**Custom Australian-engineered Bonfiglioli slew drives boost safety and efficiency for major Australian port facility**



Bonfiglioli Project Engineer Harry Singh, left, and Design Engineer, Junyi Feng, right, at Bonfiglioli’s

Australian HQ in Glendenning, with one of the slew drives before delivery to the customer

A series of seven Bonfiglioli slew drives custom-engineered in Australia for safety, durability and performance are being installed to power a stacker reclaimer for the stockpile area at a major Australian shiploading facility.

The specially designed Bonfiglioli 316 planetary bevel gearbox slew drives have several unique features and parts that have been designed and manufactured in Australia, complemented by high-quality parts sourced from Bonfiglioli’s headquarters and state-of-the art facilities in Italy.

Bonfiglioli’s Customer Application Engineering (CAE) team specially designed the drives, which the customer (which cannot be named due to commercial confidentiality reasons) will use to power the stacker reclaimers at the port, which is one of the largest in Australia, with expanding throughput year-on-year. Three drives will be used on each of the two slews, with one spare always available to minimise downtime and production losses.

“We designed the drives to boost efficiency, consume less energy and provide ultimate reliability,” says lead project engineer, Bonfiglioli, Harry Singh.



Several components of Bonfiglioli’s customised slew drives were designed

and manufactured in Australia to meet unique customer requirements

“*We had a quick turnaround time from receiving the order to delivery, to have the drives delivered during a scheduled shutdown window. This was a big challenge, because we sourced only high-quality parts throughout the entire drive, which often means longer lead times*.”

“*Additionally, despite engineering complexity and specifying all top quality parts from Australia or Italy, Bonfiglioli’s drives were still more cost-effective than the older drives they were replacing*.”

**Double safety for ultimate reliability**

The slew drives are vital to operational efficiency, and to ensure their smooth operation at all times, Bonfiglioli’s slew drives offer double back-up for enhanced safety.

“*In addition to the usual torque limiter found on most drives, these custom-engineered slew drives have a secondary encoder on the bevel stage, which has sensors to measure the drive at slow speeds and send data to the PLC [Programmable Logic Controller], which will stop the drive if any problems are detected*,” said Mr Singh.

“*To provide an additional safety for the hassle-free operation, these drives feature a secondary sensing device (proxy sensors), which can identify any marginal speed errors between the motor and gearbox shaft. The sensors, as well as all component parts of the drive, were sourced from globally proven and ISO-certified brands*,” he said.

**Bonfiglioli Slew Drives**

Bonfiglioli slew drives, with typical torque outputs of up to 130,000 Nm, are designed to be industry benchmarks of safety, efficiency and reliability. They feature a reinforced bearing output shaft, an eccentric mounting flange option for pinion/girth gear adjustment and a huge shock load up to 2,000,000 Nm.

Mr Malcolm Lewis, Managing Director, Bonfiglioli Australia says that although these slew drives were highly customised to suit the customer’s unique application requirements, they were all designed to the top quality standards of the international Bonfiglioli Group, which has more than 3,700 employees in   
22 countries.

“*When designing these drives, our CAE engineers built upon a safe, durable and reliable base – the 316 slew drive – and added additional safety and efficiency features to suit the customer’s requirements*,” he said.

“*All Bonfiglioli slew drives are easy to install, and have a precise torque control to ensure smooth, accurate performance in a wide range of applications*,” he said.

The Bonfiglioli drives will be delivered in two stages, the first of which was recently completed. The first stage involved four drives that were installed in September during a planned shutdown.

**About Bonfiglioli**

Bonfiglioli is a worldwide designer, manufacturer and distributor of a complete range of gearmotors, drive systems, planetary gearboxes and inverters, which satisfy the most challenging and demanding needs in industrial automation, mobile machinery and renewable energy. Bonfiglioli serves more industries and applications than any other drive manufacturer and is a market leader in many sectors. Established in 1956, Bonfiglioli operates in 22 countries on 5 continents and has over 3,650 employees worldwide. Bonfiglioli has been operating in Australia for more than 25 years.

More information is available at [www.bonfiglioli.com.au](http://www.bonfiglioli.com.au)

**For more information about Bonfiglioli in Australasia, please contact:**

Malcolm Lewis, Managing Director, Bonfiglioli Transmission (Australia) Pty Ltd

2, Cox Place, Glendenning, 2761

61 – 2 - 8811 8000

61 – 2- 9765 6605

[sales@bonfiglioli.com.au](mailto:sales@bonfiglioli.com.au)

**In New Zealand, please contact:**

Neil Pollington, Country Manager, Bonfiglioli New Zealand

0800 432 777

(021) 827 199

[sales.nz@bonfiglioli.com.au](mailto:sales.nz@bonfiglioli.com.au)

For further information about this media release, please contact [whytepr@whytepr.com.au](mailto:whytepr@whytepr.com.au) or call 61-2-9901 4306