

Brass / Bronze / Aluminum

Capabilities

Press Equipment Can Handle

- From 440 tons to 2500 tons
- Produce parts up to 23 kilograms

Press Type Available

- Screw
- Coring
- Mechanical
- Hydraulic

First in Forgings

Established in 1917, Mueller Brass Company was the first commercial brass forging facility in the United States.

Advantages

- A subsidiary of Mueller Industries, Inc. (NYSE: MLI).
 Over 90 years of manufacturing excellence
- · Largest producer of brass rod in North America
- From processing raw material through forging and fully machined component, Mueller Brass Co. provides a complete solution
- · Can provide completely machined product
- · State of the art Metallurgical Laboratory
- TS 16949 certified facilities
- Six Sigma / Lean manufacturing

Services

Design Simulation

- Metal flow analyzed prior to tool building ensuring optimum part quality
- Analysis of stresses in tools prior to production means lower cost for the customer

Heat Treating

- Mueller Brass Co. has complete in-house heat treat capability
 - for brass, bronze, and aluminum
- Hardening of bronze and stress relief annealing of brasses are available

Technical Services

- Complete metallurgical analysis performed on site
- Mueller Brass Co. has equipment to test tensile strength, hardness, spectroscopy, and a scanning electron microscope
- · Certifications supplied upon request



Versus Casting

- The forging process compresses metal into a dense homogenous structure.
 High pressure applications are ideal as the process eliminates porsity
- Tensile strength is double that of sand casting
- Mechanical properties are enhanced by the forging process to withstand high impact and resist fatigue

Versus Bar Stock

- Dimensional accuracy and close tolerances minimize and may even eliminate machining some surfaces
- Lettering and logo's may be forged onto the surface of the part
- Raw material purchases and machining time may be reduced by contouring the forging to a near net shape



Brass / Bronze / Aluminum

















Current Forged Materials

Alloy	Description	Comment
Brass	and Bronze*	
C27450	No Lead Plumbing Brass	Complies with AB-1953.
C35330	DZR Brass	For parts and products requiring dezincification resistance
C36300	Copper – Lead – Zinc Alloy	For parts and products requiring lower lead percentage for lead free compliance strategies
C36500	Leaded Muntz Metal	For parts and products requiring lower lead percentage for lead free compliance strategies
C37000	Low Lead Forging Brass	Used for low leaded applications.
C37700	Forging Brass	General forging use.
C48500	Naval Brass High Leaded	Marine applications.
C64200	Aluminum Silicon Bronze	High strength and corrosion resistant.
C66800	Aluminum Manganese Bronze	For parts and products requiring high strength and wear resistance
C67310	Dynalloy Bronze Leaded	Heat treatable bearing bronze for wear application.
C67350	Dynalloy Swash Plate	Used for automotive market.
C67410	Dynalloy Bronze	Non heat treatable bearing bronze for wear application.
Alumi	num*	
2014	Aluminum and Copper	Excellent mechanical properties. Heat treatable.
3003	Aluminum and Magnesium	Moderate strength. Non heat treatable. Brazeable applications.
4032	Aluminum and Silicon	High wearing properties.
6020	Aluminum and Tin	Suitable replacement for leaded aluminum alloys.
62 SN	Aluminum and Tin	Suitable replacement for leaded aluminum alloys.
6061	Aluminum with Silicon and Magnesium	Heat treatable and medium strength. Very versatile with many applications.
6063	Aluminum with Silicon and Magnesium	Heat treatable and medium strength. Brazeable applications.

*Other materials available. Please consult Mueller with any requests.

Aluminum with Silicon and Magnesium

Aluminum with Silicon and Copper

Mueller Brass Co. Services a Wide Variety of Markets

Aluminum and Zinc

- Automotive
- Plumbing
- Welding
- ATV

6082

7075

A390

- Refrigeration
- · Fittings for Hydraulics
- Pneumatics
- Compressor
- Beverage
- Paint components
- Medical
- A/C
- Electrical
- Ordnance
- Alternative Fuel Valves
- Industrial Valves



Heat treatable and medium strength. Very versatile with many applications.

Heat treatable and very high strength. Applications for highly stressed parts.

Heat treatable. For highest strength applications.

Mueller Brass Forging Company, Inc. 2199 Lapeer Avenue Port Huron, MI 48060 Phone: 810-987-7770 Fax: 810-987-6661 forge@muellerindustries.com www.muellerindustriesipd.com