PRECISION MACHINING & ENGINEERING

Supplier Capability Brief

Precision machining and engineering are fundamental to the production of every defence platform — from propulsion systems and munitions to airframes, naval structures, electronic housings and complex mechanical assemblies. As Europe accelerates defence industrial output and seeks new, resilient suppliers, OEMs and Primes require partners capable of delivering tight-tolerance, high-reliability components at both prototype and scaled production volumes.

Core subcategories

- **High-precision CNC machining (3–5 axis)**
- **Precision turning, milling and grinding**
- **Micro-machining and ultra-fine feature fabrication**
- **Fabrication, forming and complex metalworking**
- **Tooling, fixturing and production support systems**
- **Prototype-to-production machining**
- **Finishing, coating and surface-preparation processes**

Market outlook

Global demand for precision machining across defence and aerospace continues to rise, driven by platform modernisation, propulsion system upgrades, munitions replenishment and next-generation air/land/naval programme development.

Precision machining for defence is expected to grow strongly as Europe invests in increased production capacity, redundancy, sovereign capability and rapid programme delivery.

Key market indicators:

- **Defence & aerospace machining market:** ~$78B in 2024, forecast to exceed ~$105B by 2030 (CAGR ~5%)
- **Global CNC machining market:** ~$90B in 2024 : ~$140B by 2030 (CAGR ~7–8%)
- **European aerospace & defence machining:** ~€18–22B annually, supported by sovereign production initiatives

Typical defence applications

- Airframe components, brackets and structural elements
- Missile control surfaces, actuators and housings
- High-precision rotational and propulsion components
- Naval system components requiring corrosion-resistant machining
- Munitions casings, guidance housings and mechanical sub-systems
- Electronic housings, thermal plates and EMI-sensitive assemblies
- Prototype and low-volume system development support

Who should exhibit

- Precision machining specialists (3–5 axis, ultra-precision)
- Advanced fabrication and metalworking companies
- Micro-machining and small-feature specialists
- Tooling and fixturing solution providers
- Prototype-to-production machining partners
- Machining companies with defence/aerospace certifications
- Companies offering machining automation, inspection and in-process quality systems

What primes & OEMs are looking for

- New machining suppliers with capacity for surge production
- Capability to support high-tolerance, mission-critical components
- Materials expertise: titanium, Inconel, steels, composites
- Demonstrated quality systems and certification pathways
- Ability to support rapid prototyping and iterative development
- Secure, resilient, European-based machining capability
- Scalable production aligned to defence uplift requirements

Showcase your MACHINING AND ENGINEERING CAPABILITIES to defence engineering, procurement and programme teams who are ACTIVELY IDENTIFYING and ONBOARDING new suppliers across Europe.

Contact: james.meire@readinesseurope.com gavin.verbeek@readinesseurope.com
www.readinesseurope.com