Cobalt Alloy 188

Alloy 188 · GH5188

Cobalt-nickel-chromium-tungsten alloy powder for combustor liners, flame tubes, and hot parts that see thermal cycling.

Designations: Alloy 188 · UNS R30188 · GH5188

Supply

Item	Value
Particle-size cuts	15–45 µm · 15–53 µm
Processes	LPBF
Minimum pack	1 kg (paid samples)
Packaging	Aluminium-foil bag · 1 kg sealed pack · Drum
Documents	Lot-specific COA · Particle-size report · Safety data sheet · Chemistry report
List price	Price on request

Chemical composition, wt.%

Element	Limit
Co	Balance
Ni	20.0–24.0
Cr	20.0–24.0
W	13.0–16.0
La	0.03–0.12
C	0.05–0.15
Si	0.2–0.5
Fe	≤3.0
Mn	≤1.25
B	≤0.015
O	≤0.02
N	≤0.02

Typical partner-plant datasheet limits, wt.%. The quoted lot COA governs.

Powder properties · LPBF screening window

Property	Value	Note
D10	≥15 μm	
D50	30–40 μm	
D90	≤60 μm	
Sphericity	≥0.90	Method to be confirmed
Apparent density	≥4.5 g/cm³	
Tap density	≥5.2 g/cm³	
Flow	≤18 s/50 g	Method and conditioning to be confirmed

A partner-plant datasheet screening basis for this grade; the delivered lot COA remains controlling.

Typical mechanical properties

Condition	Temperature	Tensile	Yield	Elongation	Note
Heat treated	Room temperature	≥850 MPa	≥400 MPa	≥40%	
Heat treated	980 °C	≥190 MPa	≥150 MPa	≥40%	

Partner-plant datasheet values for LPBF test bars at room temperature unless stated. Printed-part properties depend on machine, parameters, orientation, and post-processing.

Typical values, not a lot certificate. The certificate of analysis for the quoted lot governs. Formal quotations and commercial terms are valid only when issued from our official corporate email.

Request a quote: https://metal3dpowder.com/rfq/?product=alloy-188 · Grade page: https://metal3dpowder.com/products/alloy-188/
Suzhou Como Precision Materials Co., Ltd. (SZCOMO) · info@szcomo.com · Exporting metal powders since 2016 · Issued 2026-10-26