

POWDERS FOR POWDER METALLURGY

Number PD-5257
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AMPERSINT[®] 1556 FeNiCoMo (18Ni300) VACUUM MELTED, INERT GAS ATOMIZED

AMPERSINT[®] 1556 FeNiCoMo (18Ni300) is an age-hardenable iron-nickel based steel. Its ultra-high strength, toughness, good workability and exceptional resistance to crack-propagation make it first choice for tooling applications where heat treatment distortion and dimensional changes must be minimized. This alloy is excellent suitable for aerospace applications, tooling and all sophisticated applications where high performance is needed.

Chemical Characteristics

(Mass fraction in % [cg/g]; ppm [µg/g])

	min.	max.	
Ni	17.0	19.0	%
Co	8.5	10.0	%
Mo	4.50	5.20	%
Ti	0.50	1.20	%
Si		0.10	%
C		0.03	%
Mn		0.15	%
P		0.010	%
S		0.010	%
Cr		0.25	%
Al	0.05	0.15	%
O		250	ppm
Fe	balance		

Physical Characteristics

Particle shape: spherical

Available particle size grades:

- 45	+ 10	µm
- 53	+ 10	µm
- 63	+ 22	µm

Tolerances: above max. 5 %¹⁾, below max. 5 %²⁾

Other particle sizes on request.

1) ROTAP Screening per ASTM B 214, 2) MICROTRAC by Laser Light Diffraction per ASTM C 1070.

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Packaging	Standard Packaging: 100 kg in steel drums (30 l) with polyethylene inlet, 6 drums on one CP pallet, one packaging unit of 600 kg. Other packaging on request.
Storage and Handling	Storage and handling are subject to the rules and regulations in the country of use.
Hazards identification in Advertising (REGULATION (EC) No 1272/2008 Article 48)	Carcinogenicity Category 2 Specific target organ toxicity – repeated exposure Category 1 Respiratory sensitisation Category 1 Skin sensitisation Category 1 Reproductive toxicity Category 2 Acute aquatic toxicity Category 1 Chronic aquatic toxicity Category 1.
Documentation	An inspection document in accordance with EN 10204 is supplied with every shipment.

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