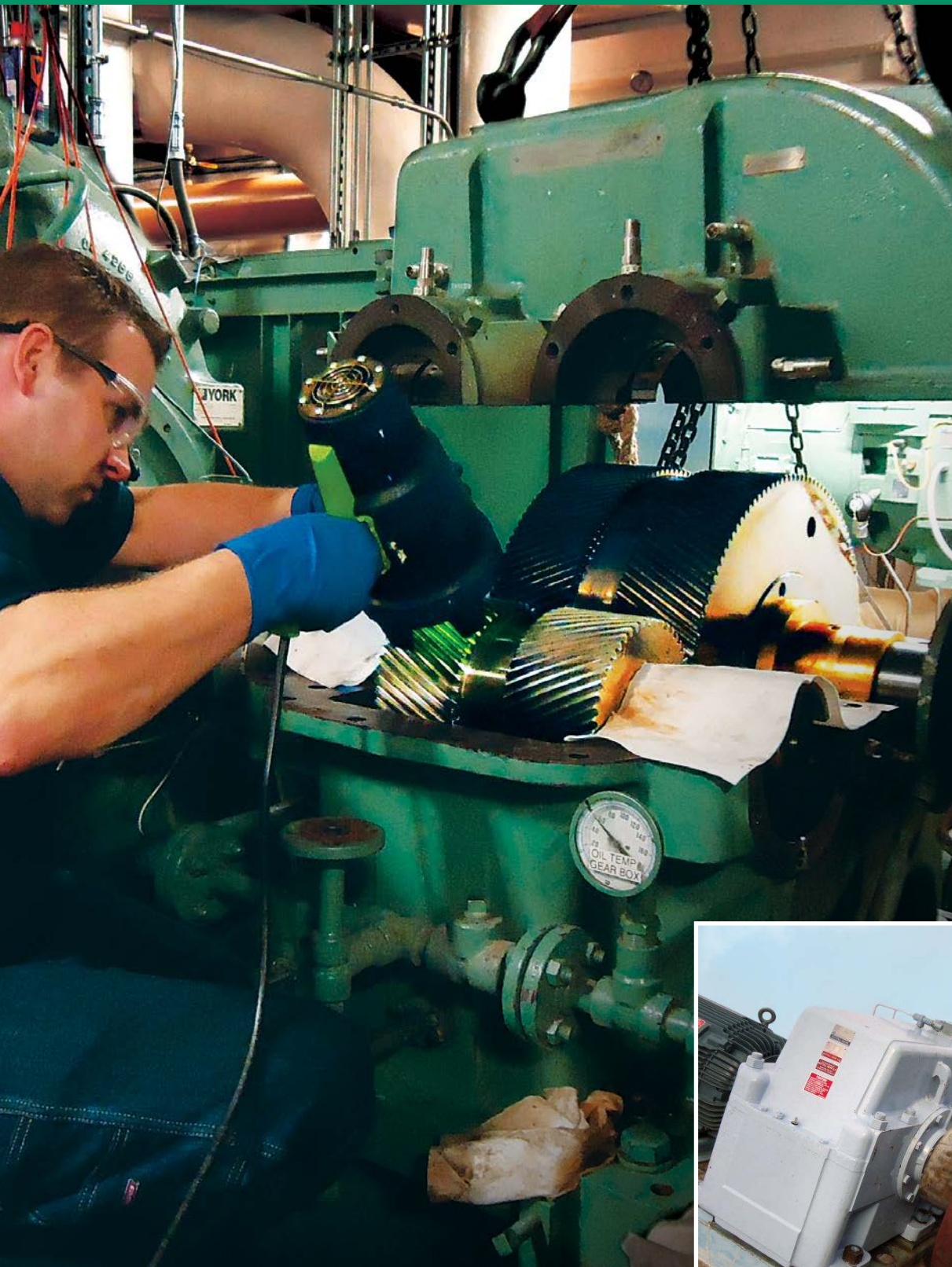


Field Services



**Innovation and Excellence...
The Tradition Continues**

Our History

The RD Nuttall Company was founded by Mr. RD. Nuttall in 1887 with one gear cutter, five men and a combined capital of \$500.

