



forAM® CP-Ti G1/G2 15/53 EG

Commercially pure Ti powder for additive manufacturing

General material description

Höganäs forAM CP-Ti G1/G2 EG is highly spherical powder for additive manufacturing. Commercially pure Ti has good strength to weight ratio combined with high elongation. It possess high corrosion resistance, very good cryogenic properties and good biocompatibility. Such properties combination make the material a good choice for components of chemical and cryomachinery as well the applications in medical and dental industries

Höganäs Ti based powders are produced via tungsten-free and crucible free manufacturing process, which excludes risk of heavy metal contamination in the material. High cleanliness level and good processability enables multiple recycling and therefore reducing total cost in production of Ti based components.

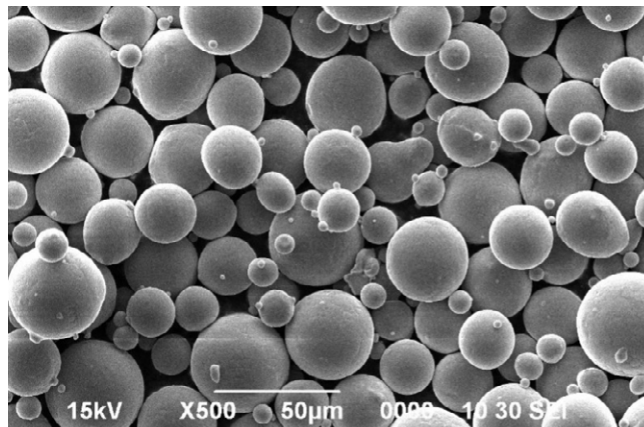
Powder chemical composition complies with:

- » ASTM B348
- » ASTM F67

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

Powder properties

Chemical composition, (typical values)	
Element	Content, %
Ti	Balance
Fe	≤0.08
O	≤0.17 (0.09)
C	≤0.03
N	≤0.03
H	≤0.01



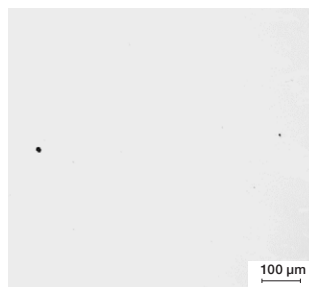
Typical powder properties		
Nominal particle range	15-53 µm	MPIF05, ASTM B214, ISO4497
Hall flow	40 s/50g	MPIF03, ASTM B213, ISO4490
Apparent density	2.34 g/cm³	MPIF04, ASTM B212, ISO3923/1

Mechanical properties

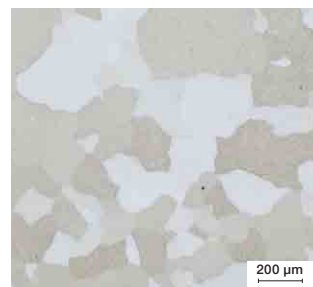
Surface condition is machined	
Heat treatment	HT700 ⁽¹⁾
Printed in Z-direction – Build direction	
UTS (MPa)	425
YS (MPa)	320
Elongation (%)	36
IE notch in Y direction (J)	190

Heat treatment	HT700 ⁽¹⁾
Printed in X/Y-direction – Perpendicular	
UTS (MPa)	400
YS (MPa)	280
Elongation (%)	34
Hardness (HV10)	130

(1) HT700 – Stress relieved at 700 °C in vacuum for 2h, cooled in Ar atmosphere.



Non etched



Etched – Stress Relieved X/Y direction

Standard packaging:

Powders are packed in 25 kg steel drums with polymer liner filled with Ar.