

# **CEMENT** MILLS



## **CEMTEC** – your partner for success.

CEMTEC operates on the basis of individual responsibility. Every member of our team has the right to make high-level decisions. The entire responsibility for a project – from planning to commissioning – rests with a single person. This means that you have the same, competent contact partner for all your queries, wishes and suggestions, without exception. In addition to standard orders, your individual requirements are also fulfilled rapidly and without complications.



# CEMTEC manages projects throughout the world for the cement and processing industry.

CEMTEC manages every project from start to finish. From planning to commissioning. Our product spectrum includes tube mills for grinding a wide range of bulk materials and minerals, as well as rotating drums for thermal treatment (calcination, drying, cooling) and mechanical processing (mixing, washing, conditioning, etc.) of different bulk materials. We also offer erection supervision, commissioning and technical support. Successful projects all over the world attest to the competence of CEMTEC.

# **CEMENT MILLS**



# **CEMTEC** cement mills for every requirement.

Two-chamber ball mills for the cement industry are available in different designs. The bearings can be either trunnion bearings or slide shoe bearings. The drive can be configured as a girth gear and pinion, lateral or central drive. If the process material is moist, cement mills can also be configured with a drying chamber. The drying chamber can be either integrated in the mill or flangemounted. The mill shell can be configured equally easily in one piece or (for transport reasons) in several pieces.

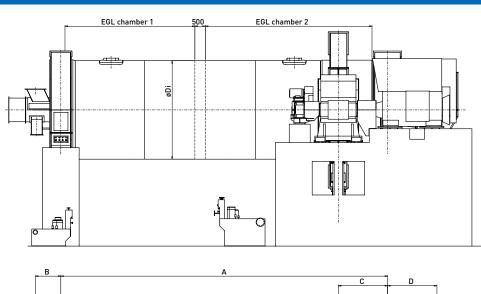


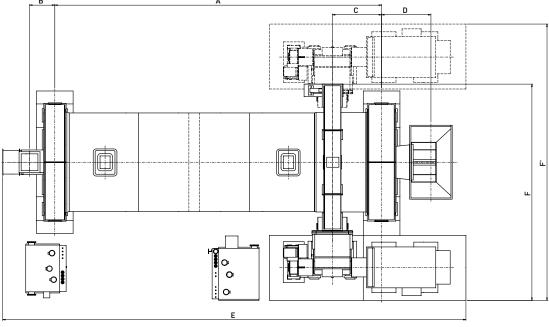
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### STANDARD SIZES AND DIMENSIONS

SHELL INSIDE DIAMETER	EFFECTIVE GRINDING LENGTH - EGL	DIMENSIONS [mm]							INSTALLED DRIVE POWER
[m]	[m]	Α	В	С	D	E	F	F'	[kW]
3.60	10.00	11,315	925	1,835	1,785	15,500	8.700	-	2,000
3.80	12.25	13,580	950	1,790	1,850	18,500	8,900	-	2,500
4.00	13.25	14,590	1,000	1,890	2,000	20,700	9,550	-	3,300
4.20	13.50	14,830	1,200	2,120	2,300	21,000	9,750	-	3,800
4.40	14.00	15,350	1,200	2,120	2,300	21,500	10,000	-	4,400
4.60	14.25	15,600	1,200	2,350	2,350	21,950	10,350	-	4,700
4.80	15.00	16,350	1,200	2,350	2,350	22,500	10,550	-	5,700
5.00	15.50	16,850	1,200	2,350	2,500	22,750	10,600	-	6,500
5.20	16.00	17,360	1,215	2,350	2,515	23,550	-	13,400	8,000

Note: additional sizes on request





# **SPECIFIC POWER CONSUMPTION vs CEMENT TYPES**

CEMENT TYPE	SPECIFIC POWER CONSUMPTION [kWh/t]	FINENESS [cm²/g Blaine]	MIX
CEM I 32.5 N	28-34	2,800-3,300	95% clinker, 5% gypsum
CEM I 42.5 N	33-42	3,200-4,000	95% clinker, 5% gypsum
CEM I 52.5 R	50-56	4,500-5,000	95% clinker, 5% gypsum
<b>CEM II 42.5 A/L</b>	32-36	3,500-4,000	85% clinker, 5% gypsum, 10% limestone
CEM III 42.5 B	50-69	4,000-4,500	65% slag, 30% clinker, 5% gypsum
SLAG	60-70	4,500	100% slag

These values refer to power consumption on main motor. They are average values of existing applications and can be different, depending on available raw materials.

# LARGEST CEMENT MILL IN EUROPE MADE BY CEMTEC

Mill size: ø 5.2 x 16.75 m Year of construction: 2010

Location: Poland

Installed main motor capacity: 8,400 kW (2 x 4,200 kW) Capacity: 200 tph

Absorbed capacity at motor shaft: 7,450 kW











# **MILL DESIGN**

Out cement grinding mills are also available in other designs and with different features.



# **MILL SUPPORT**

Design of cement grinding mill with hydrodynamic pad bearings. We also offer mills with traditional hydrodynamic trunnion bearings on request.



# **MILL DRIVE**

Direct mesh gear for the drives of large cement mills with enclosed girth gear. This type of drive features self-aligning pinionsforoptimum powertransmission.



Traditional pinion/girth gear drive with grease spray lubrication.



Depending on the fresh feed humidity, the cement mill can be equipped with a pre-drying chamber.



# **HOT GAS GENERATOR**

To provide the required hot gas volume for drying, CEMTEC supplies hot gas generators. These hot gas generators can be delivered with capacities of between 0.5 and 15 MW.



# TURN-KEY GRINDING PLANTS

CEMTEC also supplies complete grinding plants, including civil engineering work, steel structure, equipment,... as per your requirements.



CEMTEC
Cement & Mining Technology

WORLDWIDE WINDER

# **CEMENT & MINING** TECHNOLOGY WORLDWIDE

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## **HEADQUARTERS**



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