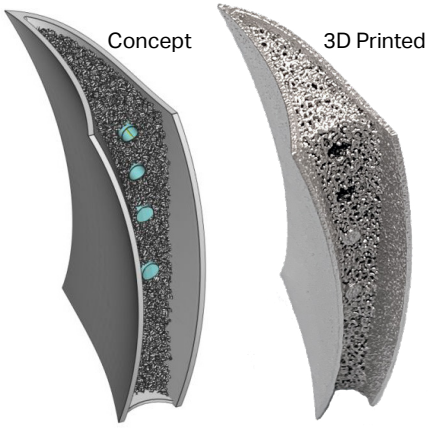
The Future of Hypersonic Technology: Advancements Beyond Expectations

Whether you're aiming to achieve air superiority or developing the next generation of defense systems, ADDMAN is your trusted partner for success in the world of military and defense. As leaders in comprehensive manufacturing solutions for hypersonic vehicles and weapons, we're already playing a key role in enabling the continued dominance of our armed forces. From advanced hypersonic missile technology to state-of-the-art reconnaissance vehicles components, our cutting-edge technologies make it possible to achieve your goals in military and defense exploration. Let ADDMAN take your military and defense project to the next level!

Additive Refractory Metals For Hypersonics

We provide advanced refractory alloys and unique geometries for hypersonic and space flight applications. Our 3D-printed Nb C103 refractory thrusters have proven effective in space, featuring a high mach leading edge with integrated cooling. Our offerings include a variable density mesh with embedded internal structures, as well as high-quality, affordable thrusters, injectors, and hot gas manifolds.

- Significant cost savings
- Ability to ramp up production quickly
- Extremely high temperature tolerant
- Non-Ablative
- Durable and strong throughout entire temperature range
- Impact and damage resistant



Hypersonic Leading Edge

Refractory thruster

CAPABILITIES

In the hypersonic industry, manufacturing complex parts in low volumes doesn't have to be the norm. ADDMAN offers a comprehensive range of manufacturing services backed by cutting-edge technology and a team of experts who prioritize quality, precision, and efficiency. From the development of refractory metal engine components and thermal protection systems to precision machining of the toughest materials, we offer a complete range of services that enable you to launch assets, propel them and protect them while traveling at hypersonic speeds.

CERTIFICATIONS

- ITAR Compliant
- ISO 9001 / AS9100
- ISO 13485:2016
- ISO 14001:2004
- ISO 50001
- NIST 800-171 Compliance
- Exostar 3.55
- Class 8 Cleanroom

Additive Manufacturing

Our additive manufacturing services use cutting-edge technologies to produce high-quality components with exceptional accuracy and precision. From metal to polymer we can produce functional prototypes, low-volume production parts, and bespoke designs.

MATERIAL

- Aluminum: AlSi10Mg, 7 a77
- Carbon Composites
- Cobalt Chrome
- Copper Alloy GrCop 42, 84
- Haynes 214, 230, 282
- Nickel Alloys
- Niobium C103
- Stainless Steel 316L, 17-4 PH
- Titanium Ti64
- Rhenium
- Tantalum
- Tungsten
- Inconel 625, 718

MACHINES

- 3x 3D Systems PROx 300
- 1x 3D Systems PROx 200
- 1x Additive Industries MetalFAB1
- 1x EOS M400-1 (single laser)
- 1x EOS M400-4 (quad laser)
- 7x EOS M290
- 1x EOS M270
- 1x EOS M100
- 2x GE Additive Concept Laser M2
- 1x Renishaw RenAM 500 Flex
- 3x VELO3D Sapphire
- 2x VELO3D Sapphire XC

Traditional Manufacturing

ADDMAN customers utilize traditional manufacturing services like CNC machining, friction stir welding, and assemblies to receive high-precision, complex parts for various commercial space applications.

MATERIAL

- Aluminum
- Copper
- Inconel
- Magnesium
- Tungsten
- Titanium
- Stainless Steels

CAPABILITIES

- Assemblies
- Band Saws
- CNC Horizontal
- CNC Lathes
- CNC Vertical
- CNC Turning
- Drill Press
- EDM
- FIP Machines
- Grinders
- Milling
- Radial Arm Drills
- Vacuum Brazing

Applications

- Propulsion Components
- Thermal Protection Systems (TPS)
  - Acreage TPS
  - Leading Edge TPS

Talk to an expert today.

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