

Impressive Versatility



OUTSTANDING CONTROLLABILITY AND MOBILITY

Rear-shield Canopy for Protection from Wind and Rain

The standard models are equipped with a rearshield canopy that is specially prepared by

They permit comfortable work even in light rain or a cold wind.





Easy-to-read monitor panel

With the monitor panel, the operator can check machine conditions at a glance from his seat.



Pilot-control shut-off lever

Pilot-control shut-off lever avoids unintended mishandling when getting in and out of the seat and when the machine is not in use.



Easy-to-clean integrated molded resin floor



Long stay Blade

Long stay blade makes possible efficient leveling and backfilling.

Short Swing Radius and Excavating Force-

Best in the Class

For all models, the minimum swing radius are the smallest of their class. This is good for working in water supply and sewerage systems in a restrained area, and work in urban areas such as densely populated areas and streets congested with traffic. The digging force is biggest of its class, large enough to bite into hard ground. The EX30-2 and the EX35-2 in particular are as powerful as the class above.

Combined Operations Can Be Performed Smoothly and Reliably

The Hitachi-developed Optimum Hydraulic System (OHS) employed permits combined operations, not only front attachment—swing, but also travel—front which ensures a straight-line travel and smooth motion of the front attachment. On the EX30-2 and EX35-2 in particular, the OHS-M which diverts the flow from the pilot pump to the blade line, enables the operator to work comfortably without sensing any slowdown, even in a travel-blade combined operation.



Enhanced High-Guard Protector Weight

The rear corner of the body is provided with a higher quard than Type 1 and it has a larger area. It protects the engine cover etc. from accidental contact.



Further Reinforced Pin Lock **Bucket Teeth**

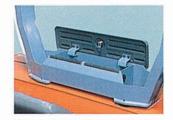
Newly-developed pin lock bucket teeth to fit bucket size are employed.

They can be easily replaced with new ones when weared.



Hardly Rusting Bolts and Nuts

Bolts and nuts are treated with green chromate to prevent rusting.



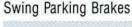
Convenient Utility Box Can also be Used for Consumables (Canopy)

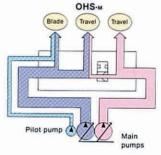
The utility box utilizes canopy poles. It can be used to store tools and consumables.

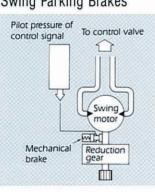
Highly Reliable Swing Parking Brakes

Because there is no natural coasting when swinging, the swing circle does not rotate when parking on a slope. Also, because no swing lock pins are needed, swing positioning is unnecessary in truck transport, allowing greater safety to be ensured.

It is also effective for preventing the superstructure from slipping during operations such as steering and swing.





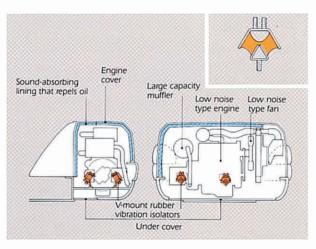




EX30/EX35

Low-noise Models Permitting Urban Construction Work without Producing a Nuisance

Extensive measures were taken to ensure worry-free work even in urban areas by reducing noise. A large-displacement engine provided with a swirl chamber featuring low noise is used at medium speeds to control noise sources. V-mount rubber vibration isolators are also used to reduce vibration and noise, and the engine cover is lined with sound absorbes that are specially treated to prevent oil spread and to minimize noise.



		EX30-2	EX35-2
Noise at operator's ears	dB(A)	77	78
Noise at 7 m away from the machine	dB(A)	65	65

Measuring conditions:

- · Level hard ground, no load during idling
- Operator's station: Canopy
- Noise at 7 m away from the machine: average in the four directions around the machine

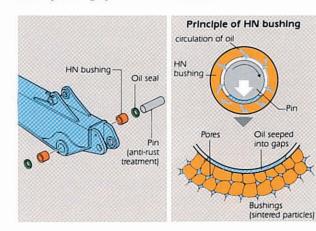


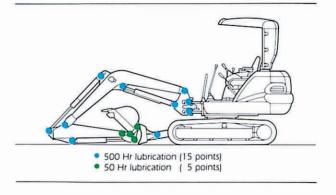
Easy Inspection and Maintenance Permitted by **HN Bushings**

All pin joints of the front attachment and the blade employ newly-developed HN bushings.

