

Brand name | 15-5PH®

Standards	Material No.	EN Designation	ASTM	UNS
	1.4545	X5CrNiCu15-5	XM-12	S15500

Description | 1.4545 / 15-5 PH is a martensitic chromium stainless steel with nickel and copper addition.

Special properties | High corrosion resistance. High strength. Excellent weldability.

Chemical Composition	C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
	≤ 0.07	1.00	1.00	0.03	0.015
	Cr %	Mo %	Ni %	Cu %	Nb %
	15.0-15.5	≤ 0.50	3.00-5.50	2.50-4.50	≥ 5xC

Mechanical Properties 20°C	Hardness HB 30 ≤ HB	0.2% Yield strength R <sub>p</sub> ≥ N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation A <sub>5</sub> ≥ %	Modulus of elasticity kN/mm <sup>2</sup>
	440	720	930-1200	10	200

Physical Properties 20°C	Density g/cm <sup>3</sup>	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm <sup>2</sup> /m
	7.8	440	11	0.77

Suitable welding filler materials | AWS E/ER 630

Application | Aircraft industry, high strenght corrosion resistant parts

Available forms for 1.4545 / 15-5PH®	Sheets/Plates	Bars	Tubes/Pipes	Forged / cast parts	Finished part (drawing)
					