

THE DAYTON FORGING & HEAT TREATING COMPANY

Heat Treating

We can handle baskets of tiny parts as well as single pieces up to 27 feet in length. Services include normalizing, annealing, carburizing, carbonitriding, quenching, tempering, and solution annealing. We can also stress relieve and straighten your parts. Our quality control measures assure adherence to your physical requirements, following all ASTM standards.



Capabilities

- Annealing
- Normalizing
- Hardening and tempering
- Stress relieving
- Neutral atmosphere hardening
- Atmosphere heat treating
 - Carborizing
- Carbonitriding
 - Carbon restoration
- Solution annealing of stainless steel
- Precipitation hardening of stainless steel
- Aging of aluminum
- Mechanical and thermal straightening
- Shot blasting
- Neutral hardening
- Cold treating
- Physical testing for; hardness, tensile, charpy impact, etc.
- Oil and water quenching
- Cranes to 20 tons
- Furnaces up to 141" W x 79" H x 288" L
- Vertical heat treating to 105" L

Miscellaneous heat treating specifications we conform to:

- AMS-H-6875.....heat treatment of steel
- ISO 9001:2000quality systems
- AMS 2750pyrometry
- AMS 2759heat treatment of steels
- MIL-A-12560 & MIL-A-46100 D.....military armor plating specification
- AMS 2770heat treatment of aluminum

Equipment List

Furnace & Number	Temp. Range	Capacity (W x H x L)	Atmosphere
Lindberg Pacemaker – 1 <i>Uses: carburize, carbonitride, neutral hardening</i>	1250-1850 °F	30" x 30" x 48"	Endothermic gas (oil quench)
DFHT Temper – 3-93 <i>Uses: tempering, stress relieving</i>	350-1250 °F	50" x 60" x 114"	Gas fired recirculating air
Lindberg Pacemaker – 4 <i>Uses: carburize, carbonitride, neutral hardening</i>	1250-1850 °F	30" x 30" x 48"	Endothermic gas
Lindberg Car – 5 <i>Uses: tempering, stress relieving</i>	300-1150 °F	84" x 72" x 144"	Gas fired recirculating air
General Electric Box Furnace – 6 <i>Uses: aluminum aging, tempering & stress relieve</i>	300-1000 °F	40" x 40" x 40"	Gas fired recirculating air
West Cyclone Pit – 7 <i>Uses: tempering, stress relieving</i>	300-1700 °F	90" Dia x 105"	Gas fired recirculating air
East Cyclone Pit – 8 <i>Uses: austenitizing, annealing, normalizing, tempering</i>	600-1700 °F	90" Dia x 105"	Gas fired recirculating air
Seybold Car – 10-95 <i>Uses: solution treating stainless steel, austenitizing, annealing, normalize</i>	900-2150 °F	84" x 72" x 121	Gas fired
Lindberg Car Furnace – 11 <i>Uses: austenitizing, normalizing, annealing</i>	1150-1800 °F	108" x 50" x 288"	Gas Fired
Holcroft Car Furnace – 12 <i>Uses: austenitizing, normalizing, annealing</i>	1250-2000 °F	141" x 79" x 288"	Gas Fired
Holcroft Car Furnace – 13 <i>Uses: austenitizing, normalizing, annealing</i>	1250-2000 °F	141" x 79" x 288"	Gas Fired
Surface Combustion Car Furnace – 14 <i>Uses: tempering, stress relieving</i>	300-1200 °F	150" x 72" x 276"	Gas fired recirculating air
Dispatch Pit Draw – 15 <i>Uses: tempering, stress relieving</i>	300-1250 °F	48" Dia x 48"	Gas fired recirculating air
Dispatch Pit Draw – 16 <i>Uses: tempering, stress relieving</i>	300-1250 °F	48" Dia x 48"	Gas fired recirculating air
Lindberg Gas Pit – 17 <i>Uses: tempering, stress relieving</i>	300-1250 °F	47" Dia x 64"	Gas fired recirculating air
Small Tool Furnace – 18 <i>Uses: solution anneal stainless steels</i>	1200-1950 °F	24" x 16" x 48"	Gas Fired
Box Furnace – 19 <i>Uses: tempering</i>	300-650 °F	48" x 24" x 72"	Gas fired recirculating air
Car Furnace – 20 <i>Uses: tempering, stress relieve, normalizing, annealing</i>	1000-1800 °F	144" x 86" x 344"	Gas Fired

Additional Equipment List

- Lindburgh atmosphere generator – 3000 CFH
- Surface Combustion atmosphere generator – 1000 CFH
- Blast cleaning products 12' square shot blast room with 4 wheels and rotating table
- 2 – Pangborn 6' wheel blast tables
- Goff tumble blast 1 cubic foot
- 1000 ton Watson Stillman straightening press
- 500 ton Dake straightening press
- 500 ton Plate straightening press
- 50 ton Eitel straightening press
- 2 – Detroit testing Brinell hardness testers
- 3 – Wilson Rockwell hardness testers
- Clark and King portable hardness testers
- Newage BOSS (Brinell Optical Scanning System)