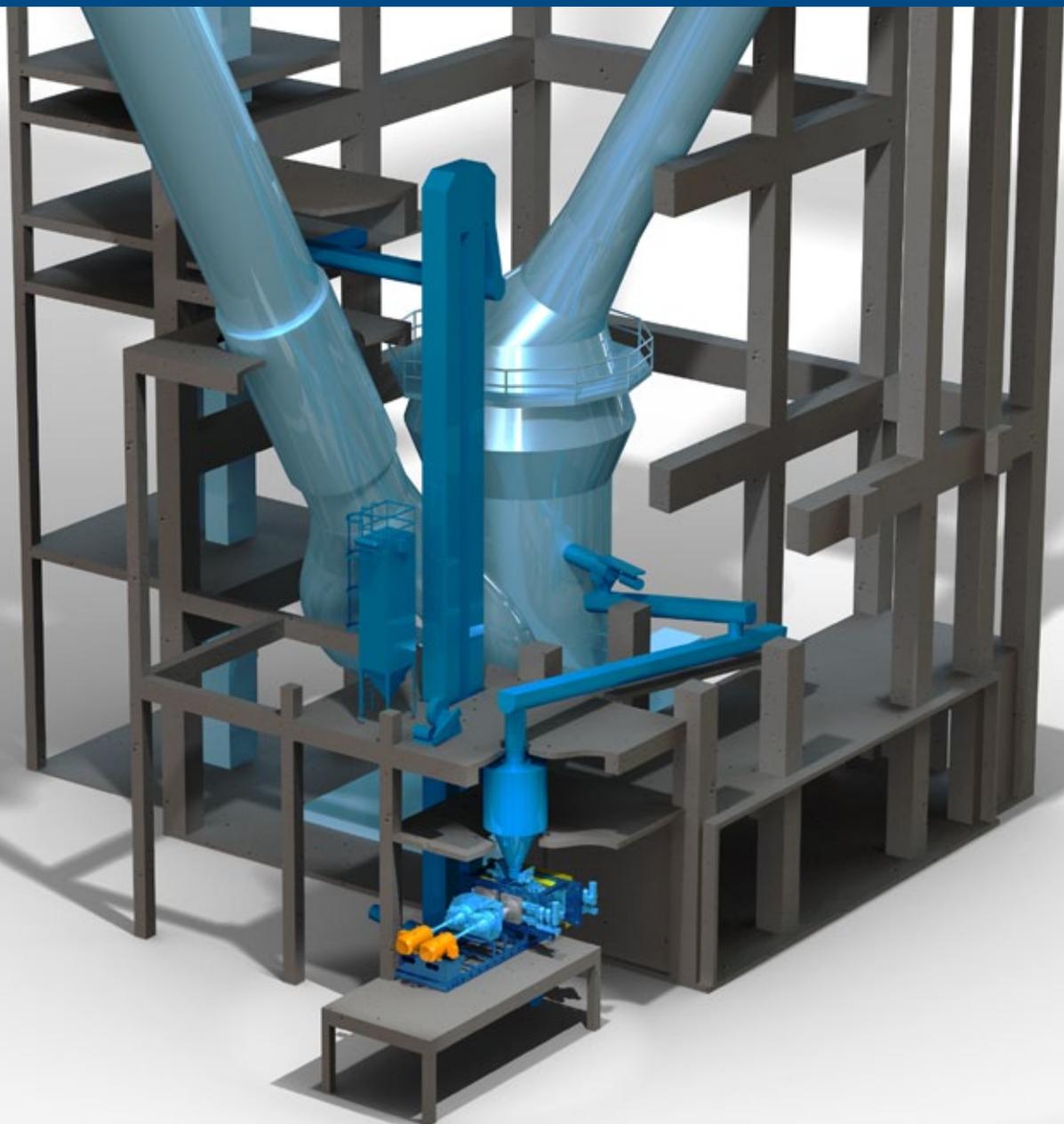


Vertical roller raw mill capacity upgrade



Now it's possible to increase the capacity of a vertical roller mill by up to 15%. Simply integrate a specially adapted Hydraulic Roller Press (HRP) to boost output.

No more bottlenecks

The Challenge

The capacity of the vertical raw mill is often the limiting factor for clinker output – when a plant upgrades the kiln system, the raw mill frequently becomes a bottleneck. Rather than investing in an entirely new vertical mill to keep pace, there is a very limited set of possibilities in upgrading existing mill capacity in smaller steps. For example, older mills can achieve a modest capacity increase by upgrading the integrated separator.

A proven new alternative

Now a significant capacity increase is possible with a proven new alternative from FLSmidth: the integration of a specially designed Hydraulic Roller Press (HRP) to the mill for a capacity boost of up to 15% depending on existing separator design, mill fan capacity and required drying capacity.

By incorporating a specially adapted extraction screw conveyor, it is possible to remove part of the reject material from the separator reject cone and transfer it to the HRP for separate grinding. The material is then transported back to the mill, where it again becomes part of the normal material circuit.

The upgrade is an energy and space-efficient solution and in many cases providing a fast return on investment.

Fast, easy installation

A vertical roller mill capacity upgrade can be achieved without significant changes to existing machinery, so there's very little downtime during installation. Downtime can be further minimised by installing the upgrade during a planned maintenance stop. Typically, it takes only a few days to connect the HRP to the mill.

High level of flexibility

Use the HRP with the vertical mill when extra capacity is needed, and run the mill without the HRP when it's not. Should maintenance on the HRP be required, the vertical mill can continue operating at its nominal capacity, uninterrupted. It simply ensures the flexibility to adapt to a wider range of feed conditions. Because of its excellent grinding economy, the HRP allows your plant to maintain the same specific power consumption (kWh/ton) as before its installation.

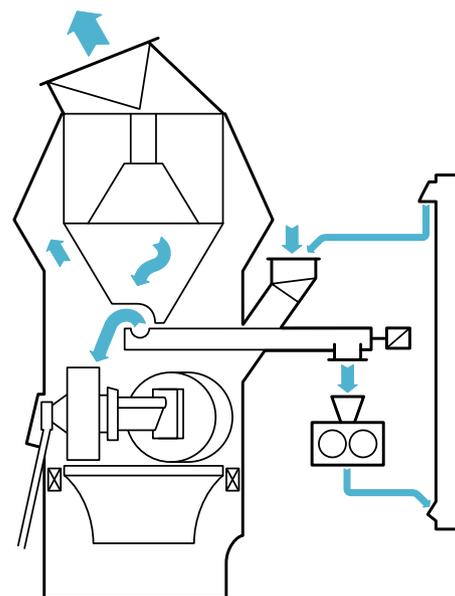
Low maintenance, high stability

The HRP incorporates a patented, flexible dam ring system that ensures an even load across the roller width, even when processing relatively fine-grained separator reject material. This even load distribution minimises maintenance and contributes to stable roller press operation.

Please contact your FLSmidth representative to learn what your options are for your specific equipment and what results you can expect with an upgrade.

Key benefits

- Increases capacity
- Maintains same specific power consumption
- High stability
- Fast installation
- Low cost
- Quick return on investment



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