

Martensitic Steel

July 2016 - rev.1.0

KLEINOX 4614 - 465 KL

ASTM F899, A564

UNS S46500, AMS 5936

CHEMICAL COMPOSITION %

C%	Si%	Mn%	P%	S%	Cr%	Mo%	Ni%	Ti%	Fe%
Max	Max	Max	Max	Max	11,00	0,75	10,75	1,50	balance
0,02	0,25	0,25	0,015	0,010	12,50	1,25	11,25	1,80	

USES AND APPLICATIONS

KLEINOX 4614 is a premium precipitation hardening martensitic stainless steel. This VIM / VAR melted and remelted steel has been designed to provide in the cold worked and H900 aged a UTS up to 2090 MPa, with an excellent tensile notch resistance coupled to a high toughness. In the H1000 condition it has a most favorable combination of high strength, stress corrosion resistance and toughness.

This steel is well indicated for the production of surgical, chemical, pharmaceutical and agro food instruments.

EXECUTIONS

Diameters	< 2,50 mm cold drawn ≥ 2,50 mm drawn or ground, rigidity Ra 0.4 (N5)
Tolerances	ISO h8 (up to h5)
Delivery conditions	in cold drawn bars 3m, annealed condition

MECHANICAL PROPERTIES

Magnetism	magnetic
Welding	good welding
Hardness Max	55 HRc
Cutting speed	20 - 30 m/min
Heat treatment	see detailed tab

OTHER INFORMATION

Diagrams, treatment tabs or other information on request.