



# Technological Process Of Cement Industry

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Drive packages for crushers, horizontal and vertical conveying systems

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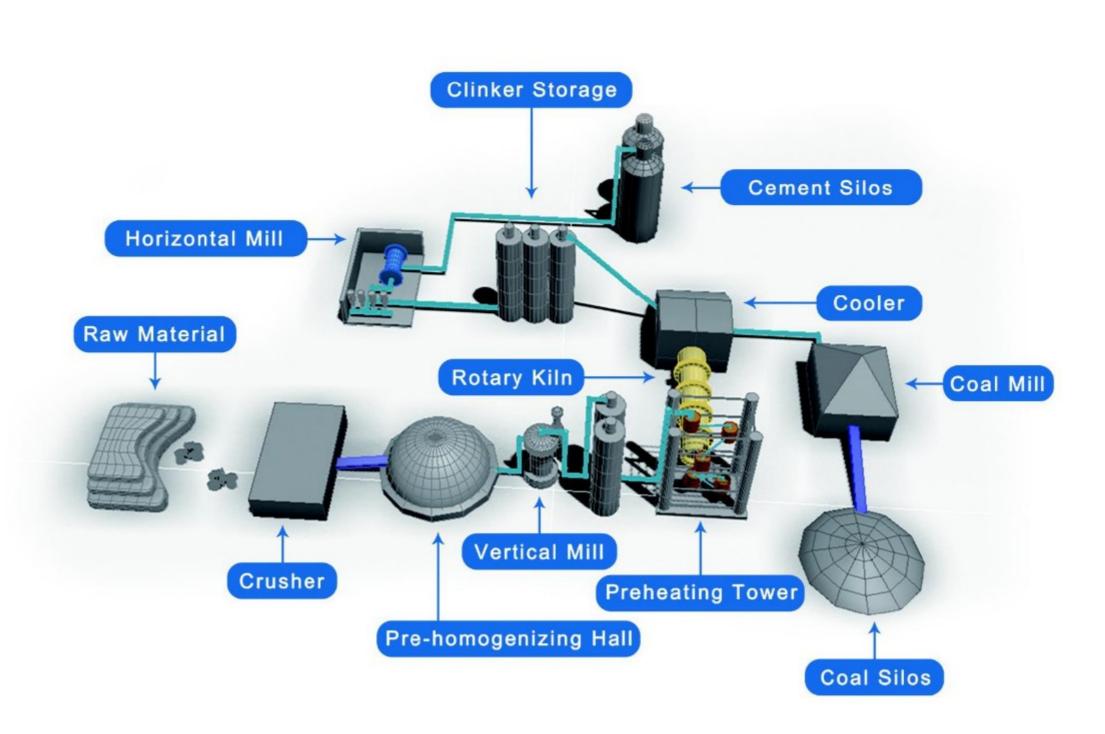
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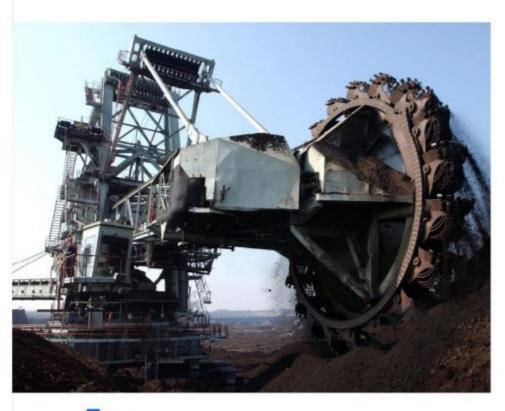
**Clinker Grinding** 

Roller presses, vertical and ball mills

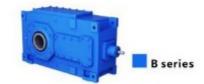














### Extracting, crushing, grinding and transporting materials

During the first step in the cement manufacturing process, the raw materials are extracted from quarries before being crushed and transported to the cement plant. AOKMAN gearmotors are widely used in the materials transportation.

#### (1) Crushers

No matter what crusher technology you are using (impact, hammer, unifeed, cone or roll crusher),our application engineers can tailor AOKMAN products perfectly to your solution.

Products from AOKMAN are designed for demanding loads and exhibit the rigidity needed to ensure that they can withstand large shock loads. Gear units can be fitted with Taconite seals and special ventilation filters and couplings, making them ideally equipped for the harsh operating conditions within the cement plant.

The components we can offer:

- Bevel-helical gear units
- Helical gear units
- Planetary gear units

#### (2) Bucket Elevators

Our drive solutions for bucket elevators include helical and bevel helical gear units B series and DY series. Custom applications are made simple by the modular thousands of industrial drives in service around the build of the gear unit along with a wide range of globe, AOKMAN is specially designed to ensure installation options.

The components we can offer:

- Bevel helical gear units with solid or hollow
- Auxiliary drives with free-running clutch & backstops
- Swing bases / base frames
- Mechanical or hydraulic couplings
- Motors









### (3) Belt Conveyors

In raw material conveyor systems, distance, weight, and continuous running pose huge challenges. With optimum mechanical performance, continuous and reliable operation.

