1.4122 (X39CrMo17-1) quenched and tempered

1.4122 (X39CrMo17-1) directly from stock & cut to your required dimensions!

International term: AISI 440B

Application field:

Same or slightly better corrosion resistance than 1.4016. Excellent mechanical properties achievable with targeted heat treatment.

Better corrosion resistance than the 13% chromium steels, such as 1.4006, due to 17 % chromium content. Resistant in media with low aggressiveness and low chlorine-ion concentration. Pitting susceptibility lower due to the molybdenum additive. Optimal corrosion resistance with polished surface.

Applications in mechanical engineering, apparatus engineering, plastics processing, fittings and pump manufacture.

Characteristics:

Weldability: Vorsicht geboten!

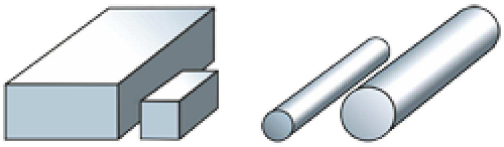
Machinability: 5 (1 = very bad - 10 = good)

Polishability: yes

Corrosion class: 2 - 3 (0 = weak - 5 = good)

Chemical composition:

1.4122 X39CrMo17-1	C	Si	Mn	P	S	Cr	Mo	Ni	V
min.	0,33	bis	bis	bis	bis	15,5	0,8	bis	
max.	0,45	1,0	1,5	0,05	0,03	17,5	1,3	1,0	

From stock:	flat, forged, quenched and tempered round, forged, quenched and tempered 
Benefit of sawn cuts:	The processing with the saw is a mechanical processing of the material, which results in a significantly lower unintended deformation and increased hardness for the existing structure, such as the thermal cutting. Thus, the machined workpiece has a homogeneous structure even at the edge, which does not change in the continuation of the material. This circumstance allows immediate finishing of the workpiece with milling or drilling . So it is not necessary to anneal the material or make a similar operation beforehand.