

The GEOSPEC Difference:

Rugged Durability That Ensures Long-Term Machine Value!

Durability That Retains Machine Value Five and Ten Years in the Future

- Improved heat resistance in the swing motor, cylinders and other hydraulic components
- New operator's seat covered by durable material

Highly Reliable ITCS

The manufactured quality of the ITCS controller has been further upgraded, with special measures taken to protect against water and dust. Improvements have also been made in the specs of the pressure sensors, as well as anti-noise performance.



The GEOSPEC Difference:

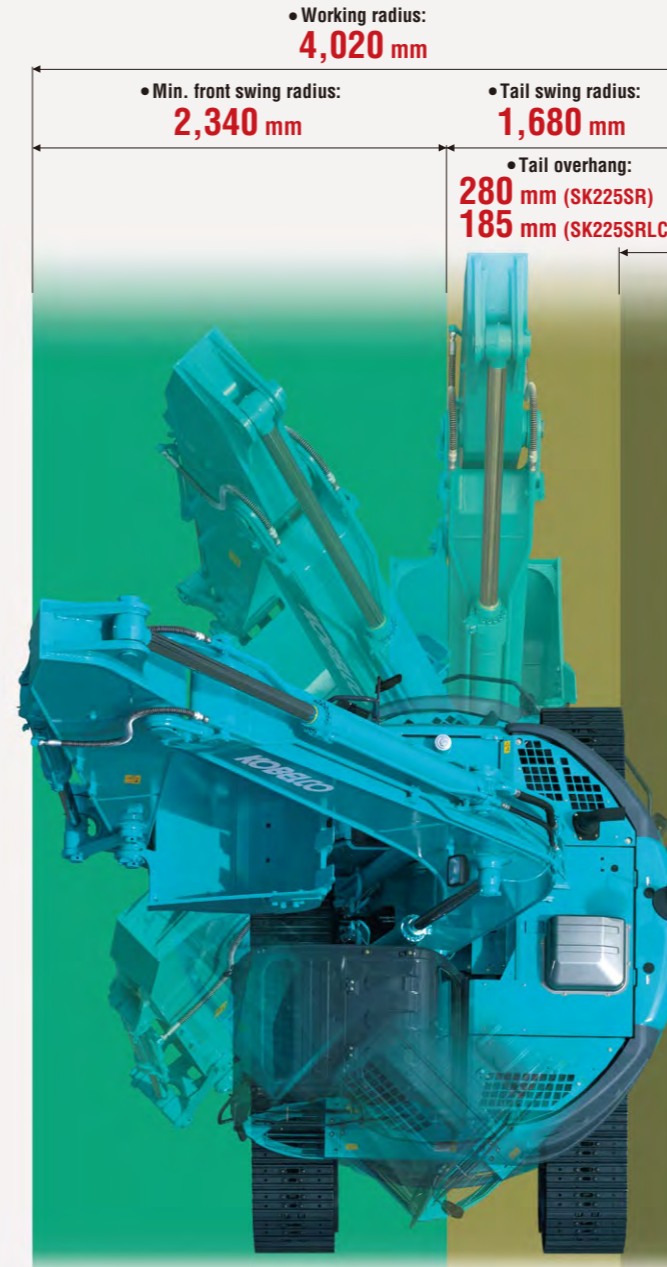
Designed to Operate Effectively in Close Quarters!

Watch the Job in Front, Not the Counterbalance

The tail of the upper body extends very little past the back end of the crawlers so that the operator can concentrate on the job at hand instead of worrying about the position of the counterweight. This not only improves operating efficiency but reduces costs associated with collision damage.

Requires Less Than 4m of Working Space

The compact design allows the machine to perform continuous 180° dig, swing and load operations within a working space of just 4.0 m.



