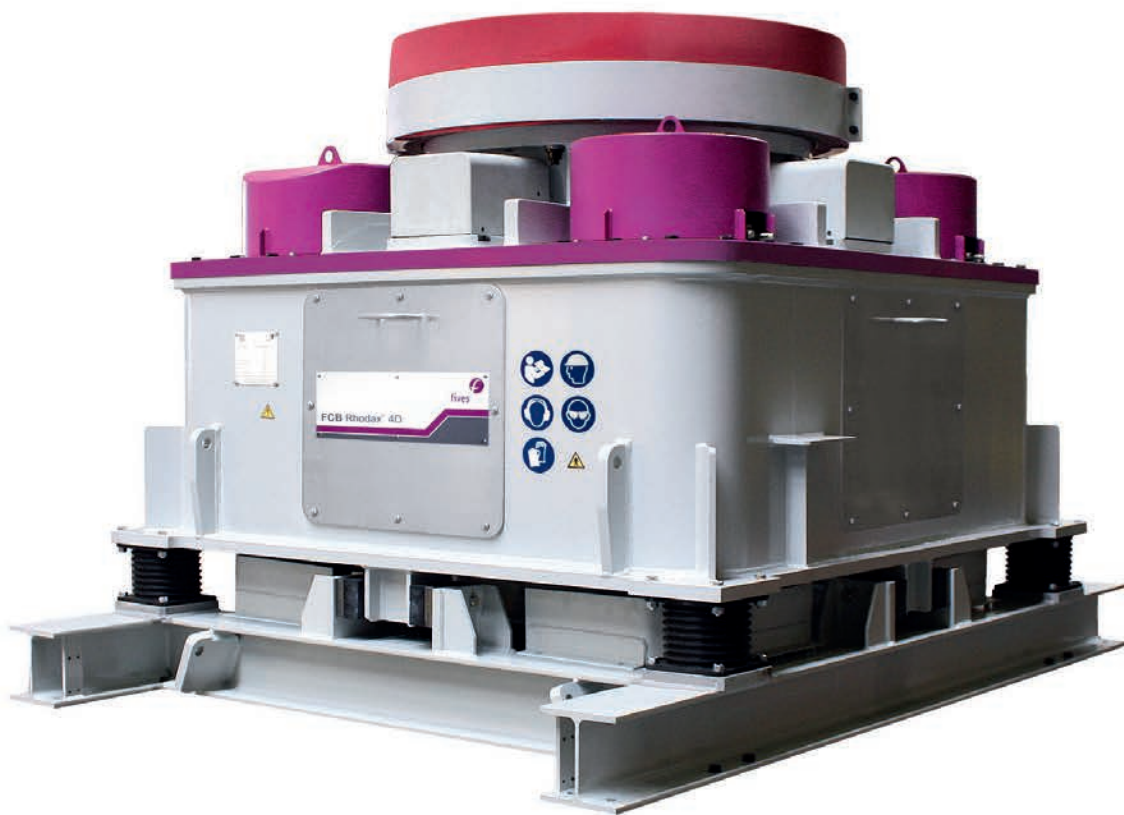


FCB Rhodax[®] 4D

Vibrating cone crusher



FCB Rhodax[®] 4D, the latest compressive technology for the best crushing and grinding performances

- Accurate control of the grinding force and high reduction ratio
- Constant product quality with the highest added value
- Low wear and long lifetime crushing parts
- A wide range of dry process applications: fused alumina, fired clay, silicon, ferroalloys, mattes, concrete recycling...

FCB Rhodax® 4D, the ultimate technology that merges crushing and grinding applications in a single equipment

