



Rural World Connections  
Joint Venture  
with  
Chesterfield Machining  
Technologies, LLC

# RWC-Chesterfield Technologies, LLC

A SDVOSB Company

2021 Capability Presentation

## **RWC-Chesterfield – Our Core Values**

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- Do things the right way with minimal waste
- Integrity
- Clear communication
- Delight our customers
- Retain our valued associates

## **RWC-Chesterfield – Our Focus**

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- To be our customer's most highly valued partner
- Machining and Assembly excellence
- Collaborative and easy to work with
- Properly protect sensitive information
- Competitive design, material, process and delivery solutions

## RWC-Chesterfield – Customer Care

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- Ship defect free, validated parts on time
- Competitive Pricing and on-time quotes
- Full certification of details
- Collaborative Part Design – reduce cost, complexity and scrap
- Project Management
  - Regular Project Reviews
  - Manage Engineering Changes
- Green Supplier Scorecards
- Ability to support drop in projects

# RWC-Chesterfield – Machine Line Up & Capabilities

**Machining of** : Large Welded Fabrications, Plate, Castings, Forgings and Pipe

**Substrates**: Steel, Cast Iron, Ductile Iron, Aluminum, Stainless Steel

**Assembly of** : Complex Machining Fixtures and Robotic Substations

|  |   |
|--|---|
| <b>Milling - CNC Machines - 10</b>       | <b>Process Window/ Weight Capacity (up to:)</b>         |
| Horizontal Machines                      | 98" x 157" x 90" - 44,000 lbs                           |
| Vertical Machines                        | 84" x 40" x 30" - 20,000 lbs                            |
| <b>Turning- CNC Lathes - 4</b>           | <b>Process Window / Weight Capacity (up to:)</b>        |
| Clausing - CNC Lathe                     | 70" Swing x 132" on center length - 40,000 lbs          |
| <b>Grinding Machines</b>                 | <b>Process Window (up to:)</b>                          |
| Horizontal Surface Grinder               | 24" x 96 " (25" vertical capacity)                      |
| O.D. Grinders                            | 12" x 30"   |
| Moore #2 JIG Grinder                     |   |
| <b>CMM Machine</b>                       | <b>Process Window</b>                                   |
| Sheffield Cordax CMM (Model# RS-150)     | 48" x 80" x 40"   |
| <b>Assembly - 8,000 sq ft</b>            |   |
| Robotic Sub Stations                     | Pneumatic, Hydraulic, Light Curtains, Safety Enclosures |
| Pneumatic, Hydraulic Stations            | Low Volume Capable                                      |
| <b>Supply Chain - All DFAR Compliant</b> |   |
| Welded Fabrications                      | Up to 80' long and 200,000 lbs                          |
| Steel, Ductile Iron Castings             | Up to 30,000 lbs  |
| Forgings                                 | Up to 30,000 lbs  |
| Sheet Metal                              | Laser cut sheet up to 0.50" thick                       |
| Paint                                    | Powder, 2K Urethane, CARC                               |
| Gear Cutting                             | Herringbone, Spiral Bevel                               |
| Splines                                  | With and without Lugs                                   |
| Blanchard and Mattison Grinding          | Able to hold Flush and Par to 0.001"                    |
| OD/ID Grinding                           | Able to hold concentricity tolerances of 0.0005"        |
| Environmental Testing                    | A2LA Certified  |

# RWC-Chesterfield – Milling

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- **CNC Machines:**
  - Up to 98”(2490mm) x 157”(4000 mm)
  - Up to 40,000 lbs (18,180 kgs) articles



Large Machined Weldments



Aerospace Weldments



## RWC-Chesterfield – Milling

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## RWC-Chesterfield – Milling

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Herringbone Gears



Gear Boxes



## RWC-Chesterfield – Milling

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Large Plates



Complex Gears



Oil Rig Couplers



Large Spiral Grooved Drums

## RWC-Chesterfield – Turning

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- **4 CNC Lathes:**
  - Up to 70" (178 mm) swing x 133" (3380 mm) long
  - Up to 12,000 lb. (5450 kg) articles



