



Grade	Code	AISI	Martensitic Stainless Steel
1.4122	X39CrMo17-1	-	

### Steel Properties

The martensitic material 1.4122 is characterized by an increased corrosion resistance which is achieved by adding nickel and molybdenum. Due to 1.4122's moderate carbon content, medium hardness values can be set, allowing applications with wear stress to be realized.

if 1.4122 properly treated, 1.4122 does not corrode, exhibits good properties at elevated temperatures, good polishing properties, is unfortunately not suitable for welding and is not resistant to intergranular corrosion.

### Chemical Composition (1.4122)

C %	P %	Si %	Mn %	S %	Cr %	Mo %	Ni %	V %	Cu %
0,33 – 0,45	0,04 max.	1,00 max.	1,50 max.	0,03 max.	15,50 – 17,50	0,80 – 1,30	1,00 max.	-	-

### Suitable For

1.4122 is used in industry for the production of shafts, gears, spindles, bodies and moulds for the production of plastics, metal casting, mandrels, valves, toolholders, screws, pins and surgical instruments.

### Remarks

Chrome-molybdenum stainless martensitic steel for quenching, showing the structure of perlite after heat treatment. After hardening and tempering it reaches the hardness of 220 - 275 HB depending on the dimensions. The closest equivalent of 1.4122 / X39CrMo17-1 classified as a tool steel is X36CrMo17 / 1.2316.

### Specification

1.4122, X39CrMo17-1