



• Datasheet

# Self-aligning mainshaft

Eliminate suspended-load risk.  
Reduce install time. Protect seals.

The FLS self-aligning mainshaft is a retrofit-ready upgrade for gyratory crushers that removes the need to work beneath suspended loads while simplifying fit-up and seal installation. By guiding and centring the shaft during assembly, it prevents sealing damage that leads to oil leaks and rework. With safer workflows, faster change-outs and more predictable shutdowns, the self-aligning mainshaft improves availability and lowers overall maintenance cost across the circuit.

### Key benefits

- **No work under suspended loads** improves maintenance safety by eliminating the need for personnel beneath the shaft.
- **Faster, more predictable shutdowns** as guide blocks and tapered interfaces help teams reach final position the first time.
- **Lower corrective maintenance** through effective sealing that protects the oil contact seal and reduces contamination risk.

### Key technical highlights

#### Self-aligning lower journal

Re-engineered geometry automatically centres the shaft during installation, preventing off-axis loading that can damage sealing surfaces and the oil contact seal.

#### Guided assembly hardware

Guide blocks and a controlled taper create a defined path to the final position, shortening time on task and reducing reliance on manual adjustment.

#### Upgraded seal ring package

A new seal ring improves seating integrity and protection, supporting longer intervals between interventions and more stable lubrication performance.

#### Safer, simpler maintenance workflow

By removing exposure to suspended loads and reducing rework, the upgrade streamlines shutdown activities and helps standardise procedures.

#### Retrofit-ready for fast integration

As a retrofit-ready solution, the self-aligning mainshaft integrates with the existing upper shell and associated components, cutting installation time, avoiding major CAPEX, and enabling rapid deployment during standard maintenance shutdowns.

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