

# HOT STUFF

## HEAT TREATING NEWS

**NEWS AND NOTES...**Ajax Tocco Magnethermic has invested £2 million in the U.K. market to establish Ajax Tocco International Ltd., with new facilities built in Saltley, Birmingham. The company is also opening a new service center in Le Roeulx, Belgium. **Surface Combustion Inc.** has received an order for a Super Allcase batch integral quench furnace line from National Metal Processing, located in Richmond, KY. **SECO/Warwick** has received an order for a new double-chamber vacuum carburizing furnace from the Randolph Austin Co., which plans to use the furnace for producing high-performance gears in its Manchaca, TX, facility. **ALD Vacuum Technologies** has received an order for a six-chamber ModulTherm vacuum furnace from the Stackpole Automotive Gear Division. The **Hi TecMetal Group** has announced the appointment of Chandni Dighe as strategic business unit manager of the company's Cincinnati-based Hydro-Vac division.

### New Rotary Hearth Oven from Grieve

The No. 815 from Grieve is a 500°F electric rotary hearth oven that is designed to preheat gears.

This unit features an aluminized steel interior and exterior and 4" insulated oven walls.

According to the company's press release, the hearth oven is driven by a

1/4 hp motor through a gear reducer with a torque limiting device. The hearth indexes one position each time the loading door is opened or closed.

Two 2000 CFM, 2 hp recirculating blowers provide a vertical downward airflow over the workload. Special safety equipment includes a manual reset excess temperature controller, separate heating element control contactors and powered exhauster and a purge timer.

For more information, contact the Grieve Corp. of Round Lake, IL, by telephone at (847) 546-8225 or at [www.grievcorp.com](http://www.grievcorp.com).



### New Hires at Inductoheat

Steve Fillip was promoted to director of aftermarket sales for Inductoheat Inc.



His new responsibilities include overseeing the aftermarket sales support team, providing customers with spare parts and service and designing, building and repairing coils.

According to the company's press release, Fillip has worked within the Inductotherm group for the past 17 years as materials control manager, director of operations, and vice president of manufacturing.

Kathy Coburn was recently appointed as the new aftermarket sales coordinator.

Her new responsibilities include spare parts sales, customer relations and support



of the recently renovated coil department, which includes fabricating new coils, prototype coil work and coil repair.

According to the company's press release, she has worked for the past five years as an engineering coordinator at Inductoheat. The company, located in Madison Heights, MI, is a designer and manufacturer of induction heating equipment.

### New Metal Treating Institute President

Harvey Dominy was elected president of the Metal Treating Institute, an international trade association representing the corporate heat treat industry.

According to the association press

## HEAT TREATING EVENTS

**March 8–11—Furnaces and Atmosphere for Today's Technology.** Holiday Inn Express, Meadville, PA. A basic primer on heat treating, equipment application, operation and maintenance along with key topics in continuous and batch systems. \$375. Contact SECO/Warwick Corp. by telephone at (814) 332-8437 or on the Internet at [www.secowarwick.com](http://www.secowarwick.com).

**March 9—Symposium on Advanced Surface Engineering for Gears.** Crowne Plaza at Detroit Metro Airport, Romulus, MI. Attendees will learn about new gear material processes, including heat treating, coating and superfinishing. \$335 for ASM/GRI/AGMA members, \$355 for non-members. Contact ASM by telephone at (800) 336-5152 or at [www.asminternational.org](http://www.asminternational.org).

**March 16 – 18—Abar-U.** Ipsen International Facility, Rockford, IL. This beginning or refresher course in the area of heat treating equipment focuses on the fundamentals of pumping systems and pumps as well as step-by-step procedures for vacuum furnace equipment maintenance. \$595. Offered bi-monthly, the next session is scheduled for May 11–13. For more information, contact Ipsen International by telephone at (815) 332-4941 or on the Internet at [www.abarippsen.com](http://www.abarippsen.com).

