1.4541 (X6CrNiTi18-10)

1.4541 (X6CrNiTi18-10) directly from stock & cut to your required dimensions

International term:	AISI 321, SS2337
Application field:	1.4541 is used if post-weld resistance to intergranular corrosion is desired. However, the material has a tendency due to the titanium stabilization for row formations and is therefore affected by knife line corrosion. Often replaced by steels with low carbon content (less than 0.03 %) for example 1.4307, as these steels are not affected by the disadvantages caused by titanium. Good corrosion resistance in natural environmental media (water of rural and industrial atmosphere) if chlorine and salt concentrations and concentration of nitric or organic acids are low. **Automotive industry, construction industry, chemical industry, food industry, aerospace, mechanical engineering.**
Characteristics:	solution annealed, tempered and aged **Weldability:** good **Machinability:** 3 (1 = very bad - 10 = good) **Polishability:** yes **Corrosion class:** 3 (0 = weak - 5 = good)

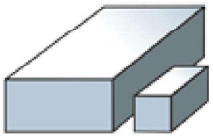
Chemical composition:

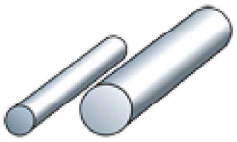
1.4541 X6CrNiTi18-10	C	Si	Mn	P	S	Cr	Mo	Ni	V
min.	bis	bis	bis	bis	bis	17,0		9,0	
max.	0,08	1,0	2,0	0,045	0,03	19,0		12,0	

1.4541 X6CrNiTi18-10	Al	Cu	N	Nb	Ti	Sonstiges
min.					5xC	
max.					0,7	

From stock:

flat, forged, solution annealed, tempered and aged
round, forged, solution annealed 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.