ENGINE POWER 149 kW / 200 HP @ 2.050 rpm

> OPERATING WEIGHT 32.600 - 34.000 kg

TREATMENT CAPACITY 50 - 240 ton/h

380

MOBILE CRUSHER

# **KOMATSU** BR380JG-1



## **BR380JG-1**

## WALK-AROUND

The newly designed Komatsu BR380JG-1 mobile crusher looks simple, and it's very powerful. This newly developed crusher offers you an amazing crushing capacity of **50 - 240 ton/h**.

#### High-performance jaw

The KCJ4222 large-capacity jaw crusher guarantees 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.

#### 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.

#### HydrauMind hydraulics and all-hydraulic drive system

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

#### Large-capacity hopper

The 2.500 mm  $\times$  3.700 mm hopper is accessible for material loading from three sides.



Komatsu Tracking System

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

#### Hydraulic conveyor lifter

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

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### **BR380JG-1**

#### ENGINE POWER 149 kW / 200 HP @ 2.050 rpm

**OPERATING WEIGHT** 32.600 - 34.000 kg

**TREATMENT CAPACITY** 50 - 240 ton/h

#### **Rotary lamp**

Lights up whenever the crusher is overloaded or in trouble.

### High-speed, large-capacity conveyor belt

**MOBILE CRUSHER** 

The 1.050 mm (1.000 mm) wide conveyor belt travels at 120 m per minute. The discharge height is 2.800 mm.



#### Komatsu's SAA6D107E-1

engine with high pressure common rail injection provides 149 kW (200 HP) @ 2.050 rpm for superior crushing power. The engine meets EU Stage IIIA and EPA Tier III emissions regulations.

#### **Emergency shut-off buttons**

are installed on both the left and right sides of the chassis, on the control panel, and on the (optional) radio remote control.

#### **Outstanding mobility**

Hydraulic steering and high-travel speed makes it easy to relocate the machine. The BR380JG-1 uses the same track undercarriage as those used on Komatsu's hydraulic excavators.

## **PRODUCTIVITY FEATURES**



#### The largest jaw crusher in its class

The large-capacity KCJ4222 jaw crusher is another successful example of Komatsu's development efforts. Crushing efficiency is substantial, thanks to the installation of a load-presetting semiautomatic 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 KCJ4222 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%)

	Crusher discharge setting (open side)			
Material	50 mm	80 mm	120 mm	150 mm
Natural stone	50 - 70	80 - 115	125 - 180	170- 240
Concrete debris	60 - 85	90 - 130	125 - 175	150 - 215

Equipped with the largest jaw crusher in its class, the BR380JG-1 offers the performance of larger crusher units.



KCJ4222 Jaw



Fully automatic discharge clearance adjustment system

Feed opening: 1.065 mm × 550 mm

#### 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.

**MOBILE CRUSHER** 

#### High-speed, large-capacity conveyor belt

The high discharge height of 2.800 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.





Minimum ground clearance – When traveling: 300 mm When crushing: 100/200 mm

**BR380JG-1** 

Conveyor elevation system

### Easy maintenance and safety

#### Maximum reliability and minimal maintenance

In addition to the spacious gap of 530 mm 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.

#### Environmentally friendly design

BR380JG-1 is in conformance with EU Stage IIIA and EPA Tier III emissions regulations. Despite the high power of 149 kW (200 HP), the mobile crusher emits a very low noise.

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.

#### **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 onetouch 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.

#### 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.



Opening under the engine side



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



Low-noise engine



Sprinkler nozzle





Main control panel



Traveling mode



Crushing mode

## **S**pecifications



#### ENGINE

Model	,
Engine power	
at rated engine speed2.050 rpm	1
ISO 14396149 kW / 200 HP	,
SAE J1349 (net engine power)140 kW / 188 HP	,
No. of cylinders	;
Bore × stroke	1
Displacement	
GovernorAll-speed, electrical	



#### HYDRAULIC SYSTEM

Type HydrauMind. Closed-centre system with load sensing		
and pressure compensation valves		
Main pump2 variable displacement piston pumps		
Pumps for Travel, crusher, feeder, conveyor		
and 4 equipment options		
Maximum pump flow2 × 230 ltr/min		
Maximum pressure		
Maximum travel speed 3 km/h		
System oil flow (travel, crusher, feeder, conveyor, and option)		
Travel		
Crusher		
Feeder		
Conveyor		
Options		





