

# KOMATSU®

## BR580JG-1 With Tier 3 Engine

**NET HORSEPOWER**  
257 kW **345 HP** @ 1900 rpm

**OPERATING WEIGHT**  
49000 - 51000 kg  
108,000 - 112,440 lb

**BR**  
**580**  
**JG**

MOBILE CRUSHER



Photo may include optional equipment



## BR580JG-1 MOBILE CRUSHER

# WALK-AROUND

The newly designed Komatsu BR580JG-1 mobile crusher looks simple but is very powerful. The upgraded Komatsu designed crusher offers maximum production capacity.

### *High-performance jaw*

The KCJ4430 large-capacity jaw crusher provides maximum crushing capacity in this class along with easy maintenance. In addition, Komatsu's locking cylinder mechanism allows you to change the discharge clearance with a simple one-touch adjustment and also facilitates the removal of clogged foreign material from the discharge side.

### *Newly designed vibrating grizzly feeder*

The vibrating grizzly feeder moves the material elliptically, so it can be effectively separated and fed evenly into the jaw.

### *HydraMind hydraulics and all-hydraulic drive system*

Fully hydraulic drive system gets you working right away. The HydraMind system supplies the optimal amount of oil through load-sensing and pressure-compensated valves.

### *Large-capacity hopper*

The 2625 mm 8'7" x 4400 mm 14'5" feed hopper is accessible from three sides for material loading.



### **KOMTRAX™**

KOMTRAX equipped machines can send location, SMR and operation maps to a secure website utilizing wireless technology. Machines also relay error codes, cautions, maintenance items, fuel levels, and much more.



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

A 1050 mm **42"** wide conveyor belt travels at 120 m **394'** per minute. The discharge height is 3000 mm **9'10"**.

**NET HORSEPOWER**  
257 kW **345 HP** @ 1900 rpm

**OPERATING WEIGHT**  
49000 - 51000 kg  
**108,000 - 112,440 lb**

***SAA6D125E-5 turbocharged after-cooled diesel engine***

provides 257 kW **345 HP net** for superior crushing power and is EPA Tier 3 and EU Stage 3A emission regulations certified.

***Emergency shut-off buttons*** are installed on both the left and right sides of the chassis, on the control panel, and on the standard radio remote control.

***Sprinkler nozzles*** are standard at the jaw entry, jaw discharge, and main conveyor discharge with a common hose connector.

***Outstanding mobility***

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

***Hydraulic conveyor lifter*** in the up position ensures adequate ground clearance even on rough ground. The mobile crusher uses a new interlock system that controls travel and crushing operation, depending on the conveyor's position.

Photos may include optional equipment



# PRODUCTIVITY FEATURES

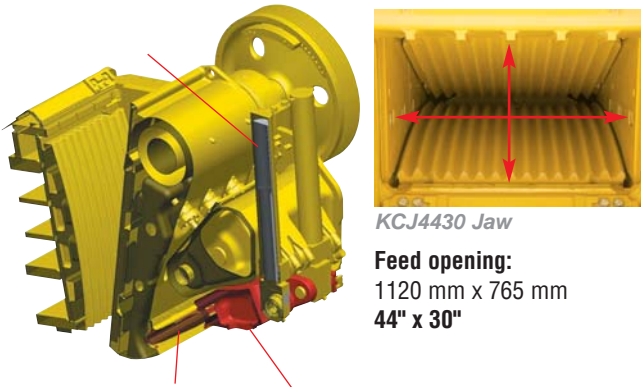


## Equipped with an eco-friendly engine

Equipped with the SAA6D125E-5 engine, this new mobile crusher has a nominal output as high as 262.5 kW **352 HP**. The latest KOMATSU engine technology for construction machinery, "ecot3", greatly reduces NOx emissions. This eco-friendly, clean engine, complies with various emission gas standards, including the EPA Tier 3 requirements in North America and the EU Stage 3A requirements in Europe.

## New Komatsu jaw crusher

The large-capacity jaw crusher, KCJ4430, is another successful example of Komatsu's development efforts. Crushing efficiency is improved dramatically with the installation of a load-presetting semiautomatic feeder system.



## Large production capacity

Komatsu's original large-capacity jaw crusher and the most advanced control systems have considerably increased its output capacity, making it easy to manage large workloads.

