

Product datasheet

Gyratory Crusher KB 63-80 Pro

High-performance primary crushing for capacities above 5,500 mtph

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 6,000 metric tph |

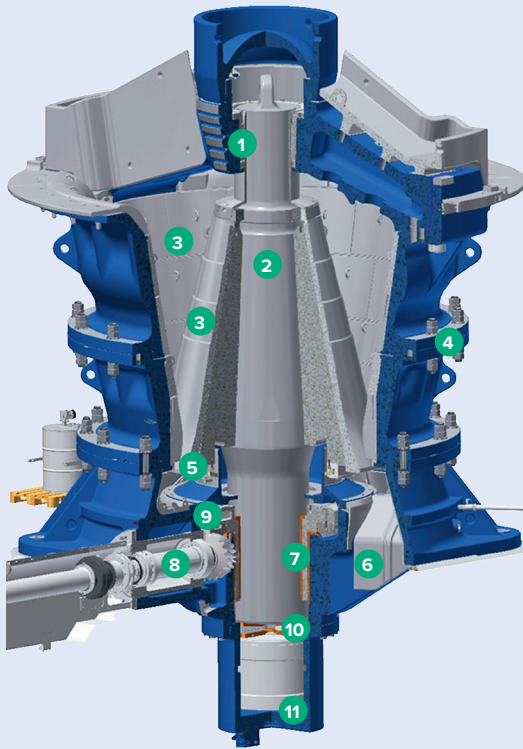
| Technical data | |
|--|---|
| Configuration | Pro Design (e.g. safe and reliable maintenance from top) |
| Feed opening ² | 1,600 mm / 63 inch |
| Mantle diameter | 2,030 mm / 80 inch |
| Eccentricity ³ | Adjustable in up to 3 settings |
| Eccentric speed | Approx. 137 rpm |
| Gap setting range OSS | 150 – 215 mm |
| Control and monitoring system | “Gyramatic” |
| Drive concept | Direct drive with hydraulic safe-set coupling |
| Installed drive motor power ⁴ | Up to 750 kW |

| Weight and dimensions | |
|--|--------------------|
| Total weight ⁵ | Approx. 270,000 kg |
| Heaviest piece for transportation ⁶ | Approx. 66,000 kg |
| Heaviest piece for maintenance ⁷ | Approx. 50,000 kg |



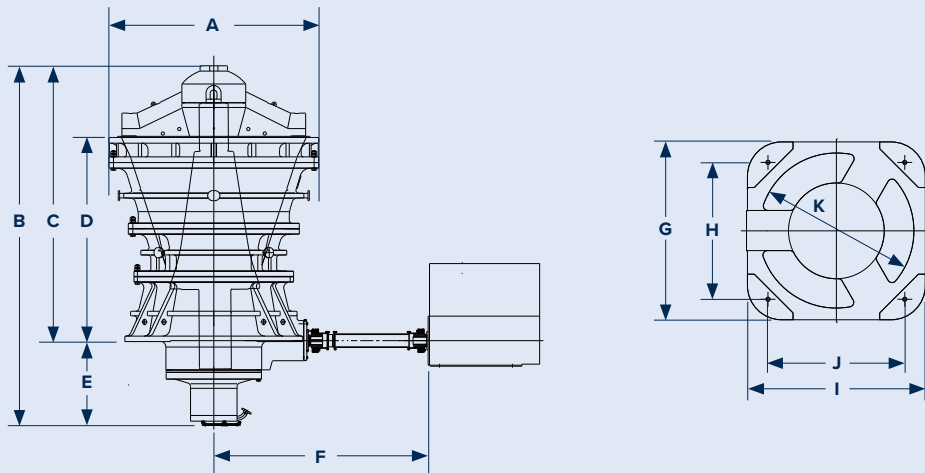
1. Crusher capacity calculated based on a feed material bulk density of 1.6 metric t/m³. Actual values depend on feed material characteristics and crusher configuration. All data should be used as a guide only and are not guaranteed.
2. For larger feed opening a Double Mouth Spider is available on request. 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] |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|
| 5,750 | 8,650 | 6,905 | 4,950 | 1,745 | 4,497 | 3,900 | 3,000 | 3,900 | 3,000 | 3,400 |

FLSmidth A/S
2500 Valby
Denmark
Tel. +45 3618 1000
info@flsmidth.com

www.flsmidth.com

FLSmidth Inc.
Salt Lake City Operations
Midvale, UT 84047-5559
USA
Tel. +1 801 871 7000
info.sl@flsmidth.com

**FLSmidth Mining
Technologies GmbH**
Ennigerloh Operations
59320 Ennigerloh
Germany
Tel. +49 201 828 3000
mining-technologies@flsmidth.com

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