

iPowder® is USD's unique, high-quality, prealloyed, gas-water combined atomized metal powder.

We offer a wide range of standard and tailored alloys which are specifically designed for metal injection molding. iPowder® stands for unique green part and as sintered chemical and mechanical properties.

Due to the special process water, grain boundaries, and H<sub>2</sub> corrosion will be significantly reduced.

Further properties:

- better sinter surface roughness
- higher sinter density
- better feedstock flowability
- adjustable sintering shrinkage (catalytic and solvent binder systems)
- specially treated powder surface: sintered part surface could be free of dark spots or lines
- sintered parts could have higher physical properties
- increase of rheologic properties
- reduced oxygen content (usu. 2.000 - 3.000 ppm, 500 - 800 ppm on request)



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Material	D50 (µm)	T.D. (g/cm <sup>3</sup> )
iPowder® 304L(8)	8 - 9	4.75 - 4.90
iPowder® 304L(D)	8 - 9	4.50 - 4.60
iPowder® 316L(6)	6 - 7	4.60 - 4.70
iPowder® 316L(8)	8 - 9	4.75 - 4.90
iPowder® 316L(D)	8 - 9	4.50 - 4.60
iPowder® 17-4PH(8)	8 - 9	4.65 - 4.80
iPowder® 17-4PH(D)	8 - 9	4.40 - 4.50
iPowder® 4140(8)	8 - 9	4.50 - 4.70
iPowder® 4140(D)	8 - 9	4.30 - 4.50
iPowder® 420W(8)	8 - 9	4.60 - 4.80
iPowder® 430L(8)	8 - 9	4.50 - 4.70
iPowder® 440C-3Nb(8)	8 - 9	4.50 - 4.70
iPowder® 4J42(8)	8 - 9	4.70 - 4.90
iPowder® 8620(D)	9 - 11	4.40 - 4.60
iPowder® HK30(8)	8 - 9	4.50 - 4.70
iPowder® Kovar(8)	8 - 9	4.80 - 5.00
iPowder® Fe2Ni(8)	8 - 9	4.60 - 4.80
iPowder® Fe6.5SiCr(8)	8 - 9	3.90 - 4.10
iPowder® Fe6.5SiCr(15)	13 - 15	4.10 - 4.30
iPowder® FePBNbCr(6)	6 - 7	3.90 - 4.10
iPowder® FePBNbCr(8)	8 - 9	4.10 - 4.30

Further and custom-tailored materials upon request.