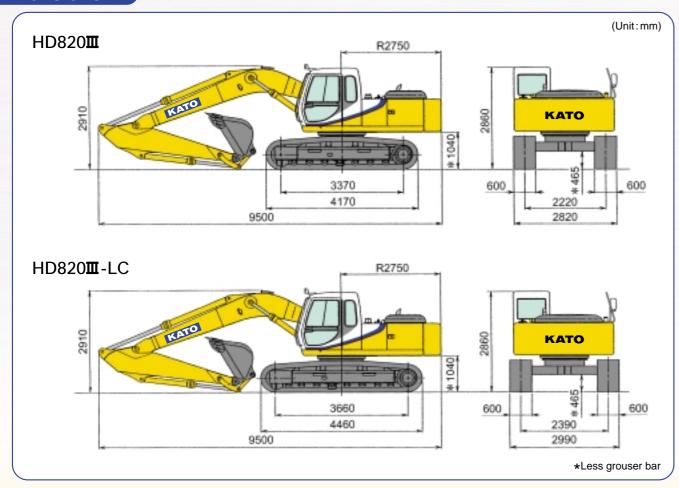
#### **Dimensions**



Address inquiries to

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



**QUALITY & EXPERIENCE SINCE 1895** 

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# **S**UPER **EXCEED**

# Gentle with Nature, Gentle with you Try and Feel the New Epoch of Performance



·Type H-version for heavy duty work

2

·Type K-version for demorishon work

# **Technical Specifications**

# ENGINE

Model ······Mitsubishi 6D	34-TLE2A, 4 cycle intercooler turbo
	charged diesel engine
Number of cylinders	6
Bore & Stroke ·····	104mm × 115mm
	5.86 L
Rated output ·····	········ 110kW/2,050min <sup>-1</sup> (ISO Net)
	······580N·m/1,400min <sup>-1</sup> (ISO Net)
Compression ratio	18.2:1
Combustion system ······	·····Direct injection
Specific fuel consumption	ı ····· 225g/kW-hour
Cooling system	<ul> <li>Pressurized water circulated by a centrifugal pump with thermostat</li> </ul>
Lubrication system	···Pressurized oil fed by a gear
	pump through full-flow and by-
Starter ······	pass cartridge filterElectric, 24V-5kW
Generator	Alternator, 24V-35A
Governor	····· Mechanical
Δir cleaner	Dry type filter

#### HYDRAULIC SYSTEM

Pumps ·····Double variable piston pump and gear pump
Max. discharge flow ······ 2 x 235L/min
Max. discharge pressure 31.4MPa
Max. discharge pressure (travel circuit only) 32.9MPa
Oil filtration ····· Full-flow filter with replaceable element,
drain cartridge filter, pilot line filter and
suction strainer
Control valves ······ 5 + 4 section multiple control valves
(with one free service circuit)
Pilot pump ····· Gear type
Oil cooler Finned tube, forced ventilation
Pressure relief valves Primary and secondary
on each circuit



## CAB & CONTROLS

Type	· All weather sound suppressed, 1,000mm
	wide pressed steel cab mounted on 6
	point viscourse mounting.
Right hand lever	Controls the boom & bucket
•	with foot pedal) ······ Controls the right
· ·	hand track
Inner left hand lever (w	ith foot pedal) ······· Controls the left
`	hand track
Left hand lever	Controls the arm & swing
	· Travel, boom, arm, bucket and swing
	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 tem-
	perature, 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

DriveAxial piston motor with shockless valve
and reduction gear.
Brake A hydraulic brake that locks automatically
when the swing control lever is in the neu-
tral 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 ······ 13.5min <sup>-1</sup>
Tail swing radius 2,750mm
Min. front swing radius 3,460mm

