STANDARD AND OPTIONAL EQUIPMENTS

Safety equipments	STD	LC
ISO12117-2ROPScabin \$withISO10262FOPStopguardLEVEL2dz	O	0
Safety lock lever	0	0
Seat-belt	0	0
Emergency engine stop switch	O	0
Emergency escape hammer	0	0
Rear view mirrors (right&left side)	0	0
Rear view Camera	0	0
Right side view camara	•	٠
Working light (slewing table right side,boom left side)	0	0
Additional working lights (cabin left and right side)	•	
Additional working light (boom right side)	•	
LED working lights	•	
Boom/Arm anti-drift valves	0	0
Slewing anti-counter action	0	0
Automatic parking brake (swing)	0	0
Automatic parking brake (traveling)	0	0
Fire walls	0	0
Falling prevention handrail	0	0
Battery disconnect switch	0	0
Caution indication signs	0	0
Cabin lower guard	•	
Cabin front guard	•	
Cabin head guard	•	
Step on side of cabin	•	
Fire extinguisher	•	
Additional electric horns	•	
Traveling alarm	•	
Swing interlocking warning lamp	•	
Loud speaker	•	
÷		
System	STD	LC
APC modes (A, P and E)	0	0
Front attachment mode	O	0
Auto-slow, one touch slow	0	0
Automatic transmission for traveling	O	0
2 speed modes for traveling	0	0

Cabin	STD	L
6points viscous dampling cabin suspension	O	(
Pull up front windshield	O	(
7 inch touch screen control LCD monitor	0	(
Double slide operator's seat	0	(
Seat suspension adjustable to operator's weight	0	(
Automatic air conditioner (pressurized)	0	(
Defroster	0	(
Large capacity warming & cooling insulation box	0	(
Intermitted windshield wiper	O	(
AM/FM radio	0	(
Two stereo speakers	0	(
LED interior light	O	(
Cup holder	O	(
Helmet hook	0	(
24V electric supply port	0	(
Transparent roof hatch with sun shade	•	
Sun shade	•	
Sun visor	•	1
Rain visor	•	1
Ash tray (with cup holder)	•	
12V electric supply port	•	
USB ports (×2, total 2.5A)	•	1
Seat cover	•	1
Piping and other	STD	I
Attachment service port (1spool)	0	(
High performance return filter	•	
Additional piping for breaker & crusher	•	
Accumulators for breaker	•	1
Boost piping for crusher	•	
Additional piping (for rotator)	•	
Lowering control device (boom)	•	
Lowering control device (arm)	•	
Control pattern change valve. (ISO-SAE)	•	
Air cleaner double elements	O	(
Linden environdervier teble (asisferred)		

Under cover slewing table (reinforced)

Electric refueling pump Specification for cold regio

Designated painting Tool set

Workir	ng equipments	STD	L
	0.45m ³ bucket	•	
	0.55m ³ bucket	•	•
	0.80m ³ bucket	0	Ø
	0.90m ³ bucket	•	
Bucket	1.00m ³ bucket	•	
	1.10m ³ bucket	•	•
	0.80m ³ reinforced bucket	•	
	0.90m ³ reinforced bucket	•	
A see	Arm (2.93m)	0	C
Arm	Arm (3.92m)	•	•
	Various type of reinforcements	•	
Boom	Standard boom (5.63m)	0	C
Boom	Reinforced boom (5.63m)	•	
	Bracket for high reach position	•	•
Link	Standard side link	0	C
Link	Reinforced side link	•	

600mm	Ø	0			
700mm	•	•			
800mm	•	•			
900mm	•				
Covers on the bottom face of traveling frame					
veling moter cover	•				
1 pc each side	0	0			
2 pcs each side	>	٠			
3 pcs each side	•				
	700mm 800mm 900mm bottom face of traveling frame weling moter cover 1 pc each side 2 pcs each side	700mm • 800mm • 900mm • bottom face of traveling frame • veiling moter cover • 1 pc each side • 2 pcs each side •			

