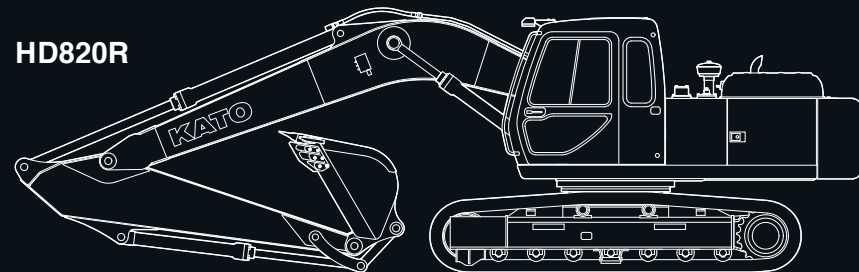


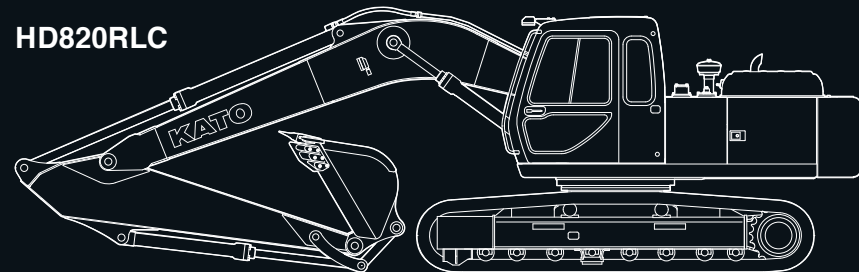
**Innovations
For The Future**

Eco & Tough

HD820R



HD820RLC



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**

KATO WORKS CO.,LTD.

9-37, Higashi-ohi 1-chome, Shinagawa-ku, Tokyo 140-0011 Japan.

Tel. : Head Office Tokyo(03)3458-1111

Overseas Marketing Department Tokyo(03)3458-1115

Fax. : Tokyo(03)3458-1163

URL <http://www.kato-works.co.jp>

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KATO

REGZM

FULLY HYDRAULIC EXCAVATOR

HD820R

Bucket capacity : 0.45m³-1.1m³(ISO)

Engine output : 110kW / 2,050min⁻¹(ISO Net)

Operating weight : 19,500kg (HD820R)
20,300kg (HD820RLC)



Option specification

Courtesy of Machine Market

REGZAM

HD820R

**REGZAM means “ACTIVE MACHINE”
with 5 essential design features**

- User friendly design
- Reliable Mitsubishi Engine (6D34-TLE2A)
- New APC Control
- Fatigue Free & Comfortable Cabin
- Powerful Operation



Equipment



New APC System

- Easily selectable 3 working modes with one-touch switches.

- Advanced TFT color monitor liquid crystal display.
- Back-light at touch switches
- 14 maintenance information available



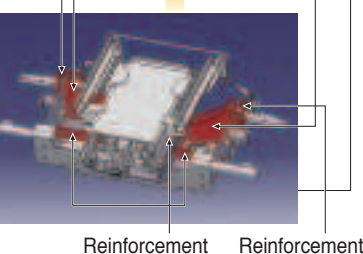
P: Professional Mode
for heavy duty application

A: All-around Multi Purpose Mode
for all application

E: ECO Mode
for economical works

Durable Seat Suspension

- Less rolling motion of lever-consol & seat assures powerful & precise operations.



Reinforcement Reinforcement

Less rolling seat

Technical Specifications

ENGINE

Model	Mitsubishi 6D34-TLE2A, 4 cycle intercooler turbo charged diesel engine
Number of cylinders	6
Bore & Stroke	104mm × 115mm
Total displacement	5.86 L
Rated output	110kW/2,050min ⁻¹ (ISO Net)
Max. torque	580N·m/1,400min ⁻¹ (ISO Net)
Compression ratio	18.2:1
Combustion system	Direct injection
Specific fuel consumption	225g/kW-hour
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 filter
Starter	Electric, 24V-5kW
Generator	Alternator, 24V-35A
Governor	Mechanical
Air cleaner	Dry type filter

