

STANEX DIAPHRAGM FOR BALL MILLS

Whether for installation on a new mill or refurbishing an existing one, the STANEX diaphragm is your choice to long-lasting, efficient and sustainable operation.

Benefits

- Highest possible grinding capacity due to narrow buildin length - one of the shortest build-in length of any diaphragm on the market
 - » Longer effective chamber lengths and better use of the mill length
- » Frees up space for more material which leads to a production increase
- Large free flow area optimises production rate
 - » Low pressure drop across the mill
 - » Optimum material transport through the mill reduces power consumption

- Low maintenance time due to easily accessible wear parts
 - » Allows replacement of separate intermediate rings of grates and sectors to compensate for local wear
 - » Conical slots minimize the risk of clogging
 - » Short maintenance stops easy handling when fastening due to weight and size
- Low maintenance frequency due to long lasting wear parts

A DIAPHRAGM FOR THE MODERN CEMENT PLANT

Built to last

We have designed the STANEX for long life and troublefree operation. Because you have better things to be worrying about than your ball mill diaphragm.

The grates are made of a highly ductile and wearresistant heat-treated alloy steel, while the lining plates facing the fine grinding compartment are made of 50mm thick heat-treated alloy steel. This gives you an estimated service life of up to 18,000 hours for the grates and 36,000 hours for the plates, when producing ordinary Portland cement from clinker and gypsum.

The lifters are radially and individually adjustable, making it possible to maintain appropriate material level in the preceding compartment and helping to avoid excessive wear on the grates, shell liners and ball charge. The sturdy design also includes retainer ring segments, bolted to the mill shell, a heavy supporting plate with spacer pipes, and a steel front plate, bolted onto the pipes for rigidity.

It all goes together to produce a diaphragm that will run... and run.



Built to operate efficiently and run productively

Those adjustable lifters, for example, help optimise grinding performance and improve mill efficiency – one of a number of features on the STANEX.



The large grate area enables a high circulation factor, while the 8mm slots in the grates have a slightly conical design, with increased width in the direction of flow, to minimise the risk of blockage. Meanwhile, the large centre opening contributes to a low pressure drop, improving energy efficiency, and the short built-in length of the STANEX ensures longer effective mill length compared to other diaphragm types.

Overall, this is a diaphragm that will reduce operating costs and improve the sustainability of your milling operations through lower energy consumption, reduced maintenance and replacement requirements, and higher productivity.

Built for all ball mills

The final bit of good news is that you can enjoy the benefits of the STANEX whatever the size of your ball mill. The STANEX is available for all mill diameters in both metric and U.S units. And because the segmented retainer is bolted to the mill shell with a single row of bolt holes only, it can also be adapted to different drilling patterns in existing mills, without making extra holes.

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