

### Introducing Metal 3D printing services for the first time in Pakistan- Desktop Metal Studio System™ 2

- Our mission is to make metal 3D printing accessible for engineers and manufacturers all over the country.
- A complete product life cycle solution from prototyping to mass production.
- Designed around the chemistry and powder supply chain of metal injection moulding (MIM).

#### Benefits of additive manufacturing

- Rapid prototyping
- Part consolidation
- Complex geometries
- Design customization
- On-demand manufacturing
- Supply chain re-engineering
- Rethinking product lines and designs
- Small, nimble manufacturers can now compete

#### Near-net-shape - Similar to casting

- Critical dimensions achieved via post-processing
- Resolution, accuracy and surface finish similar to casting
- Denser, better tensile strength, more regular microstructure
- Dimensional capabilities ±0.8%















Cast Part







Work Flow



1 PREP

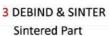
Digital model





Green Part







**4 POST PROCESS** Finished part







#### **APPLICATIONS**

- Medical
- Dental
- Orthopedic
- Implants
- Surgical Tools
- Manufacturing
- Automotive Motorsports
- Aerospace
- Industrial
- After Market
- Hinges
- Fasteners
- Brackets
- Fittings
- Impellers

- Tools
- Punches
- Dies
- Fixtures
- Jigs
- Molds

4140 Steel Tools

- Cooling channels
- Assemblies

- Sectioned Parts
- Complex
- Geometry
- Non-Machinable
- Art
- Lattices
- Architecture
- Jewellery



#### MATERIALS

- 17-4 PH Stainless Steel
- Inconel 625 Super Alloy
- 316L Stainless Steel • Ti64 Titanium
- H13 Steel Tools
  - D2 Tool Steel
- Cu Copper
- Kovar F-15 low expansion

#### PARTS GALLERY

#### Automotive applications









#### **Consumer Goods**



PA6+GF





Guitar tailpiece 17-4 PH



#### Education





Bus Bar Copper





#### **Machine Design**







Mounting Flange 4140





Custom Bolt 17-4 PH

## **Heavy Industry**









# **Tools Manufacturing**







