

# **SUPER EXCEED**

## **HD1023**

**HD1023/HD1023-LC**

**Bucket capacity**

\*ISO, SAE :  $0.55m^3(0.72yd^3)$  -  $1.5m^3(1.96yd^3)$

\*CECE :  $0.5m^3$  -  $1.3m^3$

Engine output :  $125kW/2,200min^{-1}$  (167HP/2,200rpm) (SAE, Net)

$125kW/2,200min^{-1}$  (170PS/2,200rpm) (ISO, Net & DIN, Net)

Gross weight : 23,000kg(50,700 lbs)HD1023

23,600kg(52,000 lbs)HD1023-LC

**Built for Safety and Comfort**





**SUPER  
EXCEED**

**Ease of operation  
Efficiency  
Comfort  
Safety**



# A Roomy Cabin Layout to Ensure Outstanding Operator Comfort



**A comfortable cab as standard  
Widest cab in its class • 1 metre  
Exceptional comfort and space**

■ The widest cab on the market and minimum noise and vibration levels ensure a sure working environment. Employing state-of-the-art ergonomics, the operator's station has all the comforts of the interior of a luxury car.

## Reduced noise and vibration A smooth and comfortable ride (Viscous damping cab suspension)

■ Through the adoption of a highly effective damper, (viscous damping cab suspension) cab vibration has been reduced. New ground has been broken with 6 point cab support, helping to prevent lateral vibration and reducing the noise level, making comfortable operation a reality, thereby reducing operator stress.

## Shockless Smooth Operation

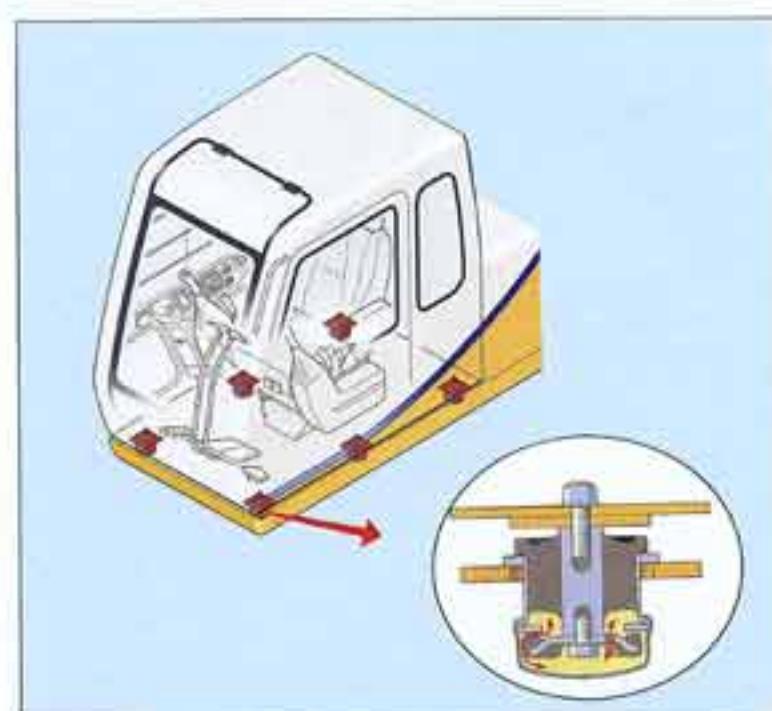
■ Smooth operation is ensured by the cushioning mechanism incorporated with the boom, arm and bucket cylinders, as well as by the shockless valves in their circuits, which absorb shock when the boom and arm cylinders stop.

## Low-noise Design

■ Unique noise-prevention features, including the rigid resonance-free bonnet, sound-absorbing engine hood, and the auto slow system minimize noise of operation.

## Comfortable ride

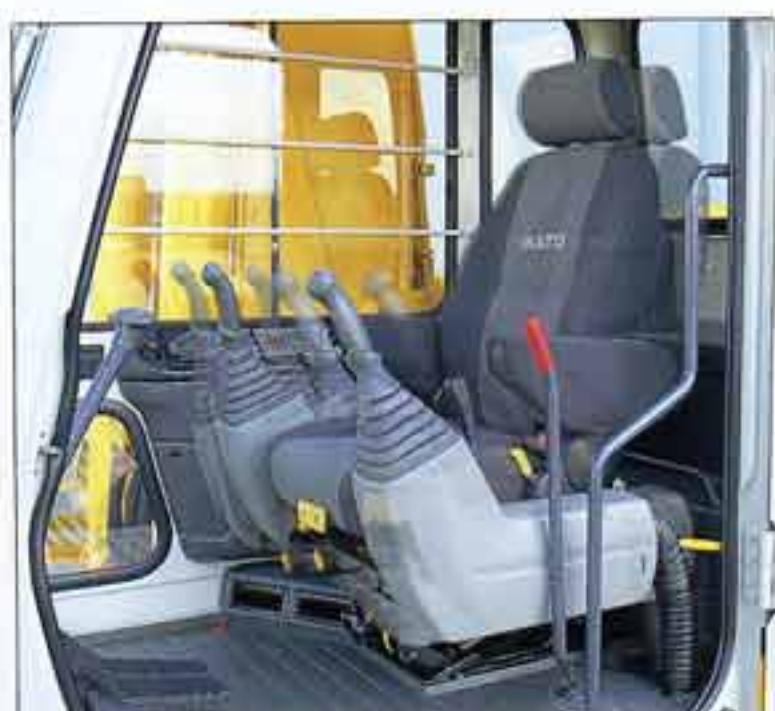
■ Responsive, ergonomic, joystick type control levers give us fatigue free operation.



