

Maxalloy 5

Material Data Sheet

Wilfley pumps and parts are available in Maxalloy 5 a Wilfley proprietary high chrome hard iron alloy.

Maxalloy 5 offers high material hardness and toughness for excellent wear in the most difficult abrasive applications. Through special proprietary processing chrome carbides are interspersed in a hardened martensitic matrix to enhance wear performance.

The average chrome content in the matrix is also increased improving its corrosion performance. Maxalloy 5 may be applied within a 3.6-9.5 pH range.

Mechanical Properties

Specification	Hardness HBN (Typical)	Tensile Strength	PH Range
ASTM A532 Class III, Type A	580-675	80,000 psi	3.6-9.5

Chemical Composition (weight %)

C 2.0-3.3 max	P 0.1 max
Cr 23-30	S 0.06 max
Ni 2.5 max	Si 1.5 max
Mo 3.0 max	Fe balance
Cu 1.2 max	Mn 2.0 max