***Working radius** equals the sum of the minimum front swing radius and tail swing radius.

The GEOSPEC Difference:

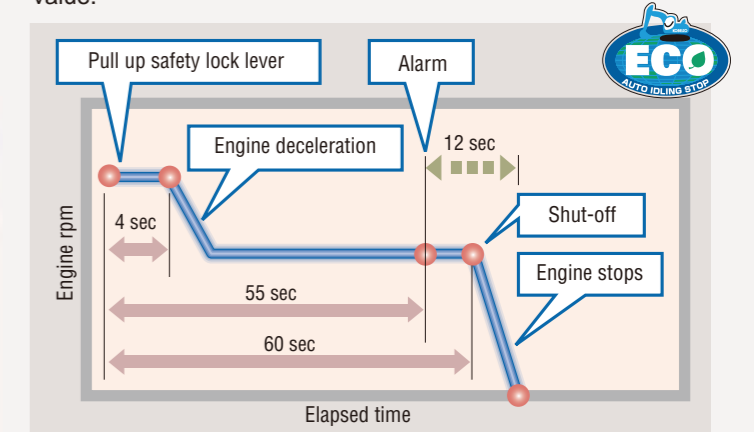
Designed for the Environment and the Future!

Meets Standard Values Set by Emissions Regulations

The engine used in the GEOSPEC machines represents the crystallization of various cutting-edge technologies that minimize the emission of PM (Particulate Matter), NOx, black smoke, and other emissions, thus meeting all internationally recognized environmental regulations, including US EPA Tier III, NRMM (Europe) Stage IIIA, and Act on Regulation, Etc. of Emissions from Non-road Special Motor Vehicles (Japan).

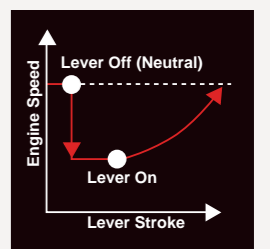
Auto Idle Stop Provided as Standard Equipment

This function saves fuel and cuts emissions by shutting down the engine automatically when the machine is on stand by. It also stops the hourmeter, which helps to retain the machine's asset value.



Automatic Acceleration/Deceleration Function Reduces Engine Speed

Engine speed is automatically reduced when the control lever is placed in neutral, effectively saving fuel and reducing noise and exhaust emissions. The engine quickly returns to full speed when the lever is moved out of neutral.



Mild Operating Sound

The iNDR cooling system also helps to keep the machine quiet, even at close quarters. Even the hydraulic relief valves have been designed specifically to reduce irritating noise during operation.

Meets EMC (Electromagnetic Compatibility) Standards in Europe.

Electrical shielding ensures that the machines clear all European standards and neither cause or are affected by electromagnetic interference.

Engine

Table with 2 columns: Model (HINO JO5E-TA) and Type. Specifications include Direct injection, water-cooled, 4-cycle diesel engine with turbocharger, intercooler, Stage IIIA, US EPA Tier III, and act on regulation, etc. of emissions from non-road special motor vehicles (Japan).

No. of cylinders: 4
Bore and stroke: 112 mm x 130 mm
Displacement: 5.123 L
Rated power output: 118 kW /2,000 min⁻¹ (ISO14396: 2002)* 114 kW /2,000 min⁻¹ (ISO9249: 2007)
Max. torque: 592 N·m/1,600 min⁻¹ (rpm) (ISO14396: 2002)* 572 N·m/1,600 min⁻¹ (rpm) (ISO9249: 2007)
*ISO 14396 meets EU regulation

Hydraulic System

Table with 2 columns: Pump and Max. discharge flow. Type: Two variable displacement pumps + 1 gear pump. Max. discharge flow: 2 x 220 L/min, 1 x 20 L/min Extra gear pump 1 x 41 L/min

Table with 2 columns: Relief valve setting and Boom, arm and bucket. Boom, arm and bucket: 34.3 MPa (350 kgf/cm²)
Power boost: 37.8 MPa (385 kgf/cm²)
Travel circuit: 34.3 MPa (350 kgf/cm²)
Swing circuit: 29.0 MPa (296 kgf/cm²)
Control circuit: 5.0 MPa (50 kgf/cm²)
Pilot control pump: Gear type
Main control valves: 8-spool
Oil cooler: Air cooled type

