



## SF™ Cross-Bar® Cooler upgrade

An easy upgrade that enhance productivity and reduces maintenance cost

Does your existing cooler limits you from increasing the production or is it time to do a major maintenance overhaul or do you want to reduce the maintenance cost? A surprisingly simple upgrade helps you in increasing the productivity and reduce the maintenance cost, both at the same time.

### Benefits

- 10% higher capacity with same grate area
- Lower maintenance cost
- Fewer wear parts
- Control red river
- At an attractive investment cost

# A step forward for your SF Cross-Bar cooler

Simply put: it's all about the transport mechanism.

Your existing SF Cross-Bar cooler has one stationary crossbar between every two moving crossbars and each crossbar covers four grates in width. By upgrading, the cooler will no longer have stationary crossbars. The newly installed moving crossbars covers two grate in width, thereby doubling the number of lanes. For instance if you have an SF 3x4 cooler it has 3 lanes, by upgrading you will then have 6 individual lanes that helps in controlling the red river.

By eliminating the stationary crossbars in between the moving crossbars, doubling the lane function and operating only in shuttle mode: the clinker transportation efficiency increase significantly. Thereby allowing the cooler to handle more clinker production than designed for, it also reduces the cooler drive speed to <60% of what you operate today. Lesser drive speed is directly proportional to the life time of the cooler parts, which ultimately reduces your maintenance cost and time.

Going forward you will only have fewer wear parts in the cooler as the cooler will no longer have stationary crossbars, stationary & moving retainer brackets and base wall plates.

## How it's done

This upgrade is achieved with most of your existing SF Cross-Bar cooler untouched. Only the crossbars and hydraulic components are changed, thus at an attractive investment cost.

### Typical steps to upgrade:

- Initial review of existing cooler from a mechanical and process perspective
- Replacement of crossbars with new design
- Mounting of new grate protection plates. If existing grates are worn out, then it is wiser to choose the latest design "Wave grate"
- Division of drive frame, each existing lane is divided into two independent lanes
- Replace cylinder brackets and intermodular straps
- Install new valve block, hydraulic components, existing hydraulic cylinders are re-used
- Install new program and supplementary electrical parts on existing Machine Control System

The upgrade can be completed within a standard maintenance stop of 2-3 weeks, and no heavy equipment is needed to carry out the upgrade.

For the ultimate solution that will further increase grate lifetime, improve cooling efficiency and reduce operating costs, why not request information on the latest design "Wave grate". This solution supports both the tougher financial and environmental sustainability targets we experience.



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