BUCKET									
	Type of bucket			Hoe I	oucket				
Bucket cap	acity m ³ , 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	-		
Number of I	bucket teeth	4 4 5		5	6	6			
Shape of bu	ucket	and the second se				Service and a			
Standard boom +	Standard arm (2.93m)	٠	٠	•	•	▲			
	Long arm (3.92m)	•	•	•	× 📣 >	×	×		

၂ Generalpurpose (used with material weight 1,800kg/ٽ or less) ၂ Lightwork (used with material weight 1,600kg/ٽ or less) ၂ Loadingonly (used with material weight 1,100kg/ٽ or less) ×၂ Unusable [] HD820LC-7 orange colored area means standard.

	TIMON SHOLS										
	Grouser shoe										
	Type of shoes			<							
	Shoe width	mm	600	700	800	900					
ain body	Operating weight	kg	21,000 [21,500]	21,400 [21,900]	21,700 [22,100]	21,900 [22,500]					
ns for m	Distance between edge of both side	shoe mm	2,820 [2,990]	2,920 [3,090]	3,020 [3,190]	3,120 [3,290]					
Specifications for main body	Ground	kPa	47 [45]	41 [39]	36 [34]	33 [31]					
	pressure	kgf/cm ²	0.48 [0.46]	0.42 [0.40]	0.37 [0.35]	0.34 [0.32]					

TRACK SHOES

Operating weight and Ground pressure figures, with 5.63m standard boom, 2.93m standard arm and 0.8ὖ (ISO) bucket. [] HD820LC-7 Oorange colored area means standard.

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

Contact for enquiry:



Available through



• • • •

• •

• • 0 0

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earthmovingwarehouse.com.au



FX FFITO



9



7th GENERATION TECHNOLOGY



Environment-friendly

- USEPATier 4 and EUStage₃ compliant engine
- New control valve reduces the fuel consumption

Operability

Operation made easier with the newly fitted 7-inch wide Liquid Crystal Display Improvements made for faster cycle time due to the newly adopted hydraulic system

Maintainability

Goodaccess to service parts Safe features for maintenance

Safety

- New ROPScabinfor safer and comfortable operation
- New engine neutral start mechanism

Comfortable cabin

- · New air conditioner
- Complete interior
- Operability is improved
- Pressurizing function

New APC

- Large size liquid crystal display
- Touch screen control
- Rear and side view monitor are available

Improvements made to the safety features and operability

MULTINI, MULTINI

HD820

Environmental friendly/Operability



Further advancements on eco-friendliness and operability

High performance and environment-friendly Isuzu engine



Selective Catalytic Reduction (SCR) system

The SCRsystem cuts the NOx(nitrogen oxides), PM(particulate matter) and NMHC(non-methane hydrocarbon). The emission control is compliant with Stage4 and Tier4.

EGR(Exhaust Gas Recirculation) system

The large capacity water-cooled EGR cooler suppresses the NOx.

Significant Reduction of the released PM

There is high precision combustion control resulting from the combination of the high pressure common rail fuel injection system and a multistage fuel injection.

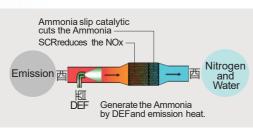


Selective Catalytic Reduction(SCR) system

The SCRsystem provides chemical reaction between Urea and NOxin emission. This reaction generates Nitrogen and Water which are friendly to the environment.

The large capacity DEF (Desel Exhaust Fluid) tank

DEFreplenishment is every 1 time per 2 times of fuel replenishment (subject to working condition). DEFtank is located inside of the tool box and easy to access



The fuel economy is increased by 4 0/ (ompared with Prevous and a Provide at Provide at

Refurbished hydraulic system for improved operability

New Control Valve Pressure loss reduction is contributory to low fuel consumption. The add-on valve is now mountable, hence smartly corresponding to the conventional optional equipment that require additional space for certain necessary valves. In addition, KATOhas a traditionally fine cut and smoothly refined com patible feeling made by detailed tuning.

able



New main pump

Contributory to reduction in fuel consumption is the newly mounted efficient main pump. Moreover, a variety of optional equipment can now be accommodated for due to the PTOpump being mount-





High mileage

Diameter of the boom and bucket cylinder hosehave beenincreased. It reduces pressure loss and minimizes power loss.



