



Grade	Type	AISI	Precipitation Hardening Stainless Steel
1.4545	15-5 PH		

Steel Properties

15-5 PH is a high-alloy, stainless, precipitation hardened steel with martensitic structure. It is characterized by excellent mechanical properties - strength and hardness, and at the same time excellent corrosion resistance.

Chemical Composition (15-5 PH)

C %	P %	Si %	Mn %	S %	Cr %	Mo %	Ni %	Cu %	Nb %
0,07 max.	0,03 max.	1,00 max.	1,00 max.	0,02 max.	14,00 – 15,50	0,50 max.	3,50 – 5,50	2,50 – 4,50	0,45 max.

Mechanical Properties

Condition	Rp0.2, Mpa	Rm, Mpa	Elongation [%]	Hardness [HB]
H900	1310	1172	10	388/444
H1150	931	724	16	277/352

Suitable For

Type 15-5 PH finds extensive use in aircraft and missile construction ranging from parts for instrumentation to landing gear components. Type 15-5 PH is also employed for valve parts, fittings, fasteners, shafts and gears and chemical process equipment and nuclear reactor components.

Remarks

Type 15-5 PH is delivered most often after heat improvement – in H900, H925, H1025, H1075, H1100, H1150, H1150M and H1150DBL conditions.

Specification

1.4545, Type 15-5 PH