These eliminate the need to lubricate most of the parts of the While greatly extending lubricating intervals to 500h (or one year) for the EX30-2 and the EX35-2. (In both models, four pins at the arm tip must be greased at 50h intervals.)

The HN bushings are made of a sintered composite iron alloy vacuum impregnated in micron-sized pores with a highviscosity lubricating oil. They are also applied cementation, so they are highly reliable and durable.









Model	KUBOTA V1505-KA
Туре	
Rated flywheel	17.3 kW (23.5 PS)
horsepower	at 2 000 rpm
(DIN 6271, net)	THE PROPERTY OF THE PARTY OF TH
Rated flywheel	17.1 kW (23.2 HP)
horsepower (SAE J1349, net)	at 2 000 rpm
Maximum torque	91.1 N·m (9.3 kgf·m) at 1 500 rpm
Piston displacement	
Bore and stroke	78.0 mm × 78.4 mm
Battery	1 × 12 V, 52 AH



HYDRAULIC SYSTEM

OHS (Optimum Hydraulic System)-м

OHS-M designed for job efficiency and smooth combined operation. Main pumps 2-variable displacement axial piston pumps 2 × 36.0 L/min Maximum oil flow (2 × 7.9 lmp gpm) 1-Gear pump Maximum oil flow 10.0 L/min (2.2 Imp gpm)

Relief Valve Settings

Implement circuit	23.5	MPa	240	kgf/cm ²)
Swing circuit	9.8	MPa	(100	kgf/cm ²)
Travel circuit	22.5	MPa	230	kgf/cm ²)
Pilot circuit	3.9	MPa	40	kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and boom swing cylinders to absorb shocks at stroke ends.

Dimensions

	Quan.	Bore	Stroke
Boom	1	80 mm	568 mm
Arm	1	75 mm	560 mm
Bucket	1	65 mm	445 mm
Boom swing	1	85 mm	535 mm
Blade	1	90 mm	130 mm



CONTROLS

Pilot controls (for front and swing operations), light touch and excellent controllability.



SUPERSTRUCTURE

Swing Mechanism

High-torque, axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type. Swing shockless valve built in swing motor absorbs shocks when stopping swing, ensuring smooth stops. Also counter balanceless system is employed for smooth operation when starting and stopping swing. Swing lock (pin lock type) is provided for

Swing speed 9.0 min⁻¹ [9.0 rpm]

Boom swing angle Canopy Left: 90°, Right: 50°

Cabin Left: 80°, Right: 50°

Operator's Cab (Factory Option)

Independent roomy cab, conforming to ISO* Standards. Reinforced glass windows on all 4 sides for all-round visibility. Front window (upper side), fully openable, are spring-assisted for easy storing in the cab and for absorbing shocks during lowering.

*International Standard Organization



UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Heavy-duty track frame of all welded structure. Top-grade materials employed for heavy-duty operation. Side frames are rigidly welded to the track frame.

Rugged track frame and sloped side frames for easy mud removal.

Numbers of Rollers on Each Side

Upper roller Lower rollers

Traction Device

Each track driven by a high-torque, axial piston 2 speed travel motor through planetary reduction gear, allowing counterrotation of the tracks. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel, ensuring smooth stops.

Low: 0 to 3.0 km/h 23.5 kN (2 400 kgf) Maximum traction force



WEIGHTS AND GROUND PRESSURE

Equipped with 2.38 m boom, 1.27 m arm and 0.092 m3 (PCSA heaps) bucket.

Chan turn	Shoe	Standard un	ndercarriage
Shoe type	width	Operating weight	Ground pressure
*Rubber (canopy)	300 mm	2 750 kg	25.5 kPa (0.26 kgf/cm²)
(cabin)	300 mm	2 880 kg	26.5 kPa (0.27 kgf/cm²)
Double grouser (canopy)	300 mm	2 820 kg	26.5 kPa (0.27 kgf/cm²)
(cabin)	300 mm	2 950 kg	27.5 kPa (0.28 kgf/cm²)
Double wide grouser (canopy)	400 mm	2 920 kg	20.4 kPa (0.21 kgf/cm²)
(cabin)	400 mm	3 050 kg	21.4 kPa (0.22 kgf/cm²)
Triangular (canopy)	400 mm	2 980 kg	20.4 kPa (0.21 kgf/cm²)
(cabin)	400 mm	3 110 kg	21.4 kPa (0.22 kgf/cm²)

^{*}Mark is standard specifications.