HYDRAULIC SYSTEM

Pumps	Double variable piston pump and gear pump
Max. discharge flow	2×235 L/min
Max. discharge pressure	31.4MPa
Max. discharge pressure (High power)	32.4MPa
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 viscous mounting.
Right hand levers	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 "Accell dial"
Meter & gauges	Hour meter, water temperature and fuel level
Working lights	Provided on the boom left side and mounted on the frame
Lubrication chart	Inside the tool box

APC150

- Quick Selection of Working Modes
- P: Professional Mode for heavy duty application (H Mode)
- A: All-around Multi Purpose Mode for all application from precision work to heavy duty work by stroke of operation levers
- E: ECO Mode for economical works
- Color monitor display with back up light
- Engine oil pressure
- Engine oil filter
- Hydraulic oil filter
- Engine Preheater
- Hydraulic oil temperature
- Water temperature
- Water level
- Fuel level
- Battery charge
- APC monitor and air cleaner
- Calendar

BOOM, ARM AND BUCKET

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

SWING SYSTEM

Drive	Axial piston motor with shock-less valve and reduction gear.
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	13min ⁻¹
Tail swing radius	2,750mm
Min. front swing radius	3,460mm

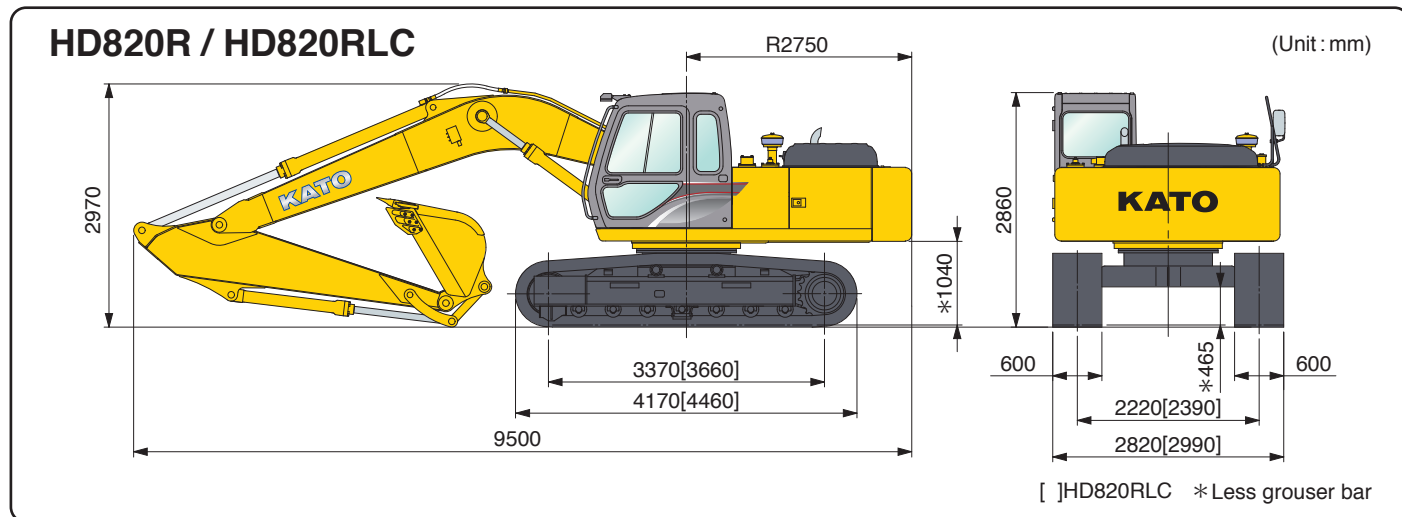
TRAVEL SYSTEM

Drive	Independent axial piston motor 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	46 each side HD820R 49 each side HD820RLC
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 Low 0~3.6km/h
Gradeability	70% (35°)
Max. drawbar pull	179.5kN
Ground clearance (less grouser bar)	465mm
Track length	4,170mm HD820R 4,460mm HD820RLC