**April 21–25—Best Practices for a Heat Treat Business.** Renaissance Wailea Beach Resort, Maui, Hawaii. Itinerary includes a keynote breakfast, general sessions and the MTI Iron Ore Golf Classic. Member registration fee is \$575. For more information, contact Metal Treating Institute at [www.metaltreat.com](http://www.metaltreat.com)

release, Dominy served at international and local levels in all elected offices of the institute. He has worked in the heat treat industry since age 14.

The association also elected several members to its board of trustees. Roger Jones of Solar Atmospheres Inc. was elected international vice president/president-elect. Norman Graves of National Metal Processing was re-elected as treasurer.

**Paulo Now Ford Preferred Supplier**

The St. Louis, MO, facility of Paulo Products Co. was awarded preferred supplier status, the highest rating that can be achieved by a tier supplier, by Ford Motor Co.

According to the company's press release, the award recognizes Paulo's sustained level of heat treating and customer service excellence. Paulo's Murfreesboro, TN, plant also has received the Ford status.

Paulo Products provides engineered solutions in heat treating, brazing and metal finishing. Paulo St. Louis specializes in production heat treating of batch and continuous furnaces, vacuum heat treating and black oxide finishing.

**Precision Batch Oven from Pyromaitre**

The Pyro Try Out oven from Pyromaitre is a batch version of its in-line, continuous, high-output P106HE.

The furnace has been updated with

**Gear Hardening Line from Inductoheat**

Three distinct technologies for heat treating gears are available from Inductoheat. The single frequency, variable frequency and simultaneous dual frequency lines are all suitable for use in gearing applications.

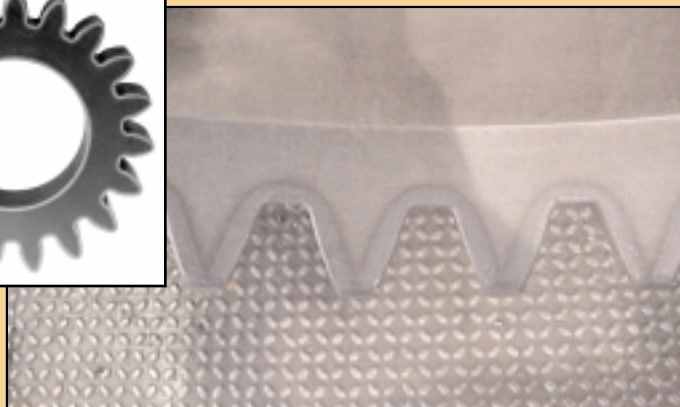
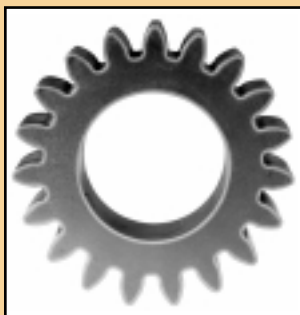
According to the company's press release, single frequency gear hardening for high volume dedicated applications allows for manual tuning while the variable frequency operates with push-button tuning. This technology matches frequency to a diametrical pitch.

The simultaneous dual frequency induction gear hardening process can

be integrated into new or existing manufacturing lines as a work cell.

By mixing the medium and high frequencies combined with a high power output, a shorter heating cycle can be achieved. The microstructure of a hardened area can be improved with minimal effect on material core properties. This line can eliminate the need for final machining since diametrical specifications are unaffected after hardening.

For more information, contact Inductoheat of Madison Heights, MI, by telephone at (248) 585-9393 or on the Internet at [www.inductoheat.com](http://www.inductoheat.com).





*The Pyro Try Out oven from Pyromaitre is used for stress relieving spiral bevel ring gears.*

simulation software that can calculate operating cost. The software automatically selects stress relief temperature as a function of cycle time according to the particular alloy, and prevents use of a temperature so high that it could negatively impact hardness.

