

1.4935

	%C	%Si	%Mn	%P	%S	%Cr	%Mo	%Ni	%V	%W
X20CrMoWV12-1	0.17	0.10	0.30	-	-	11.0	0.80	0.30	0.20	0.40
	0.24	0.50	0.80	0.025	0.015	12.5	1.20	0.80	0.35	0.60

STEEL PROPERTIES

1.4935 is a martensitic stainless steel formulated for forming into wrought products. It is embodying energy among the wrought martensitic stainless steel.

EQUIVALENT GRADES

EN 10088-3	1.4878	X20CrMoWV12-1
AISI	422	
AFNOR	X20CrMoWV12-1	
BS	X20CrMoWV12-1	
JIS	SUH616	
UNS	S42200	

APPLICATIONS

1.4935 is typically used in steam turbines, high temperature bolting and valve trim.

HEAT TREATMENT

1.4935 is offered in solution treated condition.

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Mechanical properties at room temperature for 1.4935 as per EN 10095 in the usual delivery condition

Flat products with thickness a	Heat Treatment Condition	Hardness HB max.	0.2% Proof strength MPa. min.	Tensile Strength R _m MPa.	A % Min. Long Products
a ≤ 75	+AT	215	230	550 to 750	40

Physical properties of 1.4935 as per EN 10095

Density Kg/dm ²	Linear Expansion Coefficient 10 ⁻⁶ k ⁻¹ Between 20°C and (°C)					Thermal conductivity W/(m.K)		Specific Heat capacity kJ(kg.K)	Electrical resistivity Ωmm ² /m At 20°C	Magnetizability
	100°C	200°C	300°C	400°C	500°C	20°C	500°C			
7.7	10.5	11	11.5	12	12.3	15	-	0.50	0.73	No