

PRODUCT DATASHEET

NIT 50 Annealed

Grade

Austenitic stainless steel (UNS S20910 / Nitronic® 50 / XM19)

Type

Corrosion resistant stainless steel, usually delivered in the annealed condition though a high strength (HS) can be supplied*.

Composition	
Element	Weight%
Carbon	0.06 max
Silicon	1 max
Manganese	4 - 6
Phosphorus	0.04 max
Sulphur	0.01 max
Molybdenum	1.5 - 3
Chromium	20.5 - 23.5
Nickel	11.5 - 13.5
Manganese	4 - 6
Vanadium	0.1 - 0.3
Niobium	0.1 - 0.3
Nitrogen	0.2 - 0.4

Notes: HS (high strength 105ksi yield) version up to 3" dia can be achieved through controlled hot working practices.

This grade cannot be hardened by heat treatment

Nitronic® is a trade name

Property	Values
0.2% Yield Strength	55 KSI min (379 MPA min)
Ultimate Tensile Strength	100 KSI min (689 MPA min)
Elongation	35
Reduction of area	55% min