



Facilities List

INTRODUCTION

East Carolina Metal Treating, also doing business as Virginia Metal Treating, is a commercial heat-treating company that has been in business since 1976. With two locations between North Carolina and Virginia, we use modern equipment and controls to meet present and future requirements of high technology metal treating. We are a certified supplier of automotive, aerospace, and nuclear manufacturers.

Our goal and commitment to our customers is to provide the highest quality, the fastest turnaround, and a competitive price. We specialize in custom processing of all jobs, large or small, and we have the capabilities to perform a wide variety of heat-treating services.

We operate 24 hours a day and provide quick turnaround for most orders. Our trucks pick up and deliver daily in many parts of eastern and central North Carolina along with Virginia.

SERVICES

- ① ISO 9001: 2015, AS9100, Appendix B, Nadcap, and, AQS certified
- ① Quick turnaround
- ① Daily pickup and delivery in many areas
- ① Neutral atmosphere hardening of carbon and alloy steels
- ① Carburize and carbonitride case hardening of low carbon steels
- ① Vacuum bright hardening with high pressure gas quenching of tool steels and stainless steels
- ① Induction hardening, scanning up to 36"
- ① Bright annealing and aging of steel, titanium, and copper alloys in vacuum or protective atmosphere
- ① Salt bath hardening with austempering and marquenching
- ① Normalizing, tempering, annealing, stress relieving, and age hardening
- ① Gas nitriding, single and double stage
- ① Ferritic nitrocarburizing, optional black finish
- ① Cryogenic treating
- ① Metallurgical laboratory
- ① Black Oxide coating
- ① Blasting with glass beads and aluminum oxide





PLANT SIZE (sq. ft.)

<u>ECMT</u>		<u>VMT</u>	
Production.....	40,000	Production.....	17,500
Office.....	<u>5,000</u>	Office.....	<u>2,500</u>
Total.....	45,000	Total.....	20,000

METALLURGICAL LABORATORY AND TESTING EQUIPMENT

- Struers Discotom-5 automatic cutter (Reserve)*
- Struers Discotom-100 automatic cut-off machine (Raleigh)
- Struers CitoPress-30 mounting press (Virginia)
- Buehler AbrasiMet M, Manual Abrasive Cutter (Virginia)
- Struers Tegramin-20 polishing machine (Raleigh & Virginia)
- Leica DM ILM metallurgical microscope with digital imaging
- Keyence VHX-7000 Digital Microscope (Raleigh)
- Wilson RH2150 Hardness Tester (Raleigh & Virginia)
- Duramin-160z Hardness Tester (Virginia)
- 511 Rockwell R574 Hardness Tester, standard and superficial scales
- 514 King portable Brinell tester
- 515 King portable Brinell tester
- 516 Wilson 504T Rockwell hardness tester, standard and superficial scales
- 522 Phase II PHT-1900 Portable Hardness Tester
- 527 Wilson WH2003T Hardness Tester
- 528 Phase II PHT-1900 Portable Hardness Tester
- 849 Duramin-40 AC3 Micro Hardness Tester



EQUIPMENT LIST

*All Furnaces listed below are instrument type class D.

Number	Type	Manufacturer & Model	Working Area	Class & Temp. Range (F)
117	Tempering	Wisconsin SDB-6612-12E	32" W x 68" L x 32"H	Class 2 300 - 1250
118	Integral Quench	J.L. Becker 36x48x36 IQ	36" W x 48" L x 36"H 4000 lb. capacity	Class 3 1400 - 1750
119	Tempering	J.L. Becker 36W x 48L x 36H	36" W x 48" L x 36"H 4000 lb. capacity	Class 2 300 - 1250
120	Tempering	J.L. Becker 36W x 48L x 36H	36" W x 48" L x 36"H 4000 lb. capacity	Class 2 300 - 1250
121	Washer	JLB 7802-04	36" W x 48" L x 36"H 4000 lb. capacity	
122	Washer	Surface Combustion	36" W x 48" L x 36"H 4000 lb. capacity	
123	Tempering	Wisconsin Oven SDB-6612-12E	36" W x 36" H x 96" D	Class 2 300 - 1250
124	Tempering	Wisconsin Oven SDB-6612-12E	36" W x 36" H x 96" D	Class 2 300 - 1250
125	Integral Quench	Surface Combustion SDB-446-12E	36" W x 48" L x 36"H 4000 lb. capacity	Class 3 1400 - 1750
126	Integral Quench	Surface Combustion SDB-446-12E	36" W x 48" L x 36"H 4000 lb. capacity	Class 3 1400 - 1750
127	Integral Quench	Surface Combustion SDB-446-12E	36" W x 48" L x 36"H 4000 lb. capacity	Class 3 1400 - 1750
128	Tempering	Wisconsin SDB-668-12E	36" W x 36"H x 48" D	Class 2 300 - 1250
129	Tempering	Wisconsin SDB-668-12E	36" W x 36"H x 48" D	Class 2 300 - 1250
130	Tempering	Wisconsin SDB-446-12E	24" W x 24" H x 36" D	Class 2 300-1250
131	Tempering	Wisconsin SDB-446-12E	24" W x 24" H x 36" D	Class 2 300-1250
132	Tempering	Wisconsin SDB-446-12E	24" W x 24" H x 36" D	Class 2 300-1250
133	Tempering	Wisconsin SDB-446-12E	24" W x 24" H x 36" D	Class 2 300-1250
134	Tempering	Wisconsin SDB-446-12E	24" W x 24" H x 36" D	Class 2 300-1250



