

Dura-Bar Gray Iron Grades

Overview

Dura-Bar continuous cast gray iron grades contain flake graphite in matrices that range from pearlite to pearlite plus ferrite. The matrix will influence machinability, strength, hardness and wear resistance. In general, a fully pearlitic matrix will have the best mechanical properties and will be readily machinable. Bars containing ferrite in the matrix will be easier to machine but will be lower in strength and wear resistance.

Grade	Tensile Strength (psi minimum)	Fatigue Strength (psi)
G2	40,000	20,000
G2P	40,000	tbd





G2 - Pearlitic Gray Iron

Dura-Bar G2 is a pearlitic gray iron containing Type A graphite. Dura-Bar made to this robust specification is a good fit for a variety of applications, due to its good machinability, wear resistance and vibration damping properties. G2 is built around ASTM A48 Class 40 gray iron, which is validated from a separately cast bar. Minimum tensile is 40,000 psi. G2 is a stock grade, available in rounds, rectangles, squares and tubes.*

G2P - Highly Pearlitic Gray Iron

Mechanical properties are preliminary minimums based on production data from a range of sizes and shapes, both round and square/rectangle. The preliminary minimum values of ultimate tensile strength, yield strength, elongation, and hardness are below:

*Sizes and Shapes

Please see our website for current size information: www.dura-bar.com/products/stock-sizes, or contact your Dura-Bar Account Manager. All custom shapes are special order, and are quoted individually at minimum run quantities.

Typical Applications

Automotive: Gears

Fluid Power: Cylinder blocks, Gerotors, Glands, Manifolds, Pistons, Rotors, Valves

Machinery: Barrel Rollers, Bushings, Chain Sheave Rollers, Chuck Bodies, Die Blocks, Flywheels, Gear Racks, Gears,

Housings, Pile Drivers, Press Rams, Pulleys, Rams, Rotary Tables, Tie Rod Nuts

Miscellaneous: Core Boxes, Dies, Disamatic Pouring Rails, Grinding Rolls, Mill Liners, Pattern Plates, Plunger Pin

Oil and Gas: Slips, Cones, Retainers, Mandrels, Ball Seats, Lock Rings, Completion Tool Components

Power Transmission: Gears, Pulleys

Pump and Compressor: Gears, Housings, Liners, Pistons, Rotary Screws, Rotors Steel Mill: Guide Rolls, Pinch Rolls,

Runout Table Rolls

Transportation: Gears, Motorcycle Disk Brake, Pulleys, Rail Spacers

The above list is only a small sampling of the hundreds of parts being made from Dura-Bar.

Contact us today to discuss your application and how you can start saving.