Spools/Sand Drums



High RPM Balanced Shafts

## RWC-Chesterfield – Turning

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70" Swing x 131" CNC Lathe



## RWC-Chesterfield – Turning

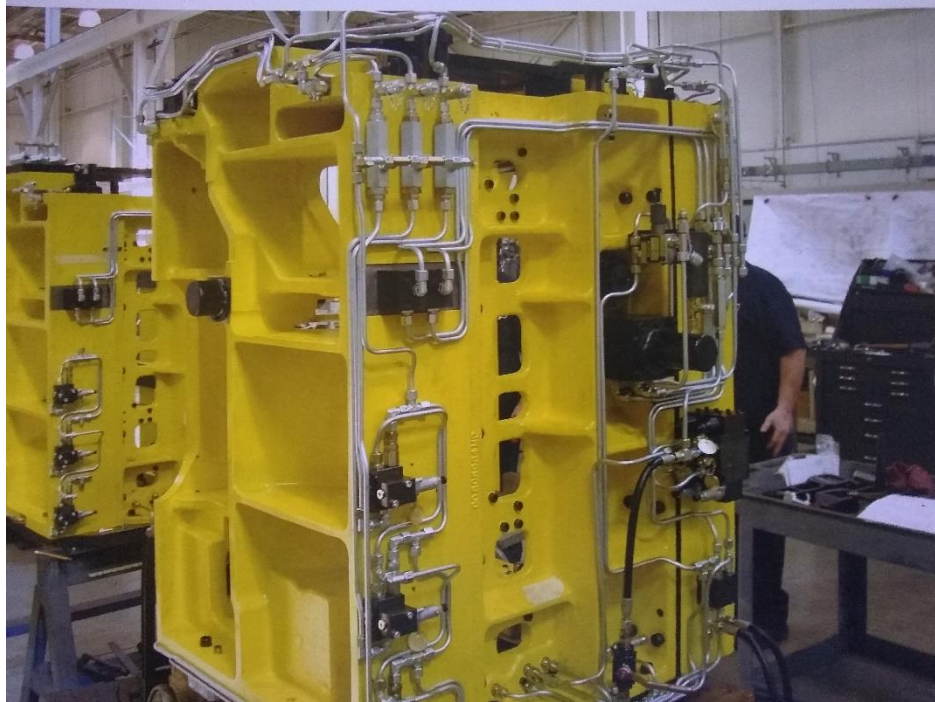




## RWC-Chesterfield – Build and Assemble

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- Complex Assemblies up to 50' long
- Hydraulic and Pneumatic Machining and Assembly Fixtures



Tomb Stone  
Machining Fixtures



Diesel Block  
Machining Fixtures

## RWC-Chesterfield – Build and Assemble

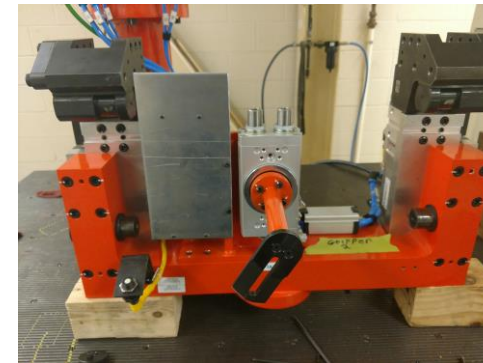
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Holding Fixtures



Die Sets/Mold Bases



Hydraulic/Pneumatic Stations



## RWC-Chesterfield – Build and Assemble

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Paint Shop Feather Duster

## RWC-Chesterfield – Low Volume Production

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Aluminum Rails



# RWC-Chesterfield – Certification

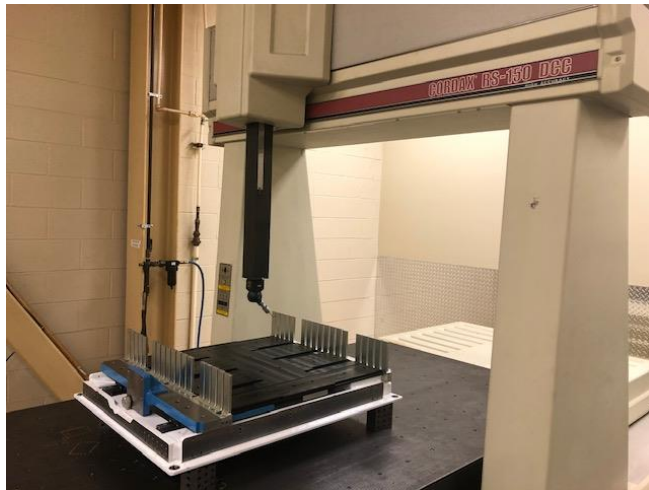
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## CMM:

- Parts up to 80" (2032 mm) x 40" (1016 mm) x 40" (1016 mm)
- Dedicated Climate Controlled Room on site

## Testing:

- Affiliated A2LA Laboratory
- Mechanical, Electrical and Material Testing
- Cyclic Corrosion, Load/Fatigue, Vibration and Dynamic Measurement



Cordax RS-150 50" x 84" Table CMM



Climate Controlled Chambers

## RWC-Chesterfield – Supply Chain

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- Welded Complex Fabrications up to 80' long
- AWS Certified Welders and UT/X-Ray Certs
- Castings – Grey Iron, Steel and Aluminum
- Paint – Powder Coating and 2K Systems
- Chrome Plating, Anodizing, Zinc/Nickel Plating
- Splines and Complex Gears
- 5-Axis Wire EDM
- 5-Axis CNC
- 72" VTL
- Large OD/ID Grind, Blanchard and Mattison Grinding
- Heat Treat – with lot certification
- Molded and Machined Plastic Components
- DVP & R Testing

