

# TruForm™ Metal Powders for Additive Manufacturing



Making our world  
more productive

## TruForm™ Metal Powders

### Print the future with proven metal powders

Additive Manufacturing (AM) continues to advance at a rapid rate. It is critical that powders source continues to advance just as fast.

At Praxair Surface Technologies, additive manufacturing powders are not just a commodity, they're a specialty. For more than 50 years, we've been a leading manufacturer of gas atomized metal powders. And today, as additive manufacturing rapidly advances, we're evolving our powders at the same rate.

### Layer by layer, TruForm™ metal powders offer optimum production performance

Our cobalt, copper, iron, nickel, and titanium metal powders are spherical in form, flow easily, and deposit evenly. The result? Successive layers with consistent density and uniform build rates. Ultimately, this helps products meet the mechanical, performance, and final part specifications of 3D printed parts.

### Metal powders engineered for additive manufacturing applications in:

Aerospace • Medical • Energy • Industrial Markets

### Features of TruForm™ metal powders:

- Approved aerospace grade
- Free Flowing
- Deposit evenly
- Fully dense

### Custom-engineered chemistries and size distribution

Our chemistries and particle sizing can be customized to ensure your finished products meet your performance and surface finish specifications.



PRODUCT NAME	TYPICAL CHEMISTRY COMPOSITION
TruForm™ CCM	Co-28Cr-6Mo
TruForm™ L605	Co-20Cr-15W-10Ni-1.5Mn-0.1C



TruForm™ CU42	Cu-3.25Cr-2.85Nb*
TruForm™ CU84	Cu-6.5Cr-5.7Nb*
TruForm™ CU	Cu 99 Min
TruForm™ CuCrZr	Cu-1Cr-0.1Zr
TruForm™ K500	Cu-67Ni-2.7Al-0.6Ti

\*Typical chemistry per NASA release



TruForm™ 155	Fe-14.5Cr-4.5Ni-3.5Cu-0.3Nb
TruForm™ 174	Fe-16Cr-4Ni-4Cu-0.3Nb
TruForm™ 36	Fe-36Ni
TruForm™ 316	Fe-17Ni-12Ni-2.5Mo
TruForm™ H13	Fe-5.25Cr-1.35Mo-1Si-1V-0.4C-0.4Mn
TruForm™ M300	Fe-18.5Ni-9Co-4.8Mo-1Ti-0.1Al



TruForm™ 247	Ni-10Co-10W-8.5Cr-5.5Al-3Ta-1.5Hf-1Ti-0.7Mo-0.1C-0.01B-0.01Zr
TruForm™ 625	Ni-22Cr-9Mo-4(Nb+Ta)
TruForm™ 718	Ni-19Cr-18Fe-5(Nb+Ta)-3Mo-1Ti-0.5Al
TruForm™ 738	Ni-16Cr-8.5Co-3.4Al-3.4Ti-2.6W-1.8Mo-1.8Ta-0.9Nb-0.15C-0.1Zr
TruForm™ 939	Ni-22.4Cr-19Co-3.7Ti-2W-1.9Al-1.4Ta-1Nb-0.15C-0.1Zr-0.01B
TruForm™ HX	Ni-22Cr-18Fe-9Mo-1.5Co-0.6W-0.1C (LC variant also available)
TruForm™ Ni	Ni 99 Min
HAYNES® 282®*	Ni-20Cr-10Co-8.5Mo-2.1Ti-1.5Al-0.06C-0.005B

\*Made under license for Haynes International



TruForm™ 4822	Ti-48Al-2Nb-2Cr*
TruForm™ 64/ELI	Ti-6Al-4V
TruForm™ 6242	Ti-6Al-2Sn-4Zr-2Mo

\*By Atomic Weight

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## AM Quality Lab

Our quality laboratory is NADCAP accredited and registered as an ISO-9001:2008 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. This ensures your printed products meet your performance and surface finish specifications.

## Contact Us Today

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

Praxair Surface Technologies 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 numerous vacuum induction melt units with Argon gas atomization and pour more than 5+ million lbs of powder each year.



## Additive Manufacturing Lab

We are printing parts every day in our AM metal powder laboratory to ensure that layer by layer, you are getting a premium product that can produce products to your exacting specifications.

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