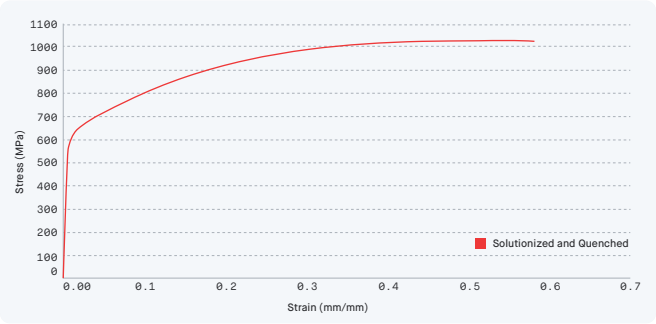
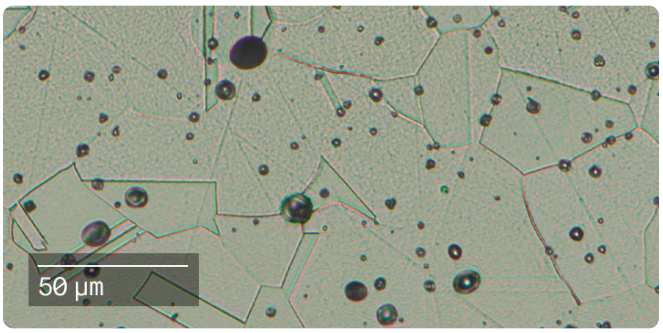
[Material Data Sheet]

Nickel-Free Austenitic Stainless Steel





COMPOSITION %

Fe	balance
C	0.02 (max)
Cr	16.5 – 17.5
Mn	10 – 12
Mo	3.0 – 3.5
N	0.75 – 0.90
Si	1 (Max)
Ni	0.1 (Max)
P	0.03 (Max)
S	0.03 (Max)

MECHANICAL PROPERTIES

	Standard	Production System™ Solutionized and Quenched
Density (g/cc)	ASTM B311	**7.70 ± 0.02**
Hardness (HRC)	ASTM E18	**30.9 ± 0.9**
Surface vickers hardness, 0.3kg load* (HV)	ASTM E92	**313 ± 12**
Relative magnetic permeability	ASTM A342 method 4	**1.02**
0.2% Yield stress (MPa)	ASTM E8	**585 ± 12**
Ultimate tensile stress (MPa)	ASTM E8	**1020 ± 15**
Elongation (%)	ASTM E8	**56 ± 7.5**
Young's modulus (GPa)	ASTM E111	**198**
Charpy Impact** (J)	MPIF59	**400**

ATTRIBUTES & APPLICATIONS

Paramagnetic Anti-inflammatory Nickle-Less Environmentally Stable Stainless Steel

Nickel release rate well below limits established in the EU-guideline 94/27/EC [EN 1811]

Crevice corrosion resistance and superior pitting resistance compared to 316L

Non-magnetic components requiring excellent corrosion resistance, good hardness & strength with superior ductility.

Wearable electronics, medical instruments, dental appliances, jewelry, and food processing components

OTHER STANDARD DESIGNATIONS

X15CrMnMoN17113

UNS S29225

* Surface hardness measured 100 microns from the surface in a polished section
** 5x10mm un-notched bar