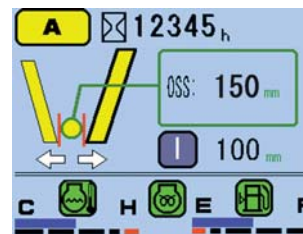
## High-speed, large-capacity conveyor belt

The high discharge height of 3000 mm **9'10"** makes it easy to configure a system with stock pile conveyor and screens. With its width of 1050 mm **42"** and a belt speed of 120 m **394'** /min., the belt conveyor has a high volume capacity. In addition, the conveyor reverse mode is provided to facilitate the removal of jammed foreign material.



## Fully automatic discharge setting adjustment system

The jaw crusher is equipped with an automatic discharge setting adjustment system that makes it easy to change the opening of the discharge port. Even as the jaw plates wear, you can adjust the discharge setting with a simple one-touch operation (adjustable within several minutes) with this automatic system. On the monitor panel, you can choose one of the three adjustment modes.  
 (Patent pending).



- Mode A: Input a desired value for the discharge setting.
- Mode B: Increase or decrease the current discharge setting.
- Mode C: Press the manual switch to increase or decrease the present discharge setting.

## Komatsu's hydraulic crusher protection mechanism

Jaw crushers typically protect themselves by bending toggle plates when they are clogged or jammed with metal or wood debris. The KCJ4430 protects itself by allowing the locking cylinders to fully open the discharge port, which makes it easy to remove clogged foreign material from the crusher.  
 (Patent pending)



## High mobility

The conveyor elevation system insures sufficient ground clearance, which provides the crusher with outstanding maneuverability at any crushing site. In addition, improved configuration and location of the guide handle make it much easier to operate the conveyor lifter. The mobile crusher uses a new interlock system that controls travel and crushing operation, depending on the conveyor's position. The system helps prevent the conveyor from being dragged or contacting the ground and provides clearance between the jaw discharge and the conveyor belt.



Conveyor Elevation System

## Minimum ground clearance

Travel:  
 200/350 mm **7.9"/14"**  
 Operation (Crushing):  
 100/200 mm **3.9"/7.9"**

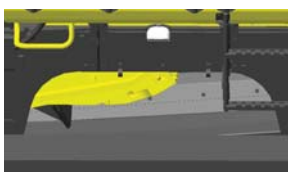
\* "Travel" is prohibited by interlock when the ground clearance is 100mm **3.9"**.



# MAINTENANCE AND OPERATION FEATURES

## Maximum reliability and minimal maintenance

In addition to the spacious large clearance between the jaw crusher and the conveyor belt, the crusher's bottom area is sealed with covers. This design prevents re-bar 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 In The Crusher Side  
(both sides of undercarriage)



Opening In The Engine Side  
(left side of undercarriage)



Between the crusher discharge  
and the belt conveyor

## Comfortable design

To prevent dust, sprinkler nozzles at the top of the jaw crusher, at the tip of the conveyor, and at the intermediate part (under the engine) are provided as standard equipment.



Sprinkler Nozzle

## Maintenance



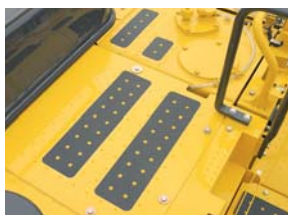
Fuel pre-filter  
(with water separator)



The engine oil drain valve is  
attached remotely with the  
drain hose connected.



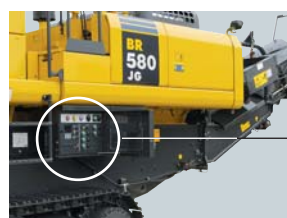
Centralized greasing of  
the crusher



Anti-slip plates

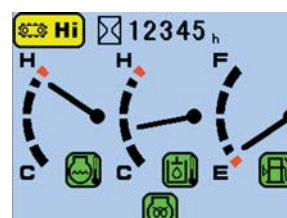
## Easy operation

- All the switches necessary for operation are located on the main control panel, making it easier for the operator standing on the ground to reach and control the operation. As the control system is equipped with the one-touch start feature, all you have to do is to push the start switch. This simple operation will sequentially start the operation of the muck conveyor, magnetic separator, belt conveyor, jaw crusher, and feeder.

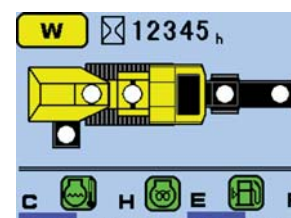


Main Control Panel

- The multi-function monitor displays the status of all components in real time. With this monitor, you can easily identify the location of a problem.



Travel Mode



Operation Mode

## Radio remote controller

With this controller, you can change the mode between "Travel" and "Operation", while remaining on-board. You can also use it to operate the one-touch Start/Stop feature, in addition to the feeder On/Off function.



