

**Material data
sheet:**

17-4 PH



**Manufacturing
process:**

Metal Binder Jetting

Physical properties:

	As sintered	H900-treated
Density:	7,63 g/cm ³	7,63 g/cm ³
Relative density	96,6 %	96,6 %

Mechanical properties:

	As sintered	H900-treated
Yield strength (Rp 0,2%):	744 MPa	1118 MPa
Tensile strength (UTS):	919 MPa	1280 MPa
Elongation at break:	7,5 %	12,2 %

Geometrical data:

Layer thickness	75 µm	
Typical part accuracy	± 0,2 mm	≤ 20 mm
(approx.):	± 3 %	≥ 20 mm

Surface roughness (Ra): 7,87 µm

Hardness	As sintered	H900 treated
Vickers Hardness	318 HV	415 HV
Conversion (approx.)	32 HRC	42 HRC

Chemical composition*

[weight%]:

Cr	15,0 ÷ 17,5
Mn	Max 1,0
C	Max 0,07
Si	Max 1,0
Ni	3,0 ÷ 5,0
S	Max 0,03
P	Max 0,04
Nb/Ta	0,15 ÷ 0,45
Cu	3,0 ÷ 5,0
Mo	Max 0,30
Fe	balance

*Chemical composition of the powder

The reported values have to be considered only just for reference.