Lever operational ability lightened

Light operational feeling is actualized due to reduced lever response. Operational fatigue has also been lessened.



Safer cabin with various features

The KATO original cabin is durable and of smart design. The cabin is compliant with ROPSsafety standard (ISO12117-2). It secures the safety and protection of the operator from roll-over over accident. The cabin is also compliant with ISO10262 (Top guard levels) and protect the operator from falling objects.

Thick plate pipe Reinforced square pipe

нр820-7

Safetv



Thick plate box shaped structure



Window and rise up wiper The large size right window and the rise up wiper secure excellent view. The wiper is storable to the right pillar.



Safety lock lever

The new electronic control lock mechanism enhances safety and prevents miss operation. It locks the hydraulic circuit in case the console is jumped up. The engine start operation is active only when the lever is applied to lock position.

Firewall

Fanguard

Retractablesidemirror

LEDworking light (option)

Fire extinguisher(option)

Other safe features

- Rearview camera
- Side view camera (option)
- Emergencyenginestopswitch
- Emergencyescapehammer
- Seatbelt



Polycarbonate door window Polycarbonate prevents the crack comes

from scattering stone. Hard coating which has provided to surface secures high resistance to yellowing or scratch.



Handrail and step

To prevent falling accident, the handrail has been provided to the upper structure. The large size anti-slip step enables operator to access the upper structure safer.



Best comfort and high efficiency



Heat&cold insulation box It is capable of storing 6 drink bottles (500mL).



Rear stowage space It is capable of storing objects such as 2L size drink bottle.



New foot rest arrangement

The foot rest has been relocated to optimum position. Replacement of the floor mat has become easier.

Drink holder

Soft material is used for the drink holder. Various arrangements are available.





5



New operation lever

Operation switches are arranged to up and bottom. Round shape grip is easy to handle.



Pressurized cabin

It prevents dust by enhancing the airtightness.

Other cabin features

- Seat suspension with large size shock absorber
- Luggage space
- Helmet hook
- AM/FM radio with 2 speakers
- USBport (option)
- 12V electric port (option)
- Ash tray (option)
- Sun visor (option)
- Rain visor (option)
- Transparent roof hatch (option)

- Air conditioner
- Air volume is increased by 26% Filter is paper type





USBport (option)





н н 2820-7

New APC

Visibility

Large and high resolution display

The display is 7 inch size and IPS liquid crystal display provides high quality image

Safety

Rear view camera for standard feature

Operatoris able to confirm rear and side view through dual view display (side view camera is an option).



It indicates rear and side view at the same time.

Operability Touch screen control is available for all operation.



Mode selection Pull-down menu enables operator to confirm all mode on the display at once.



Air conditioner

The air conditioner operation is available on the display.



Alarm message

The display indicates various alarms. It also indicates the DEFaqueousfluid replenishing timing.



Various information

Operator is able to set up to display various information such as maintenance information.

High performance and superior maintenance



LED light (option) The LEDlights have been provided to the cab. right-front and the boom.





It is able to replace the filter for the air conditioner and replenish the washer fluid from the cab maintenance space located outside of the cab.

rear

Equipment layout Electrical components are centralized in the cab



devices becomes safer.

Batterydisconnectswitch It is capable to shut down the battery completely in non-operation state. The





7



Greasing port for slewing motor

The extension hose has been provided to the slewing motor. The greasing port is locating which is easy to access.

High performance bush

The new dimple design bush keeps the grease longer than before. These have been provided to boom foot, arm foot and arm top.

