

**HOFMANN  
ENGINEERING**

**BEVEL GEARS  
SPIRAL  
HELICAL  
STRAIGHT**

*Also*

**WORM WHEELS  
&  
WORMSHAFTS**

**CAPACITY:**

8 off 5-axis machines  
Size  $\leq \phi 4m$

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

*Quality Assurance certification by Lloyds complements our total quality culture.*

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

**HOFMANN ENGINEERING PTY LTD**

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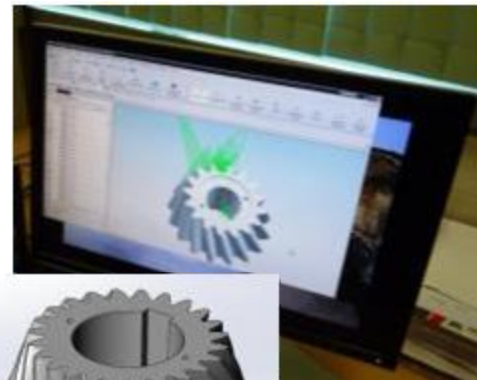
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**• BEVEL GEARING • WORM GEARING •**  
**DESIGNED OR REVERSE ENGINEERING &  
MANUFACTURED UNDER ONE ROOF**

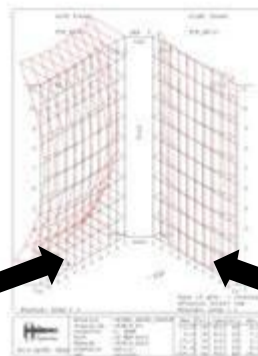
## DESIGN

Using state-of-the-art engineering calculation programs in the hands of talented engineers, a 3D model of your bevel gear can be produced to DIN, AGMA or Gleason standards from the outputs. For replacement gears, the model of the existing design can be acquired from a CMM and modified to solve the problem which caused it to fail. Tooth modification can also be optimised to give quiet running gears.



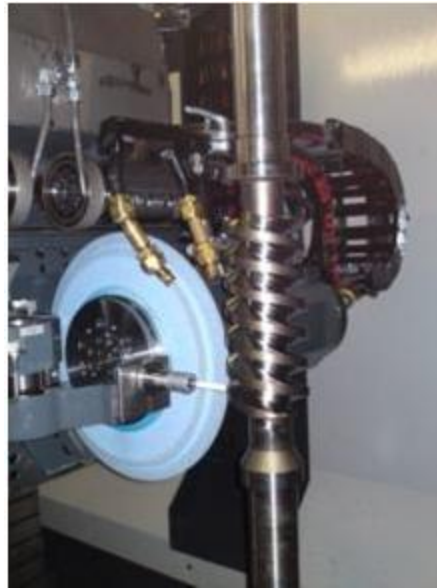
## INSPECTION

Hofmann Engineering prides itself on producing superior quality products. The only way to ensure that this is achieved is by imposing a highly accurate inspection process which the Spiral, Helical or Straight Bevel Gearing along with the Worm Gearing must pass before they can be released from the factory. All these types of Gearing are inspected on our two large CMM's or the portable CMM arm.



## CUTTING

Hofmann Engineering currently has 8 new 5-axis machines for cutting spiral, helical and straight bevel gears along with worm wheels. It also has a unique software, crafted exclusively to obtain the optimised CAM program to machine the profile of spiral, helical and straight bevel gears plus worm wheels.



### WORM GRINDING

Wormshafts being ground on one of our Hoffer form grinders. After grinding the accuracy is preliminary checked prior to final inspection on the CMM



### WORM MESH CONTACT INSPECTION

Worm wheel and wormshaft being inspected to confirm contact accuracy.

## HEAT TREATMENT

Over the years, Hofmann Engineering has developed the technology to heat treat many different types of gears. This technology can also be applied to spiral, helical, straight bevel gears and wormshafts to improve their performance and life. Hofmann Engineering is capable of case carburising to a diameter of 1.87m, and full contour, tooth-by-tooth induction hardening to a diameter of 4m. Once the gears have been heat-treated, they can be hard cut to DIN 3.



## TESTING

Hofmann Engineering can test their spiral bevel gears in the gearbox on their load test cell to ensure that the gearbox will be within the noise specifications required by the customer.

