

Gasite® 28G

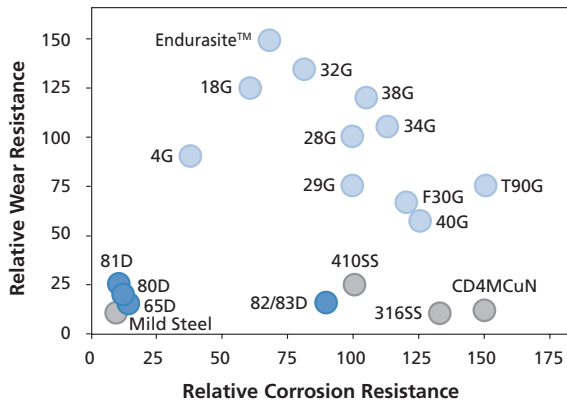
Basic Specifications

Abrasion resistant, high-chromium white iron.

Mechanical Properties

Tensile Strength: 85-125 KSI

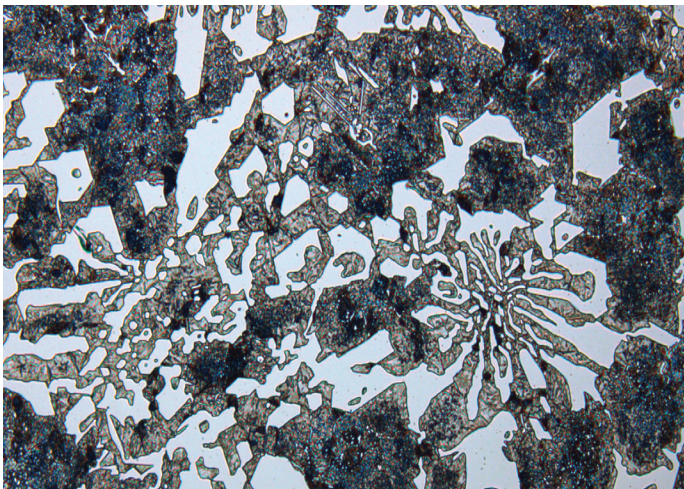
Hardness (per ASTM A532) ≥ 600 HBN/56 HRC



Wear & Corrosion Resistance Index for GIW® Minerals alloys

Microstructure

Gasite® 28G is a specially refined, high-chromium white iron alloy. The microstructure consists of chrome carbides in a matrix of martensite and a small amount of austenite.



Typical microstructure of 28G alloy (magnification 200X)

Wear Resistance

Gasite® 28G is one of the best materials in wear resistance among GIW® Minerals white iron alloys. 28G is our recommended standard for most slurry applications.

Corrosion Resistance

28G has moderate resistance against corrosive conditions.

The recommended pH range is 4.5-12, depending on chemical contents and temperature of slurry.

Chemical Specifications

Gasite® 28G is a proprietary metal (manufacturing process patent #4,638,847). The alloy conforms in chemistry and physical properties to ASTM Standard A532, Class III, Type A and to DIN EN 12513, EN-GJN-HV600 (XCr23), EN-JN3049.

Element	ASTM	Gasite® 28G
Carbon	2.3%-3%	2.3%-2.8%
Chromium	23%-30%	24-28%
Silicon	1.5% max	.5-1.2%

Test Specimens and Certifications

A chemical analysis of each heat is conducted prior to pouring. For further quality control, we pour test bars from random heats. After heat treatment, the tensile strength and hardness of the test bars are measured and recorded, and the casting is checked for uniform hardness at several locations.

Heat Treatment

Gasite® 28G is heat treated to increase its hardness, which results in maximum wear resistance.

Application

With its superior physical properties and wear resistance, the Gasite® 28G alloy is well suited for the manufacture of pump parts in applications where a degree of corrosion resistance may be required.



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GIW® Minerals