Mounting seat for additional piping

Boom and arm additional piping seat is now available as a standard feature. Hence making possible the mounting of additional piping without the burden of welding.



Fuel main filter

Adopts a cartridge-type filter and is located in the right-rear position which is easy to access.



Cooling system

The expansion tank (pressurized reserve tank) is located on top of the radiator, with improved air venting to the engine and cool ability.



Large capacity toolbox

The large size tool box that is capable to store such as tool set. 10L DEF aqueousfluid container.



DEF refilling port (DEF tank)

It is fixed in an easily accessible location making refilling of the DEFeasier to carry out.



Technical Specifications

Max. discharge pressure

Oil filtration Full-flow filter with

Pressure relief valves Primary and

SWING SYSTEM

Drive… Axial piston motor with shockless

valve and reduction gear.

automatically when the swing

control lever is in the neutral

position and a mechanical parking

brake which is applied when the

backwards, the engine is turned

off or the swing control lever is in

safety lock lever is pulled

the neutral position.

Max. swing speed

Lubrication Completely housed and

grease bathed

Brake...A hydraulic brake that locks

replaceable element,

a pilot line filter and

free service circuit)

each circuit

·····14.0min

suction strainer Control valves 5+4 section multiple

(high power) ···

Pilot pump.

ENGINE

Model·····	10020 1111117
Туре 4-су	cle, water-cooled,
in-lin	e, direct injection with
	charged
Bore & Stroke	····· 115 mm × 125 mm
	······ 5.193 L
Deted output	··· 128.4kW/2,000min ⁻¹
naleu oulpul	(ISO 14396)
	```
	120.5kW/2,000min ⁻¹
	(ISO 9249 Net)
Max. torque ······	
	(ISO 14396)
	646N·m/1,600min ⁻¹
	(ISO 9249 Net)
Compression ratio	
Cooling system ······	··· Pressurized
	coolant circulated
	by coolant pump
	with the thermostat
	and expansion tank
I I I I I I I I I I I I I I I I I I I	
Lubrication system.	····Pressurized oil fed
	by a gear pump
	through full-flow
	and by-pass
	cartridge filter
Starter	···· Electric, 24V-5.0kW
Generator	·· Alternator, 24V-50A
	element Dry type filter
	, ,,

