

# KOBELCO

SK22-1E MINI EXCAVATOR

## SK22



Complies with the EU Stage V  
exhaust emission regulation

***We Save You Fuel***  
Achieving a Low-Carbon Society

# DO FULL-SIZED JOBS WITH A COMPACT MACHINE



Mini excavators are increasingly popular for work in confined spaces such as residential areas and buildings. But smallness alone doesn't satisfy users who also demand greater stability and first-rate operating performance. The KOBELCO SK22 mini excavator answers these needs with a high-output engine that provides plenty of power for tough, efficient operation. It also delivers excellent stability with superior weight distribution, a well-designed, comfortable cab equipped with an LCD monitor, and easy maintenance. These features make the SK22 mini excavator ideal for those who want powerful, basic functions and durable reliability. When you need to do a full-sized job with a compact machine, the SK22 is your answer.

There is plenty of legroom, and the control lever, wrist rests, travel lever and control panel are all ergonomically positioned so that the operator can work for long hours without fatigue.

### Comfortable Suspension Seat

The reclining, slide seat can be adjusted to match the operator's size and posture.

### Wrist Rest



Wrist rests on the each control lever box ensure fatigue-free operation.

### Excellent Air Circulation

The SK22 has a forced-air heater that keeps the cab comfortable conditions.



### Travel Pedal

The travel pedal simplifies simultaneous operations while the machine is traveling.



### Easy Access to Control Panel and Levers

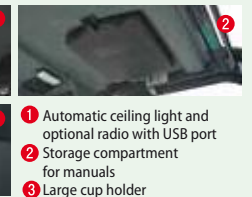


Control panel



Travel high/low select switch and throttle lever

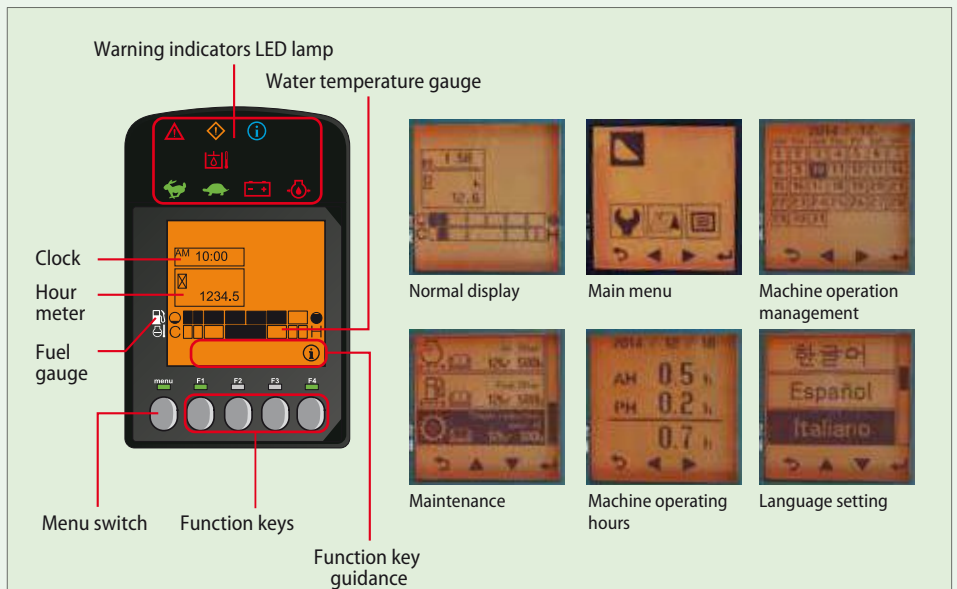
### Amenities



- 1 Automatic ceiling light and optional radio with USB port
- 2 Storage compartment for manuals
- 3 Large cup holder

### Backlit Liquid Crystal Monitor

The backlit liquid crystal monitor is provided as standard. Perfectly integrated into the right-hand console, the screen provides excellent visibility even in bright sunlight or at night, giving ready access to information concerning operation and machine status.





With its compact design, the SK22 delivers fast work performance even in limited spaces.

### Reliable Swing Power, Faster Working Speed

Boosted swing power and a top-class swing speed deliver shorter cycle times.

Swing Speed: **9.5min<sup>-1</sup>**

### Powerful Digging

For more efficient work performance.

