

KOMATSU

BR580JG-1

ENGINE POWER
263 kW / 353 HP @ 1.900 rpm

OPERATING WEIGHT
49.000 - 51.000 kg

TREATMENT CAPACITY
140 - 460 ton/h

BR
580

MOBILE CRUSHER



BR580JG-1

WALK-AROUND

The newly designed Komatsu BR580JG-1 mobile crusher looks simple, and it's very powerful. This newly developed crusher offers you an amazing crushing capacity of 140 - 460 ton/h.

High-performance jaw

The KCJ4430 large-capacity jaw crusher offers the greatest treatment capacity in its class, plus easy maintenance. In addition, Komatsu's original bear lock cylinder mechanism allows you to change the discharge clearance with a simple one-touch adjustment, and it also facilitates the removal of clogged foreign material from the discharge side.

Outstanding mobility

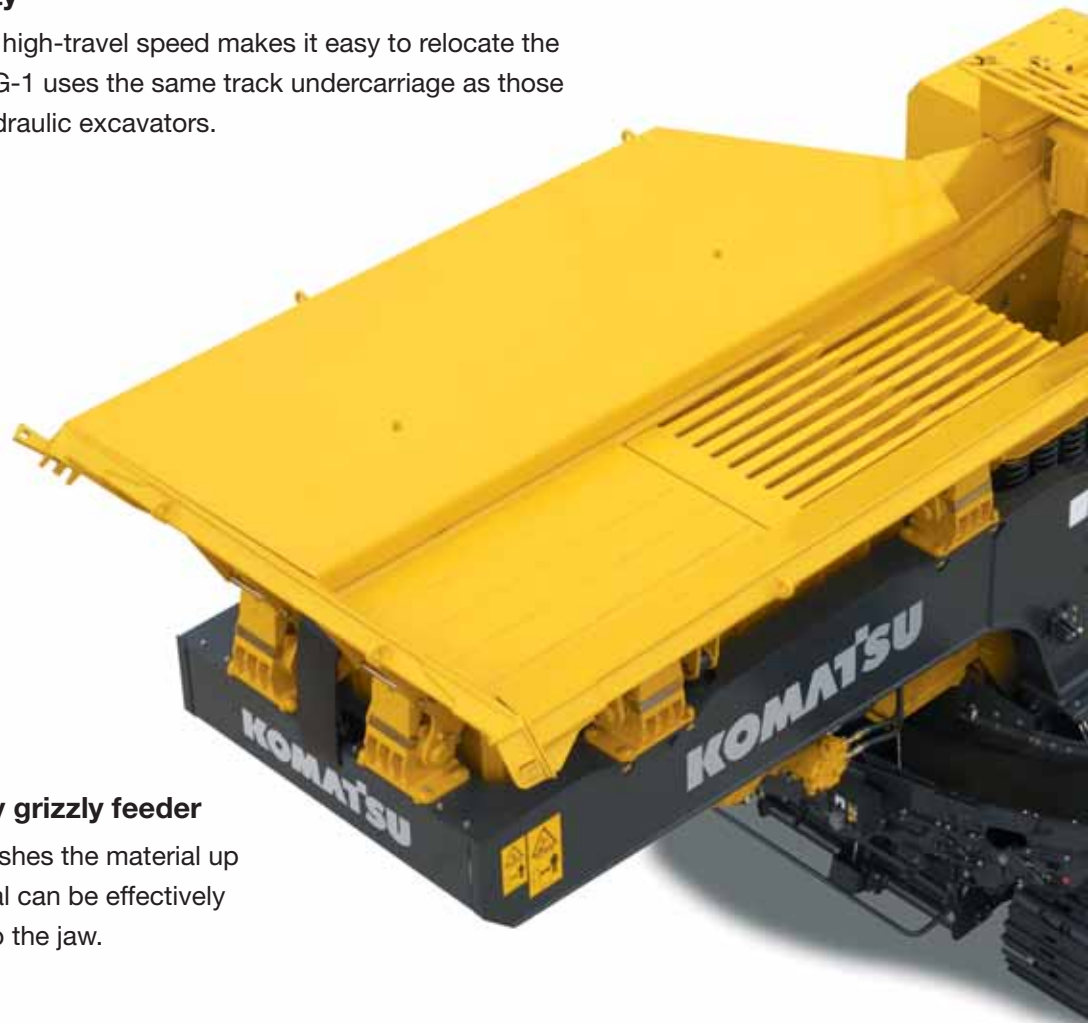
Hydraulic steering and high-travel speed makes it easy to relocate the machine. The BR580JG-1 uses the same track undercarriage as those used on Komatsu's hydraulic excavators.

