

H285S KOMATSU



Service Weight

738,500 lb
335 t

Shovel Capacity

SAE/CECE
25.0 yd³
19.0 m³

Backhoe Capacity

SAE	CECE
23.0 yd ³	20.0 yd ³
17.3 m ³	15.5 m ³

Engine Output

Diesel	1580 hp
	1180 kW
Electric	1190 kW



H285S

SPECIFICATIONS

KOMATSU
HYDRAULIC MINING SHOVEL
DEMAG



Diesel Drive

Make and model.....**Cummins K2000E**
 Type.....4 cycle, water-cooled, direct-injection
 AspirationTurbocharged and aftercooled
 No. of cylinders.....16
 Bore.....**6.25"** 159 mm
 Stroke**6.25"** 159 mm
 Displacement**3,057 in³** 50.0 L
 Rated brake power* **1,675 hp** 1250 kW @ 1800 rpm
 Flywheel horsepower** **1,580 hp** 1180 kW @ 1800 rpm
 Governor.....All-speed, mechanical

*Rated brake power is the output of the engine as installed in this machine, at governed rpm and with engine manufacturer's approved fuel setting. Accessory losses included are water pump, fuel pump and oil pump.

**Flywheel power is the rated power at the engine flywheel minus the average accessory losses.

Accessories include fan and charging alternator. Rating(s) represent gross engine performance in accordance with SAE J1349 conditions.



Electric Drive

Type.....Squirrel-cage induction motor
 Power output1190 kW
 Voltage6600 V
 Current.....130 A
 Frequencies available.....50 Hz @ 1500 rpm
 (optional)60 Hz @ 1800 rpm



Electrical System

System24 V
 Batteries (parallel/series)4 x 12 V
 Alternator.....24 V, 100 A
 Lighting3 X 200 W



Cooling System

Large components provide superior engine cooling capacity. The hydraulic system includes a large vertical air-to-oil cooler with hydraulically driven fan. Hydraulic cooler is hinged and swings out for easy cleaning and maintenance.



The ETM System

The ETM diagnostic system with text display, mounted in the operator's console, continuously monitors major data of engine, gearbox and hydraulic system. Fault messages are electronically stored and can be called up.



Hydropilot®

The Komatsu Demag Hydropilot® 3-circuit hydraulic system features a load limiting governor with oil summation delivery to the working circuits and integral pressure cutoff.



Hydraulic System

The powertrain consists of a main drive, gearbox, and four identical pumps which deliver hydraulic oil from the unpressurized hydraulic tank. Open-circuit hydraulics provide maximum cooling and filtering efficiency.

Flow rate (total 4 pumps)**952 gpm** 3600 liters/min
 Pressure.....**4,495 psi** 310 bar
 Swing gear rate**238 gpm** 900 liters/min
 Hydraulic pumpsFour Rexroth variable-displacement axial piston-type



Swing System

Hydraulic motor.....2
 Swing circle lubricationAuto-lube pinion
 Swing brake.....Hydraulic w/ wet disc locking brake
 Ring teeth.....External
 Swing speed.....3.3 rpm



Undercarriage

Center frameH-type
 Track frameBox-section
 Track adjusterAutomatic hydraulic, with accumulator
 No. of track shoes (per side)47
 No. of carrier rollers (per side)3
 No. of track rollers (per side)7