SERVICE REFILL CAPACITIES



	liters	Imp gal
Fuel tank	50	11.0
Engine coolant	6.0	1.32
Engine oil	6.2	1.36
Travel final device (each side)	0.5	0.11
Hydraulic tank	40	8.8

Buckets

Cap	acity	Wi	dth			Recommendation		
п	n³	m	mm		Weight	2.38 m boom		
PCSA heaped	CECE heaped	Without side cutters	With side cutters	teeth	kg	*1.27 m arm	1.57 m arm	
0.046	0.04	260	300	2	47	0	0	
0.057	0.05	310	350	3	50	0	0	
0.074	0.07	410	450	3	55	0	0	
*0.092	0.08	480	520	4	60	0		
0.111	0.10	560	600	4	68		Δ	
4	A: Arm	crowd forc	e	kN	(kgf)	15.7 (1 600)	13.8 (1 410)	
B	B: Buck	ket digging f	orce	kN	(kgf)	20.6 (2 100)		

*Marks are standard specifications

- O Suitable for materials with density of 2 000 kg/m³ or less
 Suitable for materials with density of 1 600 kg/m³ or less
 ∆ Suitable for materials with density of 1 100 kg/m³ or less

CANOPY TYPE

LIFTING CAPACITIES

Side: Rating over-side or 360 degrees Front: Rating over-front

With dozer blade above ground

Unit: 1 000 kg

	Load				At max, reach					
Condition	point height	2	m	3	m	4	m	AL	max. re	dCFI
	m	Side	Front	Side	Front	Side	Front	Side	Front	@m
	3			*0.48	*0.48			0.35	0.41	4.11
Boom: 2.38 m Arm: 1.27 m	2			0.58	*0.58	0.36	0.42	0.29	0.34	4.53
Bucket	3			0.54	0.64	0.34	0.41	0.27	0.32	4.62
PCSA: 0.092 m ³ CECE: 0.08 m ³ Rubber shoe 300 mm	(Ground)			0.51	0.61	0.33	0.39	0.28	0.34	4.42
	-(t)	0.95	1.19	0.50	0.60			0.35	0.41	3.85
	-2	0.98	-1 04	0.52	0.62					

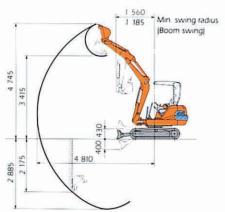
With dozer blade on ground

Unit: 1 000 kg

	Load			Load	radius			4.	At max, reach		
Condition	point	2	m	3	m	4	m	At max. reach			
	m	Side	Front	Side	Front	Side	Front	Side	Front	@m	
	3			*0.48	*0.48			0.35	10.50	4.11	
Arm: 1.27 m	2			0.58	•0.58	0.36	•0.55	0.29	•0.53	4.53	
Bucket	.1:			0.54	*0.84	0.34	*0.62	0.27	*0.56	4.62	
PCSA: 0.092 m ³ CECE: 0.08 m ³	(Ground)			0.51	•1.01	0.33	*0.68	0.28	*0.58	4.42	
Rubber shoe 300 mm	-1	0.95	-1.52	0.50	•0.97			0.35	•0.60	3.85	
	-2	0.98	*1.04	0.52	*0.68						

- Rating are based on SAE J1097.
 Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
 The load point is a hook (not standard equipment) located on the back of the bucket.
 Indicates load limited by hydraulic capacity.

Unit: mm DIMENSIONS 4 680 3 320 1 360 2 030 1 580 **WORKING RANGES** Unit: mm



CABIN TYPE

LIFTING CAPACITIES

Side: Rating over-side or 360 degrees Front: Rating over-front

With dozer blade above ground

Unit: 1 000 kg

	Load								At max, reach		
Condition	point	2	m	3	m	4	m	Λt	max. re	ax. reach	
	m	Side	Front	Side	Front	Side	Front	Side	Front	@m	
	3			*0.48	*0.48			0.38	0.44	4.11	
Boom: 2.38 m Arm: 1.27 m	2			*0.58	•0.58	0.39	0.45	0.31	0.36	4.53	
Bucket	1			0.58	0.69	0.37	0.44	0.29	0.34	4.62	
PCSA: 0.092 m ³ CECE: 0.08 m ³ Rubber shoe 300 mm	(Ground)			0.55	0.66	0.36	0.42	0.31	0.36	4.42	
	-1	1.02	1.27	0.54	0.65			0.06	0.82	3.85	
	- 2	-1.04	*1.04	0.56	0.66						