Max. Arm Crowding Force: **11.8kN**

Max. Bucket Digging Force: **18.6kN**

### Powerful Travel

Travel Speed: **4.1/2.4km/h**

### Powerful Engine (ISO 9249)

Power Output: **13.4kW/2,200min<sup>-1</sup>**

### Easy Transportability

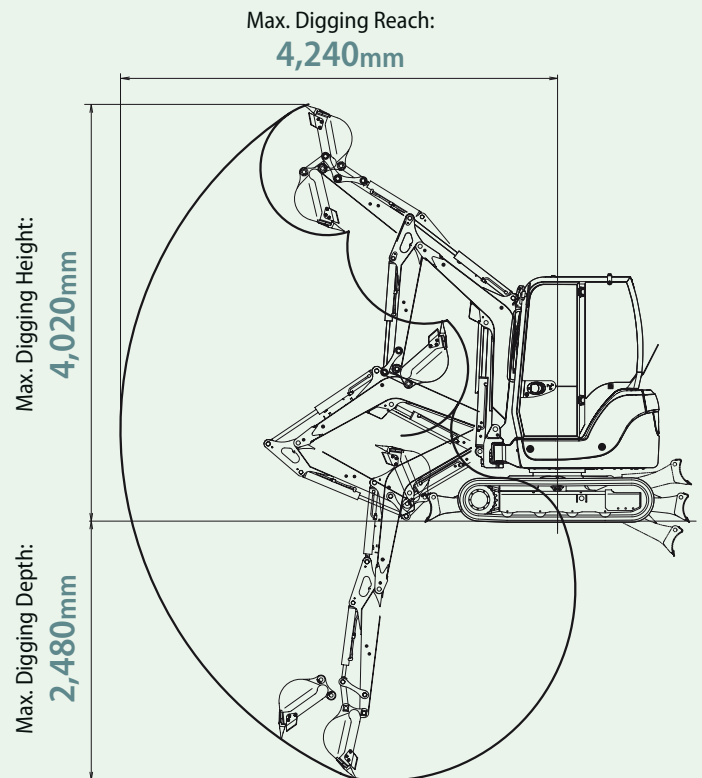
Weighing just 2,185 kg, the SK22 is easily transported on a 3.5-ton trailer with plenty of room to spare for the simultaneous transport of a bucket or other attachment.

### Auxiliary Circuit for Hammer or Auger

A proportional-control auxiliary line accommodates many accessories such as a hammer or auger, with the oil flow rate optimized for each device.

### Wide Working Range

The SK22 has plenty of working ranges.



## Compact Swing Radius

The SK22 has a very small swing radius that ensures easy access and efficient operation on sites where space is limited. The compact design keeps power, productivity and stability that allow you to work with confidence.



## Exceptional Stability and Lifting Strength

A wide counterweight and excellent weight distribution provide the SK22 with impressive stability and exceptional lifting capacities.

Lifting Capacity: **550kg** at **2.5m**

(ground level)



## RELIABILITY

## Reliable Construction

The SK22's tough durability makes it ideal for working in tight spaces and keeps repair costs down.

### Cylinder Rod Guard

The cylinder rod guard is fitted as standard for boom cylinder.



### LED Work Light

The LED work light is mounted under the boom to protect it from damage.



### Dozer

Dozer cylinder rod guard protects dozer cylinder from damage.





## SAFETY

### Operator Safety

The SK22 has a full range of safety features that help prevent or reduce the severity of onsite accidents.

#### Reliable Cab/Canopy Structure

The high-strength cab/canopy meets FOPS 1 and TOPS standards for greater operator safety.



#### Optimum Visibility

The SK22 is equipped with 3 rear and side view mirrors. The operator can control the work area as well as the area around machine.



#### Safety Lever Lock

The safety lever lock permits entry and exit only when the levers are disengaged to prevent accidental operation.



#### Three LED Cab Lights (Optional)

Three LED cab lights can be fitted as option to provide a clear view during nighttime operations. The LED provides a powerful light while reducing energy consumption.



#### Hammer for emergency exit



## MAINTENANCE

### Easy Maintenance

The engine hood opens fully and components that require the most frequent checks are positioned for easy access, thereby reducing maintenance time.