## BOOM, ARM AND BUCKET

Boom cylinders ······	Two, double acting
Bore & Stroke ·····	······ 125mm × 1,315mm
Arm cylinder	One, double acting
Bore & Stroke ·····	135mm × 1,630mn
Bucket cylinder	One, double acting
Bore & Stroke ·····	120mm × 1,090mn
Lubrication ·····	Grease nipples, with centralized
	greasing for remote points
Bucket digging force	136kN
(High power)	144kN
Arm digging force	99kN
(High power)·····	104kN
Note: High power can be us	sed with STD arm and short arm

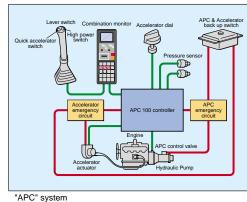


#### **SERVICE DATA**

Fuel tank ·····	320 L
Cooling system ······	23 L
Engine oil ······	
Track drives ·····	2 × 5 L
Swing drive ·····	5 L
Hydraulic oil tank	
(level)	165 L
(system)	260 L
In standard figure, with the 2.93m arm,	600mm grouser
shoes and 0.8m <sup>3</sup> ISO, bucket.	
Operating weight19,500	kg: HD820III
·	kg: HD820III-LC
Ground pressure ······ 43k	Pa: HD820III
42k	Pa: HD820III-LC

#### TRAVEL SYSTEM

DriveIndependent axial piston motor with reduction for each side
BrakesIndependent disk parking brake for each side, applied automatically when the travel
levers are in the neutral position.
Track shoes ······ 46 each side HD820III
49 each side HD820III-LC
Track adjustment Grease cylinders with recoil springs
Lubrication ····· Sealed-for-life rollers and front idlers
with floating seals
Travel speed High $0 \sim 5.5$ km/h
Medium 0 ~ 3.6km/h
Low 0 ~ 2.5km/h
Gradeability 70% (35°)
Max. drawbar pull ······ 174.6kN
Ground clearance (less grouser bar) 465mm
Track length ····· 4,170mm HD820III
4,460mm HD820III-LC

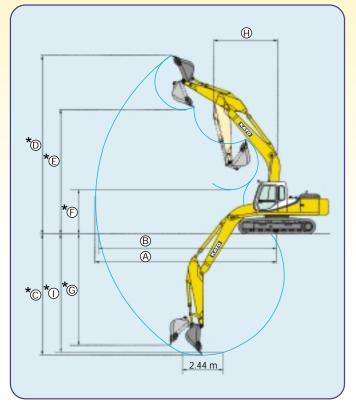








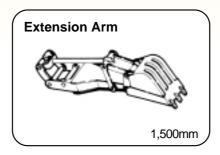
# Working Ranges



				(Unit : m)
Range	Super short Arm 1.90	Short Arm 2.43	STD Arm 2.93	Long Arm 3.92
A-Max. digging radius	9.00	9.47	9.91	10.81
B-Max. digging reach     at ground level	8.82	9.29	9.74	10.66
★ ©-Max. digging depth	5.68	6.21	6.70	7.70
★ D-Max. digging height	9.29	9.55	9.76	10.21
★ ⑤-Max. dumping height	6.38	6.62	6.83	7.26
★ ⑤-Min. dumping height	3.40	2.87	2.37	1.37
★ ⑤-Max. vertical wall	4.85	5.64	6.12	7.17
①-Min. swing radius	3.66	3.59	3.46	3.41
* ①-Max. digging depth (2.44m level bottom)	5.45	6.00	6.53	7.56

\*Less grouser bar.

( )= HD820Ⅲ-LC



#### **Bucket**

Т	Type of bucket		Dredging bucket	Slope form- ing bucket					
Bucket capacity	m³, ISO	0.45	0.55	0.80	0.90	1.0	1.1	0.65 2,400mm 45 ° 350mm	2,000mm × 1,250mm
Bucket	W/O side cutters, mm	650	800	1,020	1,190	1,270	1,400		
width	with side cutters, mm	765	915	1,135	1,305	1,305 1,385 -			
E	Bucket weight kg		570	640	710	760	760	770	980
Numb	per of bucket teeth	4	4	5	5	5	5 6		-
Sh	napes of bucket	Š.	Ď				THOUSE THE PARTY OF THE PARTY O	R.	
	Super short arm	uper short arm ( )							
	Short arm					( )			
Standard boom +	Standard arm					( )			
boom +	Long arm					×	×		
	Extension arm		×	×	×	×	×	×	×

General purpose Light work Loading Usable x Unusable Yellow colored area means standard.

