

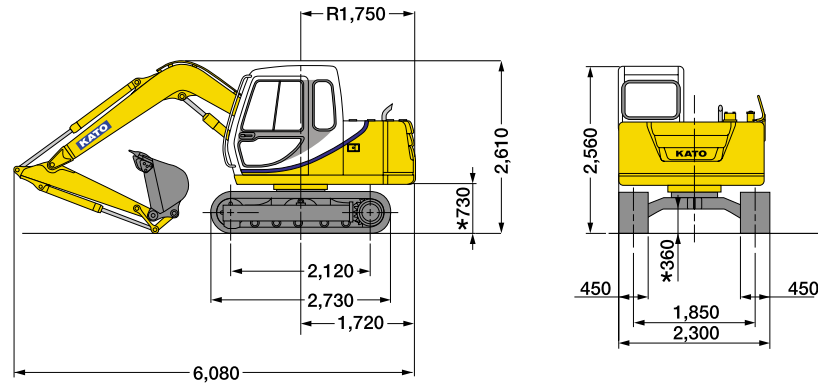
**SUPER EXCEED**

**HD307**

**Dimensions**

• Standard

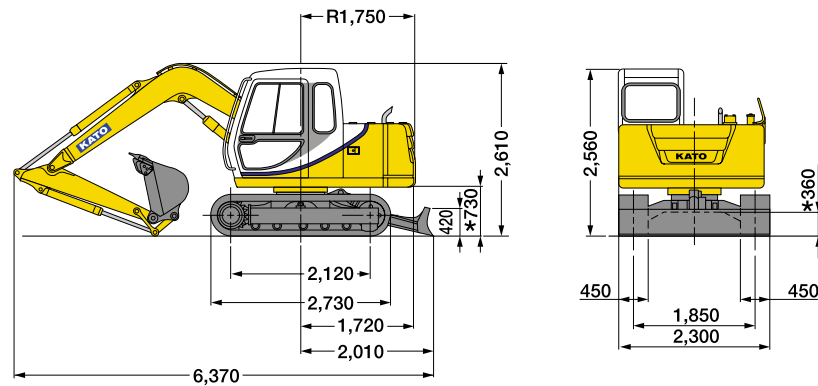
(Unit: mm)



\*Less grouser bar

• With Dozer blade (Option)

(Unit: mm)



\*Less grouser bar

Address inquiries to :

• NOTE : Illustrations may include optional equipment. KATO products and specifications are subject to improvements and changes without notice.

**KATO**

QUALITY & EXPERIENCE  
SINCE 1895



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**KATO**

FULLY HYDRAULIC EXCAVATOR

**SUPER EXCEED**

**HD307**

*Special*



Bucket capacity : 0.12m<sup>3</sup> - 0.34m<sup>3</sup> (ISO)  
Engine output : 42kW/2,200min<sup>-1</sup> (57PS/2,200rpm) (ISO, Net)  
Operating weight : 6,400kg

# Human-, Town-, Eco-friendly, Comfortable Performance! Entirely New Town-type Machine Based on Respect for Man's Life



● Dozer (option)

# Technical Specifications (HD307)



## ENGINE

Model ..... ISUZU A-4JB1, 4 cycle diesel engine  
 Number of cylinders ..... 4  
 Bore & Stroke ..... 93mm X102mm  
 Total displacement ..... 2,771 L  
 Rated output ..... 42kW/2,200min<sup>-1</sup> (57PS/2,200rpm)  
 (ISO, Net)  
 Max. torque ..... 188N·m/1,800min<sup>-1</sup> (19.2kgf·m/1,800rpm)  
 (ISO, Net)  
 Compression ratio ..... 18.4:1  
 Combustion system ..... Direct injection  
 Cooling system ..... Pressurized water circulated by a centrifugal pump with thermostat  
 Lubrication system ..... Pressurized oil fed by a gear pump through full-flow cartridge filter  
 Starter ..... Electric, 24V-3.2kW  
 Generator ..... Alternator, 24V-20A  
 Governor ..... Mechanical  
 Air cleaner ..... Dry type filter



●Engine room (Equipped with air conditioner-option)



## SWING SYSTEM

Swing motor ..... An axial piston motor with shockless valve  
 Brake ..... A hydraulic brake that locks automatically when the swing control lever is in the neutral position and a mechanical parking brake which is applied when the safety lock lever is pulled backwards, the engine is turned off or the swing control lever is in the neutral position.  
 Lubrication ..... Completely housed and grease bathed  
 Max. swing speed ..... 13.0min<sup>-1</sup>  
 Tail swing radius ..... 1,750mm  
 Min. front swing radius ..... 1,640mm



