

Designing, Engineering, Manufacturing and Refurbishing Precision Equipment

DRAGLINE TUB — HOFMANN BENDIGO



Bendigo has a long and proud history manufacturing equipment for the mining industry. This month saw further progress with the completion of a dragline base by Hofmann Engineering Bendigo for a major Queensland coal miner. Looking something like a UFO, the “base” is the section of the dragline that sits on the ground and bears the weight of the massive 3000 tonne structure spinning around on top of it.

Hofmann Engineering also provided the massive slew bearings and gears that provide the rotation of the dragline frame.

The scale of these steel components is difficult to comprehend. The completed dragline base weighs in excess of 360 tonnes,

more than 200 times the weight of your average family sedan. Even broken into sections suitable for road transport, each of the 4 main pieces is in excess of 80 tonnes.

The large gear segments were fabricated in Bendigo before transport to the Hofmann precision machining facility in Melbourne.

In Bendigo, Hofmann Engineering employs 77 people including 10 apprentices. With this project being completed on time, within budget and without a lost time injury, Bendigo's proud manufacturing tradition looks set to continue.

By Sam White

HOFMANN INVESTS IN NEW DMG TECHNOLOGY



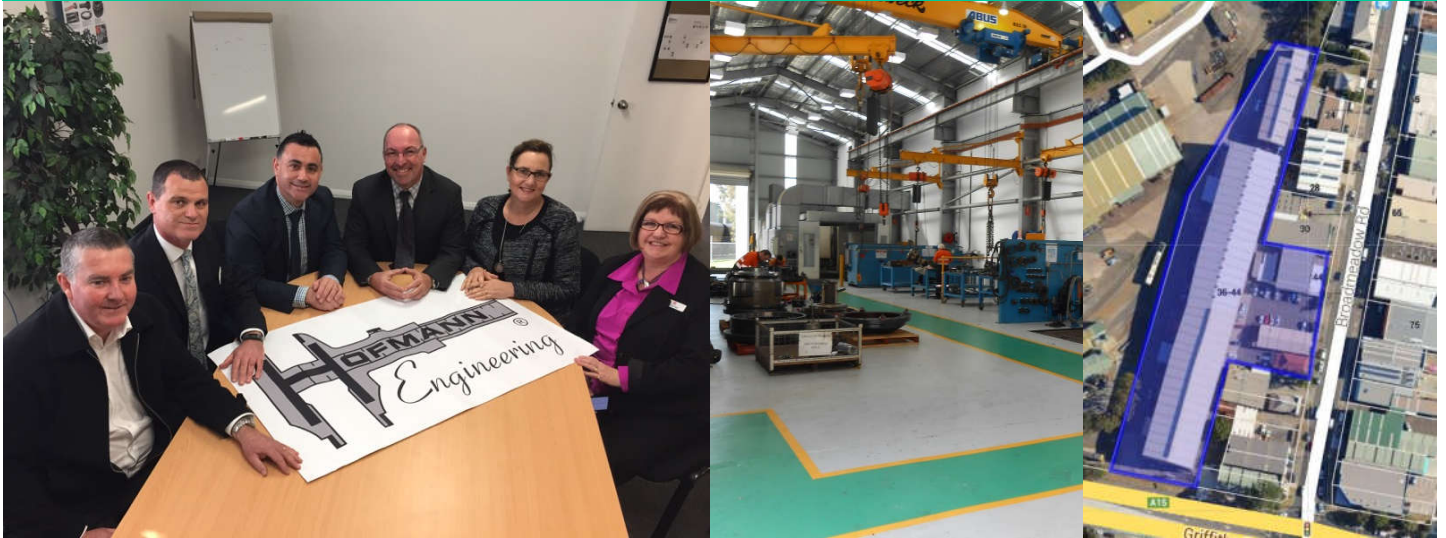
Hofmann Engineering has recently installed a Brand new DMG DMU 80 FD DuoBlock, with milling and turning capabilities. The acquisition of the machine enhances the speed, accuracy

The new DMG will ease the amount of work that is put on the existing DMG 210 P, and allow the larger DMG to focus on machining larger items. The new DMG will be able to machine Spiral Bevel gears, Double Helical gears with no gap, 5 axis aerospace parts, and due to its turning capabilities, it can now perform power skiving operations for cutting teeth at high speeds. The fleet at Hofmann's is growing fast, with a second hand DMU 80 recently installed to further divide the workload between the machines. **Hofmann now has 9 x 5 axis machines.** This steady development of 5 axis milling machines at Hofmann Engineering's disposal, improves the variety and quantity of products that Hofmann Engineering can produce for the future.

