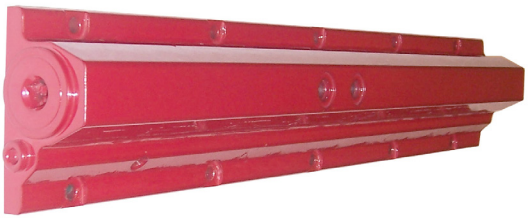
Dura-Bar®
Continuous Cast Iron Bar Stock

Application

Fuel Rail

Industry	Automotive
Dura-Bar Grade	65-45-12 Ductile Iron
Original Material	Sand Castings
Problems Solved	Pressure Issue, Machining Cycle Time, Material Quality



In need of particular material specifications and a large volume of parts, the manufacturer of a fuel rail for an internal combustion engine turned to Dura-Bar 65-45-12 continuously cast in a near-net shape. Material requirements were a problem for the manufacturer of the fuel rail, part of the electronic hydraulic unit injector (HEUI).

Aluminum couldn't withstand the operating pressure of 6,000 psi. Iron sand castings had porosity and inconsistency. Other quality requirements included dimensional control and bend & bow tolerances. Steel had a lengthy extrusion process and a lot of time was required to gundrill a hole in each piece. Dura-Bar offered a huge cost savings because of its superior machinability allowing the part to be drilled in only five minutes, as opposed to the 30 minutes required for steel.

The high volume of parts needed made it possible for Dura-Bar's engineering and manufacturing staffs to produce a custom-shaped Dura-Bar that could be cut to approximate the shape of the casting – without the inherent defects typically found in iron castings. This was one of the very first custom shapes (1995) Dura-Bar created via collaboration with a customer, and the part is still in use today (2016).

For more information contact Dura-Bar® | 1800 W. Lake Shore Drive, Woodstock, IL 60098-6911
800-BAR-MILL(227-6455) | 815-338-7800 | Fax: 815-338-1549 | dura-bar.com | sales@dura-bar.com

zero defect guarantee