## HYDRAULIC SYSTEM

Pumps ..... Variable double piston pump and gear pump  
 Max. discharge flow ..... 2X82 L/min.  
 Max. discharge pressure ..... 24.5MPa (250kgf/cm<sup>2</sup>)  
 Max. discharge pressure (travel circuit only) ..... 27.4MPa (300kgf/cm<sup>2</sup>)  
 Control valves ..... 5+4 section multiple control valves (with service port)  
 Pilot pump ..... Gear type  
 Oil cooler ..... Finned tube, forced ventilation  
 Pressure relief valves ..... Primary and secondary on each circuit



## REFILLING CAPACITY

Fuel tank ..... 140 L  
 Cooling system ..... 9.5 L  
 Engine oil ..... 8.0 L  
 Track drives ..... 2X1.7 L  
 Swing drive ..... 1.5 L  
 Hydraulic oil tank (level) ..... 65 L  
 (system) ..... 105 L



## BOOM, ARM AND BUCKET

Boom cylinder ..... One, double acting  
 Bore & Stroke ..... 115mm X 975mm  
 Arm cylinder ..... One, double acting  
 Bore & Stroke ..... 100mm X 925mm  
 Bucket cylinder ..... One, double acting  
 Bore & Stroke ..... 90mm X 745mm  
 Lubrication ..... Grease nipples  
 Bucket digging force ..... 57.9kN (5,900kgf)  
 Arm digging force ..... 39.2kN (4,000kgf)



## WEIGHT (STD machine)

Operating weight ..... 6,400kg  
 Ground pressure ..... 30.4kPa (0.31kgf/cm<sup>2</sup>)



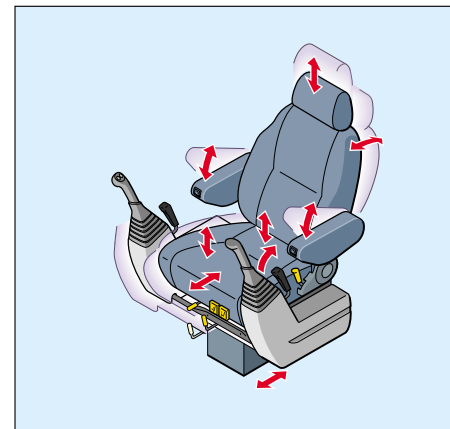
## CAB & CONTROLS

Cab ..... The all-weather sound suppressed, 1,000mm wide pressed steel cab  
 Cab mounting ..... Four point viscous mounted  
 Right hand lever ..... Controls the boom & bucket  
 Inner right hand lever (with foot pedal) ..... Controls the right hand track  
 Inner left hand drive (with foot pedal) ..... Controls the left hand track  
 Left hand lever ..... Controls the arm & swing  
 Pilot control ..... Travel, boom, arm, bucket and swing  
 Meter & gauges ..... Hour meter, water temperature and fuel level  
 Monitor lamps ..... Engine oil pressure, hydraulic oil filter, water temperature, water level, fuel level, water separator, battery charge and air cleaner.

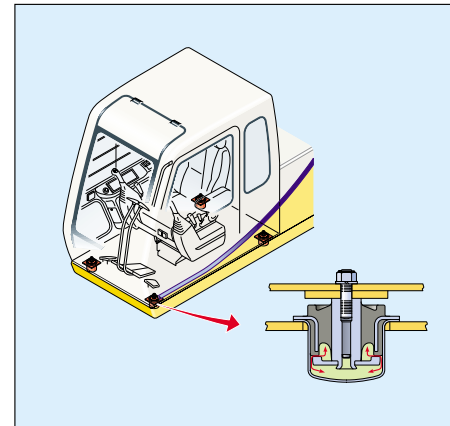
Indicator lamps ..... Engine preheater & engine slow down



●Air conditioner control panel (option)



●Exceptionally comfortable suspension seat is adjustable to the operator's weight.



●Four-point viscous damping cab suspension.



## TRAVEL SYSTEM

Traveling motors ..... Independent axial piston motor with reduction for each side  
 Brakes ..... Independent disk parking brakes for each side, applied automatically when the travel levers are in the neutral position  
 Track shoes ..... 43 each side  
 Lubrication ..... Sealed-for-life rollers and front idlers with floating seals  
 Travel speed ..... High 0~5.5km/h (0~3.4mph)  
 Low 0~3.7km/h (0~2.3mph)  
 Gradeability ..... 70% (35°)  
 Max. drawbar pull ..... 54.9kN (5,600kgf) (12,300lbf)  
 Lower rollers ..... 5 each side  
 Upper roller ..... 1 each side