By Karl Hofmann

and flexibility with which Hofmann Engineering can manufacture precision components. The machine boasts an 800mm diameter table allowing for 1000mm diameter workpieces. The turning capability allows the table to rotate up to a speed of 800rpm, with an electric motor actuated table producing 36 kW of power.

HOFMANN PURCHASES FALK FACILITIES IN NEWCASTLE



Hofmann Engineering completed the acquisition of its Newcastle manufacturing facility in March 2015. The acquisition includes land area of approximately 10,000 sq. metres, a large workshop of approximately 3,800 sq. metres, a 540 sq. metre gearbox shop and offices. The facility was previously operated by Falk Australia Pty Ltd.

Prior to the acquisition by Hofmann the facility was utilised for heavy machining and gear cutting, particularly related to minerals processing equipment such as mill heads, trunnions and girth gears, and also for gearbox assembly and overhaul. Under the

Hofmann banner the plan is to grow the business across the broader Hofmann product portfolio. Initial focus is on realising maximum benefit from the facility's relative proximity to major clients involved in mining, ports, defence and other industries. A recent successful project was the overhaul of Propel and Swing planetary gearboxes for mining shovels for Rio Tinto.

In June the facility was visited by the Hon. John Barilaro MP – Minister for Regional Development, Skills and Small Business as a show of government support for Hofmann's initiative to grow in the Newcastle region.

HOFMANN HPGR ADVANCES



HPGR technology has come a long way since it was invented and patented in 1978 by the German Professor Klaus Schoenert. Today the technology plays a key role in comminution circuits with an estimated 250 installations in mineral processing in the western world.

In recent times Hofmann Engineering has rapidly developed both their technology and footprint in the global market through supply of product improved replacement HPGR components and services.

Technical advances centre around a patented bolt on edge protection system & metallurgical optimisation in tyre design and tyre weld rebuilding. Through detailed analysis and selection of tyre geometries and carbide grades, each replacement HPGR tyre set Hofmann Engineering manufactures is tailor made for the given application. The patented welding and heat treatment procedure Hofmann Engineering has developed allows operational life cycles in excess of former limits for forged tyres. The specific weld procedure ensures that there is no risk of weld delamination as was found in conventional processes for the refurbishment of HPGR tyres. This has been proven to be a success in the field with Hofmann Engineering's first two sets of 'weld rebuild to as new' tyres being decommissioned with no surface or internal flaws.

Ultimately Hofmann Engineering's presence in the market has delivered some overdue competition leading to large cost savings in comparison to OEM supply which is desperately needed in the current tough economic conditions.

Current continents of supply include Australia, Asia, North America and South America for various HPGR OEM equipment.

By Jarrod Hofmann

New HOFMANN SUDAMERICA Workshop



In 2014 the Hofmann Engineering Group acquired some 20,000 m² of land in the area of Antofagasta/Chile in order to expand its business activities in South America, and to establish a Service Centre. The new facility is designed to rebuild and service all Hofmann products and components for our customer's key equipment. Currently construction for Hofmann Engineering Sudamerica's (HESA's) new home base is completed. Thanks to the effort of many individuals within the Hofmann Group the new Service Centre has commenced operation in March 2016.

Since the 90s Hofmann Engineering has been supplying parts and services in Chile to the back then just starting project Minera Escondida of BHP Billiton. In the following years Hofmann's increased its presence in the region and developed business relationships with many other customers in Chile, Argentina, Colombia, Peru and Brazil. Today Hofmann Engineering is an estab-

lished player who provides maintenance and repair services for a large range of products, with a recognized expertise and with proven results in the market of South America.

The new Service Centre is designed to further reinforce Hofmann's footprint in the region and to cope with the growing demand from our customers in terms of components improvement, manufacturing and service support as the technically and commercially attractive alternative to the OEMs.

The local team of Hofmann Engineering Sudamerica today consists of a team of 9 local professionals who provide our company with the required skills to keep growing Hofmann Engineering's reputation for high quality, precision and improvement engineering proudly into the future.