### Function:

- Travel
  - Left/Right
  - Forward/Reverse
- Feeder On/Off
- Work equipment Start/Stop
- Mode selection Operation/Travel
- Emergency shut-off
- Horn



## BR580JG-1 MOBILE CRUSHER

# SPECIFICATIONS



### ENGINE

Model .....Komatsu SAA6D125E-5  
Type ..... 4-cycle, water-cooled, direct injection  
Aspiration ..... Turbocharged and air-to-air aftercooled  
Number of cylinders ..... 6  
Bore ..... 125 mm **4.92"**  
Stroke ..... 150 mm **5.91"**  
Piston displacement ..... 11.04 ltr **674 in<sup>3</sup>**  
Horsepower  
SAE J1995 ..... Gross 262.5 kW **352 HP**  
ISO 9249/SAE J1349 ..... Net 257 kW **345 HP**  
Rated rpm ..... 1900 rpm  
Governor ..... All-speed, electronic

EPA Tier 3 and EU Stage 3A emission regulations certified.



### HYDRAULIC SYSTEM

Type .....HydrauMind (Newly designed Hydraulic Mechanical Intelligence) system, closed-center with load-sensing and pressure-compensated valves  
Main pumps:  
Type .....Variable-displacement piston  
Pumps for hydraulic system  
Travel, crusher, feeder, conveyor and 2 equipment options  
Maximum flow ..... 2 x 344 ltr/min **2 x 91 U.S. gal/min**  
Maximum pressure ..... 37.3 MPa 380 kg/cm<sup>2</sup> **5,400 psi**  
Maximum travel speed: High ..... 3 km/h **1.9 mph**  
Mid ..... 2.1 km/h **1.3 mph**  
Low ..... 0.7 km/h **0.4 mph**



### OPERATING WEIGHT

Operating weight ..... 49000 kg **108,000 lb**  
Operating weight, including Muck conveyor and Magnetic separator  
..... 51000 kg **112,440 lb**  
Ground pressure ..... 129.4 kPa 1.32 kg/cm<sup>2</sup> **18.77 psi**  
Ground pressure, including Muck conveyor and Magnetic separator  
..... 135.3 kPa 1.38 kg/cm<sup>2</sup> **19.63 psi**



### UNDERCARRIAGE

Track type ..... Sealed track  
Track adjuster ..... Hydraulic  
Number of shoes ..... 45 each side  
Number of carrier rollers ..... 2 each side  
Number of track rollers ..... 7 each side



### CRUSHER

Jaw .....Komatsu KCJ4430  
Inlet size ..... 1120 mm x 765 mm **44" x 30"**  
Discharge setting (O.S.S.) ..... 55 mm to 200 mm **2.2" to 7.9"**  
Maximum rotating speed ..... 300 rpm  
Drive type ..... Hydraulic motor with V-belt

### Production Capacity

Maximum production capacity (with a muck content of 30%). Unit: ton/h **U.S. ton/h**

Material	Crusher Discharge Setting (open side)				
	55 mm <b>2.2"</b>	70 mm <b>2.8"</b>	100 mm <b>3.9"</b>	150 mm <b>5.9"</b>	200mm <b>7.9"</b>
Natural stone	—	—	— 180 <b>— 198</b>	200 – 280 <b>221 – 309</b>	280 – 400 <b>309 – 441</b>
Concrete debris	— 140 <b>— 154</b>	110 – 160 <b>121 – 176</b>	150 – 220 <b>165 – 243</b>	230 – 330 <b>254 – 364</b>	320 – 460 <b>353 – 507</b>

Note: \* The production capacity of the natural stone shown in the table is based on andesite having unconfined compressive strength of about 1000 kg/cm<sup>2</sup> **14,225 psi**, 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.

The Production capacity is the sum of the quantity of the material crushed by the crusher and the quantity of the material that passed through the grizzly bar. It depends on the type and properties of the material and the working condition.

When the crusher discharge setting is 55-100 mm **2.2"-3.9"**, only concrete debris can be crushed.