#### Track Shoes

			Grouse	Flat shoe	Triangle shoe		
Type of shoe	s		<b>I</b>		-		
Shoe width mm	HD820	600	700	800	900	600	800
Shoe width Tilli	HD820 -LC	600	700	800	900	600	800
Overall width mm	HD820	2,820	2,920	3,020	3,120	2,820	3,020
Overall width Illin	HD820 -LC	2,990	3,090	3,190	3,290	2,990	3,190
Ground pressure (kPa)	HD820	43	38	34	31	45	35
Ground pressure (kPa)	HD820 -LC	42	37	33	29	44	34
Net weight change kg	HD820	S.T.D	410	670	950	860	1,440
I wet weight change kg	HD820 -LC	S.T.D	440	720	1,010	920	1,530

Yellow colored area means standard.

Lifting Capacities

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

: OVER FRONT : OVER SIDE OR 360°

SUPEREXCEED HD820II / HD820II-LC

HD820III 600mm Shoe, 5.63m Boom, 2.93m Arm, 0.8m3 Bucket (640kg)

UTIIL: T,UUUK	J
AT MAXIMUM	1

	LOAD					L	IFT PO	INT RAD	DIUS		A(m)					AT I	MAXIM	UM
	POINT	2.0	00	3.0	00	4.	00	5.	00	6.	00	7.0	00	8.	00	LIFT P	OINT R	ADIUS
	HEIGHT B(m)	B		B	<b>(</b>	b	<b>©</b>	B	<b>-</b>	B	<b>-</b>	8	<b>-</b>	Ü	<b>-</b>	B		RADIUS (m)
	7.00									* 3.55	* 3.55					* 2.94	* 2.94	6.72
	6.00									* 3.62	* 3.62	* 3.65	3.08			* 2.85	2.75	7.40
[	5.00									* 3.92	* 3.92	* 3.90	3.03			* 2.83	2.38	7.89
	4.00							* 4.74	* 4.74	* 4.39	3.86	* 4.18	2.94	3.51	2.27	* 2.88	2.14	8.22
	3.00			* 4.95	* 4.95	* 6.42	* 6.42	* 5.69	4.96	* 4.98	3.68	4.35	2.83	3.45	2.21	* 2.99	1.99	8.43
l	2.00			* 4.39	* 4.39	* 4.95	* 4.95	* 6.40	4.65	5.45	3.49	4.23	2.71	3.37	2.14	3.02	1.90	8.51
l	1.00			* 4.58	* 4.58	* 4.51	* 4.51	* 5.36	4.40	5.27	3.33	4.11	2.60	3.30	2.07	3.00	1.87	8.48
l	0.00	* 3.00	* 3.00	* 4.70	* 4.70	* 4.41	* 4.41	* 4.95	4.22	5.13	3.20	4.02	2.52	3.25	2.02	3.05	1.89	8.32
l	-1.00	* 5.44	* 5.44	* 4.64	* 4.64	* 4.40	* 4.40	* 4.81	4.12	5.04	3.12	3.96	2.46	3.22	2.00	3.20	1.99	8.03
l	-2.00	* 5.30	* 5.30	* 4.53	* 4.53	* 4.41	* 4.41	* 4.82	4.08	5.01	3.09	3.94	2.45			3.48	2.17	7.61
	-3.00	* 4.80	* 4.80	* 4.42	* 4.42	* 4.46	* 4.46	* 4.97	4.11	5.03	3.12	3.99	2.49			3.98	2.48	7.01
	-4.00	* 4.50	* 4.50	* 4.39	* 4.39	* 4.60	* 4.60	* 5.36	4.21	5.13	3.21					4.90	3.07	6.19
	-5.00			* 4.50	* 4.50	* 5.00	* 5.00	* 6.51	4.40							* 6.62	4.34	5.05

