

Primed for pump and motor support

Pump and motor technicians at a product and service facility in Wangara are helping mine operators manage increasing demands on equipment. *Australian Mining's* WA correspondent Jamie Wade writes.

Over specified, under specified, improperly used or run down from general wear and tear, there are many reasons why pumping operations break down.

But when they do, getting them back online as soon as possible is absolutely critical.

Fulfilling this key requirement is also critical to Tyco Pumping Systems, the company behind the TurboMaster Pump developed in Perth 50 years ago and renowned for its reliability.

With pumping operations pushed to the limit, the company is complementing its pump sales and spare parts business with an expanding service and repairs operation including testing and R&D.

Stress on the job

As water tables are dropping, pumps are getting bigger and so is the stress on the equipment, according to Tyco Pumping Systems operations manager Brad Cuss. "We're finding now that mine operators need to get the same



A TurboMaster with shroud, packed for shipment to a site in the North West.

volume of water out of their borehole to maintain their plant and operation, but to do that they're having to bore deeper for water or piping it from further afield.

"This is stretching the capacity of their pumping plants," Cuss told *Australian Mining*.

Standardising a pumping plant is an effective way of managing the increasing demands on equipment and achieving greater efficiencies, according to Tyco Pumping Systems-TurboMaster product manager Justine Nowrojee.

"Trying to manage a bore field with different styles of pumps is very tricky, but standardising a pumping plant can achieve efficiency while handling various duties.

"Standardising a system also makes inventory control a lot easier, particularly when you are dealing with only one service provider for part replacement and system support and repair," Nowrojee said.

"We get many enquiries from mine operators running a variety of pumps who aren't sure how to effectively manage their system. We audit and inspect their system and submit a proposal on how they can effectively manage it from an inventory and operational perspective."

Nowrojee is also keen to emphasise the importance of motor specification in a pumping plant and recommends rewindable motors over encapsulated submersible motors.

"It is more economical to use rewindable motors because they can be serviced quickly thus minimising downtime; encapsulated submersible motors are practically non-repairable," Nowrojee said.

"If rewindable motors are employed it's easier to sustain a bore field with larger pumps and larger motors because you know that when a motor goes down, the turn-around time to service and repair is quick."

Given the level of support now available to service pump and motor product, says Nowrojee, mine operators can be confident about turning to service providers who have more than likely seen the same problem in other applications.

Enquiries to Tyco Pumping Systems from mine operators seeking solutions to faults and problems are becoming more prevalent, according to Cuss.

"Given the experience and knowledge that our technicians have in pumps and submersible motors, in most instances we can suggest a solution over the phone. If that doesn't

Continued on page 48

Midwest Valves & Controls

Midwest Valves & Controls is a distributor of many brands of valves, pumps and instruments.

We select isolation, actuated on-off and control valves, pressure, flow, level, temperature and pneumatically operated equipment for your application. Then we determine the supplier that most closely matches your needs for the application and obtain a deal.

For pumping applications we use the resources of Australian Pump Industries, Pentair Water Australia, IIT Water & Waste Water Australia Limited and Southern Pumping Specialists. Please send us your enquiry.

Midwest Valves & Controls

133 Mayne St Gulgong NSW 2852
PO Box 149 Gulgong NSW 2852

Ph: (02) 6374 2808

Fax: (02) 6374 2909

Website: www.midwestvalves.com.au
Email: peter@midwestvalves.com.au
ABN: 62 935 919 610



A purpose built pressure Test Emersion Tank to simulate bore conditions.

Continued from page 46

work, the equipment can be tested at our factory where we can quickly identify and isolate the problem and recommend a solution which can be Made-to-Order or Engineered-to-Order,” he said.

The National Association of Testing Authorities (NATA) has accredited Tyco’s facility following inspection of its technical competence with ISO/IEC 17025:2005.

The Tyco facility is fully accredited in mechanical testing and complies with the requirements to test submersible, line shaft, centrifugal and fire pumps by the methods of Standards Australia (AS) 2417 and 2941 and National Fluid Power Association (NFPA) standard 20.

The company manufactures pumps and spare parts for TurboMaster, Everflow and Southern Cross products, SEMA Motors, Engineered Modular Bolted Tanks, and Tamar Hydro Turbines and Surpavac Slurry Management Systems.

Detailed inspection reports with recommendations are also provided.

“If someone has a particular application we can select the pump, the motor and their complete headwork – everything to make it a turnkey operation,” Nowrojee said.



A TurboMaster 18 Stage submersed.



The test facility with a 1500 hp Zone2 specified fire deluge pump sent for testing.

“We can offer skid-mounted dewatering units, packaged supply and project management.

“We’ve also assisted clients with parts that have failed where drawings of the associated equipment or parts have been superseded. Our pumps and motors can also be adapted to existing applications so the mine operator can have a straight change-out onsite.”

Tyco Pumping Systems also offers a full rewind service for water filled submersible motors.

Of particular note in service and testing at the Wangara workshop is

the rewinding of Hi-temp boiler circulator stators used in the power generation industry.

The winding area is a purpose-built facility incorporating climate control in a fully enclosed work area with specific flooring to protect the winding wire and other sensitive materials.

Tyco Pumping Systems has two separate testing facilities depending on the type of test required.

The Vee and Rectangular Weir Test Tank has an 8m well for testing submersible pumps up to 460 l/sec at more than 240m total head.

The larger tank has the capability of up to 5000 l/sec and is said to be one of the largest of its kind in Australia with the ability to test pumps with a discharge diameter of up to 1000mm.

Tyco has the ability to start up to 220KW/415v Direct Online (DOL) and can employ the use of a genset for 1000v requirements.

• **Tyco Pumping Systems**
Justine Nowrojee
08 9406 6565
jnowrojee@typac.com.au
www.tycopumpingsystems.com.au



“Whether Le Mans, Sebring or Daytona to win here is a question of efficiency; of the team, the cars and the equipment. And for that reason, when it comes to our compressed air supply it has to be BOGE.”

Franz Konrad, Konrad Motorsport

BOGE
 COMPRESSED AIR SYSTEMS
 BOGE AIR. THE AIR TO WORK.

www.boge.net.au

Who wins a race is not just decided at the finishing line but also in the preparation stages. No one knows this better than Franz Konrad, owner of Konrad Motorsport. For 35 years he has successfully raced, including winning the team title at the Porsche Mobil 1 Supercup. He now wants to repeat this success with 3 ultra-powerful “Porsche GT 3 Cup”, a feat only possible with absolute precision and perfection in every detail. That’s why a BOGE RM series piston compressor is essential to him.