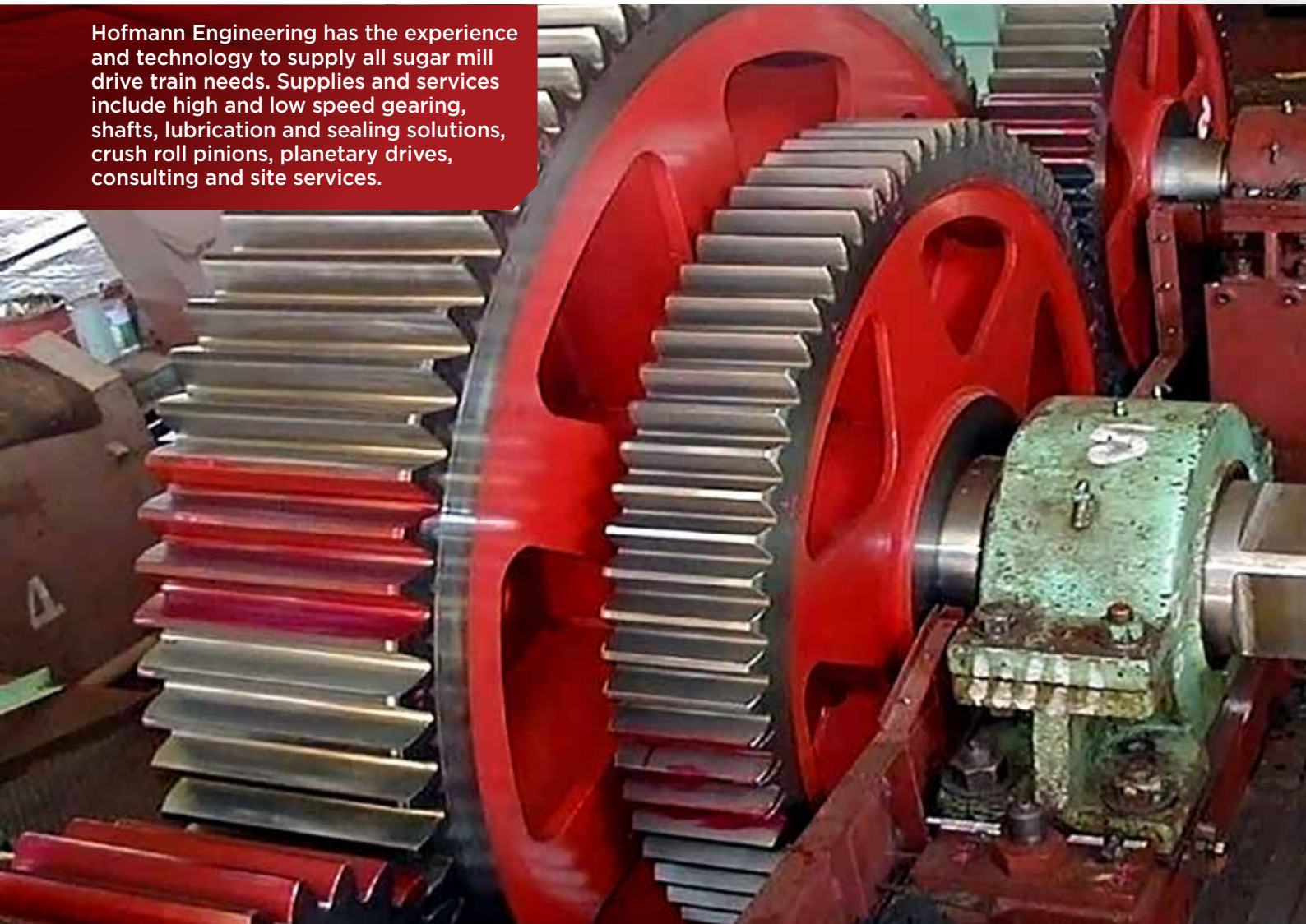


# SUGAR MILLS PARTS & SERVICES

Hofmann Engineering has the experience and technology to supply all sugar mill drive train needs. Supplies and services include high and low speed gearing, shafts, lubrication and sealing solutions, crush roll pinions, planetary drives, consulting and site services.



## LOW SPEED PINIONS

- Through hardened (to 360 BHN).
- Induction hardened (to 55 HRC).
- Case carburised (to 62 HRC).