135	Freezer	DMP Cryo Systems 42x54x52x-15HU	36" W x 48" L x 36" H	Class 2 -300 - 0 0 - 1200
136	Integral Quench Temper	Surface Combustion	36" W x 48" L x 36"H 4000 lb. capacity	Class 2 300 - 1400
208	Vacuum	Ipsen Turbo Treater H3636	24" W x 24" H x 36" D 1500 lb. capacity	Class 2 900 - 2200
214	Degreaser & Chiller	Ultra-Vapor Degreaser & Chiller		
217	Vacuum	Ipsen Turbo Treater H3636	24" W x 24"H x 36" D	Class 2 900 - 2200
218	Freezer	DMP Cryo Systems 42x54x52x-15HU	16" W x 12" H x 28" D	Class 2 -300 - 0 0 - 1200
219	Tempering	Lindberg 1216-EH	10" Dia. x 14"H	Class 2 300 - 1100
225	Vacuum	Ipsen Turbo Treater H3636	24" W x 24"H x 36" D	Class 2 900 - 2200
226	Vacuum	Ipsen Turbo Treater H3636	24" W x 32" L x 36" D	Class 2 1400 - 2200
228	Vacuum	Ipsen Turbo Treater H3636	24" W x 24"H x 36" D	Class 2 900 - 2200
229	Nitriding Dissociator	Nitrex DA40		
232	Nitriding Dissociator	Nitrex DP80		
235	Gas Nitrider	Nitrex	36" Dia. x 72"H	Class 2 900 - 1150
236	Gas Nitrider	Nitrex	36" Dia. x 72"H	Class 2 900 - 1150
301	Black Oxide		47" x 42" x 48"	
303	Tumble Blaster	Empire BB4-3K W/CDC-6	3.5 Cu. Ft.	
305	Blast Cabinet	Zero Pulsar III	36" W x 35" L x 36"H	
309	Blast Cabinet	Empire Pressure Bead Blast Cabinet	48" D x 48" W x 36" H	
401	Induction	Tocco Power Supply Quantik Verta Scan	100 kw, 10 khz 36" scanner	



402	Induction	Tocco Power Supply Quantik Scan Plus	50 kw, 450 khz 24" scanner	
403	Induction	Cyclodyne B-150	15 kw	
404	Induction	Lepel T-15-3-KC-TL	15 kw	
V1801	Blast Room	Rodeco Pre-Engineered Blast Booth System	9'-8"W x 14'L x 10'H	
V1001	Black Oxide		36" W x 84" L x 43"H	
V1002	Bead Blast	Zero Pulsar III	36" W x 35" L x 36"H	
V1003	Salt Pot	Ajax Electric HCSE IQCF	18" W x 18" L x 39"H	Class 3 1400 - 1650
V1301	Integral Quench	Surface Combustion	36" W x 48" L x 36"H 4000 lb. capacity	Class 3 1400-1750
V1330	Washer	Surface Combustion	36" W x 48" L x 36"H 4000 lb. capacity	
V1401	Tempering	Wisconsin Oven SDB-668-12E	36' W x 36 H x 48' L	Class 2 300-1250
V1402	Tempering	Wisconsin Oven SDB-668-12E	36' W x 36' H x 48' L	Class 2 300-1250
V1403	Freezer	DMP Cryo Systems 42x54x42-15	36" W x 48" L x 36" H	Class 2 -300 - 0 0 - 1200
V1404	Tempering	Wisconsin Oven SDB-668-12E	36' W x 36 H x 48' L	Class 2 300-1250
V1405	Tempering	Wisconsin Oven SDB-6616-12E	36' W x 36 H x 96' L	Class 2 300-1250
V1701	Gas Nitrider	Nitrex	36" Dia. x 72"H	Class 2 900 - 1150