Transport length	12.500 mm
Transport height	3.200 mm
Transport width	2.800 mm

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



#### **OPERATING WEIGHT (APPR.)**

Operation weight, including 500 mm shoes	32.600 kg
Operation weight, including 500 mm shoes,	
muck conveyor and magnet	34.000 kg



### CRUSHER

Jaw	Komatsu KCJ4222
Inlet size	1.065 mm × 550 mm
Discharge setting (O.S.S)	50 - 150 mm
Production capacity (indication)	50 - 240 ton/h
Rotating speed (variable)	170 - 330 rpm

#### IIII **GRIZZLY FEEDER**

Frequence (max.)	1.100 rpm
Size	1.000 mm × 3.220 mm
Amplitude (not loaded, all amplitude	) 10 mm
Drive type	Direct drive with hydraulic motor

### UNDERCARRIAGE

Track assembly	
Туре	Fully sealed
Shoes (each side)	
Shoe width	500 mm
Rollers	
Track rollers (each side)	5
Carrier rollers (each side)	2

#### COOLANT AND LUBRICANT PACITY (REFILLING)

Fuel tank	400 ltr
Radiator	
Engine oil	
Final drive (each side)	
Hydraulic tank	

## ENVIRONMENT

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

Noise levels

Ambient noise (at radius of 7 m) from engine,

high engine speed, crusher on without load ...... < 80 dB(A)

## **BR380JG-1**

**MOBILE CRUSHER** 

## DIMENSIONS





MA	CHINE DIMENSIONS	BR380JG-1
Α	Overall length	12.500 mm
В	Overall height	3.200 mm
С	Feeder height (side)	3.200 mm
D	Minimum ground clearance (traveling)	300 mm
E	Discharge height	2.800 mm
F	Grouser height	26 mm
G	Length of track on ground	3.275 mm
Н	Discharge from idler center	6.080 mm
1	Overall width	2.950 mm
J	Track gauge	2.280 mm
к	Track width	2.815 mm
L	Shoe width	500 mm
м	Hopper width	2.500 mm
Ν	Hopper length	3.700 mm
0	Discharge conveyor belt width	1.050 mm

**BR380JG-1** 

## **MOBILE CRUSHER**



#### Engine:

- Komatsu SAA6D107E-1, 149 kW turbocharged common rail direct injection diesel engine, EU Stage IIIA compliant
- · Suction type cooling fan
- Air cleaner, centrifugal method with paper filter and pre-filter

#### Electrical system:

- Starting motor 5,5 kW/24 V
- Alternator 35 A/24 V
- Battery 2 × 12 V/110 Ah

#### Undercarriage:

• 500 mm assembled triple-grouser type

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#### Crusher:

- KCJ4222 single-toggle crusher
- Size: 1.065 mm × 550 mm
- Rotation: 170 330 rpm
- Drive method: hydraulic motor with V-helt
- Setting OSS: 50 150 mm

#### Feeder:

- Type: 2-step deck · Speed-controlled grizzly feeder
- Dimensions (W × L):
- 1.000 mm × 3.220 mm
- Grizzly bar opening: 25 50 mm
- Drive method: hydraulic gear motor

#### Belt conveyor: • Width × length:

- 1.050 mm × 9.550 mm
- Speed: 120 m/min
- Drive method: hydraulic piston motor

Muck conveyor:

- · Muck conveyor assembly can be folded by hydraulic cylinder: 3.000 mm × 500 mm
- **Control systems**
- Komtrax<sup>™</sup> Komatsu tracking system

#### Magnetic separator:

- Magnetic separator for primary conveyor (900 mm)
- Hydraulic driven by gear pump

#### Water tank & spraying system:

- Hoses
- Pump
- Tank

- Radio remote controller (functions):
- Crusher On/Off
- Feeder On/Off



· Emergency shut off

• Horn

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**OPTIONAL EQUIPMENT** 

- · Change between travel and
  - crushing mode
  - Travel Left/Right/Forward/Reverse