Mills grinding raw materials to very fine grain are used at various stages in cement production. Due to their low energy consumption in comparison with conventional horizontal mills, it is preferable to use vertical mills that employ enormous drives. Its energy efficiency and its performance depend to a large extent on the drive system. Siemens offers robust, high-performance drive components and systems which have been well proven in the building materials industry. Even for limited space we can supply compact solutions from a single source.

**Drive solutions that are energy-efficient**

Aside from common drive versions having asynchronous slip ring motors and liquid starters, we offer innovative systems that ensure greater energy efficiency for your system. Due to a higher level of efficiency, the motors reduce energy consumption.

This effect can be increased by also using our medium-voltage converters such as ROBICON Perfect Harmony or SINAMICS GM150, which ensure efficient and reliable operation using the latest IGBT technology.

**Compact and reliable gear units**

Siemens also supplies the core element of a drive: The compact and reliable FLENDER vertical mill gear units KMP, KMPS, KMPP as well as the EMPP which cover a power range up to 9,000 kW. These bevel planetary gear units come with special built-in bearings and special housing to direct the high axial forces right into the plinth.