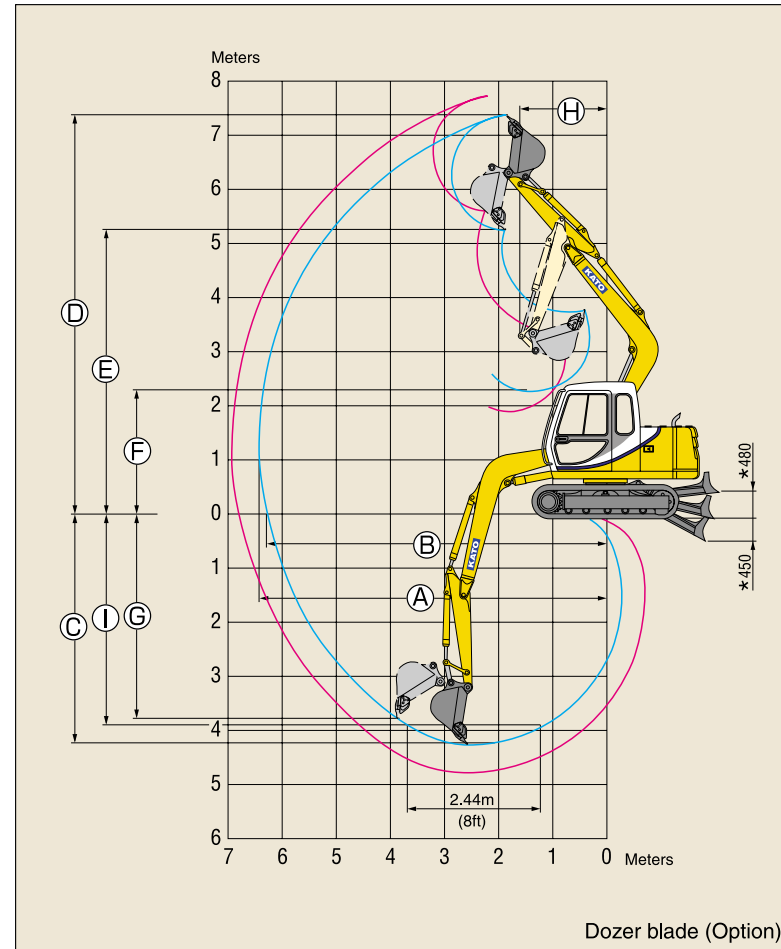
●Seat belt (option)

# Working Ranges (HD307)

(Unit : mm)

Range	Arm	STD (1.72m)	Long Arm (2.22m)
A-Max. digging radius		6,430	6,870
B-Max. digging reach at ground level		6,280	6,750
C-Max. digging depth		4,210	4,710
D-Max. digging height		7,400	7,770
E-Max. dumping height		5,280	5,650
F-Min. dumping height		2,320	1,970
G-Max. vertical wall		3,740	4,230
H-Min. swing radius		1,640	2,040
I-Max. digging depth (8ft level bottom)		3,880	4,430

\*Less grouser bar.



## Bucket

Type of bucket	Backhoe bucket					Dredging bucket	Slope forming bucket	Clamshell bucket	Ditch cleaning bucket	Ejector bucket	
Bucket capacity m <sup>3</sup> , ISO	0.12	0.16	0.22	0.28	0.34	0.2(struck)	—	0.21(struck)	0.34(struck)	0.16	
Bucket width	w/o side cutters, mm	370	440	555	650	770	1,700	1,400	570	1,000	350
	with side cutters, mm	480	555	670	770	890	1,457	800	—	—	—
Bucket weight kg	170	190	210	230	250	200	305	485	220	150	
Number of bucket teeth	3	3	3	4	4	2	—	3+3	—	3	
Shape of bucket											
Standard boom +	Standard arm	●	●	●	●	▲	●	●	●	●	
	Long arm	●	●	●	▲	×	●	▲	×	▲	
	Extension arm	●	▲	×	×	×	×	▲	×	▲	

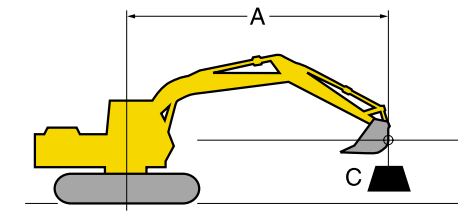
● General purpose ▲ Light work × Unusable ● Yellow colored area means standard.

## Track Shoes

Type of shoes	Rubber shoe	Grouser shoe	Flat shoe	Triangle shoe
Shoe width mm	450	450	600	450
Overall width mm	2,300	2,300	2,450	2,300
Ground pressure kPa (kgf/cm <sup>2</sup> )	30.4 (0.31)	30.4 (0.31)	23.5 (0.24)	32.4 (0.33)
Net weight change kg	±0	S.T.D	+320	+380

● Yellow colored area means standard.

# Lifting Capacities (HD307)



A : REACH FROM SWING CENTER  
B : LOAD POINT HEIGHT  
C : LIFTING CAPACITIES

: OVER FRONT  
 : OVER SIDE OR 360°

HD307 450mm Shoe, 3.69m Boom, 1.72m Arm, 0.28m<sup>3</sup> Bucket

Unit: 1,000kg

LOAD POINT HEIGHT B (m)	LOAD RADIUS A (m)						MAXIMUM LOAD RADIUS		
	2.00		3.00		4.00		5.00		m
6.00									
5.00					* 1.23	* 1.23			* 1.09 * 1.09 5.04
4.00			* 1.31	* 1.31	* 1.39	* 1.39			0.92 0.86 5.67
3.00	* 2.16	* 2.16	* 1.75	* 1.75	* 1.57	* 1.57	1.13	1.06	0.80 0.75 6.03
2.00			* 2.51	2.41	1.61	1.50	1.10	1.02	0.75 0.69 6.18
1.00			2.42	2.23	1.53	1.42	1.06	0.98	0.74 0.69 6.13
0.00			2.33	2.14	1.47	1.36	1.02	0.95	0.78 0.73 5.89
-1.00	* 3.12	* 3.12	2.31	2.12	1.44	1.33	1.10	0.94	0.90 0.83 5.43
-2.00	* 4.29	* 4.29	2.33	2.14	1.44	1.34			1.17 1.09 4.64
-3.00	* 3.34	* 3.34	2.39	2.20					

HD307 450mm Shoe, 3.69m Boom, 2.22m Arm, 0.22m<sup>3</sup> Bucket

Unit: 1,000kg

LOAD POINT HEIGHT B (m)	LOAD RADIUS A (m)						MAXIMUM LOAD RADIUS						
	1.00		2.00		3.00		4.00		5.00		6.00		m
7.00													* 1.19 * 1.19 3.16
6.00													* 1.17 * 1.17 4.73
5.00													1.01 0.95 5.62
4.00							* 1.17	* 1.17					0.84 0.78 6.17
3.00				* 1.39	* 1.39	* 1.37	* 1.37	1.20	1.13				0.74 0.70 6.50
2.00				* 2.14	* 2.14	1.70	1.59	1.17	1.09	0.84	0.78		0.70 0.65 6.64
1.00				2.56	2.36	1.61	1.50	1.12	1.05	0.82	0.76		0.69 0.65 6.60
0.00				2.44	2.24	1.54	1.43	1.08	1.01	0.80	0.74		0.72 0.67 6.38
-1.00				* 2.99	* 2.99	2.38	2.19	1.50	1.39	1.06	0.98		0.81 0.75 5.96
-2.00	* 3.16	* 3.16	* 4.93	4.62	2.38	2.18	1.48	1.38	1.06	0.98			0.98 0.92 5.27
-3.00			* 4.15	* 4.15	2.40	2.21	1.50	1.40					1.46 1.36 4.16

- NOTE : 1. Lifting capacities are based on ISO 10567.  
2. Lifting capacities shown do not exceed 87% of machine hydraulic capacity or 75% of minimum tipping load.  
3. Capacities marked with an asterisk (\*) are limited by hydraulic capacities.  
4. Lifting capacities are based on machine standing on firm, uniform supporting surface. User must make allowances for job conditions such as soft or uneven ground.  
5. Lifting capacities shown should not be exceeded. Weight of all lifting accessories must be deducted from the above lifting capacities.  
6. Capacities apply only to the machine as originally manufactured and equipped by KATO WORKS CO., LTD.

## Standard Equipment

- New M-L mode
- New One-touch-slow
- Combination monitor
- Service hour meter
- Automatic travel speed change
- Spring assisted pull-up front window
- 4 points viscous damping cab suspension
- Multi position operator's seat
- Window wiper (with intermittent)
- Rear emergency escape window
- Cabin light connected to cabin door
- 2 working lights (Upper front right side & Boom left side)
- Boom holding valve
- Arm holding valve
- Swing shockless valve
- Automatic slew parking brake
- Automatic travel parking brake
- One free service circuit for attachments
- Rear view mirror (right side)

## Optional Equipment

- Seat belt
- Automatic climate control air conditioner
- Hot & cool box contained with AC
- Cabin heater
- Front window washer (2 sprays)
- Auto tuning AM/FM radio with clock
- 2 speaker stereo
- Working light (Cab left side)
- Working light (Boom right side)
- Cab access step
- Optional piping
- Cab front half guard
- Cab front full guard
- Cab head guard
- Electronic horn
- Cabin fan
- Swing warning light
- Travel alarm
- Refueling pump
- Low temperature spec
- Tool set
- Track guard, 1 pc each side
- Track guard, 2 pcs each side
- Adjustable seat suspension