Large-capacity hopper

The 2.625 m × 4.400 m hopper is accessible for material loading from three sides.

Newly designed vibratory grizzly feeder

The vibrator grizzly feeder pushes the material up elliptically, so that the material can be effectively separated and evenly fed into the jaw.



Hydraulic conveyor lifter

In the upper position, it ensures adequate ground clearance and safe driving even on rough ground.

The mobile crusher uses a new interlock system that controls the travel and the operation (crushing), depending on the conveyor's position.

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KOMTRAX

Komatsu Tracking System

Track and monitor your machine anytime, anywhere for total peace of mind.

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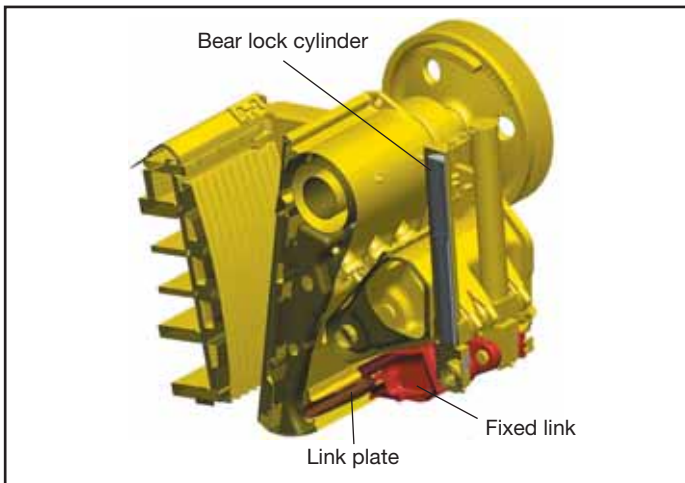
Komatsu's SAA6D125E-5

engine with high pressure common rail injection provides 263 kW (353 HP) @ 1.900 rpm for superior crushing power. The engine meets EU Stage IIIA and EPA Tier III emissions regulations.

HydrauMind hydraulics and all-hydraulic drive system

A full hydraulic drive system starts your work right away. The HydrauMind system supplies an optimal amount of oil through the load-sensing and pressure-compensated valves. Optional equipment can be connected to the hydraulic outlets on the chassis (option).

PRODUCTIVITY FEATURES



The largest jaw crusher in its class

The large-capacity KCJ4430 jaw crusher is another successful example of Komatsu's development efforts. Crushing efficiency is substantial, thanks to the installation of a load-presetting semi-automatic feeder system and rapid crusher rotation speed.

Fully automatic discharge clearance adjustment system

The jaw crusher is equipped with an automatic discharge clearance adjustment system that makes it easy to change the preset aperture of the discharge port. Even when both of the jaw plates are worn out, you can adjust the discharge clearance with a simple one-touch operation (this adjustment is completed within one minute). On the monitor panel, you can choose one of the three adjustment modes (patent pending).

A unique hydraulic crusher protection mechanism

Most jaw crushers only protect themselves with bending toggle plates when they are clogged or jammed with metal debris. The KCJ4430 protects itself by allowing the bear lock cylinders to fully open the discharge port, which makes it easy to remove clogged foreign material from the crusher (patent pending).

Large treatment capacity

Komatsu's original large-capacity jaw crusher and the most advanced control systems deliver a substantial throughput capacity, making it easy to manage large workloads.

Treatment capacity (ton/h)

Maximum treatment capacity (with a muck content of 30%)

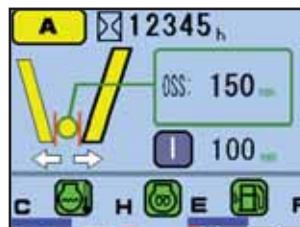
Material	Crusher discharge setting (open side)				
	55 mm	70 mm	100 mm	150 mm	200 mm
Natural stone	-	-	- 180	200 - 280	280 - 400
Concrete debris	- 140	110 - 160	150 - 220	230 - 330	320 - 460

Equipped with the largest jaw crusher in its class, the BR580JG-1 offers the performance of larger crusher units.



