Qingdao Sinter Metal Material Co., Ltd.

3D PRINTING METAL POWDERS

Powder Solutions for Metal Binder Jetting & SLM

Qingdao Sinter Metal Material Co., Ltd. (SINTER METAL) supplies a wide range of metal powders for advanced 3D printing processes, including Meta Binder Jett Printing & Sintering and Selective Laser Melting (SLM). Our powders feature spherical morphology, low oxygen content, and excellent flowability to ensure high packing density, consistent printing performance and reliable part quality Typical materials include stainless steels, tool steels, superalloys and cobalt-based alloys, suitable for diverse industrial applications.

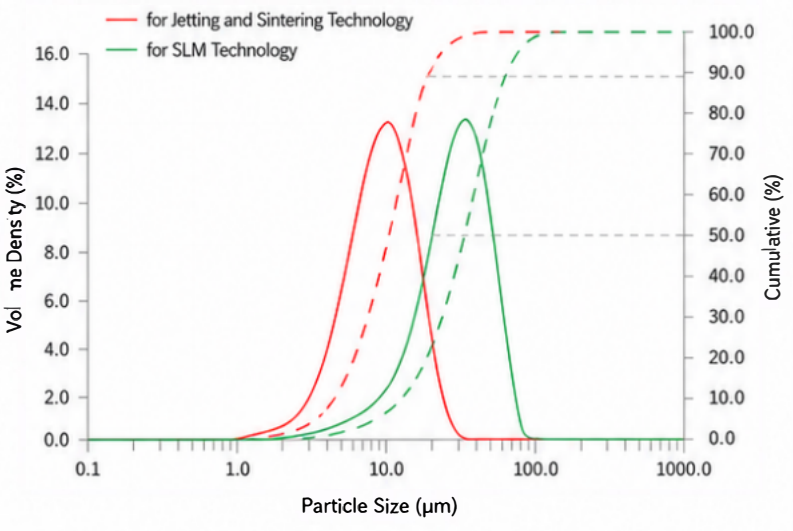
MAIN POWDER MATERIALS

- SS 17-4PH
- SS 304L
- SS 316L
- SS 420
- Inconel 625
- Stellite 6
- F75
- Co-Cr alloy
- H13
- H11
- M2
- 4605
- 4340
- 4140
- 8740

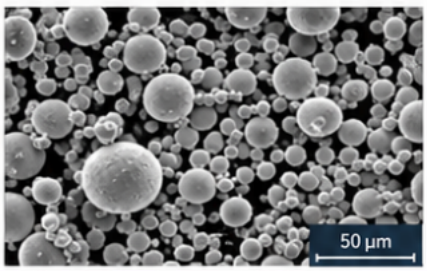
PSD SPECIFICATION AND POWDER CHARACTERISTICS

3D printing technology		Selective Laser Melting printing, μm			Metal binder jet printing, μm			Metal binder jet printing, μm		
PSD Specification		D10	D50	D90	D10	D50	D90	D10	D50	D90
		12–18	25–35	50–53	4–5	10–11.5	20–22	3.5–5	8–9	15–16
Example of 316L	Oxygen content, ppm	300–600			800–1100			≤1500		
	Green density, g/cm³	4.3–4.8			3.0–3.5			2.8–3.3		
	Tap density, g/cm³	5.0–5.3			4.8–5.1			4.4–4.7		

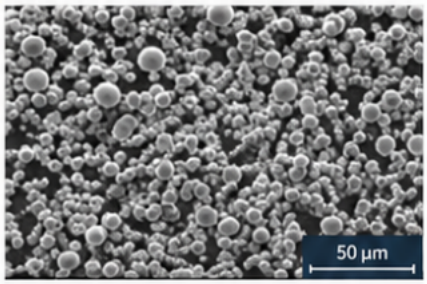
PARTICLE SIZE D STRIBUTION



Narrow distribution centered around ~7 μm delivers higher packing density and better sintering performance.



SEM of 304L for SLM printing



SEM of 316L with D90: 16 μm for metal binder jet printing

★ Detailed Technical Data Sheets (TDS), Certificates of Analysis (COA) and customized 3D printing powder recommendations are available upon request.