

The Twin-FCB Horomill® for high capacity grinding plants



The combination of two identical FCB Horomill® grinding units operating simultaneously along with a large-sized FCB TSV™ Classifier.

The FCB Aerodecantor to handle products up to 20% moisture



The integration of the drying function in the system.

FCB Horomill® grinding plant



TYPICAL SIZES

Types		Production range (tph)							
HRM	kW	OPC		Blended		Slag		Raw meal	
2000	450	12	20	16	26	10	14	45	55
2400	700	20	34	28	40	16	24	70	85
2800	1100	30	50	42	60	24	36	110	135
3400	1800	50	85	65	100	40	60	180	220
3800	2400	70	115	95	140	56	80	245	300
4000	2800	75	125	105	155	60	90	275	340
4200	3000	85	140	120	175	70	105	310	380
4400	3400	95	160	130	195	80	115	340	420
4600	3800	105	175	145	220	85	130	380	470
4800	4200	120	195	160	240	95	140	415	510
5000	4600	130	215	175	265	105	155	460	570

Twin-FCB Horomill®: production x2

FCB Horomill®, a breakthrough technology to enhance grinding plant operation and sustainability

- The lowest energy consumption
- Zero water consumption
- Better finished product quality even with higher cement/clinker ratio
- The highest flexibility for operation with various products/additives
- Production capacity that is not sensitive to the wear of lining

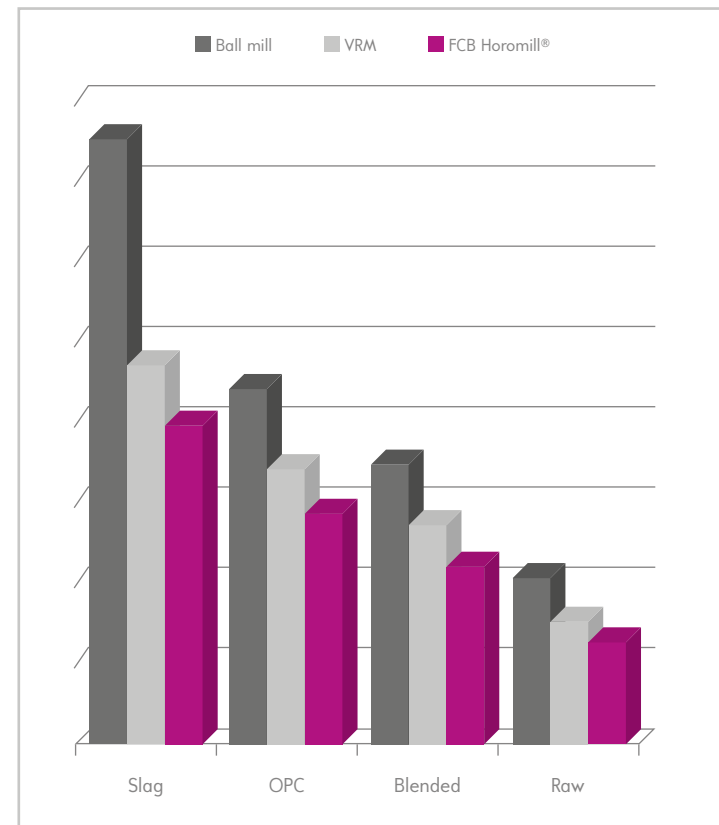
FCB Horomill® is an advanced technology in bed comminution that enables producers to face the challenges of the industry – Energy Cost and Sustainability – while achieving utmost flexibility and full automation

ADVANTAGES

- Best product quality with higher cement/clinker ratio
- Zero-water consumption
- No need for grinding aid for blended cements or slag
- Higher cement quality with less Blaine
- Production capacity that is not sensitive to the wear of lining
- Flexible operation:
 - Same machine for raw meal, cement and slag grinding
 - Automatic change of recipe within 5 to 10 minutes without surge hopper
- Low level of noise
- Compact installation

	OPC	Blended	Slag	Raw
Ball mill	44.0	34.5	75.7	20.5
VRM	34.0	27.0	47.0	14.8
FCB Horomill®	28.4	21.8	39.4	12.3

Grinding plant consumption



ENERGY SAVINGS

As a grinding technology by bed compression, FCB Horomill® covers the same application fields than conventional ball mills, vertical roller mills or roller presses.

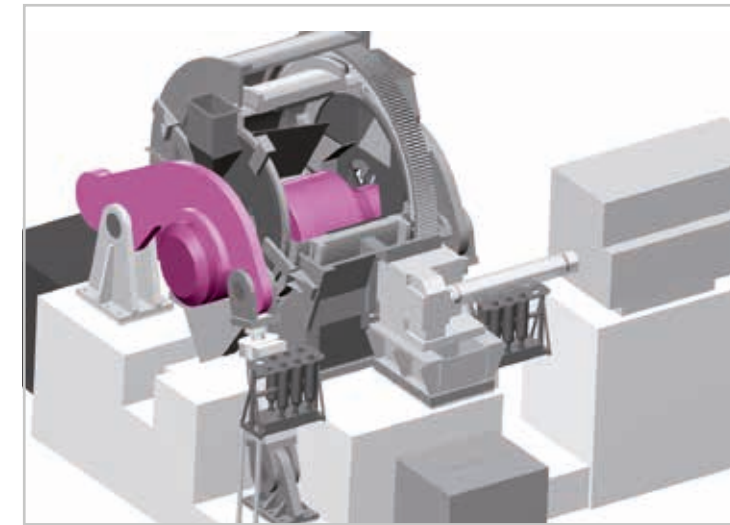
Industrial results have shown energy savings ranging between 35% and 60%.



FCB Horomill® is a proven technology adopted by the major cement producers



KEY COMPONENTS



Simple plant design

- Installation within limited space
- Low quantity of material in the circuit
- Fully automated sequences and recipe changes
- Standardized plant layout and options

FCB Horomill®

- A shell driven at supercritical speed
- A roller applied on the material bed by means of hydraulic jacks
- Material fed from one side and ground several times between the shell and the roller
- Compact integrated drive (similar to ball mill)

FCB TSV™ Classifier

The FCB Horomill® performance is enhanced with the FCB 3rd generation TSV™ Classifier that separates the fine product (for improved product quality) and the coarse material (for improved grinding efficiency and minimum mill power consumption).

Process filters

The grinding plant can be fitted with a high efficiency gas treatment system to clean the gas emissions throughout the installation. Fives process filters use the latest technology in terms of filtration and scrubbing, to achieve a very high level of pollutant removal.



ULTIMATE GRINDING TECHNOLOGY

- In-bed compression comminution for energy savings
- Material centrifugation for operation stability

- Multicompression during one pass through the mill for a better cement quality