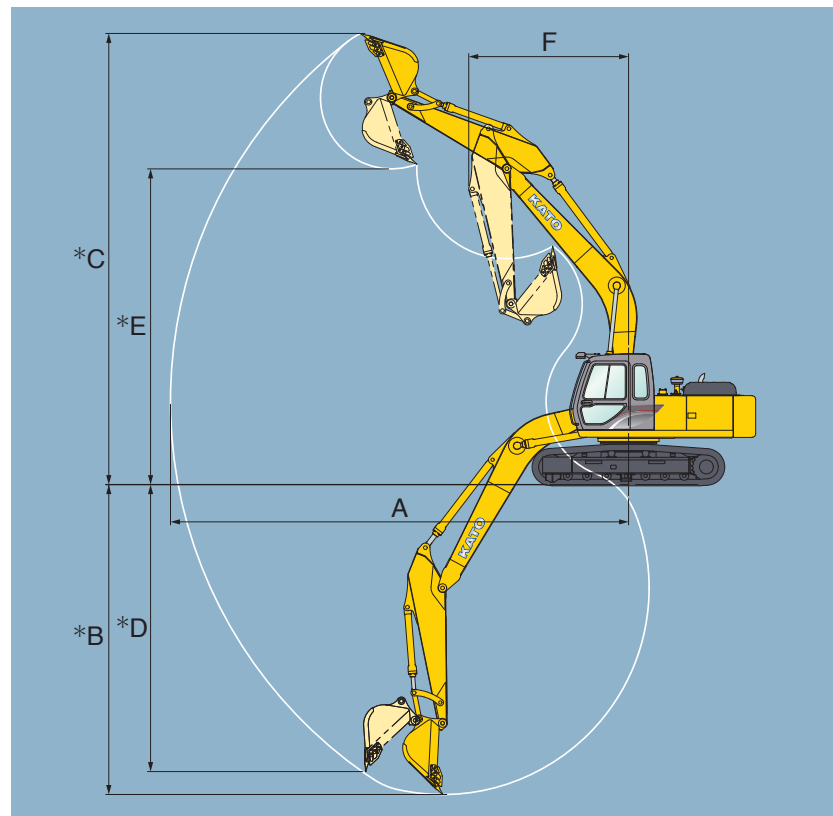
SERVICE DATA

Fuel tank	320 L
Cooling system	23 L
Engine oil	22 L
Track drives	2 × 5 L
Swing drive	4.0 L
Hydraulic oil tank (level)	165 L
(system)	260 L
In standard figure, with the 2.93m arm, 600mm grouser shoes and 0.8m ³ (HD820RLC: 0.9m ³) ISO, bucket.	
Operating weight	19,500kg: HD820R 20,300kg: HD820RLC
Ground pressure	43kPa: HD820R 42kPa: HD820RLC

Dimensions



Working Ranges



Unit: mm

Range	Arm	Short Arm 2.43m	STD Arm 2.93m	Long Arm 3.92m
A : Max. digging radius		9,470	9,910	10,840
*B : Max. digging depth		6,210	6,700	7,700
*C : Max. digging height		9,550	9,760	10,300
*D : Max. vertical wall		5,640	6,120	7,150
*E : Max. dumping height		6,620	6,830	7,340
F : Min. swing radius		3,580	3,460	3,400

*Less grouser bar.

Bucket

Type of bucket		Backhoe bucket					
Bucket capacity	m³, ISO	0.45	0.55	0.80	0.90	1.00	1.10
Bucket width	W/O side cutters, mm	650	800	1,020	1,190	1,270	1,400
	with side cutters, mm	760	910	1,130	1,300	1,380	—
Standard boom +	Short arm	●	●	●	●	▲	□
	Standard arm	●	●	●	●	▲	□
	Long arm	●	●	▲	▲	×	×

● General purpose ▲ Light work □ Loading ○ Usable × Unusable — No setting

○ Yellow colored area means standard.

(HD820R 0.8m³, HD820RLC 0.9m³)

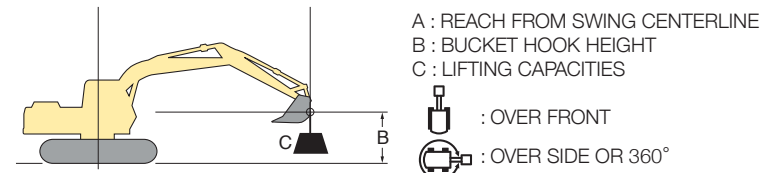
Track Shoes

Type of shoes		Grouser shoe		
Shoe width	mm	600	700	800
Overall width	mm	2,820 [2,990]	2,920 [3,090]	3,020 [3,190]
Ground pressure	(kPa)	43 [42]	38 [37]	34 [33]
Net weight change	(kg)	S.T.D.	+410 [+440]	+670 [+720]

○ Yellow colored area means standard.