With dozer blade on ground

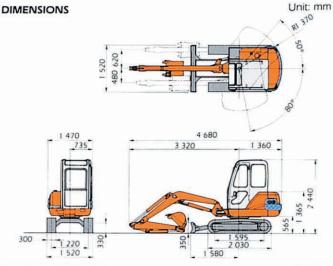
Unit: 1 000 kg

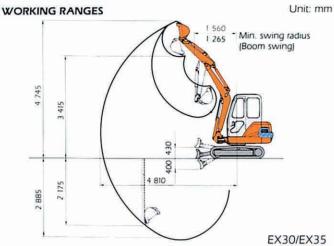
	Load			Load	radius				At max, reach		
Condition	point height	2	m	3	m	4	m	At max. reach			
	m	Side	Front	Side	Front	Side	Front	Side	Front	@m	
	3			*0.48	•0.48			0.38	•0.50	4.11	
Boom: 2.38 m Arm: 1.27 m	2			0.62	•0.58	0.39	•0.55	0.31	•0.53	4.53	
Bucket	1			0.58	*0.84	0.37	•0.62	0.29	•0.56	4.62	
PCSA: 0.092 m³ CECE: 0.08 m³	(Ground)			0.55	-1.01	0.36	•0.68	0.31	•0.58	4.42	
Rubber shoe 300 mm	-1	1.02	•1.52	0.54	•0.97			0.06	*0.83	3.85	
	-2	-1.04	*1.04	0.56	•0.68						

Rating are based on SAE J1097.

- Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.

 The load point is a hook (not standard equipment) located on the back of the bucket.
- The load point is a hook (not standard equip
 Indicates load limited by hydraulic capacity









Model	KUBOTA V1505-KA
Туре	
Rated flywheel	
horsepower (DIN 6271, net)	at 2 100 rpm
Rated flywheel	19.1 kW (25.6 HP)
horsepower (SAE J1349, net)	at 2 100 rpm
Maximum torque	91.2 N·m (9.3 kgf·m) at 1 500 rpm
Piston displacement	
Bore and stroke	



OHS (Optimum Hydraulic System)-м

OHS-M designed for job efficiency and smooth combined operation. piston pumps (2 × 8.3 Imp gpm)1-Gear pump Maximum oil flow 10.5 L/min. (2.3 Imp gpm)

Relief Valve Settings

 Implement circuit
 23.5 MPa (240 kgf/cm²)

 Swing circuit
 9.8 MPa (100 kgf/cm²)

 Travel circuit
 22.5 MPa (230 kgf/cm²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom, arm and boom swing cylinders to absorb shocks at stroke ends.

Dimensions

	Quan.	Bore	Stroke
Boom	1	85 mm	565 mm
Arm	1	80 mm	600 mm
Bucket	1	70 mm	445 mm
Boom swing	1	85 mm	535 mm
Blade	1	90 mm	130 mm



CONTROLS

Pilot controls (for front and swing operations), light touch and excellent controllability.



UPPERSTRUCTURE

Swing Mechanism

High-torque, axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type. Swing shockless valve built in swing motor absorbs shocks when stopping swing, ensuring smooth stops. Also counter balanceless system is employed for smooth operation when starting and stopping swing. Swing lock (pin lock type) is provided for transporting.

Swing speed 9,0 min⁻¹ [9.0 rpm]
Boom swing angle Canopy Left: 90°, Right: 50°
Cabin Left: 80°, Right: 50°

Operator's Cab (Factory Option)

Independent roomy cab, conforming to ISO* Standards. Reinforced glass windows on all 4 sides for all-round visibility. Front window (upper side), fully openable, are spring-assisted for easy storing in the cab and for absorbing shocks during lowering.
*International Standard Organization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Heavy-duty track frame of all welded structure. Top-grade materials employed for heavy-duty operation. Side frames are rigidly welded to the track frame.