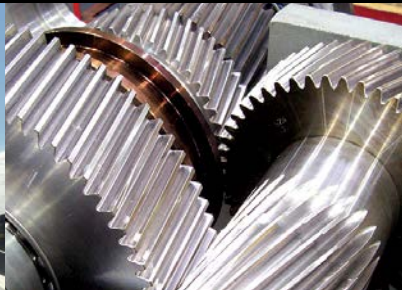
From this modest beginning, the company grew and prospered, and over the next 42 years made numerous contributions to the gear industry. It was Nuttall that developed flexible gearing for transportation applications, forced feed lubrication for large industrial enclosed gear drives, and manufactured the first integral type gearmotor. And it was Nuttall that made one of the most significant contributions to the field of gear engineering single helical gears.

In 1928, Westinghouse Electric Corporation purchased the business from Mr. Nuttall. Although the name changed, the original commitment to excellence did not. Nuttall was known for its innovation and engineering, for it was our company that developed the modern form of the gearmotor which is used by gear manufacturers all over the world today.

February 1983 signified yet another step forward in Nuttall Gear's history. At that time, we once again became a privately held corporation, continuing the tradition of leading the industry in technology - such as pioneering the use of ion-nitriding for heat treating, and the use of our MAAG SP 160, the ultimate machine available to confirm gear quality.

In 2004, Nuttall Gear became part of the Altra Industrial Motion group of companies.

While there have been corporate changes over the years, some things never change, like your need for durable, dependable gears, and our commitment to excellence in both product and service.



**THE SERVICE DIVISION OF
NUTTALL GEAR / DELROYD WORM GEAR...**

Provides comprehensive services for any manufacturer's gear drive:

- Allen Gear
- Amarillo
- Brad Foote
- Chemineer
- Cleveland Gear
- Cone Drive
- D.O. James
- David Brown
- Delaval
- Delroyd Worm Gear
- Falk
- Farrel
- Foote-Jones
- General Electric
- Holroyd
- Flender
- Hansen
- Horsburg & Scott
- Lightnin
- Link-Belt
- Lufkin
- Maag
- Marley
- Mixco
- Nuttall Gear
- Philadelphia Gear
- Renk
- Renold
- Rexnord
- Sterling
- Sumitomo
- Western
- Westinghouse*
- WestTech
- Wilson Gear
- Winsmith

** Nuttall Gear is the sole authorized repair center for Westinghouse gear drives. We maintain all original drawings and specifications.*

Some examples of the types of facilities that have utilized our extensive field services capabilities:

- Steel Mills
- Paper Mills
- Nuclear Power Plants
- Coal-Fired Plants
- Chemical Plants
- Mining Industry
- Steel Processing Plants
- Ethanol-Producing Facilities
- Large Tonnage Chiller Compressor Plants
- Wastewater Treatment Facilities





Nuttall Gear Field Service

The Service Division of Nuttall Gear and Delroyd Worm Gear offers comprehensive and dedicated onsite support designed to keep your rotating machinery in operation. When a gear drive is purchased from us, our commitment to the customer does not stop when the unit leaves our dock. You can rest assured knowing that world-class field service and repairs are only a phone call away. Our extensive experience in gear drive applications, combined with our manufacturing and design capabilities enable us to provide you with a single-source solution for minimizing your downtime and improving your productivity. In addition to our extensive line of catalog and custom products, we can offer a cost-effective repair solution for any manufacturer's gear drive.

We are a founding member of the American Gear Manufacturing Association and are an ISO 9001:2008 certified

manufacturing facility. Quality and dependability are deeply rooted in every aspect of our organization.

Since 1887 we have been providing dependable gear drives for industry. As the former Westinghouse Gearing Division, Nuttall Gear is the only authorized repair center for Westinghouse gear drives. We maintain all original drawings and specifications.

Our commitment to safe practices and superior work is backed by stringent internal safety and quality programs, and the ongoing training of our employees. Nuttall Gear continues to make significant investment in tools and equipment in order to apply the latest technologies to our service offerings.

Our shop capabilities include helical gearing up to 96". Up to AGMA 14 quality.

Field Services Offered

MAINTENANCE

Routine lubrications services, end play adjustments, bearing and oil seal replacement.