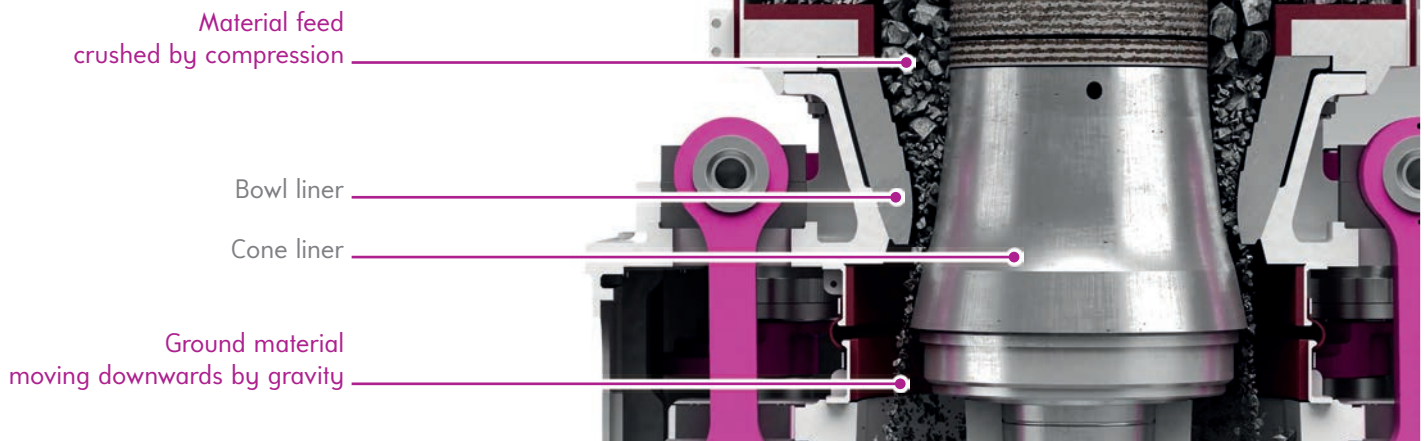
MARKET NEEDS & BUSINESS REQUIREMENTS

- Reduce crushing stages
- Control of ultrafines production
- Make artificial sand
- Shape the product
- Get better liberation at higher screen mesh
- Fast and easy liners change
- Get steady finish product

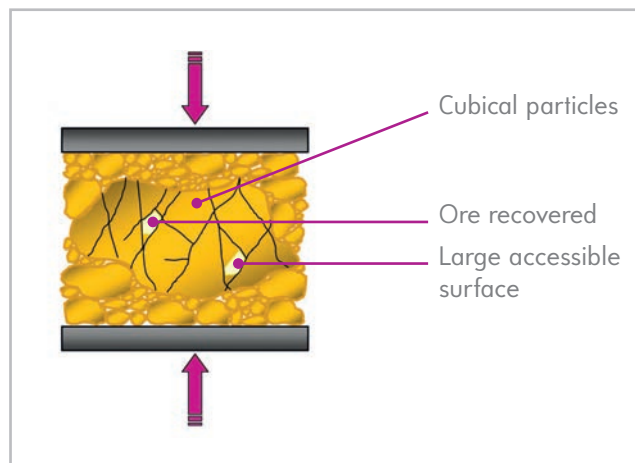


Using interparticle compressive grinding, FCB Rhodax® 4D allows for a full control of the grinding force

3 to 6 alternate phases of grinding and gravity drop through the crushing chamber in a single pass