Rugged track frame and sloped side frames for easy mud removal.

Numbers of Rollers and Shoes on Each Side Upper roller Lower rollers 4

Traction Device

Each track driven by a high-torque, axial piston 2 speed travel motor through planetary reduction gear, allowing counterrotation of the tracks. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel, ensuring smooth stops.

Travel speeds High: 0 to 4.6 km/h

WEIGHTS AND GROUND PRESSURE

Equipped with 2.60 m boom, 1.35 m arm and 0.11 m3 (PCSA heaped) buck

Chan han	Shoe	Standard ur	ndercarriage	
Shoe type	width	Operating weight	Ground pressure	
*Rubber (canopy)	300 mm	3 100 kg	29.4 kPa (0.30 kgf/cm ²)	
(cabin)	300 mm	3 230 kg	30.4 kPa (0.31 kgf/cm ²)	
Double grouser (canopy) (cabin)	300 mm	3 170 kg	29.4 kPa (0.30 kgf/cm²)	
	300 mm	3 300 kg	30.4 kPa (0.31 kgf/cm ²)	
Double grouser (canopy)	400 mm	3 270 kg	22.6 kPa (0.23 kgf/cm ²)	
(cabin)	400 mm	3 400 kg	23.6 kPa (0.24 kgf/cm ²)	
Triangular (canopy)	400 mm	3 330 kg	22.6 kPa (0.23 kgf/cm²)	
(cabin)	400 mm	3 460 kg	23.6 kPa (0.24 kgf/cm²)	

^{*}Mark is standard specifications.

SERVICE REFILL CAPACITIES

Imp gal liters 50 Fuel tank Engine coolant 6.0 1.32 1.36 Engine oil 6.2 Travel final device (each side)...... 0.11 0.5 88 Hydraulic tank

Buckets

Cap	Capacity Width		dth			Recommendation		
n	13	m	ım	No. of	Weight	2.60 m	boom	
PCSA heaped	CECE heaped	Without side cutters	With side cutters	teeth	kg	*1.35 m arm	1.7 m arm	
0.045	0.04	260	300	2	49	0	0	
0.055	0.05	310	350	3	52	0	0	
0.074	0.07	410	450	3	58	0	0	
*0.095	0.08	480	520	4	64	0	0	
*0.11	0.10	540	580	4	68	0		
0.13	0.11	610	650	4	74		Δ	
	A: Arm	crowd forc	e	kN	(kgf)	17.7 1 (1 800) (1		
B	B: Buci	ket digging f	orce	kN	(kgf)	23.9 (2 440)		

Marks are standard specifications

- O Suitable for materials with density of 2 000 kg/m³ or less

 ☐ Suitable for materials with density of 1 600 kg/m³ or less

 △ Suitable for materials with density of 1 100 kg/m³ or less

CANOPY TYPE

LIFTING CAPACITIES

Side: Rating over-side or 360 degrees

Front: Rating over-front

With dozer blade above ground

Unit: 1 000 kg

Condition	Load	Load radius							At max, reach		
	point	2 m		3 m		4 m		At max, reach			
	m	Side	Front	Side	Front	Side	Front	Side	Front	@m	
Boom: 2.60 m Arm: 1.35 m Bucket PCSA: 0.11 m ³ CECE: 0.10 m ³ Rubber shoe 300 mm	3			*0.55	•0.55	0.43	0.50	0.35	0.41	4.51	
	2	•0.97	*0.97	0.68	•0.71	0.42	0.49	0.29	0.35	4.88	
	1			0.62	0.74	0.40	0.47	0.28	0.33	4.96	
	(Ground)			0.59	0.70	0.38	0.46	0.29	0.35	4.77	
	-1	1.09	1.37	0.58	0.70	0.38	0.45	0.35	0.41	4.26	
	-2	*1.09	•1.09	0.59	0.71						

