

GRADE	X20Cr13 (W.Nr. 1.4021)	AISI	420
STANDARD	EN 10088-3; ASTM A 276		
CLASSIFICATION	MARTENSITIC STAINLESS STEEL		
APPLICATION	DENTAL AND SURGICAL INSTRUMENTS, CUTLERY, SHAFTS AND TURBINE BLADES.		

Chemical Composition [%]						
C	Si	Mn	P	S	Cr	Ni
0.16 - 0.25	max 1.0	max 1.0	max 0.04	max 0.030	12.0 - 14.0	-
Mo	Co	Cu	N	Ti	Nb	Ta
-	-	-	-	-	-	-

DELIVERY CONDITIONS	Hot rolled, annealed in black condition or cold drawn final condition
SHAPE	FLAT OR SQUARE BARS
SIZE TOLERANCE	EN 10058 / EN 10059 AND EN 10278 (H11) OR ASTM A484

Mechanical Properties						
Condition	Hardness [HB]	Rp 0,2% [MPa]	Rp 1,0% [MPa]	Rm [MPa]	A [%]	Z [%]
+A	230	-	-	max 760	-	-
QT 800	-	-	-	-	-	-
Cold drawn	290	-	-	max 910	-	-

Rp 0,2%	Yield Strength / Streckgrenze / Tensão Limite
Rp 1,0%	1% point / Dehngrenze / Limite de Extensão
Rm	Tensile strength / Zugfestigkeit / Tensão de Ruptura
A	Elongation / Bruchdehnung / Alongamento
Z	Reduction of area / Einschnürung / Coeficiente de Estricção

REQUIREMENTS	Other delivery requirements may be analysed under request
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