● Six-point viscous damping cab suspension.



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



● Operator seat slides with the console.

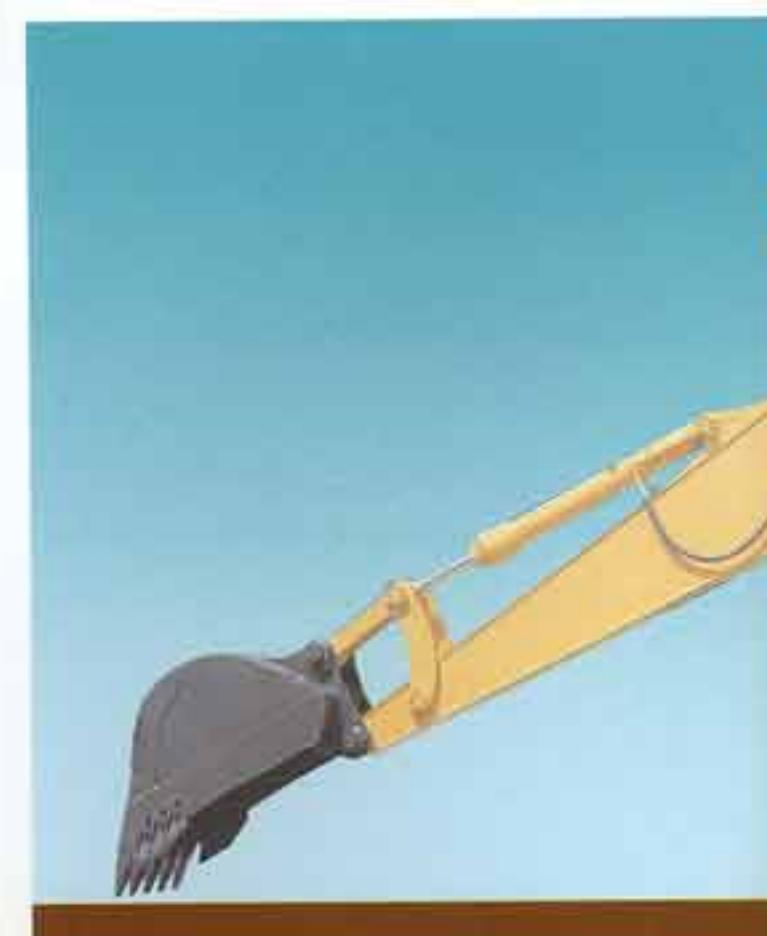


● Armrest angle adjusting mechanism enables optimum operating position.



● Ergonomic joystick-type control lever.

● Drawbridge-type console allows easy alighting and boarding.



# New Technology to Promote Equipment Safety and Reliability

## Maximization of engine output-the new APC microcomputer system

■ Oil flow is regulated by the new APC (Automatic Power Control), microcomputer system - a state-of-art electronic control system. The optimal engine torque and oil flow are selected to match the type of job or current operational situation. At all times engine power is used to full effect. This increased power can clearly be used in a wide range of applications.