KCJ4430 Jaw

Feed opening:
1.120 mm × 765 mm



Fully automatic discharge clearance adjustment system

Mode A:

Input a desired value for the discharge clearance.

Mode B:

Increase or decrease the current discharge clearance.

Mode C:

Push down the manual switch to increase or decrease the present discharge clearance.



Hydraulic crusher protection mechanism

Note:

The treatment capacity is the sum of the volume of the material crushed by the crusher and the volume of the material that passes through the grizzly bar. This depends on the type and properties of the material and the working conditions.

The production capacity of the natural stones shown in the table is based on andesite having unconfined compression strength of about 1.000 kg/cm², that of the concrete debris is based on concrete debris containing no steel bars and all the material is assumed to be dry and equal to or smaller than the optimum feed-in material size.

When the crusher discharge setting is 55 - 100 mm, only concrete debris can be crushed.

High-speed, large-capacity conveyor belt

The high discharge height of 3.000 mm makes it easy to configure a system with product stockpilers and screens. With its width of 1.050 mm and a travel speed of 120 m/min., the conveyor belt has a large transportation volume capacity.

In addition, the conveyor reverse mode is provided to facilitate the removal of jammed foreign matter.



Substantial mobility

The conveyor elevation system has a substantial ground clearance, which assists the crusher's outstanding manoeuvrability at all crushing sites.



Conveyor elevation system

Minimum ground clearance –

When travelling:
200/350 mm

When crushing:
100/200 mm

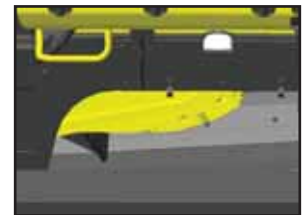
Easy maintenance and safety

Maximum reliability and minimal maintenance

In addition to the spacious gap between the jaw crusher and the conveyor belt, the crusher's outlet area is protected by covers. This design prevents reinforced bars from being caught by the crusher's member structure. Wide openings on the side frames also ensure easy access to the space below the crusher to remove clogged foreign material.



Opening under the engine side



Opening under the crusher side (both sides of the undercarriage)

Environmentally friendly design

BR580JG-1 is in conformance with EU Stage IIIA and EPA Tier III emissions regulations. Despite the high power of 263 kW (353 HP), the mobile crusher emits a very low noise level.

To prevent dust generation, sprinkler nozzles are provided as a standard attachment at the top of the jaw crusher. The sprinkler system (with water tank and pump) is optional.



Centralised greasing system



Sprinkler nozzle

Easy operation

All operation switches are consolidated onto a control panel, making it easier for the operator to reach it and safely control operations whilst standing on the ground. The crusher operation mode can be changed from crushing into travel mode with the radio control unit (option), making it easy for the operator to control all functions from distance. Because the control system is equipped with a one-touch start feature, a single push of the start switch commences operations. The multi-function monitor displays the status of all the components in real time.



Radio remote controller (option)



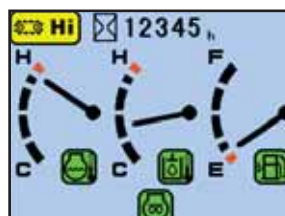
Main control panel

Safety

Emergency shut-off buttons are located on the left and right sides of the chassis, on the control panel, and in the (optional) radio remote controller.

A rotating lamp flashes when there is a malfunction on the monitor display (for example, when overheating occurs) and the operator is also alerted by a buzzer in the event of an abnormal shut-down on the conveyor belt or optional equipment.

A switch is provided to change between crushing and travel modes. Handrails and safety guards are provided for all sections.



