



## **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.

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



<b>135</b>	Freezer	DMP Cryo Systems 42x54x52x-15HU	36" W x 48" L x 36" H	Class 2 -300 - 0 0 - 1200
<b>136</b>	Integral Quench Temper	Surface Combustion	36" W x 48" L x 36" H 4000 lb. capacity	Class 2 300 - 1400
<b>208</b>	Vacuum	Ipsen Turbo Treater H3636	24" W x 24" H x 36" D 1500 lb. capacity	Class 2 900 - 2200
<b>214</b>	Degreaser & Chiller	Ultra-Vapor Degreaser & Chiller		
<b>217</b>	Vacuum	Ipsen Turbo Treater H3636	24" W x 24" H x 36" D	Class 2 900 - 2200
<b>218</b>	Freezer	DMP Cryo Systems 42x54x52x-15HU	16" W x 12" H x 28" D	Class 2 -300 - 0 0 - 1200
<b>219</b>	Tempering	Lindberg 1216-EH	10" Dia. x 14" H	Class 2 300 - 1100
<b>225</b>	Vacuum	Ipsen Turbo Treater H3636	24" W x 24" H x 36" D	Class 2 900 - 2200
<b>226</b>	Vacuum	Ipsen Turbo Treater H3636	24" W x 32" L x 36" D	Class 2 1400 - 2200
<b>228</b>	Vacuum	Ipsen Turbo Treater H3636	24" W x 24" H x 36" D	Class 2 900 - 2200
<b>229</b>	Nitriding Dissociator	Nitrex DA40		
<b>232</b>	Nitriding Dissociator	Nitrex DP80		
<b>235</b>	Gas Nitrider	Nitrex	36" Dia. x 72" H	Class 2 900 - 1150
<b>236</b>	Gas Nitrider	Nitrex	36" Dia. x 72" H	Class 2 900 - 1150
<b>237</b>	Tempering	Wisconsin SDB-446-12E	24" W x 24" H x 36" D	Class 2 300-1250
<b>238</b>	Tempering	Wisconsin SDB-446-12E	24" W x 24" H x 36" D	Class 2 300-1250
<b>301</b>	Black Oxide		47" x 42" x 48"	
<b>303</b>	Tumble Blaster	Empire BB4-3K W/CDC-6	3.5 Cu. Ft.	



<b>305</b>	Blast Cabinet	Zero Pulsar III	36" W x 35" L x 36"H	
<b>309</b>	Blast Cabinet	Empire Pressure Bead Blast Cabinet	48" D x 48" W x 36" H	
<b>401</b>	Induction	Tocco Power Supply Quantik Verta Scan	100 kw, 10 khz 36" scanner	
<b>402</b>	Induction	Tocco Power Supply Quantik Scan Plus	50 kw, 450 khz 24" scanner	
<b>403</b>	Induction	Cycledyne B-150	15 kw	
<b>404</b>	Induction	Lepel T-15-3-KC-TL	15 kw	
<b>V1801</b>	Blast Room	Rodeco Pre-Engineered Blast Booth System	9'-8"W x 14'L x 10'H	
<b>V1001</b>	Black Oxide		36" W x 84" L x 43"H	
<b>V1002</b>	Bead Blast	Zero Pulsar III	36" W x 35" L x 36"H	
<b>V1003</b>	Salt Pot	Ajax Electric HCSE IQCF	18" W x 18" L x 39"H	Class 3 1400 - 1650
<b>V1301</b>	Integral Quench	Surface Combustion	36" W x 48" L x 36"H 4000 lb. capacity	Class 3 1400-1750
<b>V1330</b>	Washer	Surface Combustion	36" W x 48" L x 36"H 4000 lb. capacity	
<b>V1401</b>	Tempering	Wisconsin Oven SDB-668-12E	36' W x 36 H x 48' L	Class 2 300-1250
<b>V1402</b>	Tempering	Wisconsin Oven SDB-668-12E	36' W x 36' H x 48' L	Class 2 300-1250
<b>V1403</b>	Freezer	DMP Cryo Systems 42x54x42-15	36" W x 48" L x 36" H	Class 2 -300 - 0 0 - 1200
<b>V1404</b>	Tempering	Wisconsin Oven SDB-668-12E	36' W x 36 H x 48' L	Class 2 300-1250
<b>V1405</b>	Tempering	Wisconsin Oven SDB-6616-12E	36' W x 36 H x 96' L	Class 2 300-1250
<b>V1701</b>	Gas Nitrider	Nitrex	36" Dia. x 72"H	Class 2 900 - 1150