

**LARGE MILL
&
KILN GEARS**



Since 1969 Hofmann Engineering has provided specialist engineering services to Australia's industry leaders.

Quality Assurance accreditation by Bureau Veritas complements our total quality culture.

Our commitment to continuous quality-improvement touches every aspect of our products, services and customer support.

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GIRTH GEARS






1. SG Iron.
2. Cast Steel.
3. Austempered SG Iron.
4. Forged Fabricated.
5. Forged Fabricated Induction Hardened.

CAPACITY

- Size -15m (50ft).
- 2.5m face x 15m dia.
- Hardness - to 52HRC (500BHN).
- Quality - AGMA 10 (DIN 5).



GIRTH GEAR RATING COMPARISON SAME SIZE BUT DIFFERENT HARDNESS AND QUALITY

		SG IRON NORMALISED INDIVIDUAL RISER		CAST STEEL NORMALISED FULL RING RISER		AUSTUF AUSTEMPERED SG IRON		FORGING FABRICATED QUENCH & TEMP		FORGING FABRICATED CONTOUR INDUCTION HARDENED	
		M a x	M a x	M a x	M a x	M a x	M a x	M a x	M a x	M a x	M a x
Material		AS 1831-700-2	AISI 4140	AS 1831-700-2	HofMod	HofMod					
Heat Treatment		Normalised	Normalised	Austempered	Quench & Temp	Inductio Hard					
Hardness		280 BHN	280 BHN	380 BHN	300 BHN	380 BHN					
		330 BHN	360 BHN	400BHN							
Quality		AGMA 10 (DIN 8)	AGMA 10 (DIN 8)	AGMA 10 (DIN 8)	AGMA 10 (DIN 8)	AGMA 10 (DIN 8)					
Machining		Hobbed	Hobbed	Hobbed	Hobbed	Hobbed					
Example											
Power Details											
Power (kW)	4500										
G Speed (RPM)	14										
Geometry		Hofmann	Hobbing (HSS)		Skiving (Carbide Hob)		Form Milling (Carbide)		Finger Milling + Double Helical		
Example		Maximum Cap	External	Internal Gear	External	Internal Gear	External	Internal Gear	External	Internal Gear	Internal Gear
Module Mn	25.4	Max Module	50 Mn	25 Mn	50 Mn	25 Mn	100 Mn	60 Mn	100 Mn	60 Mn	60 Mn
Pressure Ang α	25°	Max Press Ang	45°	45°	45°	45°	45°	45°	45°	45°	45°
Helix Angle β	5° 30'	Max Helix Ang	45°	45°	45°	45°	45°	45°	45°	45°	45°
Nos Teeth Z	282	Max No Teeth	700mm	700	700	700	700	700	700	700	700
Face Width F	860	Max Face Width	2500mm	500	2500	500	2500	600	2500	600	600
Outside Dia da	7247	Max Outside Dia	14000mm	14000mm	14000mm	14000mm	14000mm	14000mm	14000mm	14000mm	14000mm
Weight (t) W	50	Max Weight	130 t	130 t	130 t	130 t	130 t	130 t	130 t	130 t	130 t
% Price Example		100%		130%		105%		125%		135%	
Delivery Example		32 weeks		39 Weeks		34 Weeks		29 Weeks		31 Weeks	
AGMA 6004 - F88											
Pitting Csf		1.64	1.62	3.07	1.85	3.26					
Strength KsF		1.90	2.00	2.24	2.35	2.61					
MECH TESTS											
Elongation (%)		3	6	3	16	16					
Izod (J)		3	15	10	60	60					