According to the company's press release, the software generates two temperature curves, called core and surface, that are based on alloy thermal conductivity, wire diameter, cycle time and temperature.

The oven is designed for applications such as stress relieving ring gears, valve springs, half shafts and sickle blades.

For more information, contact Pyromaitre of St. Nicholas, Quebec, by telephone at (418) 831-2576 or on the Internet at [www.pyromaitre.com](http://www.pyromaitre.com).

#### **New High Temp Pyrometer from Iacon**

The Modline 5 standalone temperature thermometer was designed for temperature measurement in industries like induction heating, steel and gas.

Among its features are a total system health check diagnostic mechanism, a match function that allows users to input process temperature and automatically adjust emissivity, and a dirty window detector to check for build-up.

According to the company's press release, temperatures can range from

482°F (250°C) to 5,432°F (3,000°C). Operating wavelengths vary from 1.5 to 1.6 and 0.85 to 1.1. For the two-color version, wavelengths are 1.05.

For more information, contact Iacon of Niles, IL, by telephone at (847) 967-5151 or on the Internet at [www.ircon.com](http://www.ircon.com)

#### **Bodycote Earns NADCAP Registration**

Bodycote Thermal Processing announced the registration of its Fort Worth, TX, facility to NADCAP.

According to the company's press release, this increases the number of Bodycote plants with NADCAP accreditation to 18. Most recently, Bodycote's Woolford, U.K., plant became the first subcontract heat treatment facility in the country to gain NADCAP approval.

This registration is in addition to the Fort Worth plant's existing ISO 9002:2000 accreditation.

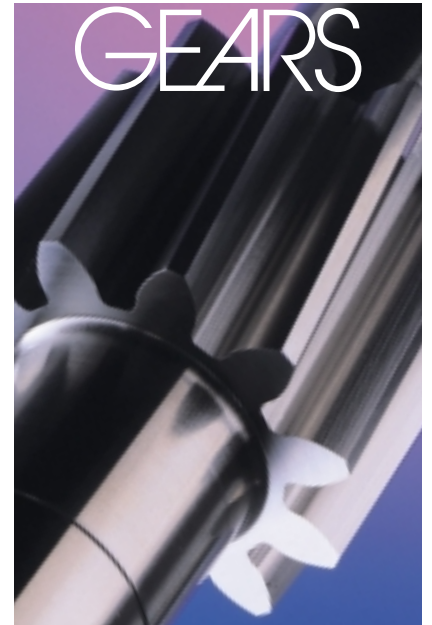
Bodycote Fort Worth specializes in various conventional brazing, batch atmosphere, deep pit, vacuum, aluminum, titanium and copper treatments. ⚙️

**Tell Us What You Think . . .**  
Send e-mail to [wrs@geartechnology.com](mailto:wrs@geartechnology.com) to

- Rate this article
- Request more information

Or call (847) 437-6604 to talk to an editor!

# GROUND GEARS



## BY NIAGARA

### **More gear for your money and value that lasts.**

Niagara Gear has an affordable solution for meeting your high quality, close-tolerance gear requirements.

With the latest CNC and Creep-Feed grinding technologies and a focus on Continuous Process Improvements, SPC and Just-In Time delivery, allow us to deliver what you need...**On Price, On Quality and On Time**

Services include:

- Manufacture complete to 13" diameter.
- Subcontract, multi-axis cylindrical (internal and external) CNC grinding.
- Precision gear grinding to AGMA 15, with Nital-Etch and CMM inspection.
- Salvage grinding, removing only a minimum of material from gear teeth.
- Prototype manufacturing of new or evolving product developments, regardless of quantity.

**Fax: (716) 874-9003**  
1-800-447-2392

e-mail: [info@niagaragear.com](mailto:info@niagaragear.com)  
[www.niagaragear.com](http://www.niagaragear.com)  
941 Military Rd, Buffalo, NY 14217



**GROUND GEAR  
SPECIALISTS**