

TRIBOMAX[®] wear surface

Unique wear protection surface for hydraulic roller press installations provides high performance and longer roller lifetime – ideal for grinding clinker, slag and raw mix.

FLSmidth's TRIBOMAX[®] wear solution is a unique, patent-pending wear-resistant surface for hydraulic roller press installations, providing significant improvement in roller lifetime. This is achieved through a combination of resistance to wear and surface overloading.

Benefits

- High wear resistance
- High surface toughness
- Low maintenance
- Cost effective
- Reduced risk of failure
- Shrink-fit solution
- Repair possible if needed
- High resistance to tramp metal

Optimised wear properties compared to traditional hardfacing

Designed for performance

Our TRIBOMAX® wear solution is based on unique PLASMA TRANSFER ARC (PTA) welding deposit technology. PTA offers a pure metallurgical composition with significantly fewer impurities, like cracks and porosities, compared to conventional hardfacing. Through dedicated research, FLSmidth has fine-tuned the PTA process to yield outstanding performance.

Surface friction

Due to special microstructure formula-tions, the TRIBOMAX surface has a unique ability to provide high surface friction and an autogenous wear layer.

Ease of maintenance

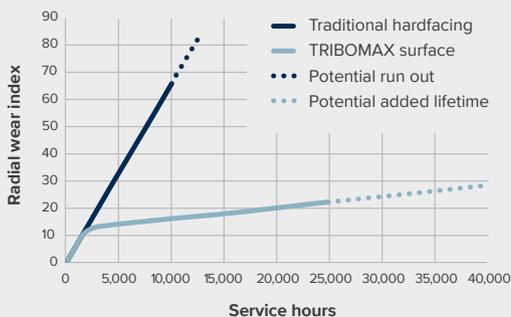
Compared with traditional hardfacing solutions, which require frequent repairs resulting in downtime, TRIBOMAX surfaces require limited or no repair. In the unlikely event the TRIBOMAX surface is damaged, it can be repaired in-situ and rollers and sleeves can be refurbished as necessary.

Cost competitive

Our TRIBOMAX wear solution offers high availability, making it an overall competitive and cost-effective solution. As the TRIBOMAX surface utilises high-end material formulations, the initial cost is higher compared to traditional hardfacing, but lower compared to similar high-end solutions. Regardless of the technology, our TRIBOMAX wear solution will be cost competitive due to lower total cost of ownership. Whereas some solutions are limited in roller size due to complex manufacturing requirements, our TRIBOMAX surface is suitable for all aftermarket applications and can be supplied on any roller size with short lead time.

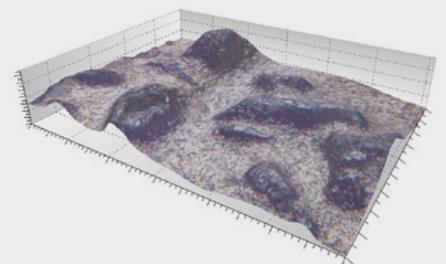
Rollers having applied TRIBOMAX surfaces can be supplied either as solid rollers or as shrink-fitted solutions that reuse the main shaft, which in turn, reduces overall cost.

Wear forecast



After run-in, the TRIBOMAX surface has better wear resistance properties than traditional hardfacing. The graph above displays a wear forecast for clinker production.

An advanced welding method creates a nearly crack-free surface and superior wear protection.



The TRIBOMAX surface consists of embedded, protruding hard carbides, which provide high surface friction and high performance.