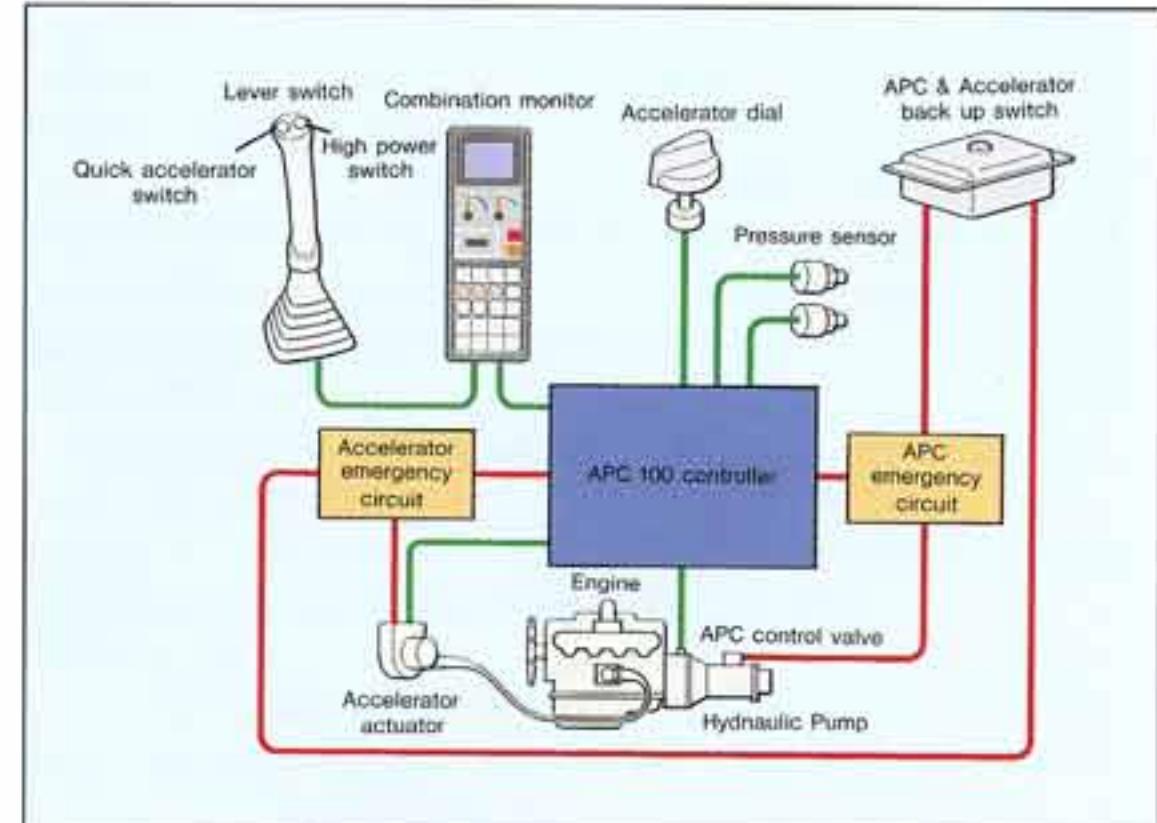


## Four operation modes can be selected, according to the operating conditions.

- The operator can select the optimal setting for operation duties and purpose, from among "heavy duty," "general," "fine" and "slow" modes.
- Heavy duty operation mode: Large-scale and heavy duty excavation
- General operation mode: General excavation and loading
- Fine control mode: accurate and safe operation, leveling, and slope forming
- Slow operation mode: Delicate tasks

## Easy to understand multi-display and recorded warning

■ The self diagnosis function displays its results through a simple LCD display and recorded warning. These functions alert the operator to any change in the working condition of the machine. Thus the operator is immediately aware of any problem or the necessity to perform maintenance tasks such as refueling or filter changes.



## Functional control panel

■ Monitoring indicators and touch control switches are all located on an easy-to-use panel to ensure smooth operation.



## Self diagnosis system

■ The APC system includes a self diagnosis function that will detect any problem and alert the operator.

## The Auto Slow and One-touch Slow systems cut waste of fuel

■ When the lever is returned to the neutral position, the synchro control system minimizes the hydraulic oil flow through the pump. Several seconds after that, the Auto Slow system reduces engine speed. When the lever is reset at the operating position, the engine recovers initial speed and hydraulic oil flow increases in proportion to the amount of the lever stroke. This cuts losses from unnecessary throttling and waiting for dumping, thereby saving fuel and ensuring low-noise operation. Machine equipped One-Touch-Slow operation which reduces engine speed down to idle simply by a touch of the quick acceleration switch on the lever.

## The regenerating circuit and a high-output, low-fuel consumption engine further save fuel

■ High-power, high-speed, and large-quantity excavation is achieved with the reliable synchro control system, the new hydraulic circuit, and the powerful engine. The regenerating system in the boom and arm circuit enhances excavation speed and fuel efficiency.



## The operator can select three speed modes. Automatic speed change ensures easy steering

■ With a single touch, the operator can select high speed (5.5km/h), low speed (3.9km/h) or crawl speed (2.7km/h) modes to suit job site conditions. When the machine is traveling at a high speed, the high speed or low speed mode is automatically selected to facilitate driveability.

# Technical Specifications



## ENGINE

Model	Mitsubishi 6D16-TE1, 4 cycle turbo charged diesel engine
Number of cylinders	6
Bore & Stroke	118mm(4.6") × 115mm(4.5")
Total displacement	7,545cc (460 cu. in.)
Engine output	125kW/2,200min <sup>-1</sup> (167HP/2,200rpm) (SAE, Net)
	125kW/2,200min <sup>-1</sup> (170PS/2,200rpm) (ISO·DIN·JIS, Net)
Max. torque	637N·m/1,600min <sup>-1</sup> (470 l lbf·ft/1,600rpm) (SAE, Net)
	637N·m/1,600min <sup>-1</sup> (65kgf·m/1,600rpm) (ISO·DIN·JIS, Net)
Compression ratio	16.0 : 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 and by-pass cartridge filters.
Starter	Electric, 24V-5kW
Generator	Alternator, 24V-35A
Governor	Mechanical
Air cleaner	Dry type filter



## TRAVEL SYSTEM

Spring-applied idlers	protect the drives from shock.
Adjust cylinder	is provided for easy arrangement of the track tensioning. An all welded undercarriage frame gives clog-free clearance, and the drive motors are neatly housed inside the track frame. The crawler tracks with interchangeable shoes are supported by 8 lower rollers (9 lower rollers for HD1023-LC), 2 upper rollers and a guard plate on each side.
Traveling motors	Independent axial piston motors with reduction for each side
Brakes	Independent disk parking brake for each side, applied automatically when the travel levers are in the neutral position.
Track shoes	47 each side HD1023 51 each side HD1023-LC
Track adjustment	Grease cylinders with recoil springs
Lubrication	Sealed-for-life rollers and front idlers with floating seals
Travel speed	High 0~5.5km/h(0~3.4mph) Medium 0~3.9km/h(0~2.4mph) Low 0~2.7km/h(0~1.7mph)
Gradeability	70%(35°)
Max. drawbar pull	186.3kN (19,000kgf) (41,900lbf)
Ground clearance(less grouser bar)	480mm(1'07")
Track length	4,260mm (14'00") HD1023 4,640mm (15'03") HD1023-LC



## HYDRAULIC SYSTEM

Two pumps	are controlled by the Kato developed "APC" (Automatic Power Control) system, which senses where power is needed and automatically adjusts the pressure and flow-rate of the pump to match the work load. New "APC" system enables pump output to be utilized to the full with minimum fuel consumption. The adoption of joint circuit enables dual speed for boom derricking and arm extension/retraction.
Pumps	Double variable piston pump and gear pump
Max. discharge flow	2 × 249 lit./min. 2 × 65.8 US gal./min.
Max. discharge pressure	29.4MPa (300kg/cm <sup>2</sup> )(4,270 psi)
Max. discharge pressure (travel circuit only)	32.9MPa (335kg/cm <sup>2</sup> )(4,760 psi)
Oil filtration	Full-flow filter with replaceable element, a drain cartridge filter, a pilot line filter and a suction strainer
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