# RWC-Chesterfield – Large Fab Partner Capabilities

Fabricated and Precision Machined Components  
Stress Relieving, Shot Blasting and Painting  
Assembly and Project Management Services

*RWC-Chesterfield Technologies*  
*Chesterfield, Michigan*  
*(586) 646 7100*

- 25 years of supplying quality manufactured parts to a wide base of industries worldwide.
- 225,000 square feet of manufacturing space across four manufacturing locations.
- 200 highly skilled and motivated team members with over 3000 years of combined experience in manufacturing complex small and large parts for various industries.

| <u>Equipment</u>  | <u>Qty</u> | <u>Capacity (up to)</u>                        | <u>Weight (up to)</u> |
|---|------------|--|-----------------------|
| CNC Horizontal Milling machines   | (24)       | 327" x 138" x 66"                              | 132,000 Lbs           |
| CNC Vertical milling Machines   | (6)        | 248" x 100 x 52"                               | 55,000 Lbs            |
| CNC Vertical Turning  | (2)        | 72" Swing x 60"                                | 60,000 Lbs            |
| <ul style="list-style-type: none"> <li>• All of the above machines are calibrated annually and are capable of holding 0.001" tolerances.</li> </ul> |            |  |                       |
| CNC CMM Inspection Machine  | (2)        | 268" x 100" x 72"                              | 88,000 Lbs            |
| Portable CNC Faro Arm (7 Axis)  | (1)        | 12 Ft Span                                     |                       |
| Yaskawa Robotic Welding Cells   | (2)        | 7 Axis with Trunnions                          |                       |
| Thermal Stress Relieving Oven   | (1)        | 30' x 14' x 9'                                 |                       |
| Shot Blasting Room  | (1)        | 32' x 20' x 12'                                |                       |
| CNC 5 Axis Plasma Machine   | (2)        | 40' x 14'                                      |                       |
| Paint Booths  | (2)        | 22' x 12' x 8'                                 |                       |
| Overhead Cranes   | (18)       | 50 ton with 25 ton Auxiliary (Max 150,000 Lbs) |                       |

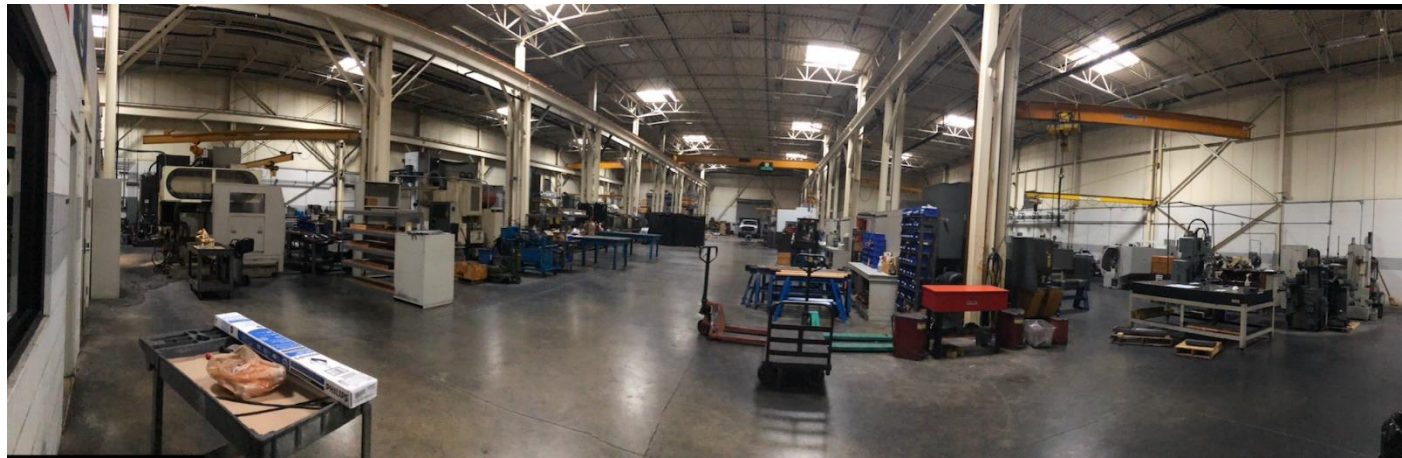
ISO 9001-2015 Certified  
CAN3-Z299.2-85 Certified  
Controlled Goods Certified  
CWB W47.1 Certified

# RWC-Chesterfield – Summary

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**RWC-Chesterfield** is committed to being continuously recognized as a World Class supplier of high quality machined large metal details, complex fixtures and assemblies for Defense, Aerospace, Space, Industrial, Automotive, Medical, Maritime, Oil/Gas Industry, Wind Turbine and other applications which require precision machining.

We strive to be your most highly valued partner.



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