

TruForm™ Metal Powders for Additive Manufacturing

TruForm[™] Maraging Steel Metal Powder

TruForm[™] M300 is a maraging tool steel that exhibit high strength and excellent hardness. TruForm[™] M300 is commonly used to fabricate parts for injection-molding, die-casts, and other high performance applications. Several variations of M300 chemistries are available. Also known as: 1.2709, 18Ni300, X3NiCoMoTi 18-9-5

Particle Size Distribution

Powders are available in a wide variety of particle size distributions and can be customized for your applications.



TruForm[™] Metal Powders for All Additive Manufacturing Processes Including:

- Direct Metal Deposition (DED)
- Direct Metal Laser Sintering (DMLS)
- Electron Beam Melting (EBM)
- Laser Metal Deposition (LMD)
- Selective Laser Melting (SLM)



Typical Mechanical Properties (contact us for additional property data)

Room Temperature		Heat Treat per AMS 5915	Min. AMS 5915
Tensile Strength	(XY)	1175 ± 100 MPa 170 ± 15 ksi	2150 ± 100 MP 312 ± 15 ksi
	(Z)	1100 ± 100 MPa 160 ± 15 ksi	2105 ± 100 MPa 312 ± 15 ksi
Yeild Strength	(XY)	1050 ± 100 MPa 152 ± 15 ksi	2100 ± 100 MP 305 ± 15 ksi
	(Z)	990 ± 100 MPa 144 ± 15 ksi	2100 ± 100 MPa 305 ± 15 ksi
Elongatior	(XY)	15 ± 5%	5 ± 2%
	(Z)	15 ± 5%	6 ± 2%
Hardness	(XY) (Z)	37 ± 2 HRC	54 ± 3 HRC





Element	Typical Composition
Fe	Bal
Ni	17.0 - 19.0
Со	8.0 - 11.0
Мо	4.5 - 5.2
Ti	0.3 - 1.2
AI	01.5 Max
Cr	0.50 Max
Si	0.10 Max
Mn	0.10 Max
С	0.03 Max
Р	0.03 Max
S	0.01 Max



www.praxairsurfacetechnologies.com/am

TruForm[™] Metal Powders

For Additive Manufacturing





Powder Atomization Capabilities

Praxair is a worldwide resource for fine and spherical, gas-atomized powders and a leader in vacuum induction melt argon gas atomization (VIM-AGA) technology. We operate 5 VIM AGA units and pour more than 3 million lbs of powder each year.

AM Quality Lab

Our quality laboratory is registered as an ISO-9001:2008, Nadcap AS7101, and AS9100 facility. We offer 100 percent lot inspection along with a certificate of analysis that details the variety of quality tests we conduct from our state-of-the-art facility to ensure your printed products meet your performance and surface finish specifications.





Additive Manufacturing Lab

We are printing parts every day with our AM metal powder to ensure that layer by layer, you are getting a premium product that can produce products to your exacting specifications. A global leader in metal powders for 50 years, aerospace grade is our benchmark.

With five powder atomizers, a fully-outfitted AM quality lab, an R&D lab complete with a metal 3D printer, and a staff of credentialed experts...

Praxair is the only partner you need to deliver on the promise of metal AM



CONTACT US

Contact our technical sales team for guidance in selecting a material, requesting an alloy not listed here, or for additional details.

praxairsurfacetechnologies.com/am

Contact us at: 1-317-240-2650 or praxair_am@praxair.com

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Praxair Surface Technologies, Inc. 1500 Polco Street Indianapolis, IN 46222

www.praxairsurfacetechnologies.com psti-info@praxair.com

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Telephone: +1 317 240 2500

Fax: +1 317 240 2255