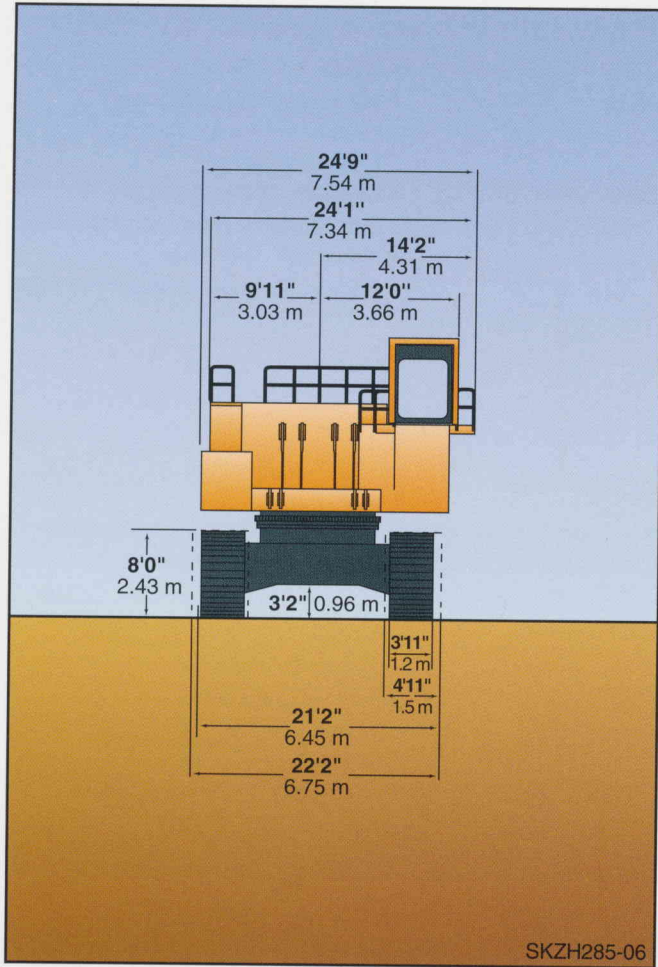
Drives & Brakes

Steering control.....Two foot pedals
 Drive method.....Fully hydrostatic
 Travel motor.....Piston-type
 Travel speed (max.).....**1.3 mph** 2.0 km/h
 Gradeability60%
 Service brake.....Hydraulic lock
 Parking brakeWet, multiple-disc

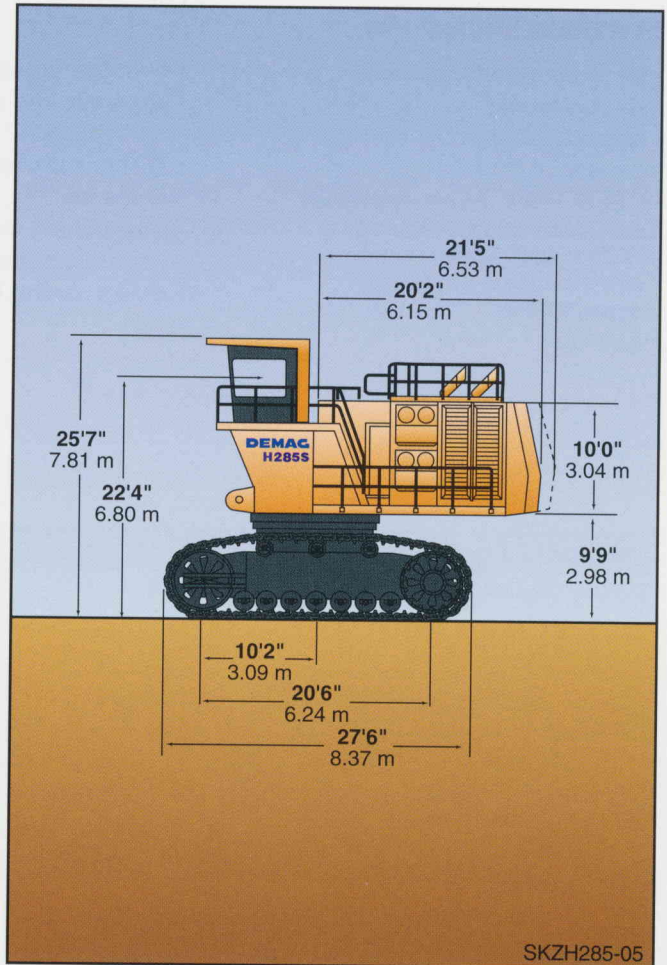


Crawler Assembly

Track width47" 1200 mm
 Weight (ea. assembly)**113,500 lb** 52 t
 Ground pressure**28 psi** 19 N/cm²
 Track width (optional).....59" 1500 mm
 Weight (ea. assembly)**115,700 lb** 53 t
 Ground pressure**23 psi** 16 N/cm²



SKZH285-06



SKZH285-05



Boom/Stick

Rigid box-section boom and stick offer exceptional service life for heavy-duty mining conditions. Large radius castings reinforce high stress areas. Oversized hydraulic cylinders provide heavy-duty performance and feature automatic lubricated bearings. Structural steel buckets with optional wear packages incorporate either Bofors or ESCO lips, mechanical shrouds, and tooth systems designed for various digging conditions.



