



## Services

### Idler Roll Testing

**TUNRA Bulk Solids** provides a wide range of idler roll testing services to the mining industry. Commonly testing to SANS 1313, ISO 5048, DIN22112 and MDG3608, TUNRA Bulk Solids also offers a series of additional tests that build upon the Standard tests while providing results more relevant to the idler roll's operating environment.

Additionally, the engineering team at TUNRA Bulk Solids is ready to discuss particular customer requirements and plan a novel test programme that will meet their unique criteria.

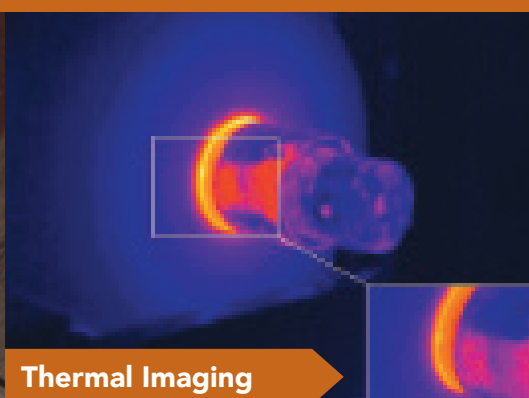
Conveyor idler rolls are integral components of belt conveying systems as they provide load support and control of the belt troughing profile. Between 10 - 20% of the overall rolling losses of a belt conveyor can be caused by the idler rolls of a belt conveyor system. Therefore, care must be taken to choose the best idler roll design for the respective purpose.

The comprehensive test facility of TUNRA Bulk Solids at the University of Newcastle, Australia enables testing of conveyor idler rolls in reference to relevant International Standards and/or Guidelines, including the CEMA 7th Ed., DIN22112-3, ISO 5048 and SABS 1313-1.

**TUNRA Bulk Solids conducts tests to meet other International Standards on request**



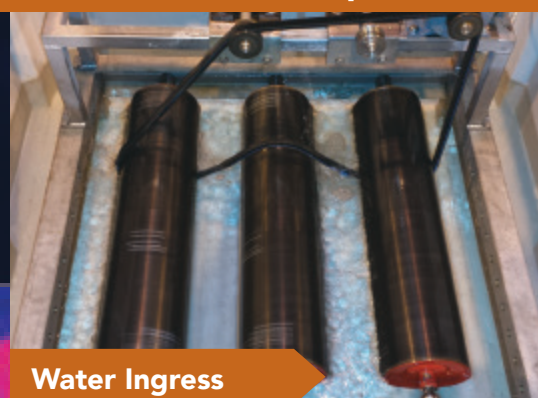
Dust Ingress



Thermal Imaging



Rim Drag



Water Ingress



Operating Noise



## What Idler Roll Testing Services are available?

### Rotational Resistance

- ▶ Rim Drag
- ▶ Break-away Force
- ▶ Maximum Start-up Drag
- ▶ Temperature Performance

### Idler Manufacture Characteristics

- ▶ Total Indicated Run-out
- ▶ Maximum Indicated Slope
- ▶ Dynamic Unbalance and Balance Grade Determination
- ▶ Axial Float
- ▶ Resistance to Pressing Out
- ▶ Dimensional Specifications

### Idler Roll Noise

- ▶ Self-noise
- ▶ Operating Noise

### Seal Design Effectiveness

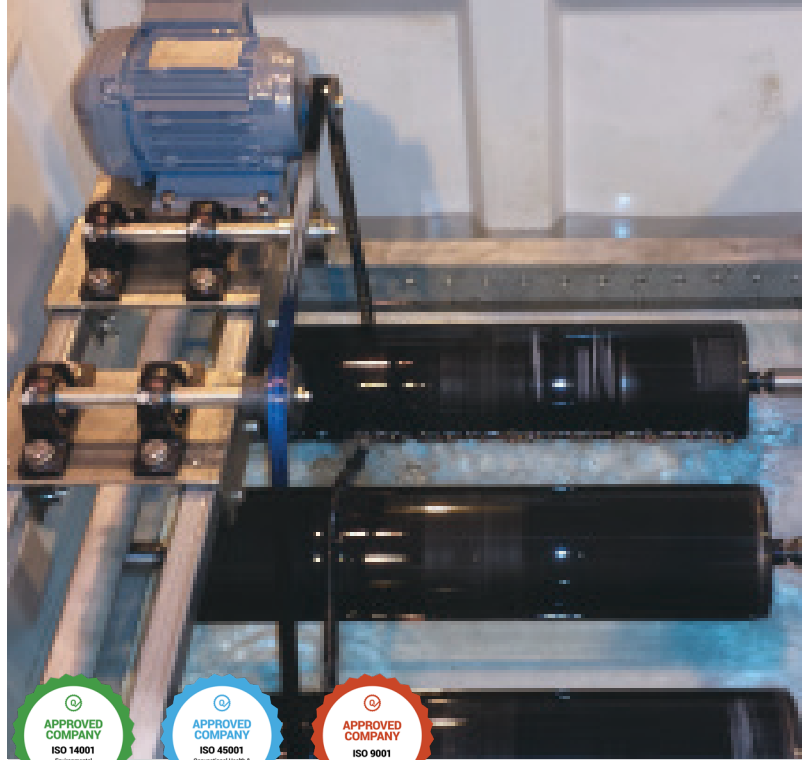
- ▶ SANS Standard Dust Ingress
- ▶ Inclined Dust Ingress
- ▶ SANS Standard Water Ingress
- ▶ Inclined Rain Event Water Ingress

### Fire Resistance Anti-static (FRAS)

- ▶ Ignitability and Maximum Surface Temperature of Idler Subject to Friction (Seized Idler)
- ▶ Electrical Resistivity
- ▶ Ignitability and Flame Propagation Characteristics (Finger Burn Test)

### Miscellaneous Tests

- ▶ Thermal Imaging
- ▶ Failure Analysis and Inspections
- ▶ Shell Wear
- ▶ Complete Idler Wear



QMS Certification Services



QMS Certification Services



QMS Certification Services

## Why TUNRA Bulk Solids?

### Experience and Expertise

We have provided expert solutions to industry for over 45 years and are the leading organisation for materials handling research and consulting in Australia and internationally

### Research and Development

We have a proven track record in research and development through the close association with The University of Newcastle

### Quality Service

We have highly qualified, well-trained and specialist staff that are committed to delivering excellence

### First Class Facilities

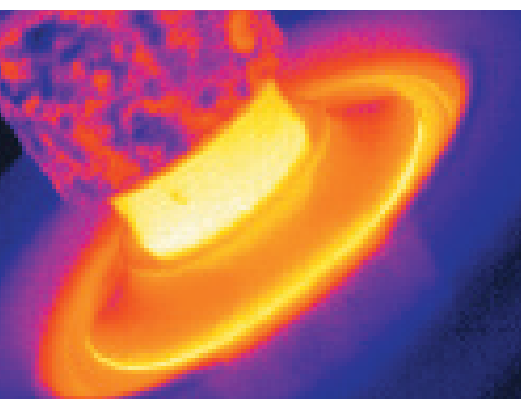
Our laboratory is a state of the art facility located within the Newcastle Institute of Energy and Resources (NIER) at The University of Newcastle

### Industry Standards

We are accredited to ISO 9001, ISO 45001 and ISO 14001

### Independent

We are independent and not for profit



## Further information

- To access our Case Studies visit [www.bulksolids.com.au](http://www.bulksolids.com.au)
- To discuss your industry and business needs phone 02 4033 9055