## CAB & CONTROLS

The all-weather sound suppressed, 1,000mm(3'03") wide pressed steel cab	is six point viscous mounted and has plenty of leg room. All windows are made of tinted safety glass. The front window can be raised and slide back so that it fits flush with the ceiling to provide improved visibility and ventilation. The cloth-covered, fully adjustable seat is provided. Operating conditions can be seen at a glance on Safety Monitor.
Right hand lever	Controls the boom & bucket
Inner right hand lever (with foot pedal)	Controls the right hand track
Inner left hand lever (with foot pedal)	Controls the left hand track
Left hand lever	Controls the arm & swing
Pilot control	Travel, boom, arm, bucket and swing
Engine throttle	Electric "Accel dial"
Meter & Gauges	Hour meter, water temperature and fuel level
Monitor display	Engine oil pressure, engine oil filter, hydraulic oil filter, hydraulic oil temperature, water temperature, water level, fuel level, battery charge, APC monitor and air cleaner
Indicator lamps	Caution lamp & Engine preheater indicator lamp
Working lights	Provided on the boom left side and mounted on the frame
Lubrication chart	Inside the tool box



## **SWING SYSTEM**

The hydraulic gear-driven swing is powered by an axial piston motor with shockless valve that is flange-connected to a planetary reduction unit. It rotates 360° continuously on the single row-ball bearing that has an integral, internally cut swing gear, and is totally enclosed to prevent the ingress of mud and water.

**Brake**.....A hydraulic brake that locks automatically when the swing control lever is in the neutral position and a mechanical parking brake applied when the swing control lever at the neutral position, pulling the safety lock lever backwards or

engine stop.	
Lubrication	...Completely housed and grease bathed
Max. swing speed	.....11.0min <sup>-1</sup> (11.0rpm)
Tail swing radius	.....3,100mm (10'02")
Min. front swing radius	.....3,880mm (12'09")



## **BOOM, ARM AND BUCKET**

The boom and arm are of all-welded, steel box section type with reinforced pin joints. Bucket is fabricated from high tensile strength steel and use taper lacated teeth.

Boom cylinders	Two, double acting
Bore & Stroke	140mm (5.5") × 1,370mm (53.9")
Arm cylinder	One, double acting
Bore & Stroke	150mm (5.9") × 1,680mm (66.1")
Bucket cylinder	One, double acting
Bore & Stroke	130mm (5.1") × 1,155mm (45.5")
Lubrication	Grease nipples, with centralized greasing for remote points
Bucket digging force (High power)	156.9kN (16,000kgf) (35,300lbf) 174.6kN (17,800kgf) (39,200lbf)
Arm digging force (High power)	112.8kN (11,500kgf) (25,400lbf) 125.5kN (12,800kgf) (28,200lbf)
	(High power can be used with STD arm only)



## **REFILLING CAPACITY**

Fuel tank	.....	320 lit. (84.5 US gal.)
Cooling system	.....	25.5 lit. (6.7 US gal.)
Engine oil	.....	28 lit. (7.4 US gal.)
Track drives	.....	2×3.3 lit. (2×0.9 US gal.)
Swing drive	.....	11.3 lit. (3.0 US gal.)
Hydraulic oil tank		
(level)	.....	165 lit. (43.6 US gal.)
(system)	.....	310 lit. (81.9 US gal.)



## WEIGHT

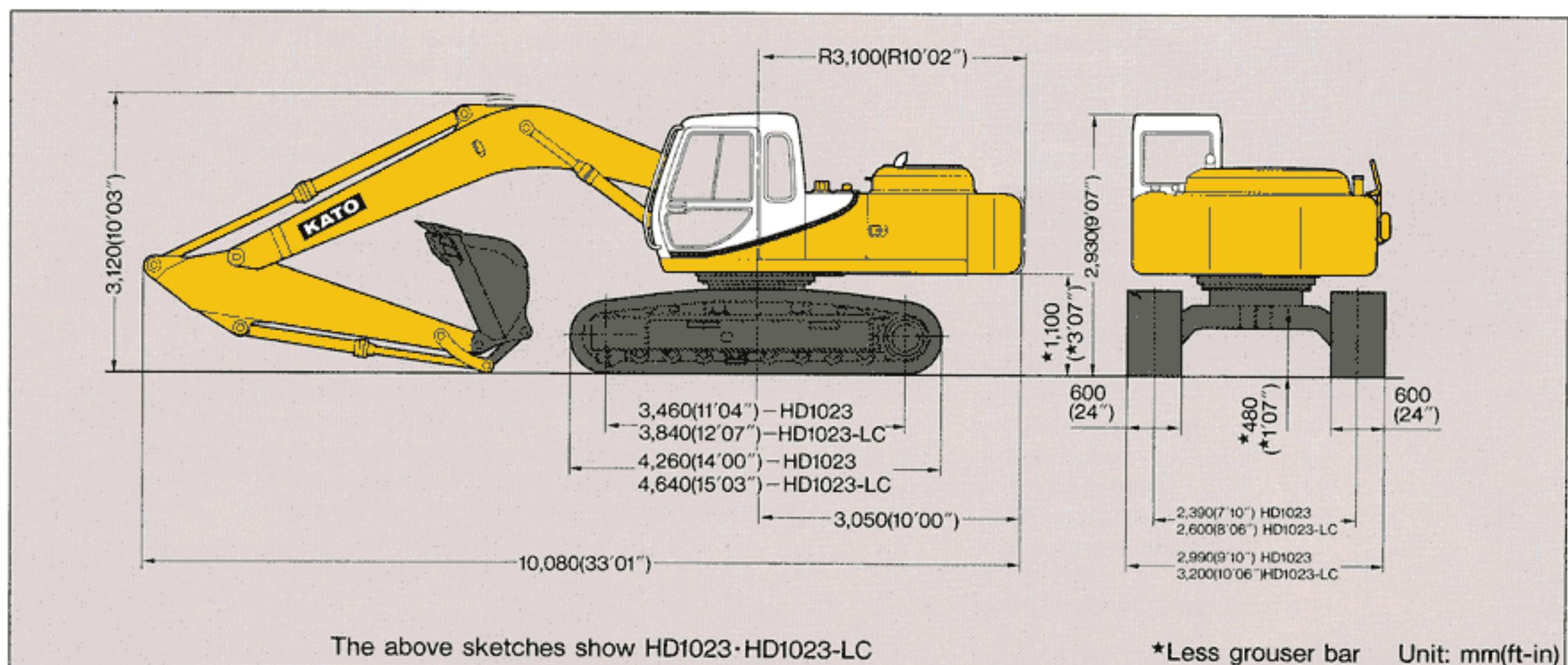
In standard figure, with the 2.96m (9'09") arm, 600mm (24") grouser shoes and 1.0m<sup>3</sup> (1.31yd<sup>3</sup>) SAE heaped, (0.9m<sup>3</sup> CECE heaped) bucket..