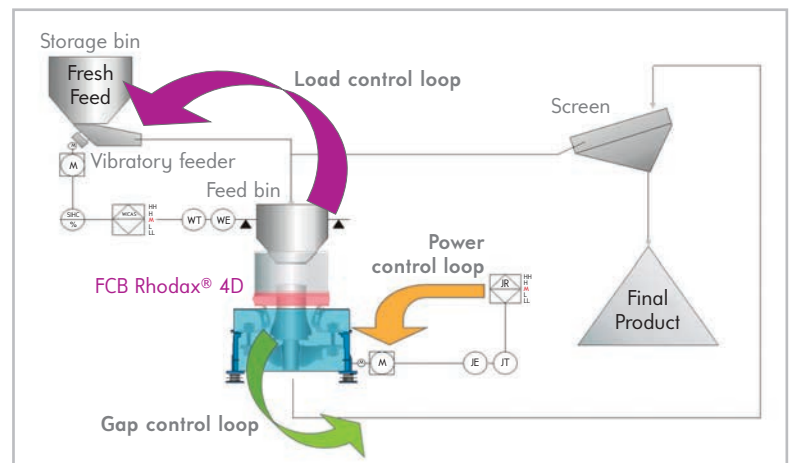


INTERPARTICLE COMPRESSIVE GRINDING



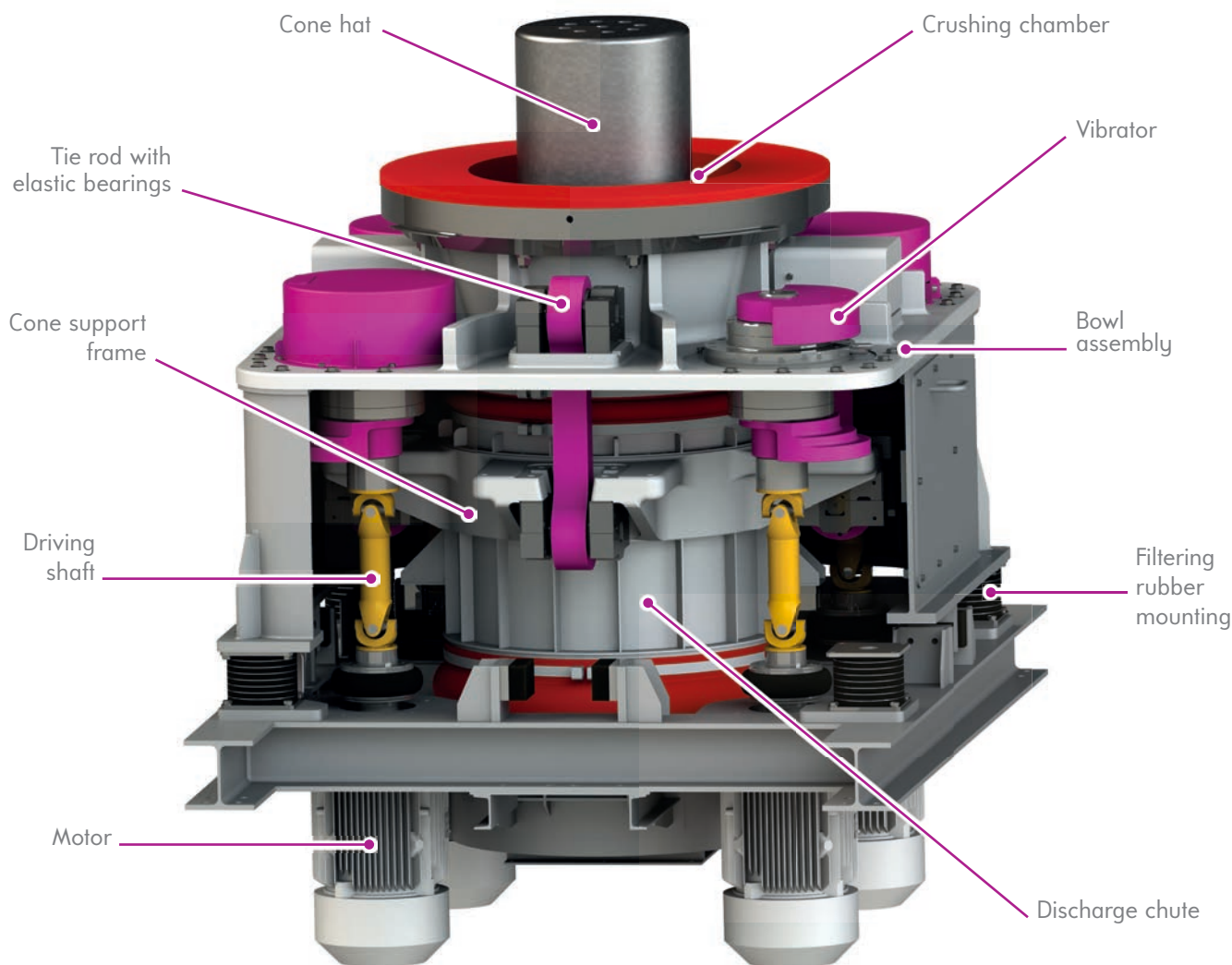
Selective grinding with the highest liberation

CLOSED CIRCUIT OPERATION



Production of fine (< 500 µm) to coarse (up to 35 mm) final product

FCB Rhodax® 4D provides the highest reduction ratio in the market



KEY COMPONENTS

- A bowl driven in a circular horizontal motion by unbalanced masses
- A choke fed operation given by the suspended feeding chute
- A cone sub-assembly suspended to the bowl
- A cone liner free to rotate
- A high tuned machine mounted on filtering rubber mountings
- High chromium cast iron wear parts