### GRIZZLY FEEDER

Frequency (variable) ..... Maximum 1000 cpm  
Size ..... 1125 mm x 3850 mm **3'8" x 12'8"**  
Amplitude (not loaded, all amplitude) ..... 8.0 mm **0.3"**  
Grizzly bar opening ..... 40–75 mm **1.6–3.0"**  
Drive type ..... Hydraulic motor



### COOLANT AND LUBRICANT CAPACITY (REFILLING)

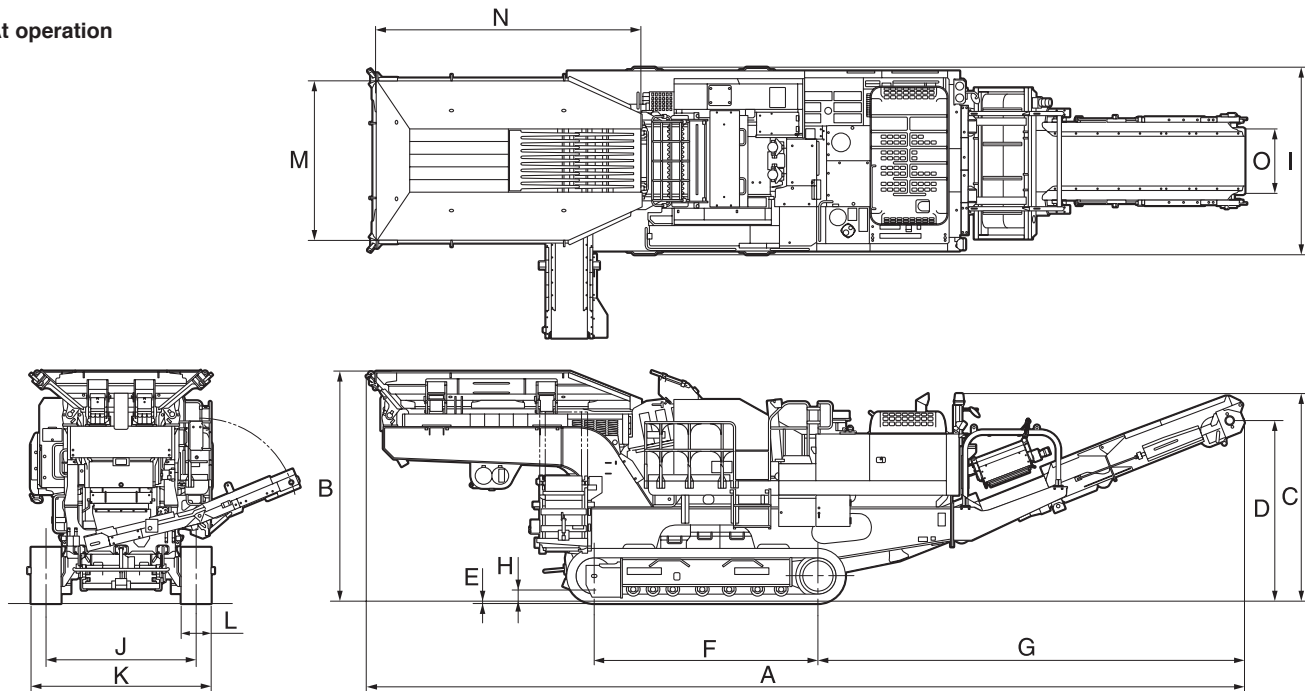
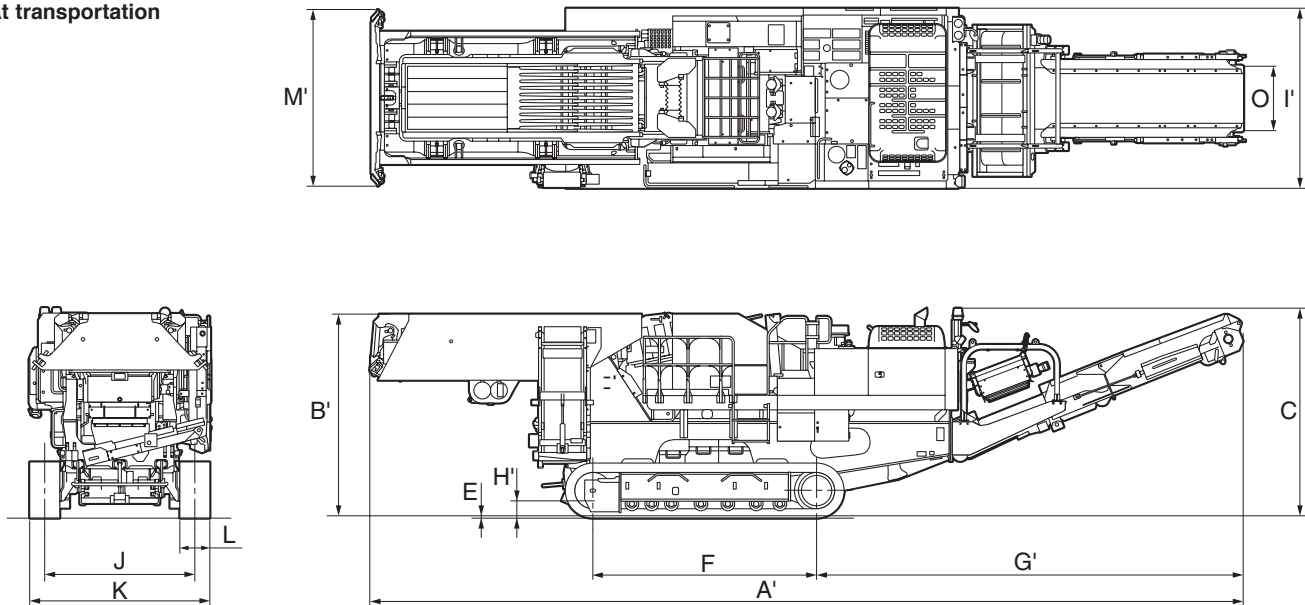
Fuel tank ..... 650 ltr **172 U.S. gal**  
Coolant ..... 39 ltr **10.3 U.S. gal**  
Engine ..... 38 ltr **10.0 U.S. gal**  
Final drive, each side ..... 9.0 ltr **2.4 U.S. gal**  
Hydraulic system ..... 248 ltr **65.5 U.S. gal**



