



## **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 cut-off machine
- Struers Discotom-10 automatic cut-off machine
- Struers CitoPress-30 mounting press
- Struers Tegramin-20 polishing machine
- Leica DM ILM metallurgical microscope with digital imaging
- Keyence VHX-7000 Digital Microscope
- 510 Wilson 4JRBB Rockwell hardness tester, standard scales
- King portable Brinell tester
- 514 King portable Brinell tester
- 515 King portable Brinell tester
- 516 Wilson 504T Rockwell hardness tester, standard and superficial scales
- 521 Wilson B524-T Series hardness tester, standard and superficial
- 522 Phase II PHT-1900 Portable Hardness Tester
- 525 Duramin-160z Hardness Tester
- 528 Phase II PHT-1900 Portable Hardness Tester
- 848 Mitutoyo HM Microhardness tester, Vickers and Knoop scales
- 849 Duramin-40 AC3 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>106</b>    | Tempering       | Lindberg 121618-EH                | 12" W x 16" D x 10"H                      | Class 2<br>300 - 1200              |
| <b>108</b>    | Tempering       | Lindberg 152418-E12               | 12" W x 8"H x 18" D                       | Class 3<br>300 - 1200              |
| <b>109</b>    | Tempering       | Lindberg 243624-E12               | 24" W x 12" H x 32" D                     | Class 3<br>300 - 700               |
| <b>117</b>    | Tempering       | Wisconsin<br>SDB-6612-12E         | 32" W x 68" L x 32"H                      | Class 2<br>300 - 1250              |
| <b>118</b>    | Integral Quench | J.L. Becker 36x48x36 IQ           | 36" W x 48" L x 36"H<br>4000 lb. capacity | Class 3<br>1400 - 1750             |
| <b>119</b>    | Tempering       | J.L. Becker 36W x 48L x 36H       | 36" W x 48" L x 36"H<br>4000 lb. capacity | Class 2<br>300 - 1250              |
| <b>120</b>    | Tempering       | J.L. Becker 36W x 48L x 36H       | 36" W x 48" L x 36"H<br>4000 lb. capacity | Class 2<br>300 - 1250              |
| <b>121</b>    | Washer          | JLB 7802-04                       | 36" W x 48" L x 36"H<br>4000 lb. capacity |                                    |
| <b>122</b>    | Washer          | Surface Combustion                | 36" W x 48" L x 36"H<br>4000 lb. capacity |                                    |
| <b>123</b>    | Tempering       | Wisconsin Oven<br>SDB-6612-12E    | 36" W x 36" H x 96" D                     | Class 2<br>300 - 1250              |
| <b>124</b>    | Tempering       | Wisconsin Oven<br>SDB-6612-12E    | 36" W x 36" H x 96" D                     | Class 2<br>300 - 1250              |
| <b>125</b>    | Integral Quench | Surface Combustion<br>SDB-446-12E | 36" W x 48" L x 36"H<br>4000 lb. capacity | Class 3<br>1400 - 1750             |
| <b>126</b>    | Integral Quench | Surface Combustion<br>SDB-446-12E | 36" W x 48" L x 36"H<br>4000 lb. capacity | Class 3<br>1400 - 1750             |
| <b>127</b>    | Integral Quench | Surface Combustion<br>SDB-446-12E | 36" W x 48" L x 36"H<br>4000 lb. capacity | Class 3<br>1400 - 1750             |
| <b>128</b>    | Tempering       | Wisconsin SDB-668-12E             | 36" W x 36"H x 48" D                      | Class 2<br>300 - 1250              |
| <b>129</b>    | Tempering       | Wisconsin SDB-668-12E             | 36" W x 36"H x 48" D                      | Class 2<br>300 - 1250              |
| <b>130</b>    | Tempering       | Wisconsin SDB-446-12E             | 24" W x 24" H x 36" D                     | Class 2<br>300-1250                |
| <b>131</b>    | Tempering       | Wisconsin SDB-446-12E             | 24" W x 24" H x 36" D                     | Class 2<br>300-1250                |

