



SERVING
INDUSTRY for
50
years
SINCE 1969

MILL & KILN PINIONS

Specialising in the design and manufacture of mill and kiln pinions of all sizes and specifications. A range of heat treatment options including case carburising, quench and tempering, and induction hardening are available. Pinions can be finish ground to achieve a superior quality level. Old, worn, existing pinions with unknown geometry can be easily replaced with a product improved pinion.



PINIONS

1. Through hardened
2. Induction hardened
3. Case carburised
4. Self aligning

CAPACITY

Size: 1.6m face width x 6m long.
Hardness: to 62 HRC.
Quality: AGMA 15 (DIN 2).



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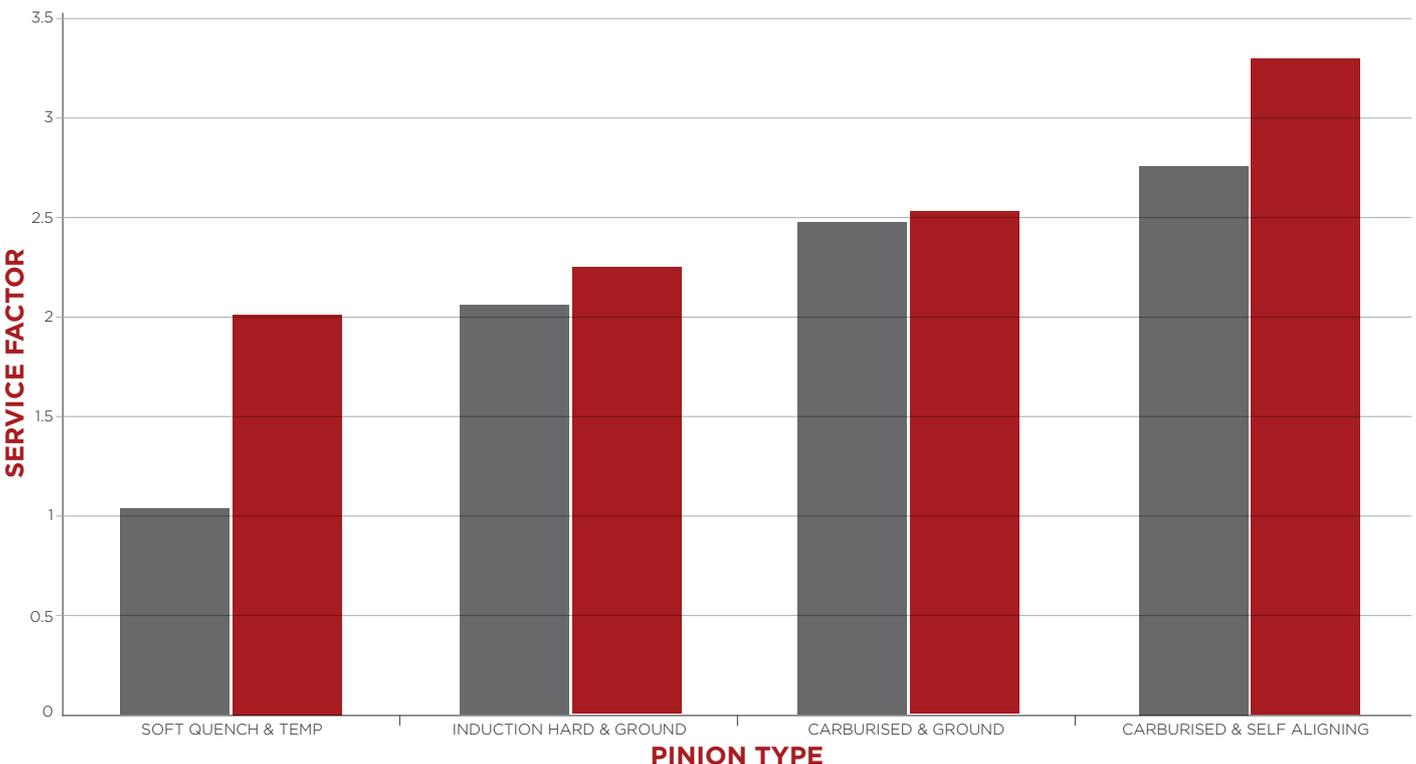
LARGE PINION RATING COMPARISON

The effect of different design and manufacturing processes on hardness and quality.

| MATERIAL | QUENCH & TEMPERED (SOFT) | | INDUCTION HARDENED & GROUND | | CARBURISED & GROUND | | CARBURISED & SELF ALIGNING | |
|---|--|---------|--|--------------------------|---|-------------------------|---|-------------------------|
| | AISI 4340 | MAX | AISI 4340 | MAX | EN10084 18CrNiMo7-6 | MAX | EN10084 18CrNiMo7-6 | MAX |
| HEAT TREATMENT Hardness | QUENCH & TEMP 320 BHN | 370 BHN | INDUCTION HARDENED Core = 300 BHN Case = 56 RC Depth = 7mm | 400 BHN 60 RC 10mm | GAS CARBURISED Core = 400 BHN Case = 60 RC Depth = 5mm | 420 BHN 62 RC 6mm | GAS CARBURISED Core = 400 BHN Case = 60 RC Depth = 5mm | 420 BHN 62 RC 6mm |
| QUALITY Machining | AGMA 10 (DIN 7) Hobbed | 11 | AGMA 12 (DIN 5) Ground | 15 | AGMA 12 (DIN 5) Ground | 15 | AGMA 12 (DIN 5) Ground | 15 |
| PICTURES DEPICT TYPICAL PINION TYPES BEING MANUFACTURED BY HOFMANN ENGINEERING |  | |  | |  | |  | |
| | | | | | | | | |
| GEOMETRY | Module Mn 25.4 Pressure Ang a 25° Helix Angle β 0 Nos Teeth Z 25 Face Width F 710 Overall Length L 2840 Outside Dia da 702 Weight (Kg) W 2720 | | Mn max = 100 a max = 45° β max = 45° Z max = 600 F max = 2500mm L max = 12000mm da max = 8000mm W max = 100 tonne | | Mn max = 50 a max = 45° β max = 45° Z max = 600 F max = 1200mm L max = 6000mm da max = 3000mm W max = 20 tonne | | Mn max = 50 a max = 45° β max = 45° Z max = 600 F max = 1200mm L max = 3700mm da max = 1900mm W max = 20 tonne | |
| % PRICE | 100% | | 140% | | 110% | | 160% | |
| DELIVERY | 18 weeks | | 21 weeks | | 19 weeks | | 24 weeks | |
| AGMA 6115-B15 Pitting Csf Strength Ks F | 1.04 2.01 | | 2.10 2.26 | | 2.44 2.53 | | 3.68 3.82 | |

LARGE PINION RATING COMPARISON

■ Pitting Csf
■ Strength Ksf



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