

Austenitic steel

July 2016 - rev.1.0

# KLEINOX 4310

DIN X10CrNi18-8

EN 10088-2, 10151

## CHEMICAL COMPOSITION %

C%	Mn%	Cr%	Ni%	Mo%	N%
0,05	Max	16,00	6,00	Max	Max
0,15	2,00	19,00	9,50	0,80	0,11

## USES AND APPLICATIONS

**KLEINOX 4310** Cr-Ni austenitic steel alloy whose average tensile strength can be increased considerably by cold rolling. If cold worked this alloy is applicable to welding with a good fatigue resistance. It is possible increase tensile strength from 80 up to 150 N/mm<sup>2</sup> through tempering 400°C, 1-2h.

This steel is well indicated for the production of springs and plates.

## EXECUTIONS

<b>Thickness</b>	0.05 – 1.5 mm
<b>Width</b>	1.5 – 1000 mm
<b>Width tolerances</b>	DIN 59381 – on request +/- 0.03 mm
<b>Thickness tolerances</b>	DIN 59381 R, F or P
<b>Surface</b>	polished Ra max 0.15 my
<b>Edges</b>	slit, deburred, rounded
<b>Straightness</b>	1 mm/m – on request 0.75 mm/m
<b>Flatness</b>	0.20% of the width
<b>Tensile Strength</b>	1000 – 2200 N/mm <sup>2</sup>

## MECHANICAL PROPERTIES

<b>Magnetism</b>	Magnetic beyond 1300 N/mm <sup>2</sup>
<b>Density</b>	7.9 g/cm <sup>3</sup>
<b>Thermal conductivity</b>	15 W/Mc
<b>Specific heat</b>	0,50 J/gK
<b>Electric resistance 20 °C</b>	0.73 Ω mm <sup>2</sup> /m
<b>Electric resistance 200 °C</b>	0.85 Ω mm <sup>2</sup> /m
<b>Magnetic permeability</b>	50-70 gauss