



## Hydraulic Cylinder Piston



<b>Industry</b>	Fluid Power
<b>Specification</b>	Dura-Bar 65-45-12
<b>Redesign</b>	From steel
<b>Design Advantage</b>	Improved machinability
<b>Cost Savings</b>	Part cost reduced by 15%

Designing and producing a broad range of hydraulic components and systems that serve all major industrial markets, this customer needed 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. The fine grained microstructure of Dura-Bar assisted in reducing bearing loads. In fact, its matrix structure is 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 savings 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.