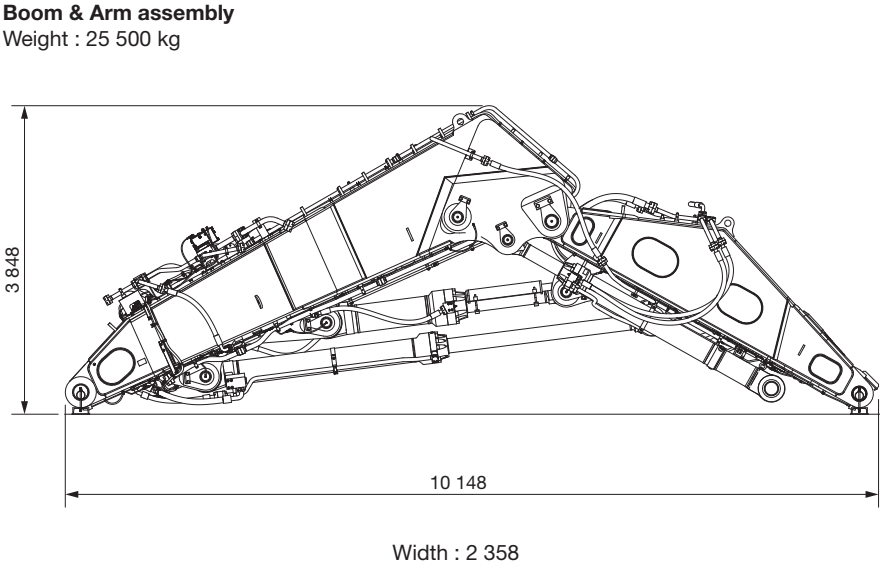
UNDERCARRIAGE

Unit: mm



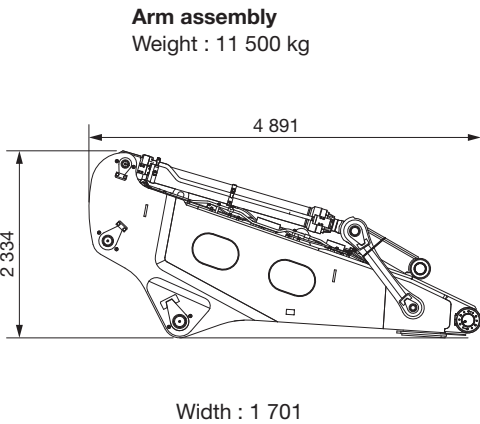
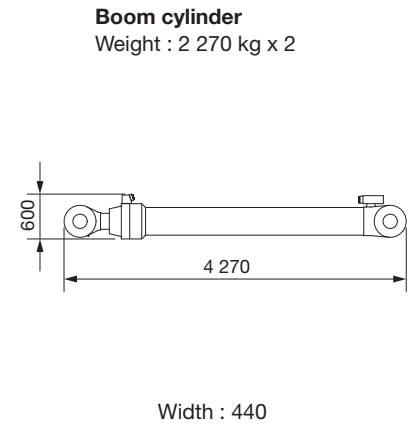
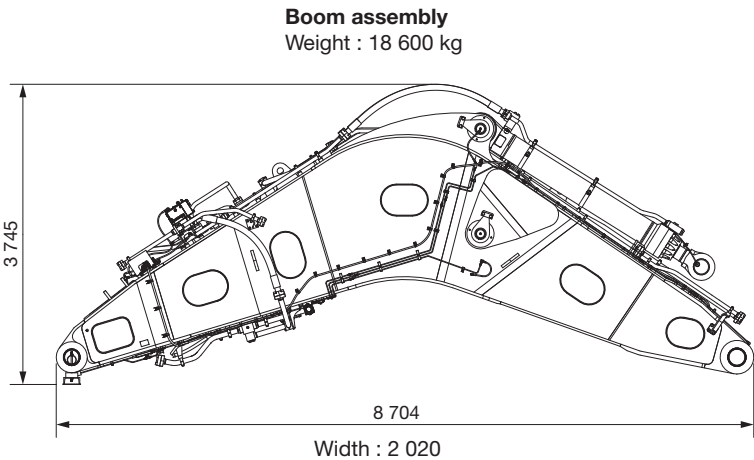
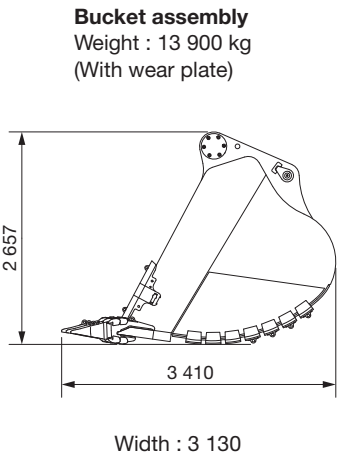
LOADER ATTACHMENT

Unit: mm

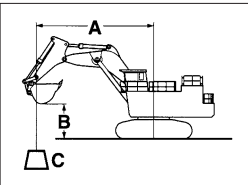


BACKHOE ATTACHMENT

Unit: mm



- 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.
5. 0 m = Ground.



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

EX2000-7

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

Conditions	Load point height m	Load radius												At max. reach		
		6.0 m		8.0 m		10.0 m		12.0 m		14.0 m		16.0 m		meter		
		Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	meter
BE-boom	8.3 m	10.0						*12.5	*12.5					*10.0	*10.0	*14.0
BE-arm	3.6 m	8.0						*19.2	*19.2					*9.9	*9.9	*14.6
Bucket ISO 7451: 2007	6.0					*26.0	*26.0	*21.0	*21.0	*14.9	*14.9			*10.3	*10.3	*14.9
(Heaped1:1) :	12.0 m³	4.0				*28.5	*28.5	*23.3	*23.3	*19.0	*19.0			*11.1	*11.1	*14.8
Shoe	800 mm	2.0				*23.8	*23.8	*24.9	*24.9	*19.4	19.0			*12.6	*12.6	*14.4
	0 (Ground)					*21.7	*21.7	*25.1	*25.1							
	-2.0			*24.7	*24.7	*23.4	*23.4	*22.9	*22.9							
	-4.0	*34.1	*34.1	*20.0	*20.0	*24.6	*24.6									
	-6.0															

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Lined area for writing on page 19.

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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