HD820III-LC 600mm Shoe, 5.63m Boom, 2.93m Arm, 0.9m3 Bucket (710kg)

Unit: 1,000kg

LOAI	D	LIFT POINT RADIUS A(m)														AT MAXIMUM		
POINT		2.00		3.00		4.00		5.00		6.00		7.00		8.00		LIFT POINT RADIUS		
HEIGH B(m)		B		B		J		B		B		J		B		B	<b>-</b>	RADIUS (m)
7.00	)									* 3.49	* 3.49					* 2.88	* 2.88	6.72
6.00	)									* 3.56	* 3.56	* 3.60	3.36			* 2.80	* 2.80	7.40
5.00	)									* 3.86	* 3.86	* 3.85	3.30			* 2.78	2.61	7.89
4.00	)							* 4.69	* 4.69	* 4.33	4.22	* 4.13	3.21	* 3.50	2.49	* 2.83	2.35	8.22
3.00	)			* 4.88	* 4.88	* 6.32	* 6.32	* 5.63	5.45	* 4.92	4.04	* 4.50	3.10	3.90	2.43	* 2.94	2.19	8.43
2.00	)			* 4.34	* 4.34	* 4.87	* 4.87	* 6.30	5.14	* 5.55	3.85	4.80	2.98	3.82	2.35	* 3.11	2.10	8.51
1.00	)			* 4.55	* 4.55	* 4.45	* 4.45	* 5.28	4.88	6.02	3.68	4.68	2.87	3.75	2.29	* 3.35	2.06	8.48
0.00	)	* 2.95	* 2.95	* 4.67	* 4.67	* 4.36	* 4.36	* 4.88	4.69	5.88	3.55	4.58	2.78	3.70	2.24	3.47	2.10	8.32
-1.00	0	* 5.39	* 5.39	* 4.61	* 4.61	* 4.34	* 4.34	* 4.74	4.59	5.79	3.47	4.52	2.73	3.67	2.21	3.65	2.20	8.03
-2.00	0	* 5.28	* 5.28	* 4.49	* 4.49	* 4.35	* 4.35	* 4.75	4.56	5.75	3.44	4.51	2.72			3.97	2.40	7.61
-3.00	0	* 4.77	* 4.77	* 4.38	* 4.38	* 4.40	* 4.40	* 4.90	4.58	5.78	3.46	4.55	2.76			4.54	2.75	7.01
-4.00	0	* 4.46	* 4.46	* 4.34	* 4.34	* 4.54	* 4.54	* 5.28	4.68	5.89	3.56					5.61	3.40	6.19
-5.00	0			* 4.44	* 4.44	* 4.92	* 4.92	* 6.41	4.88							* 6.55	4.81	5.05

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. 7. The operator should be fully acquainted with the operation manual before operating the machine.

#### Standard Equipment

Automatic slew parking brake New APC mode New auto-slow • One-touch-slow Automatic travel parking brake Multi-mode display monitor One free service circuit for attachments Adjustable monitor alarm Rear view mirror (right side) 2 service hour meter Track guard, 1 pc each side 3 traveling mode Front window washer (2 sprays) Automatic travel speed change Spring assisted pull-up front window 6 points viscous damping cab 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)

Main control valve with antidrift valves (Boom & Arm) Digging force booster (High power)

Swing shockless valve

#### **Optional Equipment**

Tinted transparent hatch Seat belt Automatic climate control air conditioner Hot & cool box contained with AC Cabin heater 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 Track guard, 3 pcs each side