Swing System

Table with 2 columns: Swing motor, Brake, Parking brake, Swing speed, Tail swing radius, Min. front swing radius. Swing motor: Axial piston motor
Brake: Hydraulic; locking automatically when the swing control lever is in the neutral position
Parking brake: Hydraulic brake
Swing speed: 13.3 min⁻¹ (rpm)
Tail swing radius: 1,680 mm
Min. front swing radius: 2,340 mm

Attachments

Backhoe bucket and arm combination

Table showing bucket capacity, opening width, and combinations for backhoe bucket and side pin type. Includes diagrams of bucket configurations.

○ Std. ◉ Recommended △ Loading only

Travel System

Table with 2 columns: Travel motors, Travel brakes, Parking brakes, Travel shoes, Travel speed, Drawbar pulling force, Gradeability. Travel motors: 2 x axial-piston, two-step motors
Travel brakes: Hydraulic brake per motor
Parking brakes: Oil disc brake per motor
Travel shoes: 46 each side (SK225SR) 49 each side (SK225SRLC)
Travel speed: 6.0/3.6 km/h
Drawbar pulling force: 227 kN [23,200 kgf] (ISO 7464)
Gradeability: 70 % (35°)

Cab & Control

Cab: All-weather, sound-suppressed steel cab mounted on the silicon-sealed viscous mounts and equipped with a heavy, insulated floor mat.
Control: Two hand levers and two foot pedals for travel, Two hand levers for excavating and swing, Electric rotary-type engine throttle

Boom, Arm & Bucket

Table with 2 columns: Boom cylinders, Arm cylinder, Bucket cylinders. Boom cylinders: 120 mm x 1,355 mm
Arm cylinder: 130 mm x 1,406 mm
Bucket cylinders: 110 mm x 1,064 mm

Refilling Capacities & Lubrications

Table with 2 columns: Fuel tank, Cooling system, Engine oil, Travel reduction gear, Swing reduction gear, Hydraulic oil tank. Fuel tank: 300 L
Cooling system: 22 L
Engine oil: 20.5 L
Travel reduction gear: 2 x 5.3 L
Swing reduction gear: 3.0 L
Hydraulic oil tank: 114 L tank oil level 230 L hydraulic system

Working Ranges

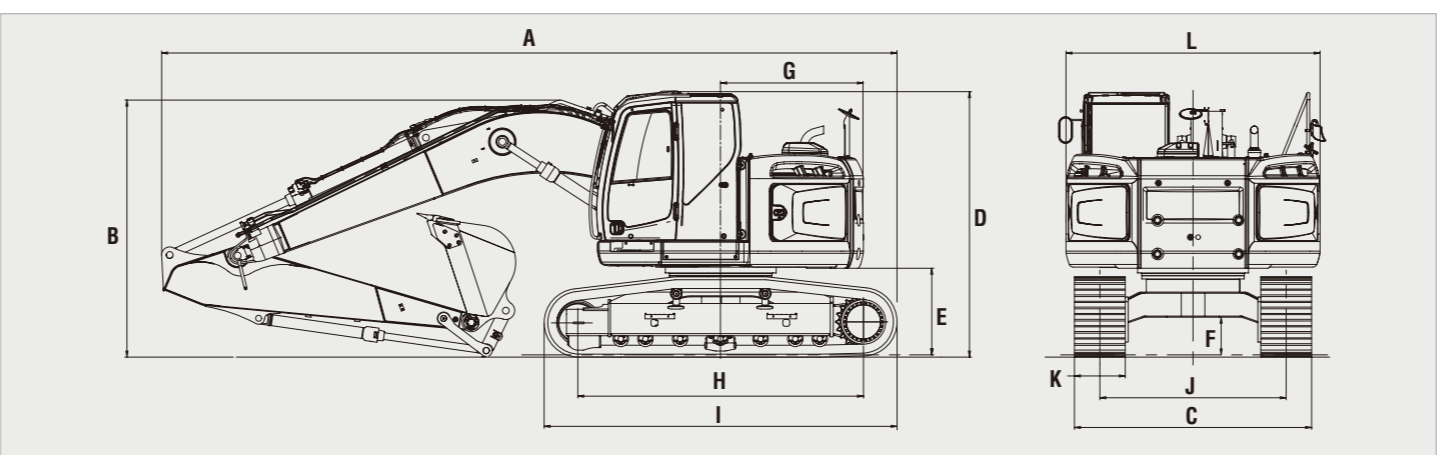
Table with 3 columns: Range, Boom, Arm. Max. digging reach: 9.71 m
Max. digging reach at ground level: 9.53 m
Max. digging depth: 6.59 m
Max. digging height: 10.57 m
Max. dumping clearance: 7.7 m
Min. dumping clearance: 2.97 m
Max. vertical wall digging depth: 5.96 m
Min. swing radius: 2.34 m
Horizontal digging stroke at ground level: 5.02 m
Digging depth for 2.4 m (8') flat bottom: 6.38 m
Bucket capacity ISO heaped m³: 0.8