#### HYDRAULICSYSTEM TRAVEL SYSTEM

Pumps......Double variable piston pump Drive ..... Independent axial piston motor and gear pump with reduction for each side Max. discharge flow ..... 2x248L/min Brakes… Independent disk parking brake Max. discharge pressure ......... 34.3MPa for each side, applied automatically when the travel ··36.3MPa levers are in the neutral position. Track shoes ...... 46 each side 49 each side (LC) Track adjustment ..... Grease cylinders with recoil springs Lubrication ··· Sealed-for-life rollers and front idlers with floating seals control valves (with one Travel speed… ······ High 0~5.9km/h ··· Gear type Low 0~3.9km/h Oil cooler ··· Finned tube, forced ventilation Gradeability ····· 70% (35° ···· 187kN Max. drawbar pull..... secondary on

#### **DIGGINGFORCE(ISO6015)**

Bucket digging force	150ki
at high power	159kľ
Arm (2.93m) digging force	109ki
at high power·····	115kN

#### **SERVICE DATA**

Fuel tank
Cooling system ····· 40 L
Engine oil····· 26 L
DEF tank
capacity55 L
replenishment46 L
Track drives······2×5.0 L
Hydraulic oil tank
level 165 L
system

Type All weather sound suppresse
cab mounted on 6 point
viscous mounting.
Right hand levers ······ Controls the boom buck
Inner right hand lever
(with foot pedal) Controls the rig
hand tra
Inner left hand lever
(with foot pedal) ······ Controls the left has
Left hand levers ·· Controls the arm & swit
Pilot controls ···· Travel, boom, arm, buck
and swi
Engine throttle Electric "Accell dial
Meters & gauges ····· Hour meter, water
temperature.DEF
and fuel level
Working lights Provided on the boo
left side and right
front cover

CABIN&CONTROLS

Lubrication chart ..... Inside of the right front side cover

Quick Selection of Working Modes----P: Professional mode for the experienced operator, Established both power and good response A: All-round multipurpose Mode for all

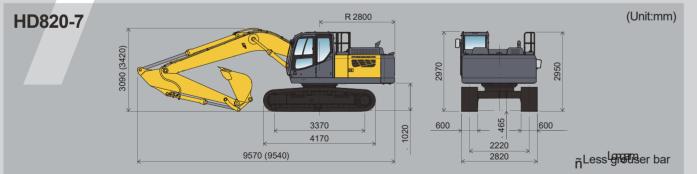
application from precision work to heavy duty work by stroke of operation levers E: ECO Mode for economical works Color monitor display with touch screen

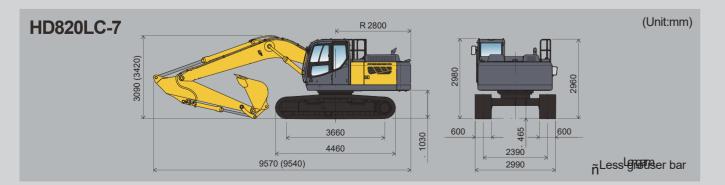
Rear / side View monitor

#### **AIR CONDITIONER**

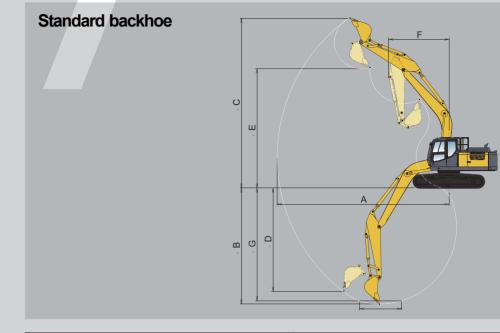
Air conditioner gas contains fluorinated greenhouse gases. HFC-134a Industrial designation... Quantity ······1.0kg ·····1 43ton CO₂ equivalent ······ Global warming potential (GWP)------1430







# **Working Ranges**



	Standard boom				
Range Arm	Standard arm 2.93 m	Long arm 3.92 m			
A : Maximum digging radius	9,930	10,880			
* B : Maximum digging depth	6,700 <6,690>	7,700 <7,690>			
* C : Maximum digging height	9,830 <9,840>	10,400 <10,410>			
* D : Maximum vertical wall	5,970 <5,960>	7,090 <7,080>			
* E : Maximum dumping height	6,890 <6,900>	7,430 <7,440>			
F : Minimum swing radius	3,480	3,380			
