RAIL - PARTS & SERVICES

- Traction Gearing
- Bogie Manufacture & Upgrade
- Wheel & Axle Components
- Inspection & Failure Analysis
- Component Refurbishment

Australian made by the experts achieving the highest axle loads in the world.

Bull Gears
- Case carburised, shot-peened, ground and/or skived
- Tooth by tooth full contour induction hardened and ground
- Profile regrinding of old worn bull gears to better than DIN 5 (AGMA 12) accuracy (gears can remain on axle).

Spiral Bevel Gears
- Case carburised to 60 ± 2 HRC and precision cut to DIN 3 (AGMA 14).
- Capacity to manufacture spiral bevel gearing up to Ø2m.

Pinions
- Case carburised and accurately ground including taper crowning.
- A shot-peened full root radius on pinions provides a substantial increase in strength.

State of the Art Robotic Bogie Production

Bogie frames are precision machined on CNC heavy machining centres.

Robotic Fabrication Capacity
- 2 x 7-axis robotic welding arms
- 2 x 5t robotic manipulators
- Fully automated robotic fabrication

Bogie Machining

Bogie Fabrication

Certified to ISO3834 & EN15085
Bogie frames can be completely fabricated using both certified welders and robotic welding. Full stress relieving is also available.

Chrome nickel steel - gas carburised core refined
- Hammock with protuberance cutter
- Taper crowned lead
- Involute ground with tip and root relief
- Shot-peened & polished root radii
- Radial on corners

ROBOTIC FABRICATION CAPACITY

AUSTRALIA: PERTH | MELBOURNE | BENDIGO | NEWCASTLE
INTERNATIONAL: CHILE | PERU | INDIA | CHINA | NORTH AMERICA

www.hofmannengineering.com
Engine blocks are completely precision machined on floor borers. In situ line boring service with portable line boring machine is also available.

Portable Coordinate Measuring Machines (PCMM) & laser trackers are used to measure manufactured components both in the workshop and on-site.

Examples: K Class bogie upgrade to suit Short G Class bearings. G Class bogie upgrade to suit heavy haulage bearings. Benefits: increased bearing life; increased axle load capacity.

Hofmann forged rail componentry is product improved to permit higher axle loads and extend operational life.

Forged wheels are finish machined on 5-axis CNC machining centres.

Axles are manufactured to AAR Standards or higher. Sourcing of forged material, NDT testing and finish machining are tightly monitored.

Hofmann Engineering have developed an overhaul process for the Comeng Powerhead that provides superior performance than the OEM product.

Location of Powerhead
English Electric GEC 02PM05A2 (Melbourne light rail train)

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