Traveling mode



Crushing mode

SPECIFICATIONS



ENGINE

Model Komatsu SAA6D125E-5
 Type Common rail direct injection, water-cooled, cooled EGR, turbocharged, after-cooled diesel
 Engine power
 at rated engine speed 1.900 rpm
 ISO 14396 263 kW / 353 HP
 ISO 9249 (net engine power) 257 kW / 345 HP
 No. of cylinders 6
 Bore x stroke 125 x 150 mm
 Displacement 11,04 ltr
 Fan drive type Mechanical
 Governor All-speed, electrical

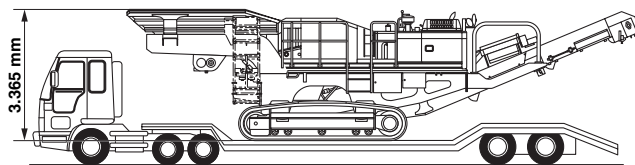


HYDRAULIC SYSTEM

Type HydraMind. Closed-centre system with load sensing and pressure compensation valves
 Main pump 2 variable displacement piston pumps
 Pumps for Travel, crusher, feeder, conveyor and 2 equipment options
 Maximum pump flow 2 x 344 ltr/min
 Maximum travel speeds
 Lo / Mi / Hi 0,7 / 2,1 / 3,0 km/h



TRANSPORTATION



Transport length	14.495 mm
Transport height (rotating beacon: + 100 mm)	3.365 mm
Transport width	2.995 mm

(In some countries, the machine may need to be disassembled for transportation)



ENVIRONMENT

Engine emissions Fully complies with EU Stage IIIA and EPA Tier III exhaust emission regulations



OPERATING WEIGHT (APPR.)

Operation weight 49.000 kg
 Ground pressure 1,32 kg/cm²
 Operation weight, including muck conveyor and magnet 51.000 kg
 Ground pressure 1,38 kg/cm²



CRUSHER

Jaw Komatsu KCJ4430
 Inlet size 1.120 mm x 765 mm
 Discharge setting (O.S.S) 55 - 200 mm
 Production capacity (indication) 140 - 460 ton/h
 Rotating speed (max.) 300 rpm



GRIZZLY FEEDER

Frequence (max.) 1.000 rpm
 Size 1.125 mm x 3.850 mm
 Drive type Direct drive with hydraulic motor



UNDERCARRIAGE

Track assembly
 Type Fully sealed
 Shoes (each side) 45
 Shoe width 500 mm
 Rollers
 Track rollers (each side) 7