Operating weight ..... 23,000kg(50,700 lb)HD1023  
23,600kg(52,000 lb)HD1023-LC

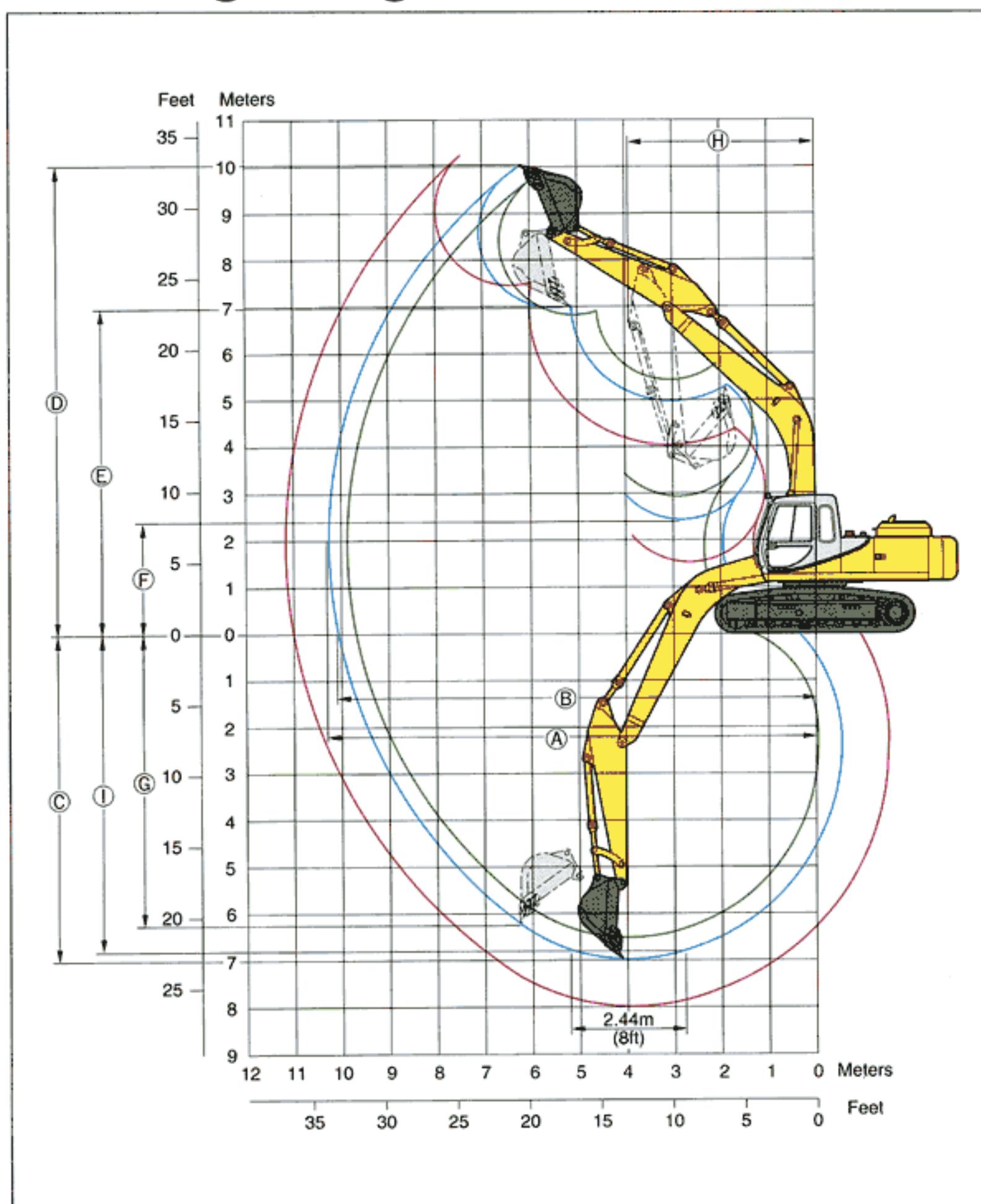
Ground pressure.....

