

## Cast Iron Information

To create cast iron, pig iron is remelted, usually with large amounts of scrap iron and steel. Other elements are also added before casting.

**Gray Iron**—Commonly includes added silicon. The carbon content,

in the form of graphite flake, is distributed through the metal.

**Ductile Iron**—Includes small amounts of magnesium or cerium to improve workability.



Cylindrical Rod

### CAST IRON COMPARISON CHART

Material	Tensile Strength (psi)*	Yield Strength (psi)*	Hardness (BHN)*	Toughness	Wear Resistance	Formability	Machinability†	Weldability
<b>Gray Iron</b>								
Class 40	40,000	—	197-301	Good	Good	Not Recommended	Good	Not Recommended
<b>Ductile Iron</b>								
Alloy 80-55-06	80,000	55,000	187-255	Good	Good	Not Recommended	Excellent	Not Recommended

(\*) Typical levels @ 1" diameter. (†) Compared to AISI 1212, which has 100% machinability.