

Product datasheet

Gyratory Crusher KB 54-75 Pro

High-performance primary crushing for capacities above 5,000 mtp

When it comes to crushing blasted hard rock in ore and natural stone mining, the efficiency of our gyratory crushers is second to none. Our KB Pro range is designed for high-performance primary crushing, with safe and easy maintenance by design.

Safer by design

Maintenance friendly design

- Easy access to all heavy components from top

Optimized “fish belly” shell design

- Ensures less weight, less stresses and easier casting
- Increase of overall strength

Easy modification of eccentricity

- Change of stroke by adjustment of the eccentricity

Adjustable pinion gear

- Simple adjustment of the backlash by rotating the housing from outside

Several options to increase safety and performance

- Hydraulic spider fixing unit (Bone type spider)
- Spherical spider bearing
- Eccentric removal trolley
- Spider maintenance platform
- Concave mounting rack
- Concave dismantling device (Concave pans)
- Main shaft stand
- Hydraulic nuts
- Enclosure of hydraulic unit, comparable to IP 54
- Different liner configurations etc.

Efficient primary crushing

Optimized crushing chamber

- High throughput rates
- Optimum degree of comminution
- Low operating and wear costs
- Huge feed opening for receiving big lumps of rock
- Direct feed possible

Hydraulic main shaft adjustment

- Hydraulic adjustment of crushing gap to compensate for wear
- Hydraulic main shaft adjustment for overload protection

“Gyramatic” monitoring and control system

- Ensures easy, safe operation
- Control and interlocking of all machine parameters and auxiliary systems
- Interactively used to input set point and read off operating data

Drive concept

- Direct drive via disc-pack coupling with floating shaft and safety coupling
- Cyclo-paloid spiral bevel gear for smooth operation and use of high-capacity drive motors
- High starting torque allows start of crusher under load (in emergencies)

Technical specification

Application data	
Application	Primary crushing
Feed material	Medium hard to hard rock and ore
Capacity ¹	Up to 5,300 metric tph

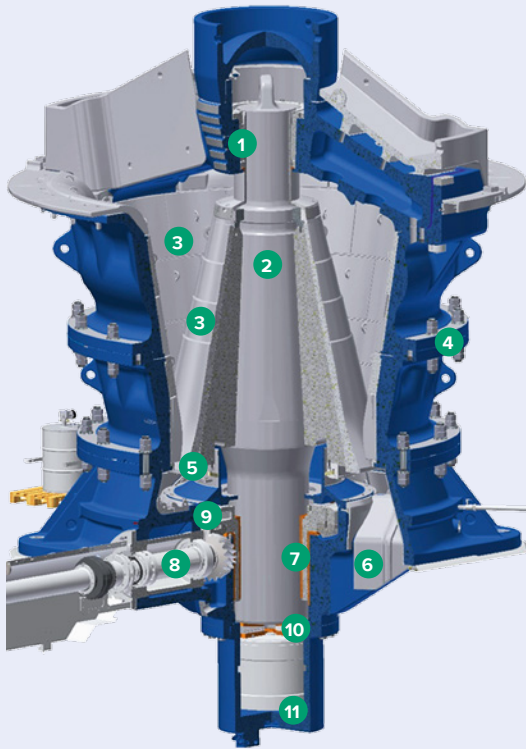
Technical data	
Configuration	Pro Design (e.g. safe and reliable maintenance from top)
Feed opening ²	1,370 mm / 54 inch
Mantle diameter	1,900 mm / 75 inch
Eccentricity ³	Adjustable in up to 3 settings
Eccentric speed	Approx. 137 rpm
Gap setting range OSS	130 – 200 mm
Control and monitoring system	“Gyramatic”
Drive concept	Direct drive with hydraulic safe-set coupling
Installed drive motor power ⁴	Up to 650 kW

Weight and dimensions	
Total weight ⁵	Approx. 215,000 kg
Heaviest piece for transportation ⁶	Approx. 43,500 kg
Heaviest piece for maintenance ⁷	Approx. 43,000 kg



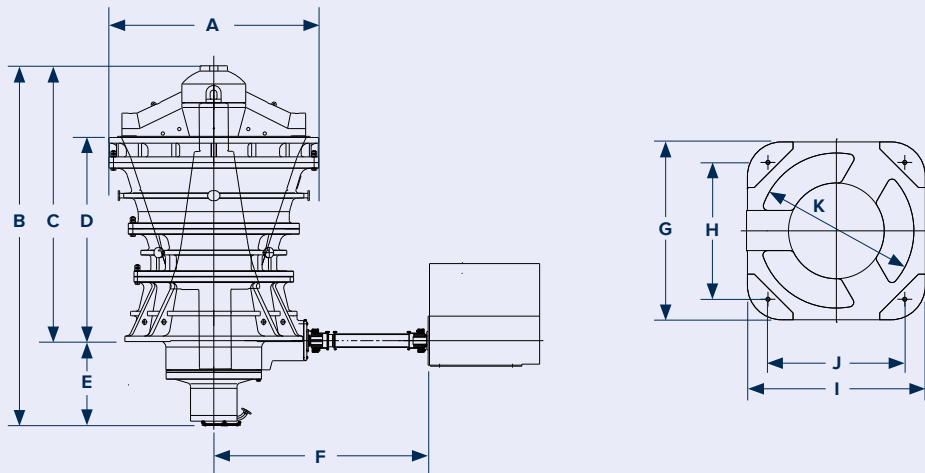
1. Crusher capacity calculated based on a feed material bulk density of 1.6 metric t/m³. Actual values depend on feed material characteristics and crusher configuration. All data should be used as a guide only and are not guaranteed.
2. For larger feed opening a Double Mouth Spider is available on request. Recommended maximum feed size up to 80% of the feed opening
3. Range of Eccentricity 14-26 mm.
4. Actual motor rating depending on the feed material characteristics, crusher configuration and altitude.
5. Crusher weight indicated do not include any base frame, drive motor and tools. Weight may vary depending on actual machine configuration.
6. Shell segment
7. Mainshaft assembly with “oversized” mantle diameter including crushing elements.

Main components



1. Spider bearing
2. Main shaft
3. Crushing elements: mantle/concaves
4. Shell sections
5. Dust sealing
6. Material discharge
7. Eccentric bearing assembly
8. Countershaft assembly
9. Bevel gear and pinion
10. Step bearing
11. Hydraulic cylinder

Main dimensions



Ø A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	Ø K [mm]
4,600	7,850	6,105	4,475	1,745	4,484	3,900	3,000	3,900	3,000	3,400

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