### MAIN DISCHARGE CONVEYOR

Width x length ..... 1050 mm x 10621 mm **42" x 34'10"**  
Belt speed ..... 120 m/min **394 ft/min**  
Drive type ..... Hydraulic motor



**At operation****At transportation**

A	Overall length (at operation)	14540 mm	<b>47'8"</b>
A'	Overall length (at transportation)	14495 mm	<b>47'7"</b>
B	Overall height (at operation)	3820 mm	<b>12'6"</b>
B'	Height when folded	3365 mm	<b>11'0"</b>
C	Rotating lamp height (Overall height when folded)	3465 mm	<b>11'4"</b>
D	Discharge height	3000 mm	<b>9'10"</b>
E	Grouser height	30 mm	<b>1.2"</b>
F	Length of track on ground	3700 mm	<b>12'2"</b>
G	Discharge from final drive center (at operation)	7060 mm	<b>23'2"</b>
G'	Discharge from final drive center (at transportation)	7085 mm	<b>23'3"</b>

H	Ground clearance (at operation)	200 mm	<b>7.9"</b>
H'	Ground clearance (at transportation)	350 mm	<b>14"</b>
I	Overall width (at operation)	3090 mm	<b>10'2"</b>
I'	Overall width (at transportation)	2995 mm	<b>9'10"</b>
J	Track gauge	2480 mm	<b>8'2"</b>
K	Track width	2980 mm	<b>9'9"</b>
L	Shoe width	500 mm	<b>20"</b>
M	Hopper width	2625 mm	<b>8'7"</b>
M'	Hopper width when folded	2930 mm	<b>9'7"</b>
N	Hopper length	4400 mm	<b>14'5"</b>
O	Discharge conveyor belt width	1050 mm	<b>42"</b>





## STANDARD EQUIPMENT

- Alternator, 50 ampere 24 V
- Anti-slip plates
- Automatic deaeration system for fuel line
- Automatic engine warm-up system
- Batteries, large capacity
- Conveyor protective plate
- Dry type air cleaner, double element
- Electric horn
- EMMS monitoring system
- Engine, Komatsu SAA6D125E-5
- Engine overheat prevention system
- Fan guard structure
- Hydraulic track adjusters (each side)
- In-line filter
- KOMTRAX™
- Multi-function color monitor
- Power maximizing system
- PPC hydraulic control system
- Radiator and oil cooler dust proof net
- Radio remote controller
- Rearview mirror, LH
- Rotating lamps (red, amber)
- Shoes, triple grouser: 500 mm 20"
- Starting motor, 11 kW 24 V x 1
- Travel alarm
- Travel control levers
- Water spray nozzles above the belt conveyor



## OPTIONAL EQUIPMENT

- **MAGNETIC SEPARATOR:**  
Magnetic separator for primary conveyor, 750 mm 30" wide
- **MUCK CONVEYOR:**  
Muck conveyor assembly can be folded by hydraulic cylinder, 3414 mm x 600 mm 11'2" x 2'



**KOMATSU®**