50.0kPa(0.51kgf/cm<sup>2</sup>) (7.25psi) HD1023  
47.1kPa(0.48kgf/cm<sup>2</sup>) (6.83psi) HD1023-LC

# Dimensions

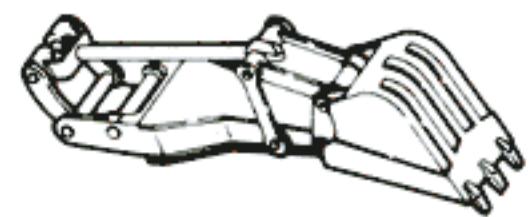


# Working Ranges



**Extension Arm**

1,500mm (4'11")



Range	Arm	Short Arm 2.47 (8'01")	STD Arm 2.96 (9'09")	Long Arm 3.95 (13'00")
A - Max. digging radius		9.91 (32'06")	10.35 (33'11")	11.26 (36'11")
B - Max. digging reach at ground level		9.73 (31'11")	10.17 (33'04")	11.10 (36'05")
C - Max. digging depth		6.52 (21'05")	7.01 (23'00")	8.01 (26'03")
D - Max. digging height		9.88 (32'05")	10.06 (33'00")	10.50 (34'05")
E - Max. dumping height		6.81 (22'04")	6.99 (22'11")	7.44 (24'05")
F - Min. dumping height		2.93 (9'07")	2.44 (8'00")	1.45 (4'09")
G - Max. vertical wall		5.75 (18'10")	6.25 (20'06")	7.19 (23'07")
H - Min. swing radius		4.01 (13'02")	3.88 (12'09")	3.80 (12'06")
I - Max. digging depth (8ft level bottom)		6.33 (20'09")	6.85 (22'06")	7.87 (25'10")

Unit : m (ft-in)  
Less grouser bar

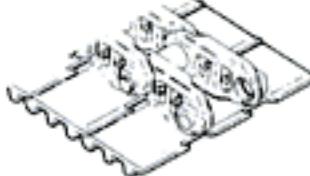
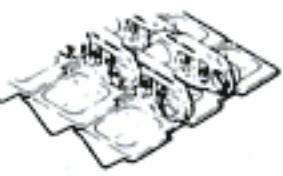
## Bucket

Type of bucket		Backhoe bucket							Dredging bucket	Slope forming bucket	Rock bucket	Ripper
Bucket capacity	m <sup>3</sup> (yd <sup>3</sup> ), ISO · SAE m <sup>3</sup> , CECE	0.55 (0.72) 0.50	0.80 (1.05) 0.70	1.00 (1.31) 0.90	1.10 (1.44) 1.00	1.30 (1.70) 1.10	1.40 (1.83) 1.20	1.50 (1.96) 1.30	0.70 (0.92) 0.60	— —	0.7	—
Bucket width	W/O side cutters, mm (in)	800 (31")	950 (37")	1,170 (46")	1,220	1,400 (55")	1,490 (59")	1,580 (62")	2,400 (94.5") 45	2,000 (78.7") X	—	—
	with side cutters, mm (in)	915 (36")	1,065 (42")	1,285 (51")	1,335	1,515 (60")	—	—	350 (13.8")	1250 (49.2")	760 (30")	—
Bucket weight	kg lb	580 1,280	740 1,630	850 1,870	875 1,920	935 2,060	970 2,140	1,010 2,230	770 1,700	990 2,180	995 2,190	380 840
Number of bucket teeth		4	4	5	5	5	5	2	—	5	1	
Shapes of bucket												
Standard boom +	Short arm	●	●	●	●	▲	▲	□	●	○	◎	◎
	Standard arm	●	●	●	▲ [●]	▲	□	×	●	○	◎	◎
	Long arm	●	●	▲	□	×	×	×	▲	○	×	×
	Extension arm	●	▲	×	×	×	×	×	×	×	×	×

● General purpose ▲ Light work ◎ Rock digging □ Loading ○ Usable × Unusable [ ]:HD1023-LC

• Yellow colored area means standard.

## Track Shoes

Type of shoes		Grouser shoe			Flat shoe	Triangle shoe
						
Shoe width mm(in)	HD1023	600 (24")	700 (28")	800 (32")	600 (24")	800 (32")
	HD1023-LC	600 (24")	700 (28")	800 (32")	600 (24")	800 (32")
Overall width mm(ft, in)	HD1023	2,990 (9'10")	3,090 (10'02")	3,190 (10'06")	2,990 (9'10")	3,190 (10'06")
	HD1023-LC	3,200 (10'06")	3,300 (10'10")	3,400 (11'02")	3,200 (10'06")	3,400 (11'02")
Ground pressure kPa (kgf/cm <sup>2</sup> , psi)	HD1023	50.0 (0.51, 7.25)	43.0 (0.44, 6.26)	38.0 (0.39, 5.55)	52.0 (0.53, 7.54)	39.5 (0.40, 5.69)
	HD1023-LC	47.0 (0.48, 6.83)	40.0 (0.41, 5.83)	36.5 (0.37, 5.26)	48.0 (0.49, 6.97)	36.5 (0.37, 5.26)
Net weight change kg (lb)	HD1023	S.T.D.	+280 (620)	+540 (1,190)	+720 (1,590)	+1,290 (2,840)
	HD1023-LC	S.T.D.	+300 (660)	+590 (1,300)	+780 (1,720)	+1,400 (3,090)

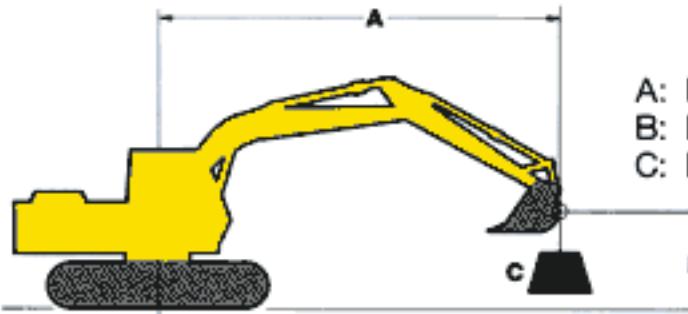
• Yellow colored area means standard.

