Dura-Bar®
Continuous Cast Iron Bar Stock

Application

Hydraulic Cylinder Piston

Industry	Fluid Power
Dura-Bar Grade	65-45-12 Ductile Iron
Original Material	Hot Rolled 1215 Alloy Steel
Problems Solved	Wear Resistance, Material Performance, Cycle Time
Cost Savings	Total part cost reduced by 15%

Designing and producing a broad range of hydraulic components and systems that serve all major industrial markets, this customer needs a quality material that would ensure consistent performance from its pistons.

A number of Dura-Bar's ductile iron features made the match a perfect one. This fine grained microstructure coupled with the presence of graphite improves wear characteristics, which will extend the life of the cylinder while maintaining performance as it relates to bearing loads. In fact, it's those same features that are the most significant contributing factor that affects ease of drilling and tool life.

Dura-Bar's 65-45-12 has the highest ferrite percentage, making it the easiest to machine. The material's machinability led to a direct cost saving for the customer.

Because of its inherent vibration damping, Dura-Bar ductile provided greater shock absorption as well. That ensured not only a longer piston life but a longer cylinder life too. Dura-Bar even provided much higher compressive strength than steel could offer. Dura-Bar's broad range of inventory size selection was an advantage, too. Pictured here is a 1-and 1/2" diameter piston.

Contact us today to discuss your application and how you can save with Dura-Bar.

For more information contact Dura-Bar® | 1800 W. Lake Shore Drive, Woodstock, IL 60098-6911
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zero defect guarantee

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