Table with 2 columns: Digging Force (ISO 6015) and Arm crowding force. Bucket digging force: 120 (12,240) 132 (13,460)
Arm crowding force: 88.0 (8,980) 96.8 (9,880)

*Power Boost engaged.

Dimensions

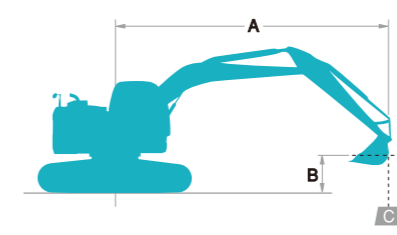
Table with 2 columns: Arm length and Overall dimensions. Overall length: 8,690 (SK225SR) 8,830 (SK225SRLC)
Overall height (to top of boom): 3,130 m
Overall width of crawler: 2,800 (SK225SR) 2,990 (SK225SRLC)
Overall height (to top of cab): 3,100 m
Ground clearance of rear end*: 1,030 m
Ground clearance*: 445 m



Operating Weight & Ground Pressure

In standard trim, with standard boom, 2.87 m arm, and 0.8 m³ ISO heaped bucket

Table showing operating weight and ground pressure for different crawler configurations: shaped, triple grouser shoes (even height), and dozer (optional).



Rating over front, Rating over side or 360 degrees. A - Reach from swing centerline to bucket hook, B - Bucket hook height above/below ground, C - Lifting capacities in kilograms. Max. discharge pressure: 34.3 MPa (350 kgf/cm²)

Lifting capacity table for SK225SR with Standard Arm: 2.87 m, Bucket: 0.8 m³ SAE heaped 630 kg, Shoe: 600 mm. Columns for reach (1.5m to 7.5m) and radius.

Lifting capacity table for SK225SR with Standard Arm: 2.87 m, Bucket: 0.8 m³ SAE heaped 630 kg, Shoe: 800 mm. Columns for reach (1.5m to 7.5m) and radius.

Lifting capacity table for SK225SRLC with Standard Arm: 2.87 m, Bucket: 0.8 m³ SAE heaped 630 kg, Shoe: 600 mm. Columns for reach (1.5m to 7.5m) and radius.

Lifting capacity table for SK225SRLC with Standard Arm: 2.87 m, Bucket: 0.8 m³ SAE heaped 630 kg, Shoe: 800 mm. Columns for reach (1.5m to 7.5m) and radius.

Notes: 1. Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities. 2. Lift capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc. 3. Bucket lift hook defined as lift point.

4. The above lifting capacities are in compliance with ISO 10567. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Lifting capacities marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load. 5. Operator should be fully acquainted with the Operator's and Maintenance Instructions before operating this machine. Rules for safe operation of equipment should be adhered to at all times. 6. Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.