



Metal powders for serial production of Additive Manufacturing components

AM 410 Sieve Code 6

Höganäs stainless steel 410 Sieve Code 6 is a gas atomised, spherical powder for Additive Manufacturing applications. It is typically used for the Selective Laser Fusing (SLM)⁽¹⁾ processes.

A lower-chromium ferritic grade widely used in applications such as automotive exhaust systems and household goods. In containing no nickel it is very attractive from the price stability point of view.

For more information, please contact your local sales representative or send an e-mail to additivemanufacturing@hoganas.com

Features:

- Powder with good flowability and with very good building properties
- Customised particle size distributions to fit different SLM equipments
- General purpose manufacturing material with good response to various secondary operations



The gas atomisation process employed for Additive Manufacturing powders, produces powders which must pass stringent controls at each manufacturing step. Certified production units ensure chemical and physical properties according to specifications.

Raw materials are carefully selected and sourced from certified suppliers. The individual raw materials are melted together in our induction furnaces. Prior to atomisation the chemical composition of the melt is analysed and a correction is made if necessary. Spherical powders without satellites is the characteristic morphology of Höganäs gas atomisation. This will ensure excellent flow and spreadability of the powder. After atomisation, the powders are sieved according to agreed requirements and the powder properties are carefully controlled on each lot.



Powders are packed in 5 kg air tight plastic bottles. The packing technique ensures a dry and contamination free powder as well as a uniform grain size distribution.

Typical alloy composition AM 410 Sieve Code 6
Fe (balance) ⁽²⁾
Cr 12.5%
Ni 0.5 %
C max 0.03%
Si 0.5%

Typical powder properties
20-53 µm balance ⁽³⁾
> 63 µm max 1% ⁽³⁾
< 20 µm max 2%
Hall flow rate 16 s/50g ⁽⁴⁾
Apparent density 4.1 g/cm ³ ⁽⁵⁾

- 1) ASTM F2792
- 2) DIN 51008-2; DIN 51009, ISO 9556, ISO 4935, EN 10276-2, ISO 15351
- 3) MPIF05, ASTM B 214, ISO 4497
- 4) MPIF03, ASTM B 213, ISO 4490
- 5) MPIF04, ASTM B 212, ISO 3923/1