By Stephan Kirsch

HOFMANN CHINA



In recent times Australia's strong ties with China have been further formalised through the signing of the Chinese free trade agreement 'CHAFTA'. Similarly, to react to an ever growing demand for competitively sourced raw materials, Hofmann Engineering has set up a sourcing and sales office in Ningbo, Zhejiang Province in late 2014. Building on Hofmann Engineering's 15 year presence in the region, the office with full time employed engineers, expeditors and in-

spectors allows Hofmann to be more self-reliant and react fast to inspection, enquiry and expediting requirements. Currently, Hofmann Engineering imports approximately 500T per month of raw material products such as forgings and castings from China for further value adding in our Australian workshops.

By Jarrod Hofmann

Congratulations

Congratulations to all staff who have reached milestone anniversaries with Hofmann Engineering, especially to:

35 years: Reinhard Fatzkampter; Mike Tymus

30 years: Tim Robson; Ziggy Swalski; Bruno Butkevicius;

25 years: Joachim Strauss; Michael Dyson; Peter Crawford; Adam Kilijanski; Ian Martin

20 years: Hermanus DeGoede;

Rebecca Leigh; Alan Spooner; Andrew Lill; Gavin Rodgriges; Andreas Voigtlander; Dean Schultz; Robert Fernandez; Mike Hill; Dennis Saric; Sean Tinoo; Wayne Bengtsson; Sylvia Blackburn; Brian Pelham; Ross Holloway; Leigh Sizer

15 years: Chris Lackner; Derek Amy; Rane Ender; Mario Gallina; Guy Jarrett; Paul Waters

10 years: Robert Godbeer; Rod Kissick; David Reynolds; Patrick Simeons; Basil Rodrigues; Adrian Fooks; Andrew Kinninmont; Paul Johnston; Dave Dyer; Stephen Turner; Marat Zheldubayev; Ashok Vilvanathan; Monika Panizza; Philip Ellison; Daniel Marcus; Poul Mariannan; Laurence Brooks; Gary Clark; Vanniya Pandian; Thomas Montefiore; Marc McDavitt; Theo Komninos;

FMG/CHRISTMAS CREEK CHALLENGE



In October 2014, FMG Christmas Creek approached Hofmann Engineering to provide the skills and resources needed to carry out extensive recovery repairs to their Scrubber Trommel's, which were close to catastrophic failure. The structural support stiffeners had suffered extensive wear and in places original material thickness of 32mm was worn to 4mm. An urgent response was required, which meant mobilising 24 personnel from Site Services and the majority of the Fabrication department of Bassendean, rising to 34 crew with additional personnel from

Bendigo and elsewhere over a 25 day period. The shutdown work was conducted in especially difficult and challenging conditions. All involved rose to the occasion and the client was extremely pleased when the overall shut was completed 2½ days ahead of schedule. FMG Shut Supervisor stated: *"A very difficult job was executed safely and well under the original program ... The way Hofmann reacted and turned the job around was exemplary."*

by Adrian Fooks

MILL HEAD REPLACEMENT

Yamana Gold in Chile urgently requested Hofmann Engineering's assistance as they had a cracked Mill Head that required urgent replacement. A Fabricated Mill Head with integrated forged Trunnion was offered in 6-8 weeks, however manufacturing was completed in an industry record of 4 weeks from design to customer final inspection. Yamana Gold thanked Hofmann's for *"An outstanding effort by all concerned."* Due to the urgency the Head was transported direct to Chile via Antonov airfreight.

Chirano Gold Mines in Ghana approached Hofmann Engineering as their Mill Head was also cracked and required a replacement. Our initial response was to despatch a team to Ghana to measure and assist with removal of the damaged Head / Trunnion, which identified that the Head / Shell interface was badly washed away. A replacement forged fabricated Head was designed and manufactured along with Trommel and associated components. During the manufacturing lead-time our Site Services team were mobilised to the mine with a Large Facing Machine to machine the Shell washout and prepare for the installation of the replacement Head. All the components were despatched by Antonov airfreight and installed by Hofmann Site Services 3 months after the initial enquiry in March. The Mine Engineering & Maintenance Manager stated: *"Huge success story in Kinross, you guys did an awesome job, can't say enough praise for all the site crew and of course the team back in Australia who produced all the parts with such precision. Really well done!."*

by Adrian Fooks

