

# PELAGUS CORE SERVICES

## Processes

### Metals

#### Conventional Manufacturing

Rapid Casting  
 Conventional Casting  
 CNC (Turning/ Milling/ Drilling/ EDM)  
 Sheet Metal Fabrication (Bending, Cutting, Welding)

#### Additive Manufacturing

Laser Powder Bed Fusion (LPBF)  
 Wire Arc Additive Manufacturing (WAAM)  
 Laser Metal Deposition (LMD)  
 Binder Jetting

### Polymers

#### Conventional Manufacturing

Injection Molding  
 Vacuum Forming  
 CNC (Turning/ Milling/ Drilling)  
 Sheet Fabrication (Laser/ Water Jet Cutting)

#### Additive Manufacturing

Fused Deposition Modelling (FDM) / Fused Filament Fabrication (FFF)  
 Fused Granular Fabrication (FGF)  
 Selective Laser Sintering (SLS)  
 Multi-Jet Fusion (MJF)  
 Stereolithography (SLA)  
 Digital Light Projection (DLP)  
 Material Jetting

## Services

### Other

#### Additional Services

Ceramic Additive Manufacturing (Binder Jetting)  
 Composite Additive Manufacturing (Carbon Fiber reinforced, etc.)  
 Finishing (Plating, Anodizing, Heat Treating, Coating / Plating, Polishing etc.)  
 Large Scale Additive Manufacturing  
 3D Scanning, reverse engineering & on-site inspection

#### Repair

Any combination of accessible inspection and manufacturing technologies for the repair of critical components  
 Project Specific Engagement  
 Remote Locations  
 Exotic Materials  
 Early TRL Technologies (R&D)

## Common Materials

### Alloys - Metals

Steels/ Stainless Steels  
 Duplex / Super Duplex Stainless Steels  
 Inconels  
 Iron, Grey Iron, Ductile Iron  
 Nickel Aluminium Bronze (NAB)  
 Aluminiums  
 Titaniums  
 Coppers

### Polymers & Composites

PETG, ABS, ASA, PC, ULTEM 1010, ULTEM 9085,  
 Nylons, Nylon Glass Fibre,  
 PP, PP-Glass Bead,  
 Standard resin, Coloured resin, Transparent resin, High detail resin, Multi colour resin,  
 PC, PA, POM, PMMA, PEEK, PEKK, Carbon PEEK, TPU,  
 Rubber, Silicone

### Ceramics

Zirconia, Alumina, Titania, Silicate, Silicone Nitride, Aluminium Nitride

## Certification bodies - Class

Det Norske Veritas (DNV)  
 American Bureau of Shipping (ABS)  
 Nippon Kaiji Kyokai (ClassNK)  
 Lloyd's Register (LR)  
 Korean Register (KR)  
 Bureau Veritas (BV)  
 Registro Italiano Navale (RINA)  
 Certification Bodies - Non-Class  
 Société Générale de Surveillance (SGS)  
 Technischer Überwachungsverein Süd (TUV)  
 British Standards International (BSI)  
 Underwriters Laboratories (UL)  
 American Society for Testing and Materials (ASTM)  
 International Standards Organisation (ISO)  
 Intertek