

### Turn to the Masters™

P 800-435-6621 F 847-587-2000

# Ringmasters



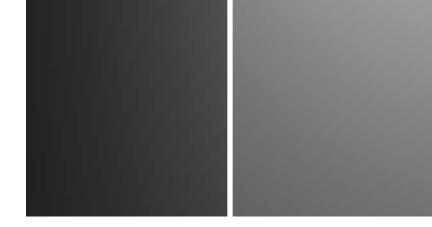
### COMPREHENSIVE RAW MATERIAL INVENTORY

Ringmasters satisfies an array of material requirements with a full inventory that includes carbon, alloy, tool steel, stainless and custom melts for specific requirements. All incoming materials undergo thorough inspection, including 100% chemical spectroanalysis.

### STRONG QUALITY STANDARDS

With our commitment to strict ISO 9001:2008 quality standards, Ringmasters consistently achieves customer acceptance rates of over 99% on product quality. To provide the highest quality forgings possible, we conduct a variety of quality tests, including spectroanalysis, ultrasonic and magnetic particle testing and in-house mechanical testing. By adhering to rigid quality procedures and maintaining tight cutting and rolling tolerances, we are able to meet exact customer specifications.





### WHAT RINGMASTERS CAN DO FOR YOU

Because forged rolled rings are the only thing we manufacture, we have mastered the ability to provide superior ring products within delivery times that are among the fastest in the business. In our advanced ISO 9001:2008 manufacturing facility in Wayne, Michigan, we meet customer specifications for a wide variety of ring configurations.

We specialize in small quantity orders, but can also accommodate larger quantities. Our ranges include:

- From 13" to 125" O.D.
- From 8" to 116" I.D.
- Up to 24" height
- Up to 18" wall thickness
- Parts weighing up to:
  - 7,000 lbs. in carbon steel
  - 6,000 lbs. in alloy and tool steel
  - 3,000 lbs. in stainless steel



### Perceived Quality of 99%

### MANUFACTURING CAPABILITIES

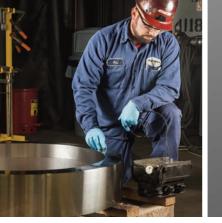
In order to meet the evolving needs of our customers, we are continually investing in our people, process, plant and capabilities. Quality is also maximized through continuous investment in personnel training, new equipment and equipment upgrades. Every Ringmasters customer benefits from our wide array of manufacturing equipment and services.

### **RINGMASTERS EQUIPMENT LIST**

- •2 Rolling mills: a 160/120 RAW and a 100/80 CNC RAW
- 3 Hydraulic preform presses: 750 tons, 1600 tons and 2500 tons,
- •7 Forge furnaces
- •A 20 ton Gantry crane
- •2 Circular and 5 band saws for raw material
- 3 Band saws for preparing test specimens
- •1 Band saw for segmenting rings
- •6 Quench tanks and 9 heat treat furnaces
- •5 CNC and 3 manual lathes
- Metallurgical lab with tensile and charpy capabilities
- Grade verification by x-ray analysis

98.5% Delivery Reliability





### DOWNSTREAM CAPABILITIES

Ringmasters is dedicated to serving all of our customers' requirements by offering a variety of secondary services.

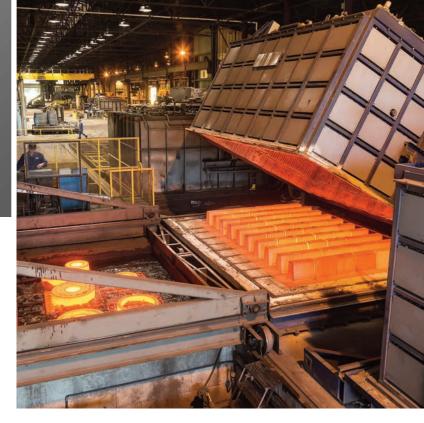
Downstream (post forging) internal processes:

- Heat treating
- Hardness testing
- Machining
- Saw cutting
- Parting, splitting and segmenting
- Shot blasting
- Destructive testing (tensile and charpy)
- Non-Destructive testing (ultrasonic and magnetic particle)

Through our network of approved suppliers, Ringmasters can also provide:

- Finish machining
- Welding

## Lead Times 1-3 Weeks



### FAST TURNAROUND BACKED BY OUR SHIPPING GUARANTEE

Ringmasters is committed to providing you with the industry's leading turnaround times on every ring we forge. In fact, **we have a formal shipping guarantee**. Most forged and shipped rings are guaranteed in just one week, and most thermal treated rings (one process) are guaranteed in just two weeks. This speed-to-market solution boasts a success rate of over 98.5%.

### **EXCELLENT CUSTOMER SERVICE**

At Ringmasters, being available for our customers is important to us. We offer quick responses to your inquiries. Our knowledgeable sales account managers provide fast, accurate quotations and are backed with the technical support needed to fulfill even the most complex ring requirements.

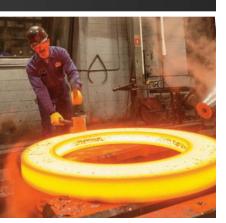




### FORGED ROLLED RINGS

### A Superior Seamless Solution

Rings manufactured by the forging process have many advantages over those produced from torch cutting, casting or fabrication. A custom forged ring allows greater versatility and improved quality while reducing material cost.



#### Compared to Torch-Cut Plate

### Compared to Casting

Forging allows greater size versatility while minimizing material waste, often reducing costs. Forging provides controlled directional grain flow for increased strength and offers superior structural integrity, eliminating inclusions and porosity.

#### Compared to Rolled and Welded Bar or Plate

Forging produces a seamless ring with unsurpassed structural integrity. Welding is eliminated, thus reducing risk of part fatigue and breakage.

### MARKETS THAT TURN TO MASTERS<sup>™</sup> INCLUDE:

- Bearing, Gear & Power Transmission
- Defense
- Industrial Equipment & Machinery
- Infrastructure
- Metal Processing
- Metal Working Machinery
- Metals Service Centers

- Mining Machinery & Equipment
- Off-Highway Equipment & Construction
- Oil & Gas Machinery & Equipment
  - Petrochemical & Refineries
  - Power Generation
  - Railroad Equipment
- Ship & Boat Building & Repairing





Ringmasters is represented by Scot Forge 8001 Winn Road, Spring Grove, IL 60081 P 800-435-6621 • F 847-587-2000