

# **DRIVE SOLUTIONS**

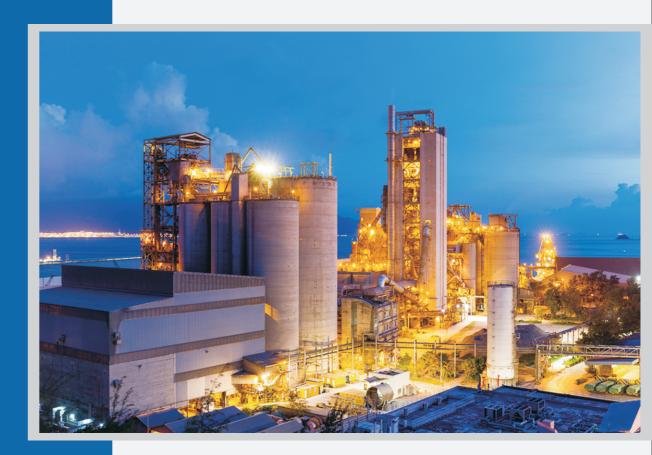
# **Industrial Gear Units**

For Cement Processing



#### **Zhengzhou AOKMAN Machinery Co.,Ltd**

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# **The**Brief Description Of AOKMAN

The cement industry is the building block of the construction industry and the regular application sector of gear drives.

AOKMAN could provide the highly reliable and costefficient solutions, energy-efficient drives and one-stop services for the entire process chain of cement production, from the quarry to the raw materials, to the clinkers, and to the cement products.

AOKMAN gearboxes & motors are ideal for replacing gearboxes from the famous brands and suppliers, and also for building the new plants or upgrading the existing and old drives. The best solutions will be offered to you from AOKMAN DRIVE according to your requirements.



# **Technological Process Of Cement Industry**

1

**Extracting, Crushing, Grinding And Transporting Materials** 

Drive packages for crushers, horizontal and vertical conveying systems

2

**Raw Material Grinding** 

Drive packages for vertical mills

3

**Fuel Preparation** 

Drive packages for vertical and horizontal mills

4

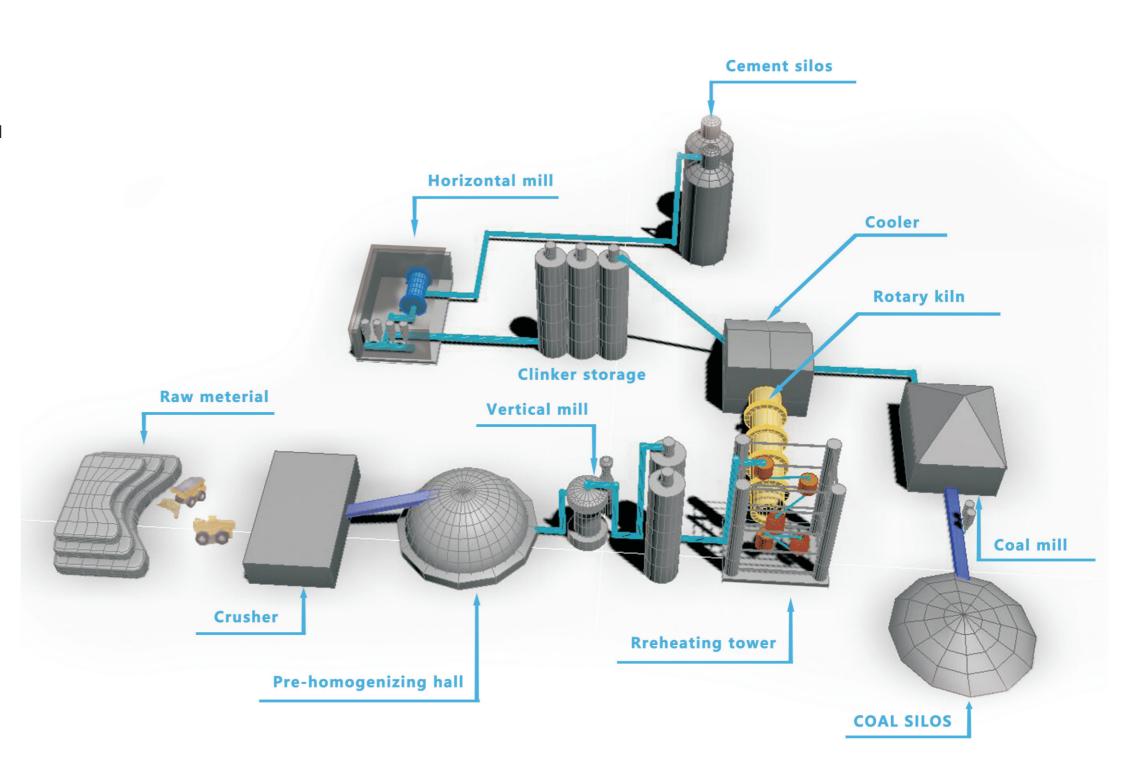
**Clinker Production** 

Drive packages for rotary kilns



**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 build of the gear unit along with a wide range of 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 thousands of industrial drives in service around the globe, AOKMAN is specially designed to ensure 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, Ty 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

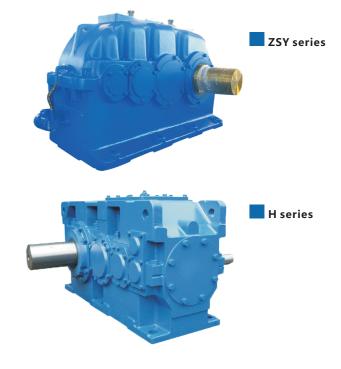
- The components we can offer:

   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 units
- Auxiliary drives
- Motors
- Various couplings

- Lubrication and Oil cooling systemsRolling bearingGirth 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 sprocketCustomer-specific torque supports