[] HD820RLC

Lifting Capacities



HD820R BOOM: 5.63m, ARM: 2.93m, BUCKET: 0.8m³ (640kg), SHOE WIDTH: 600mm, COUNTERWEIGHT: 4,200kg

Unit: 1,000kg

LIFT POINT HEIGHT B (m)	LIFT POINT RADIUS A (m)												AT MAXIMUM LIFT POINT RADIUS		
	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	RADIUS (m)
7.00													*3.27	*3.27	6.72
6.00													*3.17	2.92	7.40
5.00													*3.16	2.54	7.89
4.00													*3.21	2.29	8.22
3.00													*3.32	2.13	8.43
2.00													3.21	2.04	8.51
1.00													3.19	2.00	8.48
0.00													3.24	2.03	8.32
-1.00													3.40	2.13	8.03
-2.00													3.70	2.32	7.61
-3.00													4.22	2.65	7.01
-4.00													5.19	3.27	6.19
-5.00													7.38	4.61	5.05

HD820RLC BOOM: 5.63m, ARM: 2.93m, BUCKET: 0.9m³ (710kg), SHOE WIDTH: 600mm, COUNTERWEIGHT: 4,200kg

Unit: 1,000kg

LIFT POINT HEIGHT B (m)	LIFT POINT RADIUS A (m)												AT MAXIMUM LIFT POINT RADIUS		
	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	RADIUS (m)
7.00													*3.21	*3.21	6.72
6.00													*3.12	*3.12	7.40
5.00													*3.11	2.78	7.89
4.00													*3.16	2.51	8.22
3.00													*3.27	2.34	8.43
2.00													*3.46	2.25	8.51
1.00													3.62	2.21	8.48
0.00													3.69	2.25	8.32
-1.00													3.88	2.36	8.03
-2.00													4.22	2.57	7.61
-3.00													4.83	2.94	7.01
-4.00													5.95	3.62	6.19
-5.00													*7.33	5.11	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

- COLOR MONITOR DISPLAY (APC150)
- SEAT-BELT
- AUTOMATIC AIR CONDITIONER (PRESSURIZED)
- HOT & COOL BOX
- INTERMITTENT WINDSHIELD WIPER
- EMERGENCY EXIT REAR WINDOW
- AM/FM RADIO (2 SPEAKERS)
- 13 CM DUAL CORN SPEAKER X2
- CABIN LIGHT
- 3 STD WORKING LIGHTS (SLEWING TABLE-R, BOOM-L, CAB-L)
- REAR VIEW MIRROR-R
- WORKING MODE SELECTOR (APC150)
- AUTO-SLOW, ONE TOUCH SLOW
- BOOM/ARM ANTI-DRIFT VALVE
- SLEWING ANTI-COUNTER ACTION
- AUTOMATIC PARKING BRAKE (SLEWING TABLE)
- AUTOMATIC PARKING BRAKE (TRAVELING)
- SERVICE PORT (1 SPOOL)
- TRACK GUARD (1 PD EACH SIDE)
- AIR CLEANER DOUBLE ELEMENT
- PRE-CLEANER
- COVER ON THE BOTTOM FACE OF TRAVELING FRAME

Optional Equipment

- TRANSPARENT ROOF HATCH WITH SUN VISOR
- OPTIONAL WORKING LIGHT (BOOM-R)
- OPTIONAL WORKING LIGHT (CAB-R)
- 2 WAY OPTION PIPING (FOR CRUSHER & BREAKER)
- OPTION PIPING (FOR BREAKER)
- WINDSHIELD HALF SIZE GUARD
- WINDSHIELD FULL SIZE GUARD
- CABIN HEAD GUARD
- ROOM FAN
- ELECTRIC REFUELING PUMP
- HIGH PERFORMANCE FUEL FILTER