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|            |                       |                                    |  |                                 |
|------------|-----------------------|------------------------------------|--|---------------------------------|
|            |                       |                                    |  |                                 |
| <b>132</b> | Tempering             | Wisconsin SDB-446-12E              | 24" W x 24" H x 36" D                      | Class 2<br>300-1250             |
| <b>133</b> | Tempering             | Wisconsin SDB-446-12E              | 24" W x 24" H x 36" D                      | Class 2<br>300-1250             |
| <b>134</b> | Tempering             | Wisconsin SDB-446-12E              | 24" W x 24" H x 36" D                      | Class 2<br>300-1250             |
| <b>135</b> | Freezer               | DMP Cryo Systems<br>42x54x52x-15HU | 36" W x 48" L x 36" H                      | Class 2<br>-300 - 0<br>0 - 1200 |
| <b>206</b> | Tempering             | Lindberg 242418-EHT                | 22" W x 12" L x 15" H                      | Class 3<br>300 - 1100           |
| <b>208</b> | Vacuum                | Ipsen Turbo Treater H3636          | 24" W x 24" H x 36" D<br>1500 lb. capacity | Class 2<br>900 - 2200           |
| <b>214</b> | Degreaser & Chiller   | Ultra-Vapor Degreaser & Chiller    |  |                                 |
| <b>216</b> | Lindberg              | 13-243624-ECF                      | 18 W x 24" L x 36"H                        | Class 3<br>300 - 1150           |
| <b>217</b> | Vacuum                | Ipsen Turbo Treater H3636          | 24" W x 24"H x 36" D                       | Class 2<br>900 - 2200           |
| <b>218</b> | Freezer               | DMP Cryo Systems<br>42x54x52x-15HU | 16" W x 12" H x 28" D                      | Class 2<br>-300 - 0<br>0 - 1200 |
| <b>219</b> | Tempering             | Lindberg 1216-EH                   | 10" Dia. x 14"H                            | Class 2<br>300 - 1100           |
| <b>225</b> | Vacuum                | Ipsen Turbo Treater H3636          | 24" W x 24"H x 36" D                       | Class 2<br>900 - 2200           |
| <b>226</b> | Vacuum                | Ipsen Turbo Treater H3636          | 24" W x 32" L x 36" D                      | Class 2<br>900 - 2200           |
| <b>227</b> | Tempering             | Surface Combustion SDB-658-<br>12E | 22" W x 32" L x 16"H                       | Class 2<br>300 - 1250           |
| <b>228</b> | Vacuum                | Ipsen Turbo Treater H3636          | 24" W x 24"H x 36" D                       | Class 2<br>900 - 2200           |
| <b>229</b> | Nitriding Dissociator | Nitrex DA40                        |  |                                 |
| <b>232</b> | Nitriding Dissociator | Nitrex DP80                        |  |                                 |

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|              |                |   |                               |                        |
|--------------|----------------|---|-------------------------------|------------------------|
| <b>235</b>   | Gas Nitrider   | Nitrex                                      | 36" Dia. x 72"H               | Class 2<br>900 - 1150  |
| <b>236</b>   | Gas Nitrider   | Nitrex                                      | 36" Dia. x 72"H               | Class 2<br>900 - 1150  |
| <b>303</b>   | Tumble Blaster | Empire<br>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>307</b>   | Tumble Blaster | Zero DCM-161                                | 1 Cu. Ft.                     |                        |
| <b>309</b>   | Blast Cabinet  | Empire Pressure Bead Blast<br>Cabinet       | 48" D x 48" W x 36" H         |                        |
| <b>401</b>   | Induction      | Tocco Power Supply Quantik<br>Verta Scan    | 100 kw, 10 khz<br>36" scanner |                        |
| <b>402</b>   | Induction      | Tocco Power Supply Quantik<br>Scan Plus     | 50 kw, 450 khz<br>24" scanner |                        |
| <b>403</b>   | Induction      | Cycledyne B-150                             | 15 kw                         |                        |
| <b>404</b>   | Induction      | Lepel<br>T-15-3-KC-TL                       | 15 kw                         |                        |
| <b>V1801</b> | Blast Room     | Rodeco Pre-Engineered Blast<br>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<br>HCSE IQCF                  | 18" W x 18" L x 39"H          | Class 3<br>1400 - 1650 |
| <b>V1004</b> | Tempering      | Lindberg 306030-E12                         | 30" W x 60" L x 30"H          | Class 3<br>300 - 1250  |
| <b>V1401</b> | Tempering      | Wisconsin Oven SDB-668-12E                  | 36' W x 36 H x 48' L          | Class 2<br>300-1250    |
| <b>V1402</b> | Tempering      | Wisconsin Oven SDB-668-12E                  | 36' W x 36' H x 48' L         | Class 2<br>300-1250    |