OK™ raw mill
Reliable and efficient raw material grinding
Based on proven technology

The OK™ raw mill is designed with the same proven technology and modular design as our standard OK™ cement mill.
Quality and profit-improving features

Vertical Roller Mills (VRMs) have been the standard option for raw materials grinding in the cement industry for several decades. FLSmidth has supplied the global cement industry with leading VRM designs for all applications since they were first brought to market. The OK™ mill has been FLSmidth’s standard cement VRM since 1993. Since its introduction the OK mill has proven to be the most efficient cement VRM available with the highest reliability and ease of operation. In 2017, FLSmidth introduced the OK raw mill, which is designed with the same proven technology and modular design as the OK cement mill.

FLSmidth’s modular design uses the same common OK mill parts for both raw and cement applications.

Common parts include using the same:
- Roller assembly and swing lever system
- Grinding tables
- Simple hydraulic or hydro-pneumatic spring system
- Drive systems

Along with FLSmidth’s proven high-efficiency RAR separator, the OK raw mill also incorporates the best VRM features in one proven design.

- The swing-out feature allows rollers to easily be removed from the mill, allowing the possibility to perform maintenance work externally from the mill.
- Segmented roller tires offer the flexibility of having more than one approach for fast and simple wear surface maintenance inside of the mill. When the roller grinding surfaces are worn the tire segments can either be replaced without swing out the rollers or they can be re-welded also without removing the rollers. Segmented tires are well suited for hard facing without the risks of surface failure that come with solid tires.

These options allow for the highest maintenance flexibility to optimize operating & maintenance costs in any plant.
The rollers
The OK mill design uses the same swing lever and roller assemblies for either cement or raw applications. It also allows the ability to continue using the unique grinding roller profile of the OK cement mill and an optimized spherical grinding profile for raw grinding applications.

Gear types
To accommodate the various requirements for different mill sizes and applications, the OK mill is designed with the flexibility to install all available drive types. This includes standard planetary gear systems, which are proven reliable for up to 8,000 kW, and the many alternative drive systems that have recently been introduced to the market – such as the MAAG® MAX Drive for large mill sizes up to 15,000 kW.

OK mill – the name says it all
A complete size range, including the largest VRM available for raw grinding, ensure the ability to meet all possible capacity requirements in a single mill even for the hardest materials. The well-known reputation of the OK mill as a reliable machine that is easy to operate and maintain continues with the OK raw mill. In addition to the roller design features, the OK mill retains the ability to operate with a reduced number of rollers if needed.

The high-efficiency separator gives a steep separation curve, resulting in stable kiln operation. Finally, the feed and reject can be installed from both sides, which give a flexible layout.

The use of concrete stands saves installation time and reduces the cost of steel.
FLSmidth OK™ raw mill.
Size range

A complete size range ensures the ability to meet all possible capacity requirements in a single mill even for the hardest materials.