

Specifications

SH800LHD-5 Technical data

Engine

SH800LHD-5	
Model	ISUZU AH-6WG1XYSS
Type	Electric control, water cooled, 4-cycle diesel, 6-cylinder in line, direct injection, turbocharged with air cooled inter-cooler
Rated output	397 kW/540 PS/1,800 min ⁻¹
Maximum torque	2,250 N·m at 1,500 min ⁻¹
Piston displacement	15,700 cc
Bore and stroke	147 mm x 154 mm
Starting system	24 V electric motor starting
Alternator	24 V, 50 A
Fuel tank	900 liters
Air filter	Double element

SIH:S

Two variable displacement axial piston pumps, one gear pump for pilot controls and the electronic-controlled engine of SPACE5 and SIH:S (SUMITOMO Intelligent Hydraulic System) includes: three working mode (SP, H, A) one-touch/automatic idling system and automatic power-boost.

Hydraulic pumps

Two variable displacement axial piston pumps provide power for boom, arm, bucket, swing and travel.

SH800LHD-5	
Maximum oil flow	2 x 500 liters/min
Pilot pump max. oil flow	27 liters/min

Hydraulic motors

For travel: Two variable displacement axial piston motors.
For swing: Two fixed displacement axial piston motor.

Relief valve settings

Boom/arm/bucket 36.3 Mpa (370 kgf/cm²) <Holding pressure>
Boom/arm/bucket 31.4 Mpa (320 kgf/cm²) <Working pressure>
Boom/arm/bucket 34.3 Mpa (350 kgf/cm²) with Power-up <Working pressure>
Swing circuit 26.5 Mpa (270 kgf/cm²)
Travel circuit 34.3 Mpa (350 kgf/cm²)

Control valve

With boom/arm holding valve
One 4-spool valve for right track travel, bucket, boom and arm acceleration
One 5-spool valve for left track travel, auxiliary, swing, boom acceleration and arm

Oil filtration

Return filter 6 microns
Pilot filter 8 microns
Suction filter 105 microns

Hydraulic cylinders

SH800LHD-5		
Boom	2	200 mm x 140 mm x 1,893 mm
Arm	1	215 mm x 150 mm x 2,290 mm
Arm (Mass)	1	215 mm x 150 mm x 2,175 mm
Bucket	1	190 mm x 130 mm x 1,555 mm
Bucket (Mass)	1	215 mm x 150 mm x 1,520 mm

Double-acting, bolt-up type cylinder end; hardened steel bushings installed in cylinder tube and rod ends.

Cab & controls

The cab is mounted on 4 fluid mountings. Features include safety glass front, rear and side windows, reclining/sliding cloth upholstered suspension seat with headrest and armrest, cigarette lighter, pop-up skylight window, and intermittent wiper with washer. The front window slides upward for storage, and the lower front window is removable. Control levers are located in 4 positions with tilting control consoles. Reliable soft-touch switches are a standard feature. An easy-to-read full-dot LCD monitor keeps operation in touch with critical machine functions.

Swing

Planetary reduction powered by an axial piston motor. Internal ring gear with grease cavity for pinion. Swing bearing is single-row shear type ball bearing. Dual stage relief valves for smooth swing deceleration and stops. Mechanical disc swing brake.

SH800LHD-5	
Swing speed	0~6.4 min ⁻¹
Tail swing radius	4,300 mm
Swing torque	266 kN·m · 27,100 kgf·m

Undercarriage

X-style carbody is integrally welded for strength and durability. Grease cylinder track adjusters with shock absorbing springs. Undercarriage with lubricated rollers and idlers.

Type of shoe: sealed link shoe

Upper rollers -

Heat treated, mounted on steel bushings with fluorine resin, sealed for lifetime lubrication.

Lower rollers -

Heat treated, mounted on steel bushings with leaded tin bronze casting, sealed for lifetime lubrication.

Track adjustment -

Idler axles adjusted with grease cylinder integral on each side frame; adjustment yoke mechanism fitted with heavy duty recoil spring.

Number of rollers and shoes on each side

SH800LHD-5	
Upper rollers	3
Lower rollers	9
Track shoes	51

Travel system

Two-speed independent hydrostatic system with compact axial motors for increased performance. Hydraulic motor powered output shaft coupled to a planetary reduction unit and track sprocket. All hydraulic components mounted within the width of side frame. Travel speed can be selected by switch panel. Hydraulically released disc parking brake is built into each motor.

SH800LHD-5		
Travel speed	High	4.2 km/h
	Low	2.9 km/h
Maximum traction force	565 kN · 57,600 kgf	

Lubricant & coolant capacity

SH800LHD-5	
Hydraulic system	720 liters
Hydraulic oil tank	310 liters
Fuel tank	900 liters
Cooling system	108 liters
Final drive case (per side)	13.8 liters
Swing drive case (per side)	4.7 liters
Engine crank case (with remote oil filter)	52 liters

Auxiliary hydraulic system

SH800LHD-5		
Auxiliary piping type (option)	For Breaker	For Double (breaker & crusher) acting
Arm type	STD	STD
Bucket linkage type	STD	STD
Auxiliary hydraulic pump flow	max. 480 liters/min	max. 1 000 liters/min

Weight & ground pressure

SH800LHD-5 (Mass)			
Model	SH800LHD-5 (Mass)		
Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser shoe	650 mm	80 100 kg (80 200 kg)	109 kPa (110 kPa)
	750 mm	80 800 kg (80 900 kg)	96 kPa (96 kPa)

Digging force

Model		SH800LHD-5			SH800LHD-5 Mass
Arm length		3.66 m	4.44 m	5.62 m	2.98 m
Bucket digging force <with auto power up>	ISO 6015	330 kN <361 kN>			430 kN <470 kN>
	SAE: PCSA	294 kN <322 kN>			412 kN <377 kN>
Arm digging force <with auto power up>	ISO 6015	274 kN <300 kN>	232 kN <253 kN>	202 kN <221 kN>	317 kN <347 kN>
	SAE: PCSA	265 kN <290 kN>	225 kN <247 kN>	197 kN <216 kN>	332 kN <304 kN>

Principal specifications & dimensions

Model		SH800LHD-5	SH800LHD-5 Mass
Base	Boom Length	8.4 m	7.25 m
	Arm Length	3.66 m	2.98 m
	Bucket capacity (ISO heaped)	3.3 m ³	4.1 m ³
	Operating weight	80 100 kg	80 200 kg
Engine	Make & model	ISUZU AH-6WG1XYSS	
	Rated output	397kW(540PS)/1 800 min ⁻¹	
	Displacement	15 700 ml(cc)	
Hydraulic System	Main pump	2 variable displacement axial piston pumps with regulating system	
	Max Pressure (with auto power up)	31.4 MPa 34.3 MPa	
	Travel motor	Variable displacement axial piston motor	
	Parking brake type	Mechanical disc brake	
	Swing motor	Fixed displacement axial piston motor	
Performance	Travel speed	4.2/2.9 km/h	
	Traction force	565 kN	
	Grade ability	70% <35°>	
	Ground pressure	109 kPa	110 kPa
	Swing speed	6.4 min ⁻¹	
	Bucket	361 kN	470 kN
Other	Arm	300 kN	347 kN
	Fuel tank	900 liter	
	Hydraulic fluid tank	310 liter	