ADVANTAGES

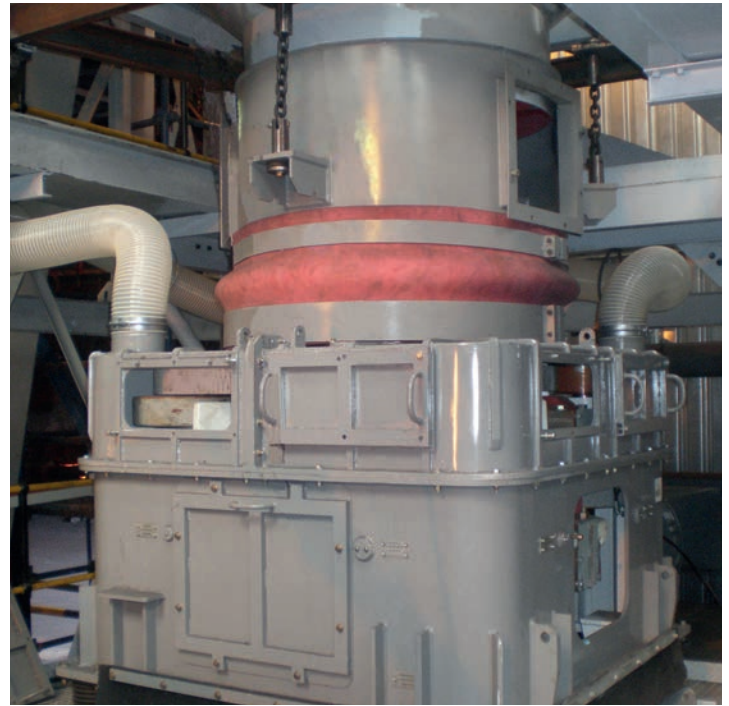
- Control of the grinding force and differential grinding
- No dust emission
- Low level of noise
- Low sensitivity to tramp iron
- Highest reduction ratio up to 100:1
- Choke fed start and shutdown
- Compact installation
- No specific civil works required for installation

- **Constant product quality, totally independent from the wear of the liners**
- **Long lifetime of wear parts leading to significant savings, especially when grinding hard and abrasive materials**
- **Replacement of 2 to 3 conventional crushing stages**
- **Control of the ultrafines production**
- **Adjustable capacity and particle size distribution**
- **High liberation ratio for the best beneficiation**
- **Up to 30% energy savings**
- **Recycling of unsold stocks or undesirable fractions**
- **Low flakiness index (cubical shape)**

FCB Rhodax® 4D, a flexible machine for a wide range of applications

PROCESS APPLICATIONS

- Ceramics, tiles, fired clay
- Abrasives
- Silica
- Silicon metal
- Ferroalloys
- Diamond ore
- Concrete recycling
- Precious and rare metals
- Iron ore
- Phosphates
- Limestone
- Slags
- Others...



FCB RHODAX® 4D RANGE (LP / HP: Low / High Pressure)

Equipment range	Maximum feed size (mm)	Nominal power (kW)	Nominal gap (mm)	Nominal throughput* (tph)	Capacity at 1mm screening* (tph)
FCB Rhodax® 300 HP	30	13	12	10	1.5
FCB Rhodax® 450 HP	60	35	18	30	4
FCB Rhodax® 600 HP	90	70	24	70	8
FCB Rhodax® 800 HP	120	150	32	140	17
FCB Rhodax® 1000 LP	150	200	40	180	24
FCB Rhodax® 1000 HP	150	250	40	240	30
FCB Rhodax® 1200 HP	185	400	48	380	48
FCB Rhodax® 1400 HP	220	600	56	560	71

*Capacities given are FCB Rhodax® 4D throughput when crushing dry clean material with bulk density of 1600 kg/m³ in closed circuit. Factors which may affect capacity include hardness, moisture content, size distribution of the feed material and final product size.

KEY REFERENCES

- FCB Rhodax® 300 – Fired clay grinding
2 tph from 0-30 mm to 0-800 µm
- FCB Rhodax® 450 – Corundum crushing
4 tph from 0-30 mm to 0-2 mm
- FCB Rhodax® 600 – Silicon grinding
4 tph from 0-90 mm to 0-425 µm
- FCB Rhodax® 1000 – Chromium corundum crushing
50 tph from 0-120 mm to 0-6 mm

FCB RHODAX®-CARE

Tailor-made Technical Assistance Program

- Comprehensive process and technical surveys
- Spare parts management
- Predictive maintenance plan
- On-site trainings



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