With dozer blade on ground

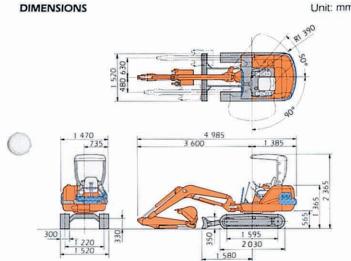
Unit: 1 000 kg

Condition	Load			At max reach						
	point	2 m		3 m		4 m		At max. reach		
	m	Side	Front	Side	Front	Side	Front	Side	Front	@m
Boom: 2.60 m Arm: 1.35 m Bucket PCSA: 0.11 m³ CECE: 0.10 m³ Rubber shoe	3			•0.55	•0.55	0.43	•0.58	0.35	•0.55	4.51
	2	•0.97	•0.97	0.68	•0.71	0.42	•0.60	0.29	•0.55	4.88
	1			0.62	•0.99	0.40	•0.69	0.28	*0.57	4.96
	(Ground)			0.59	•1.13	0.38	•0.76	0.29	•0.57	4.77
	-1	1.09	•1.63	0.58	*1.06	0.38	•0.72	0.35	•0.56	4.26
	-2	•1.09	-1.09	0.59	•0.78					

Notes: 1

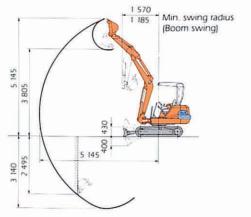
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 Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
 The load point is a hook (not standard equipment) located on the back of the bucket.
 *Indicates load limited by hydraulic capacity.

Unit: mm



WORKING RANGES

Unit: mm



CABIN TYPE

LIFTING CAPACITIES

Side: Rating over-side or 360 degrees Front: Rating over-front

With dozer blade above ground

Unit: 1 000 kg

Condition	Load	Load radius							At max reach		
	point	2 m		3 m		4 m		At max. reach			
	m	Side	Front	Side	Front	Side	Front	Side	Front	@m	
Boom: 2.60 m Arm: 1.35 m Bucket PCSA: 0.11 m ³ CECE: 0.10 m ³ Rubber shoe 300 mm	3			•0.55	•0.55	0.46	•0.58	0.37	•0.55	4.51	
	2	•0.97	•0.97	•0.71	•0.71	0.45	•0.60	0.32	•0.55	4.88	
	-1			0.66	•0.99	0.43	*0.69	0.30	•0.57	4.96	
	(Ground)			0.63	•1.13	0.41	*0.76	0.31	•0.57	4.77	
	-1	1.16	*1.63	0.62	-1.06	0.41	0.72	0.37	0.56	4.26	
	-2	-1.09	*1.09	0.63	0.78						

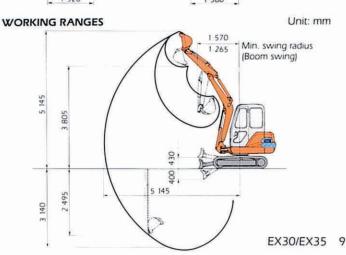
With dozer blade on ground

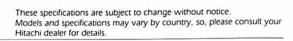
Unit: 1 000 kg

Condition	Load	Load radius							Ar may mach			
	point height	2 m		3 m		4 m		At max. reach				
	m	Side	Front	Side	Front	Side	Front	Side	Front	@m		
Boom: 2 60 m Arm: 1.35 m Bucket PCSA: 0.11 m ³ CECE: 0.10 m ³ Rubber shoe 300 mm	3			*0.55	•0.55	0.46	•0.58	0.37	•0.55	4.51		
	2	0.97	•0.97	•0.71	•0.71	0.45	•0.60	0.32	•0.55	4.88		
	- 1			0.66	*0.99	0.43	*0.69	0.30	•0.57	4.96		
	(Ground)			0.63	*1.13	0.41	•0.76	0.31	•0.57	4.77		
	- 1	1.16	-1.63	0.62	-1.06	0.41	•0.72	0.37	•0.56	4.26		
	-2	•1.09	•1.09	0.63	*0.78							

- Rating are based on SAE J1097.
 Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
 The load point is a hook (not standard equipment) located on the back of the bucket.
 *Indicates load limited by hydraulic capacity.

Unit: mm **DIMENSIONS** RI 390 520 1 385 3 600 300 1 220 E 1 580





Hitachi Construction Machinery Co., Ltd.

Head Office: Nippon Bldg., 6-2, 2-chome, Ohtemachi, Chiyoda-ku, Tokyo 100, Japan

Telephone: Tokyo (03) 3245-6388 Facsimile: Tokyo (03) 3246-2609 Telex: J32539 HITACONJ

Cable Address: "TOKHITACHIKENKI"