### CAPACITY

Size: 2,500mm dia. x  
1,600mm face width.  
Quality: AGMA 15 (DIN 2).

## LOW SPEED GEARING

- SG iron.
- Cast steel (to 320 BHN).
- Austempered SG iron (to 450 BHN).
- Forged fabricated (to 360 BHN).
- Forged fabricated induction hardened (to 55 HRC).

### CAPACITY

Size: 15,000mm dia. x  
2,500mm face width.  
Quality: AGMA 10 (DIN 7).

## RE-RIMMED GEARS

- Remove old rim and weld new rim to hub with full penetration welding.

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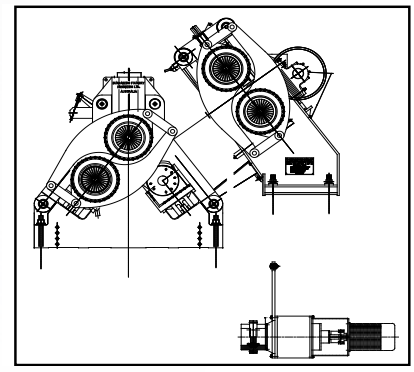
### HIGH SPEED GEARBOXES

- Replacement gearing and new gearboxes.
- Ratio changes and power upgrades.
- Case-carburised to 62 HRC and precision ground to AGMA 12 (DIN 5).
- White metal bearing manufacturing and reconditioning.



### CRUSH ROLL PINIONS

- Cast to 300 BHN.
- Forged to 300 BHN and CNC cut to AGMA 6 quality. Eliminates casting inclusions that can cause fatigue fracture.
- Induction hardened to 55 HRC and CNC hard cut to AGMA 6 gives 200% improvement in pitting and 70% improvement in bending strength.



### CRUSH ROLL PLANETARY

- Planetary drives use electric motors and eliminate crush roll pinions while still allowing centre distance adjustment.
- Precision gears, case hardened and ground to AGMA 12 quality.
- Standard modular design minimises spare parts capital and can be changed out in less than one shift.



### SPECIAL GEARBOXES

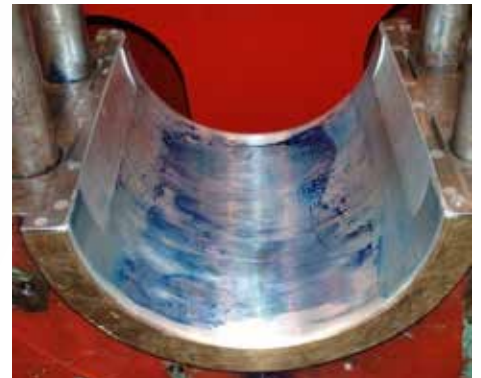
Special gearboxes can be designed to fit existing foundations as a direct replacement of OEM drives. (Flender, Falk, Valmet, David Brown etc.).

- Power upgrades, ratio changes and replacement parts available.
- Torque-splitting gear drives.



### LUBRICANT SUPPLY

In alliance with Klüber Lubrication of Germany, Hofmann Engineering offers a range of products, directly formulated to protect in-house designed and manufactured gearing as an integral part of a complete gear protection package.



### LOW SPEED JOURNAL BEARINGS

- White metal
- Bronze
- Pedestals and caps
- High tensile studs and nuts
- Full reconditioning and installation available



### GEAR RE-RIMMING

The process of gear re-rimming:

1. Existing gear material is tested to ensure compatibility with the new rim material.
2. Rim is machined off leaving the bare diaphragm.
3. New forged rim is welded to diaphragm by submerged arc full penetration welding.
4. Full contour induction hardened to 55 HRC and hard cut to AGMA 10.
5. Full NDT to ensure structural integrity.



### ON-SITE INSPECTION & CONSULTING SERVICE

- Inspection and assessment of mill and drive train.
- Failure analysis including engineering and gearing design review, Finite Element Analysis and metallurgical analysis.



### SITE SERVICES

- Laser alignment of gear trains.
- Gear and pinion installation.
- Reconditioning of worn gearing using Hofmann Engineering's reconditioning procedure.
- White metal and bronze bearing installation including scraping.

## HOFMANN ENGINEERING PTY LTD

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