Dura-Bar®
Continuous Cast Iron Bar Stock

Application

Accessory Drive Gear

Industry	Pump and Compressor
Dura-Bar Grade	65-45-12 Ductile Iron
Original Material	Hot Rolled 8620 Alloy Steel
Problems Solved	Cost Reduction, Machining Cycle Time, Heat Treat Growth
Cost Savings	Total part cost reduced by 33%

Utilized in compressive and air hydraulic pumps in diesel engines, the accessory gear component is a high-volume production part for an end use gear manufacturer. Converting to Dura-Bar continuous cast iron from 8620 steel provided numerous benefits for the gear manufacturer, including reduced cost, improved quality and faster machinability.

In addition to the faster machining cycle times achieved simply due to Dura-Bar's continuous cast process and intrinsic graphite properties, the gear manufacturer was able to save time and money by eliminating the deburring and finish grinding processes. And with Dura-Bar's inherent ability to dampen vibration, the gear component produced is quieter. Since Dura-Bar weighs approximately 10% less than steel, it is also a lighter weight part as well.

The improvements did not stop there, however. To increase both wear resistance and tooth bending life, the gear component is austempered. The microstructure in Dura-Bar 65-45-12 can be controlled providing consistent heat treat growth.

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

Form: 99-75-00-06-00 0619