#### Easy Access to Engine Compartment



Air cleaner  
Water separator  
Fuel filter  
Radiator over flow bottle



#### Right Side



Fuel tank

#### Under the Operator's Seat

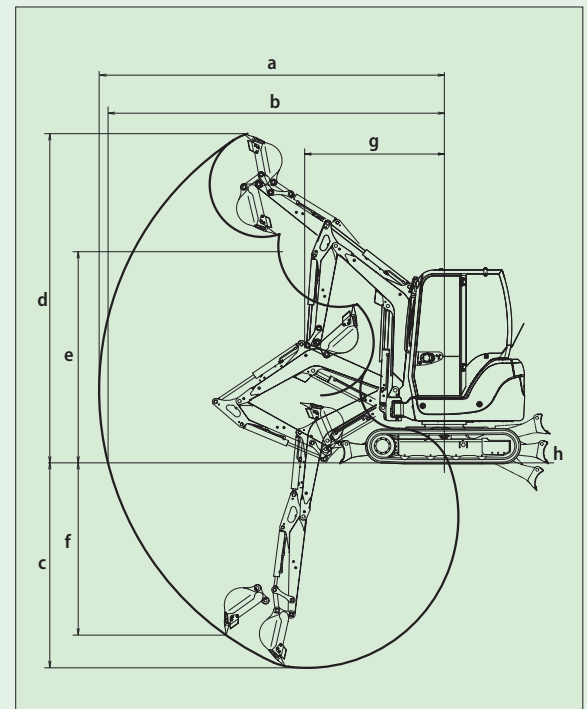


•Generator •Starter motor

## Specifications

| GENERAL                       |              |                             |             |
|-------------------------------|--------------|-----------------------------|-------------|
| MODEL                         |              | SK22                        |             |
| Type                          |              | SK22-1E                     |             |
| PERFORMANCE                   |              |                             |             |
| Shoe Type                     |              | Rubber                      |             |
| Bucket Capacity               |              | m <sup>3</sup>              |             |
| Travel Speed (high/low)       |              | km/h                        |             |
| Swing Speed                   |              | min <sup>-1</sup> {rpm}     |             |
| Gradeability                  |              | % (degree)                  |             |
| Traction Force                |              | kN                          |             |
| Bucket Digging Force          |              | kN                          |             |
| Arm Crowding Force            |              | kN                          |             |
| WEIGHT                        |              |                             |             |
| Machine Mass                  | Cab          | kg                          | 2,185       |
|                               | Canopy       | kg                          | 2,045       |
| Ground Pressure               | Cab          | kPa                         | 26.5        |
|                               | Canopy       | kPa                         | 24.5        |
| ENGINE                        |              |                             |             |
| Model                         |              | YANMAR 3TNV76-SBVA2         |             |
| Type                          |              | Water cooled                |             |
| Power Output NET              | (ISO9249)    | kW/min <sup>-1</sup> {rpm}  | 13.4/2,200  |
|                               | (ISO14396)   | kW/min <sup>-1</sup> {rpm}  | 13.8/2,200  |
| Max. Torque NET               | (ISO9249)    | N-m/min <sup>-1</sup> {rpm} | 67.7/1,600  |
| Displacement                  |              | L                           | 1.115       |
| Fuel Tank                     |              | L                           | 29          |
| HYDRAULIC SYSTEM              |              |                             |             |
| Pump                          |              | Variable pump               |             |
| Max. Discharge Flow           |              | L/min                       | 50          |
| Relief Valve Setting          |              | MPa                         | 20.6        |
| Hydraulic Oil Tank (system)   |              | L                           | 20 (32)     |
| DOZER BLADE                   |              |                             |             |
| Width x Height                |              | mm                          | 1,380 x 300 |
| Working Ranges (height/depth) |              | mm                          | 370/340     |
| SIDE DIGGING MECHANISM        |              |                             |             |
| Type                          |              | Boom swing                  |             |
| Offset Angle                  | To the left  | degree                      | 40          |
|                               | To the right | degree                      | 80          |

## Working Ranges



Unit: mm

| MODEL                                 | SK22    |
|---------------------------------------|---------|
| a- Max. digging reach                 | 4,240   |
| b- Max. digging reach at ground level | 4,130   |
| c- Max. digging depth                 | 2,480   |
| d- Max. digging height                | 4,020   |
| e- Max. dumping clearance             | 2,760   |
| f- Max. vertical wall digging depth   | 2,085   |
| g- Min. swing radius                  | 1,700   |
| g- Min. swing radius at boom swing    | 1,460   |
| h- Dozer blade (height/depth)         | 370/340 |

