



# ADDITIVE MANUFACTURING & 3D PRINTING

## Supplier Capability Brief

Additive Manufacturing (AM) and 3D printing have become critical enablers for defence modernisation, supporting rapid prototyping, agile development, lightweighting, tooling, spares production and increasingly, certified end-use components. As Europe accelerates defence production and prioritises supply-chain resilience, OEMs and Primes are seeking AM partners capable of delivering repeatable, high-performance polymer and metal parts to defence-grade specifications.

## Core subcategories

- **Metal AM:** SLM, DED, EBM and hybrid manufacturing
- **Polymer AM:** SLS, FDM, SLA and high-performance thermoplastics
- **Large-format AM:** For tooling, jigs and fixtures
- **Design for Additive Manufacturing (DfAM)**
- **Rapid prototyping and iterative development**
- **Post-processing, finishing and heat-treatment**
- **AM powders, filaments and high-temperature feedstock**

## Market outlook

Additive manufacturing is one of the fastest-growing segments of the defence industrial base. Demand is driven by accelerated R&D cycles, lightweighting requirements, simplified assemblies, reduced dependency on complex supply chains and the shift toward on-demand production.

Europe's defence AM market is strengthened by sovereign manufacturing initiatives, digitalisation programmes and the requirement for distributed, rapid-response production capacity.

### Key market indicators:

- **Defence & aerospace AM market:**  
~\$4.8B in 2024 : ~\$11B by 2030 (CAGR ~15%)
- **Metal AM materials:**  
~\$1.4B in 2024 : ~\$3.8B by 2030 (CAGR ~15-17%)
- **Polymer AM for aerospace/defence:**  
~\$1.1B in 2024 : ~\$2B+ by 2030 (CAGR ~10-12%)
- **Large-format AM systems:**  
rapid adoption across tooling and structural prototyping

## Typical defence applications

- Rapid prototyping for R&D and system development
- Lightweight structural brackets, ducts, housings and UAV components
- Custom tooling, jigs and fixtures for production lines

- Complex metal geometries for propulsion, thermal and high-stress environments
- Replacement parts and on-demand spares for legacy systems
- Conformal cooling channels and performance-enhancing geometries
- Electronics housings, antenna mounts and specialist enclosures

## Who should exhibit

- Metal and polymer AM service bureaus
- Industrial 3D printing service providers
- Producers of AM powders, filaments and feedstock

- Suppliers of post-processing, heat-treatment and finishing solutions
- AM machine and hardware manufacturers
- DfAM specialists and digital engineering partners
- Tooling and prototyping specialists supporting defence programmes

## What primes & OEMs are looking for

- Metal AM capability for high-strength, high-temperature components
- Repeatable, certifiable production with robust QA/validation processes

- Rapid prototyping and accelerated development cycles
- Lightweight structural solutions for air, land and naval platforms
- High-performance polymer AM for functional, load-bearing parts
- Suppliers able to scale from prototype to low/medium-rate production
- Secure, Europe-based AM suppliers with defence compliance frameworks

Showcase your **ADDITIVE MANUFACTURING** and **3D PRINTING** capabilities to defence engineering, procurement and programme teams who are **ACTIVELY IDENTIFYING** and **ONBOARDING** new suppliers across Europe.

