

forAM[®] 17-4PH WA

Precipitation hardening stainless steel powder for Binder Jet

forAM 17-4PH is a leading stainless steel material used across additive manufacturing technologies. It is a precipitation hardening steel that combines high strength and hardness with corrosion resistance. Due to the attractive combination of properties it is used in a wide range of different applications ranging from automotive and tooling to IT segments.

Höganäs specially water atomised forAM 17-4PH WA powder is developed to provide high sinterability and limit furnace maintenance.

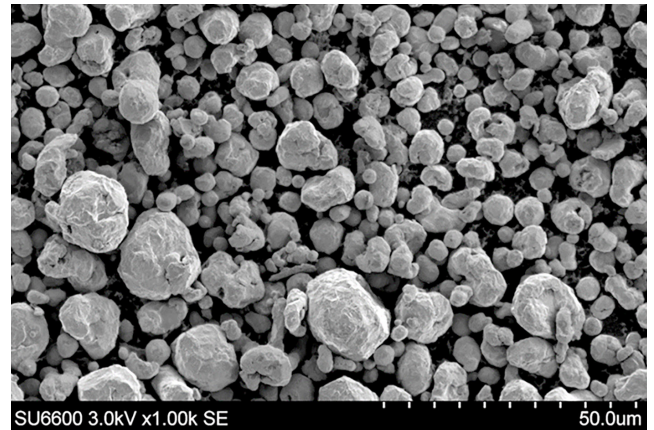
Equivalent materials:

- » AISI SAE 630
- » UNS17400
- » X5CrNiCuNb17-4
- » 1.4542

For more information on forAM product line and other of Höganäs products, please contact your local sales representative.

Powder properties

Chemical composition specification	
Element	Content, %
Cr	15.5-17.5
Ni	3.0-5.0
Cu	3.0-5.0
Si	<1.0
Nb + Ta	0.15-0.45
C	<0.07
Mn	<1.0
Fe	Balance



Powder properties specification	
D50	13-16 μm
Tap Density	min. 4.35 g/cm ³

Typical mechanical properties

Heat treatment	As sintered ⁽¹⁾
Sintered density (%)	99
UTS (MPa)	895
YS (MPa)	710
Elongation (%)	4

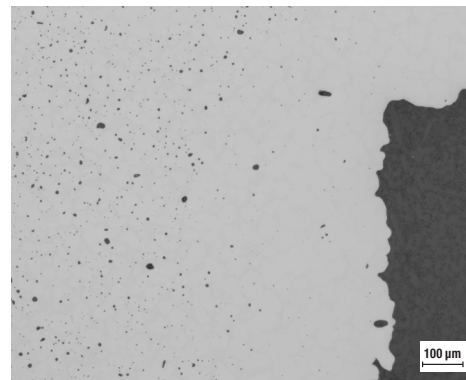
(1) Sintering condition, 1,380 °C for 2h in H₂

Standard packaging:

22.7 kg metal drum with polymer liner

45.4 kg metal drum with polymer liner

(Other tailored particle sizes and packaging are available under conditions)



forAM® 17-4PH WA sintered structure