



Grade	Code	AISI	Martensitic Stainless Steel
1.4313	X3CrNiMo13-4	415	

Steel Properties

1.4313 is corrosion resistant, soft martensitic chrome-nickel steel with molybdenum addition. Very good strength and toughness properties.

The material 1.4313 impresses with its very good mechanical properties. Has good toughness properties in the tempered state. Can be used in the temperature range from -60°C to 300°C. The material 1.4313 also has a medium corrosion resistance and machinability, as well as poor weldability and is easy to polish. 1.4313 can be welded using arc welding.

Chemical Composition (1.4313)

C %	P %	Si %	Mn %	S %	Cr %	Mo %	Ni %	V %	Cu %
0,05 max.	0,04 max.	0,70 max.	1,50 max.	0,015 max.	12,00 – 14,00	0,30 – 0,70	3,50 – 4,50	0,02 max.	-

Mechanical Properties (QT 900)

Product Form	Rp0.2, Mpa	Rm, Mpa	Elongation [%]	Hardness [HB]
Bar & Rod	> 800	900 - 1100	> 12	-

Suitable For

Due to its good mechanical properties, 1.4313 is used in the chemical and petrochemical industries, plant engineering, the pump industry and turbine wheels. 1.4313 is also used in power engineering and in valve construction.

For example, waves, valves, vanes, pump covers and pump housings are manufactured from material 1.4313.

Remarks

Type 1.4313 is delivered most often after heat improvement - in QT650, QT780 and QT900 conditions in the form of round bars. Steel is not suitable for welding.

Specification

1.4313, X3CrNiMo13-4, AISI 415