## General Dimensions

Unit: mm

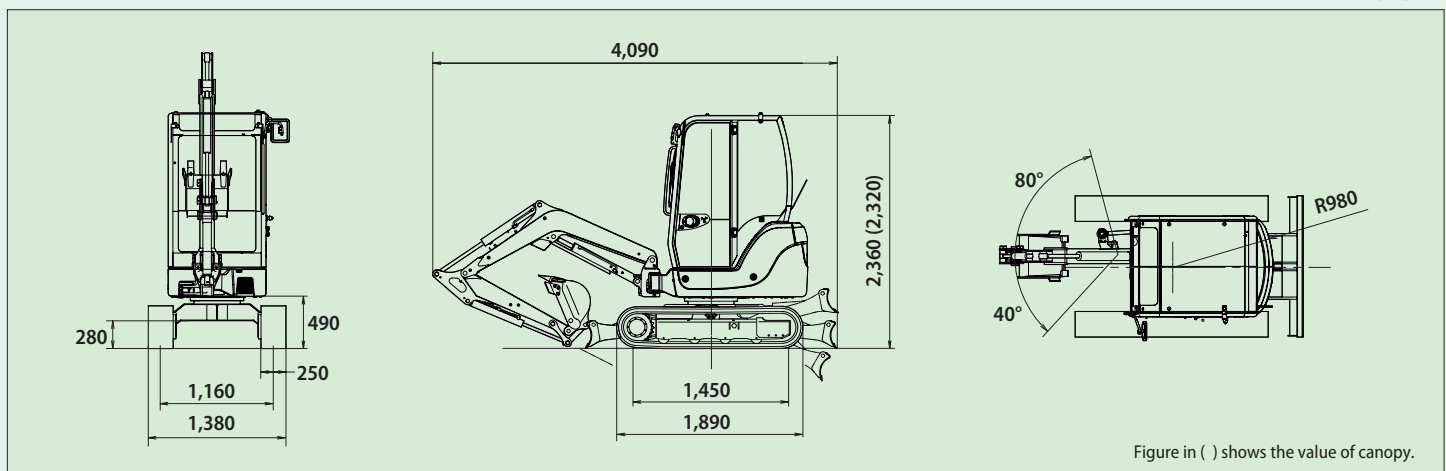
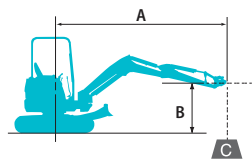


Figure in ( ) shows the value of canopy.

## Lifting Capacities



Rating over front



Rating over side or 360 degrees

A: Reach from swing centerline to arm top

B: Arm top height above/below ground

C: Lifting capacities in kilograms

Shoe: Rubber shoe Dozer blade: Up

Relief valve setting: 20.6 MPa

### CAB

| SK22   |    | Arm: Standard |       | Bucket: Without                                                                   |                                                                                   | Shoe: 250 mm                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |        |
|--------|----|---------------|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|
|        |    | A             |       | 1.5 m                                                                             |                                                                                   | 2.0 m                                                                             |                                                                                   | 2.5 m                                                                             |                                                                                   | 3.0 m                                                                             |                                                                                   | 3.5 m                                                                             |                                                                                   | At Max. Reach                                                                     |                                                                                   | Radius |
|        |    |               |       |  |  |  |  |  |  |  |  |  |  |  |  |        |
| 2.5 m  | kg |               |       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | *470                                                                              | *470                                                                              |                                                                                   |                                                                                   | *505                                                                              | 345                                                                               | 3.2 m                                                                             |                                                                                   |        |
| 2.0 m  | kg |               |       |                                                                                   |                                                                                   | *505                                                                              | *505                                                                              | *480                                                                              | *480                                                                              |                                                                                   |                                                                                   | 390                                                                               | 340                                                                               | 3.4 m                                                                             |                                                                                   |        |
| 1.5 m  | kg |               |       | *700                                                                              | *720                                                                              | *595                                                                              | *595                                                                              | 460                                                                               | 420                                                                               | 345                                                                               | 320                                                                               | 345                                                                               | 320                                                                               | 3.5 m                                                                             |                                                                                   |        |
| 1.0 m  | kg |               |       | *965                                                                              | 720                                                                               | 590                                                                               | 520                                                                               | 450                                                                               | 400                                                                               | 355                                                                               | 320                                                                               | 345                                                                               | 300                                                                               | 3.6 m                                                                             |                                                                                   |        |
| 0.5 m  | kg | 1,110         | 965   | 840                                                                               | 660                                                                               | 590                                                                               | 495                                                                               | 445                                                                               | 395                                                                               | 350                                                                               | 310                                                                               | 340                                                                               | 300                                                                               | 3.6 m                                                                             |                                                                                   |        |
| G. L.  | kg | 1,190         | 1,025 | 820                                                                               | 670                                                                               | 550                                                                               | 495                                                                               | 430                                                                               | 375                                                                               | 355                                                                               | 315                                                                               | 355                                                                               | 315                                                                               | 3.5 m                                                                             |                                                                                   |        |
| 0.5 m  | kg | 1,065         | 1,060 | 650                                                                               | 660                                                                               | 490                                                                               | 505                                                                               | 385                                                                               | 355                                                                               |                                                                                   |                                                                                   | 360                                                                               | 330                                                                               | 3.2 m                                                                             |                                                                                   |        |
| -1.0 m | kg | *1,235        | 1,000 | 680                                                                               | 700                                                                               | 505                                                                               | 465                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 445                                                                               | 390                                                                               | 2.9 m                                                                             |                                                                                   |        |
| -1.5 m | kg | *830          | *830  | *550                                                                              | *550                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | *560                                                                              | *560                                                                              | 2.5 m                                                                             |                                                                                   |        |