## Standard Equipment

- New APC mode
- New auto-slow·One-touch-slow
- Multi-mode display monitor
- Adjustable monitor alarm
- 2 service hour meter
- 3 Traveling mode
- Automatic travel speed change
- Spring assisted pull-up front window
- 6 points viscous dumping suspension
- Multi position operator's seat
- Adjustable seat suspension
- Adjustable speed window wiper
- 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
- Digging force booster(High power)
- Swing shockless valve
- Automatic swing parking brake
- Automatic travel parking brake
- Service port for attachments(without relief valve)
- Rear view mirror (right side)
- Center guard, 1 pcs each side

## Optional Equipment

- Tinted tranceplant hatch
- Self retracting seat belt
- Pressurelized air conditioning system
- 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)
- Working light (cab 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
- Air cleaner, double element
- Low temperature spec
- Tool set
- Center guard, 2 pcs each side



# LIFTING CAPACITIES

- A: REACH FROM SWING CENTERLINE
- B: BUCKET HOOK HEIGHT
- C: LIFTING CAPACITIES

 : OVER FRONT  
 : OVER SIDE OR 360°

**HD1023 600mm Shoe, 5.87m Boom, 2.47m Arm, 1.0m<sup>3</sup> Bucket (850kg)**

Unit: 1000kg

LOAD POINT	LOAD RADIUS								A				m			MAXIMUM LOAD RADIUS					
	2.00		3.00		4.00		5.00		6.00		7.00		8.00								
HEIGHT B m																					
8.00																*3.24	*3.24	7.25			
7.00																*3.05	*3.05	*8.06			
6.00																*2.95	2.77	*8.65			
5.00									*4.91	*4.91	*4.82	4.05	*4.17	3.10	*2.91	2.48	9.07				
4.00					*7.63	*7.63	*6.26	*6.26	*5.57	5.13	*5.19	3.93	4.44	3.06	*2.91	2.29	9.34				
3.00									*7.69	6.51	*6.39	4.89	5.48	3.79	4.35	2.99	*2.95	2.18	9.49		
2.00									*9.10	6.11	6.83	4.65	5.32	3.64	4.26	2.90	*3.04	2.13	9.51		
1.00									8.85	5.84	6.62	4.46	5.18	3.51	4.17	2.82	*3.18	2.14	9.40		
0.00									8.69	5.70	6.48	4.33	5.08	3.41	4.10	2.75	3.33	2.23	9.17		
-1.00									*9.10	8.12	8.63	5.65	6.40	4.26	5.02	3.36	4.07	2.72	3.57	2.39	8.79
-2.00					*7.56	*7.56	*11.21	8.19	8.65	5.66	6.39	4.25	5.00	3.35	4.09	2.74	3.97	2.68	8.26		
-3.00	*9.72	*9.72	*13.56	*13.56	*12.77	8.29	8.72	5.72	6.43	4.29	5.05	3.39				*4.68	3.19	7.52			
-4.00					*13.87	*13.87	*11.64	8.45	8.86	5.84	6.55	4.40					5.74	4.15	6.49		
-5.00									*9.76	8.71	*7.95	6.07									

**HD1023 600mm Shoe, 5.87m Boom, 2.96m Arm, 1.0m<sup>3</sup> Bucket (850kg)**

Unit: 1000kg

**HD1023 600mm Shoe, 5.87m Boom, 3.95 m Arm, 1.0m<sup>3</sup> Bucket (850kg)**

Unit: 1000kg

HD1025 600mm Shoe, 3.87m Boom, 3.93m Arm, 1.0m³ Bucket (850kg)													Unit: Tonne/m		
Load Point	Load Radius												A	m	Maximum Load Radius
	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00					
Height B m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	m
9.00															*1.91 *1.91 8.16
8.00															*1.77 *1.77 9.01
7.00															*1.68 *1.68 9.65
6.00															*1.63 *1.63 10.14
5.00															*1.62 *1.62 10.49
4.00															*1.63 *1.63 10.72
3.00															*1.66 1.58 *10.84
2.00															*1.72 1.54 10.86
1.00															*1.81 1.54 10.77
0.00															*1.94 1.58 10.57
-1.00															*2.12 1.67 10.26
-2.00	*3.76	*3.76	*4.93	*4.93	*7.67	*7.67	12.59	7.81	8.43	5.44	6.22	4.07	4.84	3.17	3.89 2.53 3.20 2.06
-3.00	*6.15	*6.15	*7.66	*7.66	*10.64	*10.64	12.60	7.82	8.39	5.41	6.17	4.03	4.80	3.14	3.87 2.52 3.20 2.07
-4.00	*8.94	*8.94	*10.88	*10.88	*14.47	13.33	12.70	7.91	8.44	5.44	6.19	4.05	4.82	3.16	3.90 *2.55
-5.00			*14.74	*14.74	*15.98	13.60	*12.33	8.06	8.55	5.55	6.28	4.13	4.90	3.24	
-6.00								*13.76	*13.76	*10.79	8.31	*8.67	5.73	6.47	4.30

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**NOTE:**

- NOTE:**

  1. Lifting capacities are based on SAE J1097.
  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.

**HD1023-LC** 600mm(24") Shoe, 5.87m(19'3") Boom 2.47m(8'1") Arm, 1.0m<sup>3</sup>(1.31yd<sup>3</sup>) Bucket 850kg(1870lb)

Unit: 1000 lb(1000kg)

LOAD POINT HEIGHT	LOAD RADIUS								ft. in. (m)		MAXIMUM LOAD RADIUS	
	10'0" (3.05)		15'0" (4.57)		20'0" (6.10)		25'0" (7.62)					
	B ft.in. (m)	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	ft·in (m)
25'0" (7.62)										*6.96 (3.16)	*6.96 (3.16)	24'11" (7.59)
20'0" (6.10)					*9.95 (4.51)	*9.95 (4.51)				*6.52 (2.96)	*6.36 (2.89)	28'3" (8.60)
15'0" (4.57)					*11.32 (5.13)	*11.32 (5.13)	*10.86 (4.92)	7.72 (3.50)	*6.40 (2.90)	5.42 (2.46)	30'2 " (9.21)	
10'0" (3.05)			*18.74 (8.50)	16.88 (7.66)	*13.82 (6.27)	10.79 (4.90)	*11.90 (5.40)	7.41 (3.36)	*6.50 (2.95)	4.96 (2.25)	31'1" (9.48)	
5'0" (1.52)					*16.53 (7.50)	10.06 (4.56)	11.99 (5.44)	7.05 (3.20)	*6.83 (3.10)	4.85 (2.20)	31'1" (9.47)	
0'0" (0.00)			*26.33 (11.94)	14.79 (6.71)	16.71 (7.58)	9.58 (4.34)	11.68 (5.30)	6.77 (3.07)	*7.44 (3.38)	5.07 (2.30)	30'1" (9.17)	
-5'0" (-1.52)			*26.54 (12.04)	14.76 (6.69)	16.50 (7.48)	9.40 (4.26)	11.56 (5.25)	6.67 (3.03)	*8.49 (3.85)	5.74 (2.61)	28'0 " (8.54)	
-10'0" (-3.05)	*28.80 (13.06)	*28.80 (13.06)	*24.98 (11.33)	14.99 (6.80)	16.61 (7.54)	9.50 (4.31)			*10.40 (4.72)	7.30 (3.31)	24'6 " (7.48)	
-15'0" (-4.57)	*28.23 (12.80)	28.23 (12.80)	*21.12 (9.58)	15.54 (7.05)	*15.03 (6.82)	10.01 (4.54)						

**HD1023-LC** 600mm(24") Shoe, 5.87m(19'3") Boom 2.96m(9'9") Arm, 1.0m<sup>3</sup>(1.31yd<sup>3</sup>) Bucket 850kg(1870lb)

Unit: 1000 lb(1000kg)

LOAD POINT HEIGHT B ft.in. (m)	LOAD RADIUS						A ft. in. (m)				MAXIMUM LOAD RADIUS			
	5'0"(1.52)		10'0"(3.05)		15'0"(4.57)		20'0"(6.10)		25'0"(7.62)		30'0"(9.14)			
25'0" (7.62)													*5.66 (2.57)	
20'0" (6.10)									*9.41 (4.27)	7.96 (3.61)			*5.34 (2.42)	
15'0" (4.57)							*10.09 (4.58)	*10.09 (4.58)	*9.82 (4.46)	7.81 (3.54)			*5.26 (2.39)	
10'0" (3.05)					*16.52 (7.49)	*16.52 (7.49)	*12.66 (5.74)	10.96 (4.97)	*11.03 (5.00)	7.46 (3.38)	*6.73 (3.05)	5.21 (2.36)	*5.38 (2.44)	
5'0" (1.52)					*22.47 (10.19)	15.64 (7.09)	*15.54 (7.05)	10.15 (4.60)	12.01 (5.45)	7.05 (3.20)	8.78 (3.98)	5.05 (2.29)	*5.69 (2.58)	
0'0" (0.00)					*25.76 (11.69)	14.79 (6.71)	16.72 (7.58)	9.57 (4.34)	11.64 (5.28)	6.72 (3.05)	*8.20 (3.72)	4.91 (2.23)	*6.24 (2.83)	
-5'0" (-1.52)					*13.84 (6.28)	*13.84 (6.28)	*26.56 (12.05)	14.59 (6.62)	16.41 (7.44)	9.30 (4.22)	11.45 (5.19)	6.55 (2.97)		*7.16 (3.25)
-10'0" (-3.05)	*18.62 (8.45)	*18.62 (8.45)	*24.72 (11.21)	*24.72 (11.21)	*25.65 (11.64)	14.72 (6.68)	16.42 (7.45)	9.31 (4.22)	11.50 (5.22)	6.60 (2.99)			*8.79 (3.99)	
-15'0" (-4.57)					*31.45 (14.27)	*30.93 (14.03)	*22.70 (10.30)	15.17 (6.88)	*16.67 (7.56)	9.63 (4.37)			*12.31 (5.58)	

**HD1023-LC** 600mm(24") Shoe, 5.87m(19'3") Boom 3.95m(13'0") Arm, 1.0m<sup>3</sup>(1.31yd<sup>3</sup>) Bucket 850kg(1870lb)

Unit: 1000 lb(1000t:-)

NOTE:

- NOTE:**

  1. Lifting capacities are based on SAE J1097.
  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.



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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