

## An Industry-Leading, State-of-the-Art Foundry for Aluminum Billet Casting Services

In the 20 years since its installation adjacent to Aluminum Shapes, LLC's 1.3 million square foot aluminum extrusion, anodizing, and fabrication facility, the company's state-of-the-art foundry has refined and redefined casting of aluminum log and billet for the extrusion industry. Our three melting furnaces, two melt holding/transfer furnaces, and two casting pits enable us to produce up to 80,000 lbs. of aluminum per drop.



Utilizing the latest Wagstaff® NuMax™ and MaxiCast™ casting technologies, Aluminum Shapes, LLC produces a wide range of 6000 Series aluminum casting alloys for use in extrusion presses. "Special" alloyed logs can also be produced in the 6000 Series to meet specific customer equipment. Typically, material chemistry is altered to improve characteristics such as machineability or finish, depending on the end use of the product. Minimum quantities are required for these customer specific alloys.

### Our Casting Capabilities

Aluminum Shapes, LLC's NuMax billet casting mold technology is an economical solution for producing billets and results in billet quality second only to AirSlip® Air Casting Technology. Along with a DualJet™ Enhanced Cooling Technology feature, its robust design, ease of implementation, and use make this mold technology an attractive choice for billet production. This cost effective technology allows us to produce:

- 7, 9, 11, 14, and 16" diameter logs
- Saw billet cut lengths from 20" to 40"
- A maximum crop length of 240"
- Up to 80,000 lbs. cast per drop



### Other Related Casting Services Include:

- In-house sampling
- Ultrasonic inspection
- Full spectrometer analysis of metal composition

### Available Billet Casting Alloys

Aluminum Shapes, LLC specializes in producing the following 6000 Series alloys in log diameters ranging from 7" to 16":

- 6060
- 6061
- 6063
- 6101
- 6005
- 6105

• Plus, the ability to produce "special" alloyed logs in the 6000 Series to meet specific customer requirements.





## Our Equipment Capabilities

The process of manufacturing precision-formulated billets in our foundry begins with reverberatory furnaces that melt and process recycled aluminum ingots and recycled aluminum. The molten aluminum is then transferred into the hold/tilting furnaces where it is meticulously tested and then cast into finished logs. The technologically sophisticated foundry equipment that enables this casting process includes:



- Wagstaff® NuMax™ billet and MaxiCast™ casting technology
- Two SECO/WARWICK hold/tilting melting furnaces
- Three SECO/WARWICK homogenizing ovens
- Three melt furnaces
- Two casting pits
- Ceramic foam filtration system
- Fluxing and aluminum Novelis® Jet Cleaner™ degassing system

### Other Available Services Include:

- Aluminum anodizing
- Aluminum extrusions
- Fabrication



*A Fully Integrated Aluminum Services Resource*

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