

17-4PH Stainless Steel

1.4542 (17-4PH)

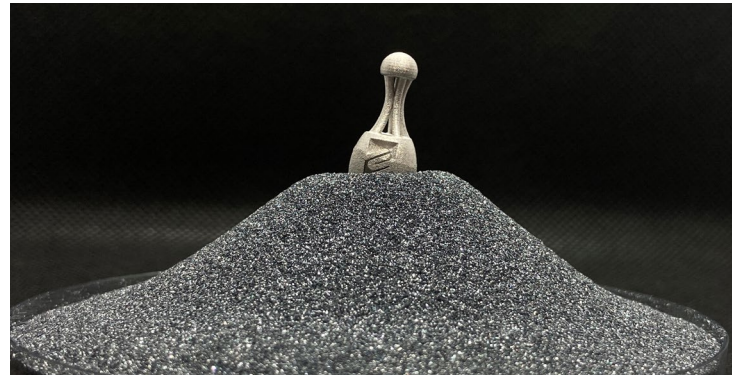
1.4542 is a stainless martensitic age-hardenable chromium-nickel-copper stainless steel with high strength and toughness. This steel is used for the manufacture of:

- medical, surgical and dental instruments
- chemistry and petrochemistry
- tools
- aerospace

Through heat treatment, the properties of the material can be adapted to versatile requirement profiles..

Properties

- high corrosion resistance
- high resistance
- hardenability
- high wear resistance



Chemical composition

Abbreviated name	Material no.	C	Cr	Mo	Ni	others
X5CrNiCuNb16-4	1.4542	≤ 0.07	15.0 - 17.0	≤ 0.60	3.0 - 5.0	Cu 3.0 - 5.0 Nb 5 x C (max. 0.45)

Technical data

General data

achievable surface quality

- „as sintered“
- after micro-rays

Ra 5 ± 1 μm

Ra 3 ± 2 μm

Physical characteristics

sensity

7.95 g/cm³

achievable relative density with standard parameters

96 - 99.5 %

