



**Transmission
& Bearing Corp.**

Technical Notes by Dr. Mel

July 2018

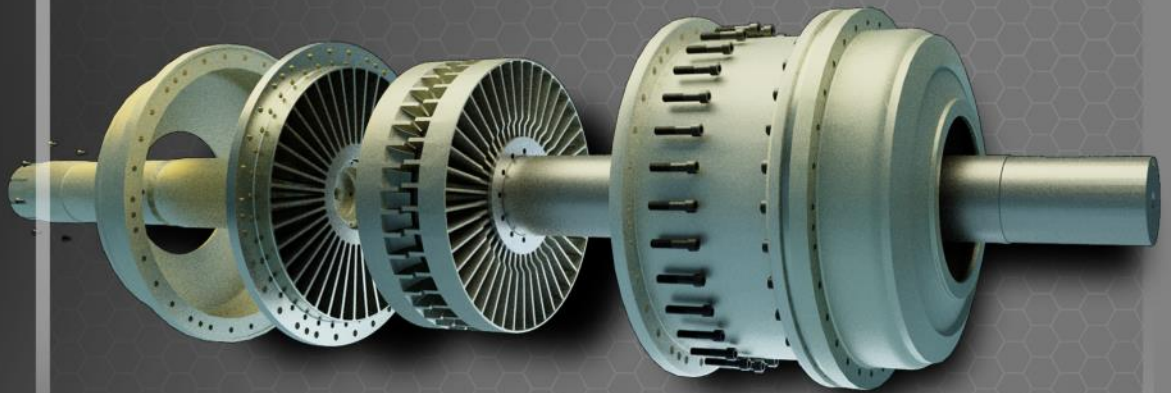
MAIL
P.O. Box 454
Lionville, PA 19353

SHIPPING
212 Welsh Pool Rd.
Exton, PA 19341

Tel: 610-363-8570
Fax: 610-524-6326

info@turboresearch.com
www.turboresearch.com

100,000 hours between overhauls

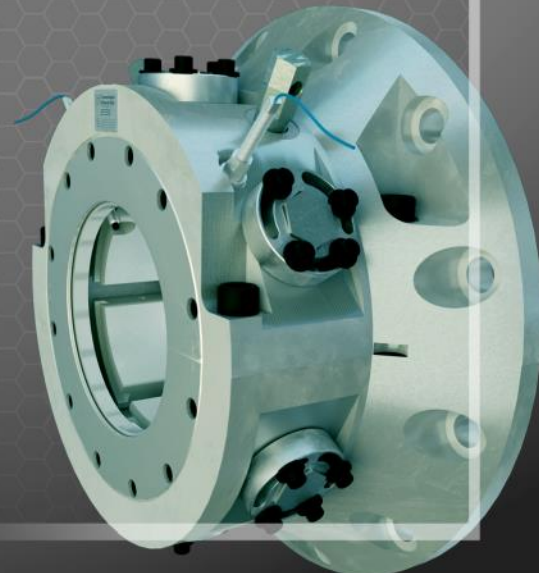


FLUID DRIVE UPGRADES

Vibration Control - Improved Performance - Lower Maintenance Costs

SUPPORT AND SPARE PARTS

Founded in 1961, TRI is a premier source for service and spare parts for fluid drives of all sizes, designs, applications and manufacturers; including American-Standard, American Blower, Howden and others.



Variable speed fluid drives such as the Gyrol® fluid drive have been used since the 1930s in the US to provide variable speed power to drive boiler feed pumps and fans. New fluid drives of a similar design are still manufactured today by TRI because they are very reliable and very efficient. TRI manufactures fluid drives for speed ranges from 600 rpm to over 5000 rpm and for powers from 3000 hp to 40,000 hp.

If your fluid drive requires maintenance in operational cycles less than 10 to 12 years, ask TRI to inspect your situation and make recommendations to improve the design/parts/operations. TRI designs and manufactures fluid drives that typically operate with 12-year inspection and refurb cycles without a need for opening between scheduled inspection and refurb outages. To achieve 100,000 hour runs, TRI offers upgrades for critical parts.

Common Upgrades

- **Journal bearings**
- **Thrust bearings**
- **Shafts**
- **Shaft seals**
- **Impellers and runners**
- **Scoop tubes**
- **Scoop tube actuators**
- **Couplings**

Analysis and Resolution

- **Vibration analysis**
- **Heat transfer analysis**
- **Lubrication upgrades**
- **Improved instrumentation**
- **Eliminating design flaws**

TRI supports over half of the American Standard Fluid Drives (13,000 hp to 30,000 hp) used for BFP Service. Extensive Service and Manufacturing Capabilities in 23,000 sq ft Facility - near Philadelphia, PA

TRI product & service information is available at www.turboresearch.com

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* Gyrol® is a registered trademark of Howden North America, Inc.
