

INCAST®

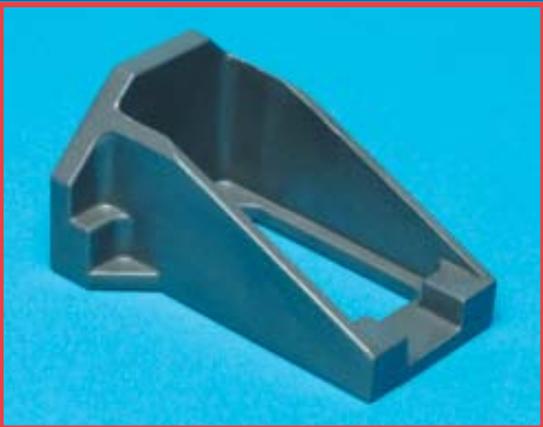
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Globalization Book
Review p. 17



2004 Contest Winners
Showcase Investment
Casting Process



The
Changing
Economics
of Low-Volume
Investment
Casting



Investment
Casting
Institute

CASTING CONTEST

Automotive Award

Alloy Choice and Quick Turnaround Point to Investment Casting & Aristo Cast to Produce Fuel Pump Removal Tool

Alloy choice, overall configuration and rapid turnaround were major considerations when choosing the investment casting process and **Aristo Cast Inc.** to manufacture a fuel pump removal tool for the automotive industry.

Winner of the Automotive Award in the Investment Casting Institute's Casting Contest, the fuel pump removal tool was designed as a joint project between Aristo Cast and the makers of the Ford Focus.

An emergency recall required the removal of the fuel pump that was attached to the inside bottom of the fuel tank. Since the tool would be used in a gas fume environment, a nonsparking metal was necessary; The alloy chosen was aluminum bronze.

High strength was also needed since the tool would

be required to cut through four supports on the bottom of the pump without damaging the coating inside the tank that prevent fuel from seeping.

The customer in this case had an idea of what the tool should do, but not a complete design. Aristo Cast, Inc,

using its experience with rapid prototyping technology and its casting expertise was able to provide several design iterations in the form of plastic prototypes within a 48-hour period, and produced 17,100 aluminum bronze castings in seven weeks from final design concept including

packaging, assembly and shipping of the complete product to auto dealers throughout the world.

The investment cast fuel removal tool saved the auto manufacturers the cost of completely replacing the fuel tank.



Investment cast fuel removal tool manufactured by Aristo Cast showcases investment casting alloy choice and quick turnaround.

Aristo Cast Receives Recognition in AFS Casting Competition

Aristo Cast Inc., Almont, MI, was recognized recently with an honorable mention award in a casting contest sponsored by the American Foundry Society.

The award-winning component was a swing arm

for an unmanned military vehicle

The aluminum component was produced completely via rapid prototyping with the first two components being delivered 16 calendar days after the date of the order.

Aristo Cast, Inc.

For the past two years, Aristo Cast has won awards from the AFS and ICI. Quantities from 1-1,000,000. Rapid prototypes and production tooling, all built totally in-house. Highest quality ferrous and non-ferrous alloys including magnesium.

Many foundries claim magnesium, but we do it.

810/798-2900 Fax: 810/798-2730
Web Site: www.aristo-cast.com