### CANOPY

| SK22   |    | Arm: Standard    Bucket: Without    Shoe: 250 mm |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |  |        |
|--------|----|--------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|--------|
|        |    | A                                                |                                                                                   | 1.5 m                                                                             |                                                                                   | 2.0 m                                                                             |                                                                                   | 2.5 m                                                                             |                                                                                   | 3.0 m                                                                             |                                                                                   | 3.5 m                                                                              |                                                                                     | At Max. Reach                                                                       |  | Radius |
|        |    |                                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |
| B      |    |                                                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |  |        |
| 2.5 m  | kg |                                                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | *470                                                                              | 375                                                                               |                                                                                   |                                                                                   | 385                                                                                | 325                                                                                 | 3.2 m                                                                               |  |        |
| 2.0 m  | kg |                                                  |                                                                                   |                                                                                   |                                                                                   | *505                                                                              | *505                                                                              | *480                                                                              | 370                                                                               |                                                                                   |                                                                                   | 335                                                                                | 295                                                                                 | 3.4 m                                                                               |  |        |
| 1.5 m  | kg |                                                  |                                                                                   | *700                                                                              | *720                                                                              | 505                                                                               | 470                                                                               | 400                                                                               | 365                                                                               | 295                                                                               | 275                                                                               | 295                                                                                | 275                                                                                 | 3.5 m                                                                               |  |        |
| 1.0 m  | kg |                                                  |                                                                                   | 745                                                                               | 615                                                                               | 505                                                                               | 450                                                                               | 390                                                                               | 345                                                                               | 305                                                                               | 275                                                                               | 295                                                                                | 255                                                                                 | 3.6 m                                                                               |  |        |
| 0.5 m  | kg | 855                                              | 780                                                                               | 715                                                                               | 555                                                                               | 505                                                                               | 430                                                                               | 380                                                                               | 340                                                                               | 300                                                                               | 265                                                                               | 295                                                                                | 260                                                                                 | 3.6 m                                                                               |  |        |
| G. L.  | kg | 940                                              | 840                                                                               | 690                                                                               | 565                                                                               | 470                                                                               | 425                                                                               | 370                                                                               | 325                                                                               | 305                                                                               | 270                                                                               | 305                                                                                | 270                                                                                 | 3.5 m                                                                               |  |        |
| 0.5 m  | kg | 810                                              | 880                                                                               | 525                                                                               | 560                                                                               | 405                                                                               | 435                                                                               | 320                                                                               | 300                                                                               |                                                                                   |                                                                                   | 300                                                                                | 280                                                                                 | 3.2 m                                                                               |  |        |
| -1.0 m | kg | 865                                              | 815                                                                               | 555                                                                               | 600                                                                               | 420                                                                               | 395                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 380                                                                                | 330                                                                                 | 2.9 m                                                                               |  |        |
| -1.5 m | kg | *830                                             | *1,005                                                                            | 490                                                                               | 600                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 445                                                                                | 440                                                                                 | 2.5 m                                                                               |  |        |

#### Notes:

- 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.
- 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.
- Arm top defined as lift point.

- 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.
- 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.
- Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

Note: This catalog may contain attachments and optional equipment that are not available in your area. And it may contain photographs of machines with specifications that differ from those of machines sold in your areas. Please consult your nearest KOBELCO distributor for those items you require. Specialist equipment is needed to use this machine in demolition work. Before using it please contact your KOBELCO dealer.

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## Kobelco Construction Machinery Europe B.V.

Veluwezoom 15  
1327 AE Almere  
The Netherlands  
www.kobelco-europe.com

Inquiries To: