



OK™ PRO+

ceramic wear segments
for vertical roller mills

RECYCLABLE CERAMIC WEAR SEGMENTS THAT LAST 3 TIMES LONGER

Designed specifically for OK™ mills, OK™ Pro+ ceramic wear segments offer superior quality and extended wear life.

- Improve mill productivity
- Guaranteed performance
- Reduce wear segment consumption
- Recyclable at end of life

They also bring sustainability advantages compared to third-party wear liners, which may not fit as well or be made from inferior materials. By ensuring mill performance remains at optimum levels, grinding is more efficient and energy consumption is optimised. There is also less consumption of wear parts (because the OK™ Pro+ liners last longer) and they are recyclable at end-of-life, minimising waste.

A best-in-class mill deserves a tailored wear solution

The common maintenance practice for worn roller and table wear liners in vertical roller mills (VRMs) is to reweld or hard face the worn surface. This means regularly stopping the mill. Because the wear rate in a VRM varies, depending on feed materials and product fineness, the number of times maintenance is required over a given time period is variable.

With significantly longer wear life than traditional high-chrome liners, OK™ Pro+ ceramic wear liners address these issues by reducing the number of annual maintenance stops and offering a long-lasting wear solution for our OK™ mills.



We know performance is important. But we also need to reduce the amount of waste produced during operations to help achieve circular economy goals. Our OK™ Pro+ ceramic wear segments are recyclable at end of life – so they won't be cluttering up scrapyards at the plant or filling up landfills when their job in your mill is done.

Improve mill productivity with fewer maintenance stops

While we may be experts in vertical mill technology, we can't stop wear in your OK™ mill. What we can do is make sure that the interval between wear lining maintenance stops is as long as possible – up to three times longer than alternative wear solutions, in fact.

Guarantee mill performance with an expert OEM-made solution

With our first-hand OK™ mill knowledge, we make sure our wear segments are tailored to fit. The ceramic inserts match the spherical dual-lobed surface profile of the OK Cement Mill, and are properly placed to prevent localized wear areas that shorten the effective life of the wear segments. Each segment is checked to ensure it meets our design specifications and standards before shipment.

Reduce wear liner consumption with the highest-quality materials

The ceramic inserts in OK™ Pro+ wear segments are 10mm thicker than those in non-FLSmidth liners, ensuring the wear-resistant surface layer will last the full production run. The ceramic element is also impregnated with a special hi-chrome alloy, ensuring better flowability during casting, and resulting in a dense material matrix with high hardness.



OK™ Pro+ wear liners are currently available for rollers and tables of all OK™ raw mills and most OK cement mills with full roller segments.

OK Pro+ warranties

Because they are designed by us for our mills, our OK Pro+ ceramic wear segments are guaranteed to ensure your mill performance stays at the high level you expect it.

- Campaign life calculated based on 20 hours/day of operation x 320 days/year
- If the grinding portion is to be used completely, when grinding table wear exceeds 40mm, the mill must be re-adjusted for optimized production and stability during operation.
- Guaranties are based on the actual known wear data from site.
- Separate guarantee document is available

| Product | Multiplication factor on the current high-chrome installed | Estimated campaign wear life (hours) |
|---------|--|--------------------------------------|
| Cement | 3 | 19,000 |
| Slag | 2* | 6,400 |
| Raw | 2.5 | 16,000 |

* depending on slag type and content

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