



Grade	PH Type	AISI	Precipitation Hardening Stainless Steel
1.4568	17-7 PH		

Steel Properties

Type 17-7 PH is a stainless steel from the group of age-hardened PH with the highest content of Chromium - 17% and Nickel - 7% in relation to PH of grades 15-5 and 17-4. Type 17-7 PH has excellent strength properties, high hardness and elasticity, good corrosion resistance and resistance to high temperatures and deformation.

Chemical Composition (17-7 PH)

C %	P %	Si %	Mn %	S %	Cr %	Mo %	Ni %	Cu %	Al %
0,09 max.	0,025 max.	0,50 max.	1,00 max.	0,025 max.	16,00 – 17,25	-	6,50 – 7,75	-	0,75 – 1,25

Mechanical Properties

Condition	Rp0.2, Mpa	Rm, Mpa	Elongation [%]	Hardness [HRC]
RH 950	1517	1620	6	48
TH 1050	1276	1379	9	43

Suitable For

Type 17-7 PH is used on valve parts, tanks, springs, spring washers, food knives, diaphragms, low and high temperature parts, heat exchangers, special fittings and installations, machine constructions and components. Steel is intended for the aerospace, petroleum, chemical and petrochemical industries, energy, food and cryogenic industry in the form of strips, wires, sheets and bars.

Remarks

For heat treating stainless steel grade 17-7 PH, three important steps need to be carried out - austenite conditioning, cooling to transform the austenite to martensite, and precipitation hardening to condition TH 1050 or RH 950.

Specification

1.4568, Type 17-7 PH