

Martensitic Steel

July 2016 - rev.1.0

KLEINOX 4112

DIN X90CrMoV18

EN 10088-3

CHEMICAL COMPOSITION %

C%	Si%	Mn%	P%	S%	Cr%	Mo%	V%	Fe%
0,85	Max	Max	Max	Max	17,00	0,90	0,07	balance
0,95	1,00	1,00	0,04	0,03	19,00	1,30	0,12	

USES AND APPLICATIONS

KLEINOX 4112 (AISI 440B) hardenable martensitic stainless steel with a low S content and ESR remelted.

It has a good wear resistance and, because of its high C content, it also has a good resistance to bluntness. It is widely used in the cutlery industry where it substitutes the 4034 and 4035 grades. The corrosion resistance is at its best when the parts are previously tempered, polished and passivated.

It is well adapted for production of medical, dental and surgical instruments and for agro food industries.

EXECUTIONS

Diameters	1.00 - 15.00 mm
Tolerances	ISO h8 (up to h5)
Delivery conditions	in cold drawn or ground bars 3m and Coils

MECHANICAL PROPERTIES

Before hardening

Tensile Strength	925 N/mm ² max
Heat treatment	hardening: 950 - 1050°C
Hardness Max	58 HRc
Cutting speed	25 - 40 m/min
Lubrificant-cooling fluid i.e.	INOX or ORTHO Motorex

OTHER INFORMATION

Diagrams, treatment tabs or other information on request.