The components we can offer:

- K series bevel helical gear-motor
- ATA series shaft mounted gearbox
- X.B series cyclodial pin-wheel reducer
- Roller - Motor
- Back-stop - Conveyer belt / Drive belt
- Mounting base - Belt pulley













# Material grinding ---- Vertical Mill

Vertical mills are the key equipment for raw material grinding, coal grinding and clinker grinding.

Throughout the grinding process, AOKMAN DRIVE solutions ensure fault-free, high-performance processing and also further optimize and minimize your energy costs.

The components we can offer:

- Planetary gear units with bevel-helical gear stages with oil cooling system
- Lubrication systems
- Motor and couplings



# Fuel preparation ---- Horizontal Mill

AOKMAN offers you a complete drive unit for your ball mill – whether for directdrive, pinion or girth gear drive solutions. Depending on requirements, our application engineers design a drive package with P series planetary and MFY series helical gear units for direct drives for ball mills solutions, and MBY series, H series, ZY series parallel shaft helical gear units for pinion & girth gear drives for ball mills drive solutions. In addition to our standard gear units, our tried-and-tested industrial gear units can also be used as auxiliary drives and seamlessly integrated into your existing system.















### (1) Direct drives for ball mills

The components we can offer:

- P series planetary gear units with primary gear units
   MFY series helical gear units
   Auxiliary drives with clutch
   Lubrication and Cooling systems
   Various couplings

- Brakes
- Base frames
- Coupling safety covers (input and output side)

### (2) Girth gear drives for ball mills

The components we can offer:

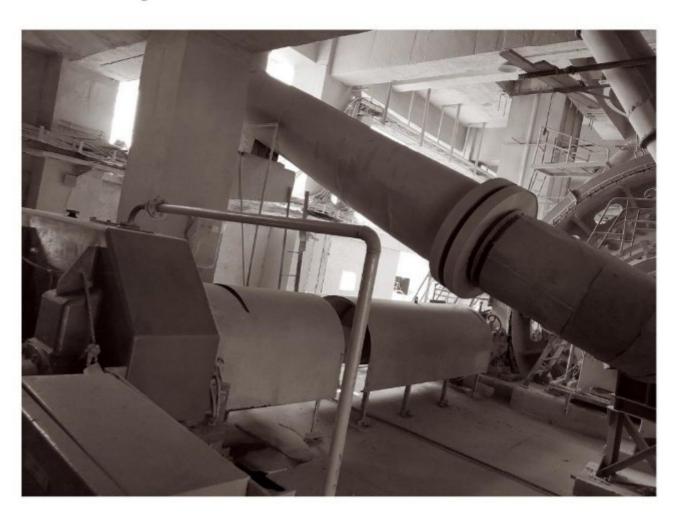
- MBY series multi-stage helical gear units
  H series multi-stage helical gear units
- ZSY series multi-stage helical gear units
   Lubrication and Oil cooling systems
- Motors
- Various couplings (input and output side)
- Base frames
- Auxiliary drives
- Girth gears in segmented designPinions and bearing blocks







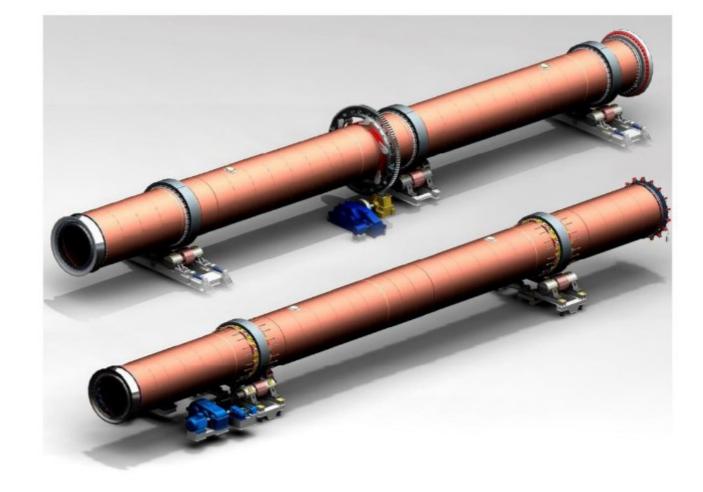












### Clinker production ---- Rotary Kiln

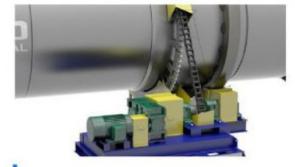
Rotary kiln is the key equipment for clinker production. AOKMAN can provide the following components for rotary kiln drives.

- Main gear unitsAuxiliary drives
- Motors
- Various couplingsLubrication and Oil cooling systems
- Rolling bearing
- Girth gears (with leaf spring coupling)
- Pinions





Silent Continuous Operation



High Torque and Low Maintenance





## Clinker grinding ---- Roller presses, vertical and ball mills

No matter what blaine value you want your final product to achieve, AOKMAN can supply the right drive package for your application.







### **Roller Press Mill**

The roller presses are the key grinding equipments with the features of high efficiency, energy saving.

- The components we can offer:

   Drive systems with planetary / helical gear unit combinations

   Lubrication and Oil cooling systems
- Shrink disk
- Safety clutches
- Auxiliary drives via sprocket
   Customer-specific torque supports

