



ALUMINUM FOUNDRIES

MODERN PRODUCTION SOLUTIONS
FOR ALUMINUM CASTINGS



- Sand Metalcasting
- Permanent Mold Metalcasting
- Core Production
- Pattern Making
- Heat Treating
- Engineering
- Machining



OVERVIEW

Founded in 1938, Edelbrock Corporation is recognized as one of the nation's premier designers, manufacturers and distributors of performance replacement parts for the automotive and motorcycle industry. Our knowledge of cast aluminum products gained over our first 52 years in business provided the catalyst to open our first foundry in 1990. Edelbrock expanded operations and processes with the opening of a second facility in 2007 that specializes in permanent mold metalcasting. We are now able to provide our clients with a comprehensive and complete solution to their aluminum casting needs, thanks to our diversity in casting processes and services.

Edelbrock Foundries services include concurrent design engineering, traditional and CNC pattern making, tooling production, core production, green and dry sand mold, permanent and semi permanent mold metalcasting, solution heat treat to T-6 spec, finishing and machining.

Our clientele spans all industrial markets with a need for aluminum castings and finished aluminum products.

EDELBROCK SAND FOUNDRY

QUICK FACTS

- Established: 1990
- 300 series alloys, specializing in A356 and 808
- Facility: 115,000 sq./ft.
- Quality Standard: ISO 9001:2008 registered

TECHNOLOGY

- Two fully automated Cope and Drag molding lines
- Automated flaskless Match Plate molding line
- Two Modern Tower Jet Melter Furnaces (4,000 lb./hr melt rate)
- Three Reverb natural gas furnaces (25,000 lb. holding capacity)
- Automated High Volume Green sand handling system
- Dry sand mold line

CAPACITIES

- Three Automated Mold Lines**
 - Two automated 20" X 30" cope and drag mold lines are equipped with BMM Molding machines
 - Sinto brand 20" X 24" matchplate flaskless molding
- Dry Sand Molding:** A Dry Sand continuous mixer adds to our molding process, capacity, and diversity.
- Castings:** Automated lines are capable of core intensive castings up to 60-pounds
- Sand handling systems:** The sand foundry has a self contained sand handling system capable of processing 100 tons of sand per hour by mixing 5,000 pound batches of sand every 90 seconds. Each batch is tested by a Hartley Automatic Controller for proper moisture content and compactability. Each molding machine is replenished automatically by a complex conveyor system traveling throughout the building through 400 feet of underground tunnels.
- Core Production:** Edelbrock core production is anchored by (26) core machines, this includes (3) cold box and (23) shell machines.
- Robotic Ladling Systems:** Two ABB and one Shamrock 100 pound bottom pour ladling robots pour aluminum at a preset value for unsurpassed quality. The unique bottom pour design fills the ladle below the metal surface resulting in reduced dross and turbulence for a more consistent casting quality and better yield.



AMERICAN MADE

Located in Southern California, Edelbrock is an American company with an affinity for American industry. If American Made products are part of your business model, Edelbrock can fulfill your needs competitively and quickly.



QUALITY ASSURANCE

Edelbrock Corporation is committed to producing quality products, providing total customer satisfaction and continually improving the effectiveness of the quality management system. Our ISO 9001:2008 registration guarantees our commitment to providing our customers with world-class quality and superior customer service.

EDELBROCK PERMANENT MOLD FOUNDRY



QUICK FACTS

- Established: 2007
- 300 series alloys, specializing in A356
- Facility: 70,000 sq./ft.
- Quality Standard: ISO 9001:2008 registered

TECHNOLOGY:

- Modern Tower Jet Melter Furnace (3,000 pound per hour)
- Robotically controlled pouring
- PLC controlled Hall Gravity & tilt molding machines
- PLC controlled Laempe cold box and 23 shell core machines
- Tinker Omega TOM 250 continuous sand mixer
- Two 1000 pound Baker melting batch holding furnaces



CAPACITIES

- Castings:** Permanent and Semi-permanent mold castings.
- Core Production:** Permanent mold core production is processed through a high-volume Laempe automated and 23 shell core machines.
- Molding Machines:** Two semi-automatic Hall vertical molding machines PLC controlled, two semi-automatic 3HS Hall tilt molding machines PLC controlled (36 X 38).
- Dry Sand Molding:** Dry sand molding adds to our services. We can process 300 lbs/min and produce molds up to 1,000 lbs.
- Robotic Ladling Systems:** A KUKA 6-axis robotic ladle provides precise metal pouring. The 6-axis technology produces perfect and repeatable pours for outstanding casting quality.



CORE REMOVAL & FINISHING

- Core sand removal equipment includes:
 - Bake out oven
 - (2) Automated Herschel vibratory machines
 - (3) A-Frame vibratory machines
- Hand finishing and high-tech robotic equipment is used to deliver machine ready castings.



METALLURGICAL ANALYSIS & QUALITY CONTROL

- Reduced atmospheric testing for scientific gas analysis
- Specific gravity testing ensures proper metal density
- Spectrograph testing to verify chemical properties
- Coordinate Measuring Machine (CMM) for inspection and layout
- Pressure testing
- Hardness testing to verify specified heat treat
- Microanalysis material testing for exact microstructural assesment





VALUE ADDED SERVICES

HEAT TREATMENT

Edelbrock offers Solution and Ageing using CEC continuous equipment, providing the very latest in heat treat processing technology. Our heat treat is certifiable to AMS 2750 and capable of 4,000,000 pound annual throughput.

ENGINEERING

Edelbrock engineering, located in our Torrance, CA facility, staffs only the best and the brightest mechanical design engineers. Utilizing ProEngineer 3D modeling software, we have the capabilities to engineer your product or use your engineering file for rapid prototyping and tooling production. Additional engineering services include Computational Fluid Dynamics (CFD).

RAPID PROTOTYPING

With two rapid prototyping stations, Edelbrock can turn your engineering design into a working model for modeling prior to producing tooling.

PATTERN MAKING AND TOOLING

Affordable, fast turn-around offering CNC and traditional methods.

MACHINING

Edelbrock manufacturing is ISO 9001:2008 registered and equipped with (55) CNC machines ready to deliver you a finished product.



Contact us for more information

Edelbrock

Free DVD available: Preview our facilities, capabilities and quality.

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EDELBROCK FOUNDRIES, USA

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for Aluminum Castings.