

# Heat Treating Division

Modern Heat Treating, a division of Modern Industries, Inc., is your regional leader in commercial heat treating. We take pride in our modern facilities, advanced process techniques, and state-of-the-art network systems.

With convenient locations throughout Pennsylvania, Modern is the largest source for heat treating in Northwestern Pennsylvania and we regularly provide our services to companies from the automotive, aeronautical, aerospace, medical, military, and tool & die industries.

## Our Services include, but are NOT limited to:

### Batch Processing:

- Hardening
- Carbonitriding
- Carburizing
- Annealing
- Normalizing with Protective Atmosphere
- Nitriding and Ferritic Nitrocarburizing

### Continuous Belt Processing:

- Polymer/Water or Oil Quench Capability

### Vacuum Processing:

- Argon Gas, Nitrogen Gas, and Oil Quenching Capability

### Aluminum Process (6 Second Quench):

- Quick Quench Aluminum Processing, Aging Furnaces.

### Tempering:

- Full complement of over 30 tempering furnaces.

### Deep Freezing:

- Cryogenics to -300 F

### Post Heat Treat Cleaning:

- Sand Blasting
- Shot Blasting
- Wet & Dry Tumbling

### Qualifications and Certifications

ISO 9001:2015 - MHT Erie

ISO 9001:2015 - MHT Kersey

IATF 16949:2009 - MHT Erie

IATF 16949:2009 - MHT Kersey

Nadcap Aerospace Quality System AC-7004 Certificate - MHT Erie

Nadcap Heat Treating Certificate and AC-7102 - MHT Erie

### Support Systems & Services:

- Computerized Furnace Controlling System
- Furnace Management Network Systems for the continuous control and tracking of key heat treating parameters.
- Three-way gas analysis of CO<sub>2</sub>, CO, and CH<sub>4</sub> in addition to O<sub>2</sub> probes.
- Metallurgic Consulting
- Trucking, with door to door service
- State-of-the-art digital metallography
- Staff Metallurgists
- Staff Process Engineers
- Process Charts on Request
- Process Certification

### Other Processes & Services:

- Surface Cleaning & Preparation
- Deep Case Carburizing
- CNC Straightening
- Solution Treating
- Aging - to the latest AMS revision
- Induction Hardening
- Nitriding and Ferritic Nitrocarburizing
- Stress Relieving Processes
- Carbon Restoration

## Additional Quality Systems:

- Digital Hardness Testers
- Weekly Calibration of Furnaces
- 2 Independent Methods of Checking Atmosphere
- Carbon probes/3 gas analyzer
- Uniformity per SAE/AMS 2750
- Military, Automotive and Aerospace Specifications
- Recently Updated Computer Process Controls

## Special Benefits to our Customers:

- Processing variables digitally tracked and archived for seven years.
- Corporate trucking and logistics offered as value-added service to customers
- Local partnerships with several plating, tinning & galvanizing, and forging companies
- Metallurgic Consulting
- Trucking, with door to door service
- State-of-the-art digital metallography
- Staff Metallurgists
- Staff Process Engineers
- Prototyping / Research and Development
- Process Charts on Request
- Process Certification
- Full on-site Nadcap, ISO:9001, and ISO/IEC accredited Materials Testing Laboratory services
- On-site Metallurgical Testing laboratory

## Laboratory Services:

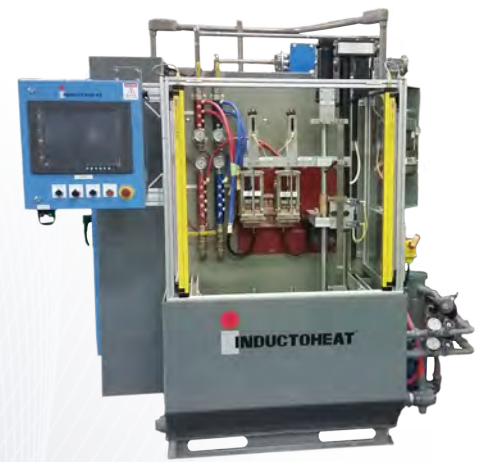
- Chemical Analysis
- Mechanical Properties
- Micro hardness
- Scanning Electron Microscope
- Metallography
- Impact Testing
- Failure Analysis/Fractography
- NDT and More

## Modern Industries, Inc. Divisions

- Machining and Assembly Division
- Products Division
- Materials Testing Division
- Heat Treating Division



## Heat Treating Division



613 West 11th Street  
Erie, PA 16501  
814-455-8061

[mhtsales@modernind.com](mailto:mhtsales@modernind.com)

[www.heattreatingbymodern.com](http://www.heattreatingbymodern.com)

[www.modernind.com](http://www.modernind.com)