* G: Maximumdigging depth at 2,440mm (8ft) floor length	6,530 <6,520>	7,560 <7,550>			

# **Lifting Capacities**

HD820-7		BOOM: 5.	.63 m, ARN	/l: 2.93 m,	BUCKET:	0.8 m ³ (65	∂kg), SHC	E WIDTH:	600mm,	COUNTER	RWEIGHT	:4,000 kg	Unit:kg
LIFT	LIFT POINT RADIUS A(m)										AT MAXIMUM		
POINT	1.	50	3.	00	4.	50	6.	00	7.	50	LIFT	POINT RA	ADIUS
HEIGHT B(m)	Ů		Ů		Ů		Ů		Ů		Ů		RADIUS (m)
7.50							ñ ³⁶⁴⁰	<b>ñ</b> 3640			<b>ñ</b> ³⁵⁸⁰	ñ ³⁵⁸⁰	6.09
6.00							ñ ⁴⁰²⁰	ã ⁴⁰²⁰			<b>n</b> 3020	<b>n</b> 3020	7.45
4.50							ã4600	4400	4460	2950	<b>≈</b> 3010	2520	8.12
3.00			<b>≈</b> 5500	ã ⁵⁵⁰⁰	≈6920	6530	≈5530	4120	4330	2820	<b>≈</b> 3150	2240	8.47
1.50			ã ⁴⁹⁶⁰	ñ ⁴⁹⁶⁰	ñ ⁵⁶⁹⁰	ñ ⁵⁶⁹⁰	5990	3830	4180	2670	3360	2130	8.54
0.00			<b>x</b> 5200	<b>n</b> 5200	<b>≈</b> 5130	<b>n</b> 5130	5760	3620	4060	2560	3430	2150	8.35
-1.50	≈6500	ñ ⁶⁵⁰⁰	<b>≈</b> 5080	₹5080	≈5050	₹5050	5640	3520	4000	2510	3730	2340	7.87
-3.00	<b>n</b> 5670	ñ ⁵⁶⁷⁰	<b>≈</b> 4910	<b>n</b> 4910	<b>n</b> 5190	<b>n</b> 5190	5660	3730			4460	2810	7.03
-4.50			ñ ⁴⁹³⁰	ñ ⁴⁹³⁰	ñ ⁵⁷⁵⁰	ñ ⁵⁶⁷⁰					6340	4000	5.70

HD820LC-7 BOOM: 5.

.63 m, AR	M: 2.93 m,	BUCKET:	0.8 m ³

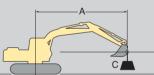
LIFT		LIFT POINT RADIUS A(m)								AT MAXIMUM			
POINT	1.50 3.00		00	4.50		6.00		7.50		LIFT POINT RADIUS			
HEIGHT			-		I.	A				(The	П		RADIUS
B(m)	0		Ü				Ū		0		0		(m)
7.50							ñ ³⁶⁴⁰	ñ ³⁶⁴⁰			<b>n</b> ³⁵⁸⁰	ñ ³⁵⁸⁰	6.09
6.00							ñ4020	ñ4020			<b>n</b> 3020	<b>n</b> 3020	7.45
4.50							<b>≈</b> 4600	ã4600	<b>ñ</b> ⁴⁴⁶⁰	3280	<b>≈</b> 3010	2810	8.12
3.00			ñ ⁵⁵⁰⁰	ñ ⁵⁵⁰⁰	ñ ⁶⁹²⁰	ñ ⁶⁹²⁰	<b>n</b> 5530	4580	<b>n</b> 4910	3150	<b>n</b> 3150	2520	8.47
1.50			<b>≈</b> 4960	≈4960	≈5690	<b>≈</b> 5690	<b>≈</b> 6560	4290	4800	3000	<b>≈</b> 3430	2400	8.54
0.00			₹5200	<b>n</b> 5200	<b>x</b> 5130	<b>x</b> 5130	6660	4070	4680	2890	<b>n</b> 3930	2430	8.35
-1.50	ñ ⁶⁵⁰⁰	ñ ⁶⁵⁰⁰	ã ⁵⁰⁸⁰	ã ⁵⁰⁸⁰	<b>x</b> 5050	<b>x</b> 5050	6540	3960	4630	2840	4310	2650	7.87
-3.00	<b>ñ</b> 5670	ã5670	<b>n</b> 4910	<b>n</b> 4910	<b>n</b> 5190	<b>n</b> 5190	6560	3980			5150	3170	7.03
-4.50			ñ ⁴⁹³⁰	ñ ⁴⁹³⁰	ñ 5750	<b>ñ</b> 5750					ñ ⁶⁹⁷⁰	4490	5.70

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 apply only to the machine as originally manufactured and equipped by KATO WORKS CO., LTD.
7. The operator should be fully acquainted with the instruction manual before operating the machine.



Unit : mm *Less grouser bar

< >HD820LC-7



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

: OVER FRONT

: OVER SIDE OR 360°

#### (650kg), SHOE WIDTH: 600mm, COUNTERWEIGHT: 4,000 kg Unit: kg