CONTRACT MAINTENANCE

Scheduled periodic on-site services to establish condition-based maintenance for critical machinery.

INSPECTIONS

Evaluate the conditions of gears, shafts, bearings, seals, housing and foundation. All field service inspections come with a detailed report that allows management to make informed decisions on maintenance and repair options.

NON-DESTRUCTIVE TESTING

Wet magnetic particle and dye penetrant testing processes to detect surface and slightly subsurface cracks in gearing, housings, and components.

LASER ALIGNMENT AND INSTALLATION ASSISTANCE

Eliminate machine vibration and premature wear by verifying proper alignment of your rotating equipment.

FAILURE ANALYSIS

Specially trained personnel to assist in getting to the root cause of a drive failure.

UPGRADES AND UPRATES

We offer a variety of cost-saving options, including re-rates for older drives and the ability to redesign and rebuild used drives to meet your expectations.

TORQUE MEASUREMENTS

Record actual torque under operating conditions. Full report provided to assist management in making cost effective decisions on equipment upgrades and repairs.

TRAINING SEMINARS

Covers all phases of repair and rebuild in a hands-on maintenance training program: inspection, troubleshooting, teardown, reassembly, maintenance best practices and testing.

REPAIRS

Short-term emergency repairs and long-term emergency repairs can be made on site. Complete rebuilds and overhauls can be done right at your facility.

VIBRATION ANALYSIS AND TRENDING

We have the most advanced portable vibration equipment offered today.

TORQUE MEASUREMENTS

Record actual torque applied on your gear drive under your production operating conditions.

IMPLEMENTATION OF TPM

Nuttall Gear can assist you in setting up a Total Productive Maintenance system for our products. In TPM the machine operator is trained to perform many of the day-to-day tasks of simple maintenance and fault-finding. This enables the operators to understand the machinery and identify potential problems, righting them before they impact production.

Nuttall Gear and Delroyd Worm Gear Facilities

North America

USA

2221 Niagara Falls Boulevard
Niagara Falls, NY 14304 - USA
716-298-4100

*Worm Gear and
Helical Speed Reducers*

The Brands of Altra Industrial Motion

Couplings

Ameridrives
www.ameridrives.com

Bibby Turboflex
www.bibbyturboflex.com

Guardian Couplings
www.guardiancouplings.com

Huco
www.huco.com

Lamiflex Couplings
www.lamiflexcouplings.com

Stromag
www.stromag.com

TB Wood's
www.tbwoods.com

Gear Cam Limit Switches

Stromag
www.stromag.com

Electric Clutches & Brakes

Inertia Dynamics
www.idicb.com

Matrix
www.matrix-international.com

Stromag
www.stromag.com

Warner Electric
www.warnerelectric.com

Linear Products

Warner Linear
www.warnerlinear.com

Engineered Bearing Assemblies

Kilian
www.kilianbearings.com

Heavy Duty Clutches & Brakes

Industrial Clutch
www.indclutch.com

Twiflex
www.twiflex.com

Stromag
www.stromag.com

Svendborg Brakes
www.svendborg-brakes.com

Wichita Clutch
www.wichitaclutch.com

Belted Drives

TB Wood's
www.tbwoods.com

Gearing

Bauer Gear Motor
www.bauergears.com

Boston Gear
www.bostongear.com

Delroyd Worm Gear
www.delroyd.com

Nuttall Gear
www.nuttallgear.com

Overrunning Clutches

Formsprag Clutch
www.formsprag.com

Marland Clutch
www.marland.com

Stieber
www.stieberclutch.com

Neither the accuracy nor completeness of the information contained in this publication is guaranteed by the company and may be subject to change in its sole discretion. The operating and performance characteristics of these products may vary depending on the application, installation, operating conditions and environmental factors. The company's terms and conditions of sale can be viewed at <http://www.altramotion.com/terms-and-conditions/sales-terms-and-conditions>. These terms and conditions apply to any person who may buy, acquire or use a product referred to herein, including any person who buys from a licensed distributor of these branded products.

©2018 by Nuttall Gear and Delroyd Worm Gear LLC. All rights reserved. All trademarks in this publication are the sole and exclusive property of Nuttall Gear and Delroyd Worm Gear LLC or one of its affiliated companies.