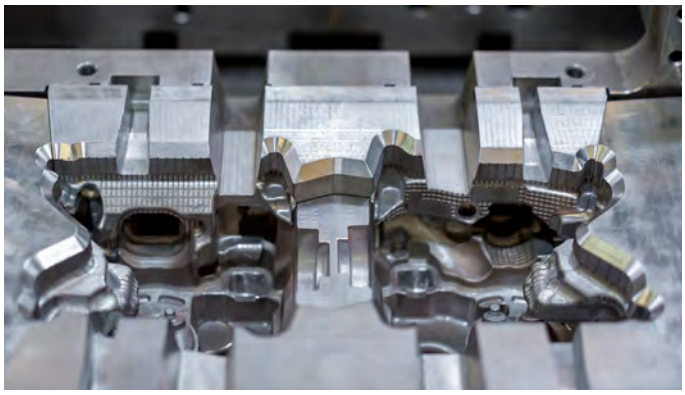
FORMETRIX™

High Performance Tool Steel Powders for Metal 3D Printing

Enabling Additive Manufacturing for Tooling and Specialty Part Applications

THE
NEW STANDARD
IN AM POWDER FOR TOOLS, MOLDS & DIES



Example of high-precision die cast mold application

Formetrix Innovative Tool Steel Materials for AM

Additive Manufacturing has many process benefits, but has lacked materials that can deliver similar or superior peformance compared to convetionally manufactured tool steels, particularly with respect to properties such as hardness and ductility.

Formetrix specializes in the design and manufacturing of 3D Printable steel alloys with exceptional properties. Formetrix's steel alloy powders are designed to deliver previously unmatched performance characteristics and to be easily printed on a variety of commercial powder bed fusion platforms.

We work closely with our customers and strategic partners to develop optimized workflow solutions that enable the repeatable production of high value, 3D printed metal tools and components.

formetrixmetals.com

FORMETRIX™

THE NEW STAN

High-Performance Tool Steels for Powder Bed Fusion Platforms

Formetrix's tool steel powders are specifically designed for metal AM (Additive Manufacturing) and provide the user with unparalled performance benefits by simultaneously providing high hardness AND ductility (or toughness) at the same time. The alloys are easy to print (no preheat necessary) and can be printed with high efficiencies. The unique properties of these alloys enable users to capture the significant benefits of 3D Printing while delivering similar or superior performance to conventionally manufactured components.

Industry - Leading Performance Compared to Other Traditional and AM Materials

- **Printability** (no cracking)
- **Hardness & Ductility**
- **Corrosion Resistance**
- **Low Toxicity** (Cobalt Free)
- **Superior Performance/Price**

AM ADVANTAGES

Delivering Design Freedom and Performance

- Increase Complexity or Part Consolidation
- Conformal Cooling
- Access New Material Properties
- Lightweighting
- Mass Customization

Supply Chain

- Reduce Cycle/Lead Times
- On-Demand Manufacturing
- Less Inventory, Lower Obsolescence
- Tool-Less Production
- Lower Set Up Cost

Total System Cost and Optimization

- Increase Overall Productivity
- On-Shore Production, Increased Assurance of Supply
- Enable New Flexible Business Models

L-40

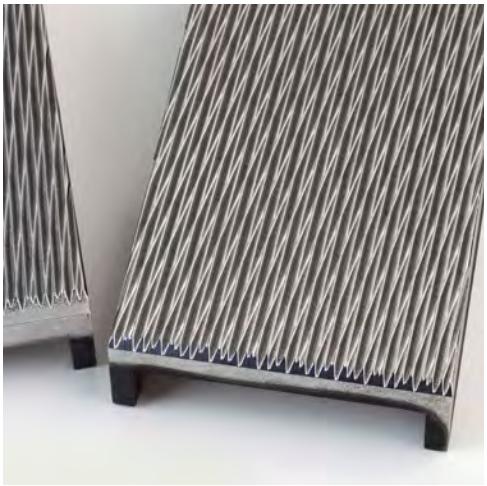
TOOL STEEL POWDER

DARD

APPLICATIONS

- Stamping Dies
- Compression Dies
- Injection Molding
- Aluminum Die Casting Molds
- Other Specialty Parts

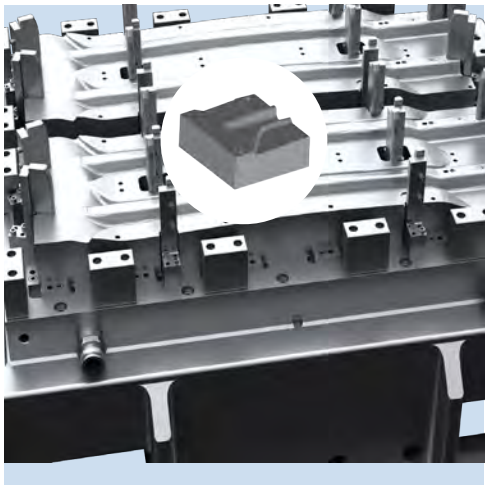
L-40 Application Printed via Powder Bed Fusion



Compression Die Set

for Advanced Fasteners

"The Formetrix L-40 solution and delivery were exactly what we are looking for, including excellent surface finish, flexibility as well as strength and hardness for maximum die life."
— Perfect Lock Bolt America, Inc.



Hot Stamping Die Insert

for Anti-Intrusion Door Beam

Formetrix's L-40 3D Printed die insert has been used in the production of over 30,000 door beams and continues to meet performance requirements.

NANOSTEEL

Leveraging NanoSteel's decade long expertise in patented steel alloy design, Formetrix's metal powder portfolio provides an attractive combination of benefits such as higher hardness, higher ductility and outstanding printability compared to existing alternatives.

FORMETRIX™

Setting the Standard in Tool Steel Powder for Metal 3D Printing

ABOUT US

Formetrix designs and manufactures patented steel alloys for 3D printed components such as tooling for molding, casting and stamping within the industrial, automotive, oil and gas, and heavy machinery markets.

Formetrix's expertise is in the design and manufacture of steel alloys with exceptional properties for 3D printing processes. Formetrix's high-performance steel alloys offer a unique combination of benefits such as higher hardness, higher ductility, and higher corrosion resistance compared to existing alternatives.

Formetrix was formed in August 2018 as the former Additive Manufacturing business unit of NanoSteel.

FORMETRIX™

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