Cab

Fully adjustable weight-compensating seat with vibration-dampening and adjustable armrests. Foldaway auxiliary seat. Two levers control digging and swing functions. Foot pedals control all crawler motions, clam, and swing brake. External FOPS system, air conditioner, heater/defogger, sound suppression, radio, sun visor, windshield wiper/washer. Cab is rubber-mounted to reduce noise and vibration.



Superstructure

Heavy-duty castings provide superior durability in high stress areas. Designed for excellent accessibility to major components for maintenance.

Counterweight.....**88,000 lb** 40 t



Service Weight

Machine w/o attachments.....	565,900 lb	257 t
Bucket	66,000 lb	30 t
Boom	68,000 lb	31 t
Stick	38,600 lb	17 t
Total	738,500 lb	335 t

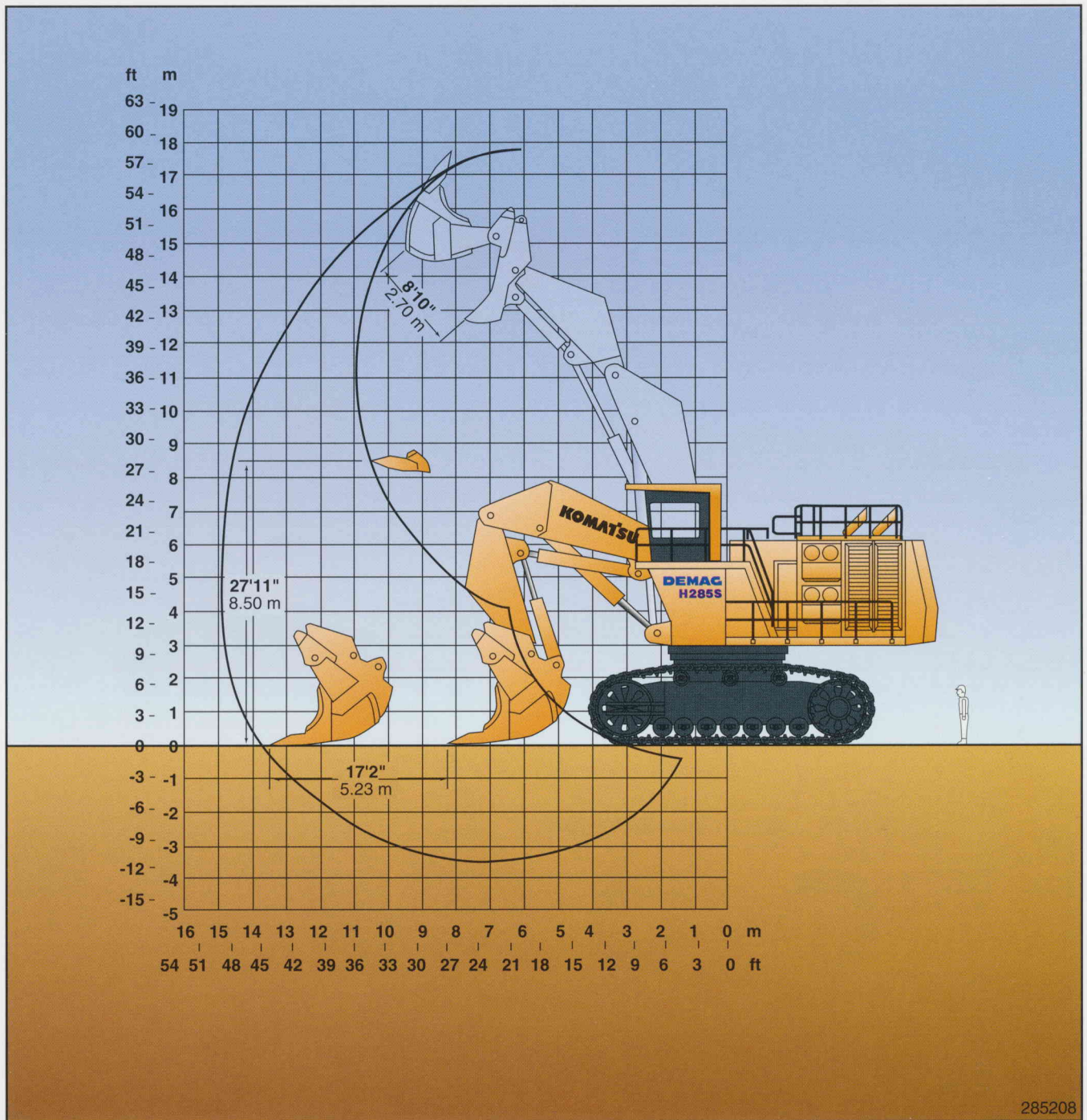


Service Capacities

Fuel*	1,207 U.S. gal	4570 L
Hydraulic oil tank	782 U.S. gal	2960 L
Hydraulic system	1,046 U.S. gal	3960 L
Engine cooling.....	102 U.S. gal	385 L
Engine crankcase.....	55 U.S. gal	208 L
Travel gear	41 U.S. gal	155 L
Swing gear	33 U.S. gal	125 L
Pump drive	40 U.S. gal	150 L

