



**MATERIAL DATA SHEET 1.4305 (X8CRN18-9)**

DESCRIPTION: This material is a stainless austenitic nickel-chrome steel with sulfur additive. With a sulfur content of 0,15 – 0,35 %, 1.4305 is the classical, austenitic steel for automatic machining.

CHEMICAL COMPOSITION ACCORDING TO ISO 3506 / EN 10088-3								
%	Cr	Ni	Mo	C	Si	Mn	P	S
	16 – 19	5 – 10	≤ 0,7	0,12 max.	1,0 max.	6,5 max.	0,20 max.	0,15 – 0,35

MECHANICAL PROPERTIES AT ROOM TEMPERATURE											
Dia- meter Ø	State of Heat Treat- ment <sup>2)</sup>	Hard- ness <sup>2)</sup> HB max.	0,2 % Yield Point Rp 0,2 N/mm <sup>2</sup> min.	1 % Yield Point Rp 1,0 N/mm <sup>2</sup> min.	Tensile Strength Rm N/mm <sup>2</sup> % min.	Ultimate Strain A min.		Notched-Bar Impact Value (ISO-V)		Resistance to Intergranular Corrosion	
						long- itudinally	diagon- ally	long- itudinally	diagon- ally	delivery Condition	sensitized Condition 6)
≤ 160	AT	230	190	225	500- 750	35	-	-	-	No	No

2) AT = solution annealed  
5) when tested according to Euronorm 114  
6) The characteristics of stainless steels towards corrosion are very dependend on the type of environment and therefore cannot always be identified by trials.

USE: Faucets for moderate corrosive stress, automotive industry, decorative purposes and kitchen equipment, electronic equipment, mechanical engineering.

NO RESPONSIBILITY IS TAKEN FOR THE CORRECTNESS OF THIS INFORMATION