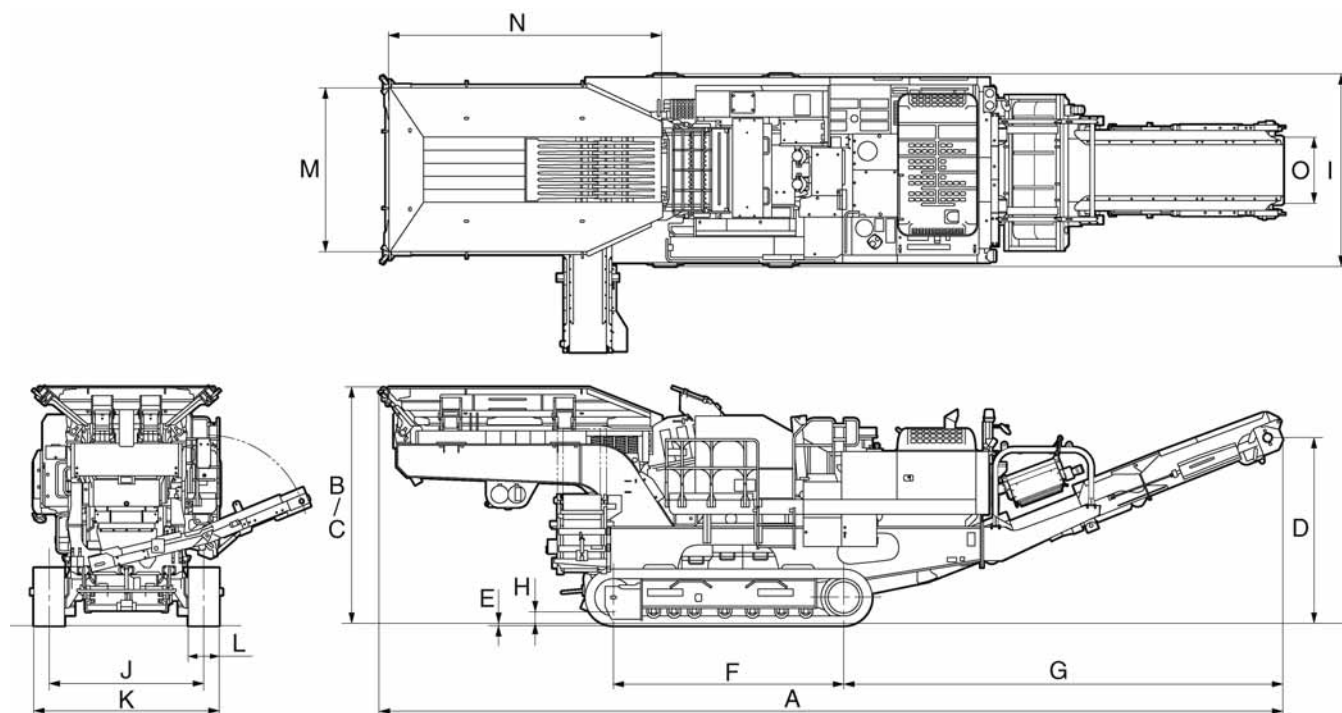


COOLANT AND LUBRICANT CAPACITY (REFILLING)

Fuel tank 650 ltr
 Radiator 39 ltr
 Engine oil 38 ltr
 Final drive (each side) 9 ltr
 Hydraulic tank 248 ltr

DIMENSIONS

Dimensions at operation



MACHINE DIMENSIONS		BR580JG-1
A	Overall length	14.540 mm
B	Overall height	3.820 mm
C	Feeder height (Loading height hopper)	3.820 mm
D	Discharge height	3.000 mm
E	Grouser height	30 mm
F	Length of track on ground	3.700 mm
G	Discharge from idler centre	7.060 mm
H	Minimum ground clearance (travelling)	200 mm
I	Overall width	3.090 mm
J	Track gauge	2.480 mm
K	Track width	2.980 mm
L	Shoe width	500 mm
M	Hopper width	2.625 mm
N	Hopper length	4.400 mm
O	Discharge conveyor belt width	1.050 mm

MOBILE CRUSHER

STANDARD EQUIPMENT

Engine:

- Komatsu SAA6D125E-5, 263 kW turbocharged common rail direct injection diesel engine, EU Stage IIIA compliant
- Automatic fuel line de-aeration
- Automatic engine warm-up system
- Engine overheat prevention system
- Double element air cleaner

Electrical system:

- Starting motor 11 kW/24 V
- Alternator 35 A/24 V
- Battery 2 × 12 V/110 Ah

Undercarriage:

- 500 mm assembled triple-grouser type
- Hydraulic track adjusters

Crusher:

- KCJ4430 single-toggle crusher
- Size: 1.120 mm × 765 mm
- Rotation speed (max.): 300 rpm
- Drive method: hydraulic motor with V-belt
- Setting OSS: 55 - 200 mm

Feeder:

- Type: 2-step grizzly deck
- Speed-controlled grizzly feeder
- Dimensions (W × L): 1.125 mm × 3.850 mm
- Grizzly bar opening: 40 - 75 mm
- Drive method: hydraulic motor

Hopper:

- Capacity: 5,4 m³
- Dimensions: 2.625 mm × 4.400 mm
- Foldable type

Belt conveyor:

- Width: 1.050 mm
- Discharge height: 3.000 mm
- Speed: 120 m/min
- Drive method: hydraulic piston motor

Control systems:

- Remote controller (wired)
- Komtrax™ Komatsu tracking system
- EMMS (Equipment Management and Monitoring System)
- Multi-function colour monitor

Others:

- Electric horn
- Travel alarm
- Anti-slip plates
- In-line filter for hydraulics
- Rearview mirror, left

OPTIONAL EQUIPMENT

Magnetic separator:

- Magnetic separator for primary conveyor (750 mm)
- Hydraulic driven by gear pump

Electrical system:

- Alternator 50 A/24 V

Radio remote controller (functions):

- Change between travel and crushing mode
- Travel Left/Right/Forward/Reverse
- Crusher On/Off
- Feeder On/Off
- Emergency shut off
- Horn

Muck conveyor:

- Muck conveyor assembly can be folded by hydraulic cylinder
- Width: 600 mm
- Discharge height: 2.000 mm



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