*Adequate for three shifts

Shovel Digging Range



285208



Forces

Break-out force264,600 lb 1200 kN
 Crowd force264,600 lb 1200 kN



Attachments

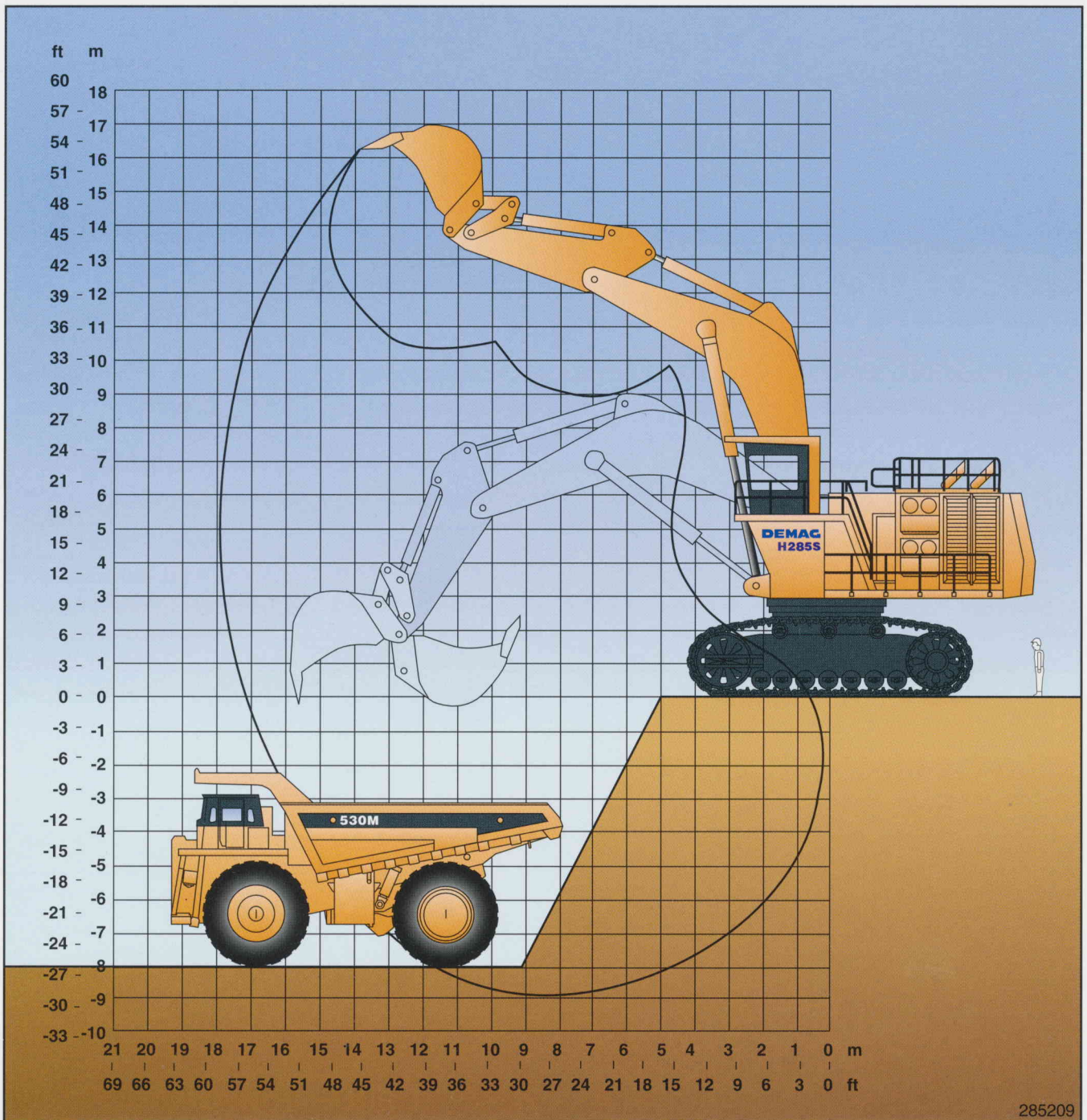
Boom20'8" 6300 mm
 Stick14'1" 4300 mm



Bucket

Capacity (SAE/CECE) 2:1 slope25.0 yd³ 19.0 m³
 1:1 slope30.0 yd³ 22.8 m³
 Width13'1" 4000 mm
 Weight w/ wear package66,000 lb 30 t
 Number of teeth5
 Material density3,050 lb/yd³ 1.8 t/m³

Backhoe Digging Range



285209



Forces

Break-out force.....	220,500 lb	1000 kN
Tear-out force.....	209,470 lb	950 kN



Attachments

Boom.....	30'10"	9400 mm
Stick.....	14'9"	4500 mm



Bucket

Capacity (SAE) 1:1 slope.....	23.0 yd ³	17.3 m ³
(CECE) 2:1 slope.....	20.0 yd ³	15.5 m ³
Width.....	10'10"	3300 mm
Weight w/ wear package.....	33,930 lb	15 t
Number of teeth.....	5	
Material density.....	3,050 lb/yd ³	1.8 t/m ³

H285S

Standard Equipment

- Air cleaner, double element
- Air conditioner
- Alternator, 100 A
- Batteries, 4 X 12 V
- Cab, includes: deluxe suspension seat, foldaway auxiliary seat, FOPS, sound suppression, radio, sun visor, windshield wiper/washer
- Catwalks
- Controls, wrist-type
- Electronic load governor
- ESCO teeth
- ETM monitoring system
- Guard, fan
- Guard, swing ring
- Heater/defogger
- Ladder, manual lift
- Lights, 3 X 200 W
- Lincoln Auto-lube System
- Lincoln Automatic Swing Gear Lubrication
- Overheat prevention
- Pump/engine room partition
- Shoes: 47" 1200 mm
- Wiggins Replenish System w/ arm

Optional Equipment / Accessories

- Additional lights, 200 W
- Alternator, 225 A
- Aquadigger configuration: various boom/stick lengths, various bucket capacities
- Auto deceleration
- Bofors teeth
- Bucket, coal
- Bucket, HD
- Bucket wear packages
- ECS Monitoring System
- Electric cable drum
- Fire suppression systems (Ansul)
- Kim Hot Start
- Generator, auxiliary
- Shoes: 59" 1500 mm
- Special paint scheme
- Sun blinds (for cab side windows)
- Track support rails

KOMATSU

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Featured machines may include optional or special equipment. Materials and specifications are subject to change without notice.