French company offering an advanced stereolithography-based ceramic 3D printing technology for aerospace and defence applications seeks industrial partners for commercial agreement with technical assistance

Summary

Profile type	Company's country	POD reference
Technology offer	**France**	**TOFR20250901008**
Profile status	**Type of partnership**	**Targeted countries**
PUBLISHED	**Commercial agreement with technical assistance**	**• World**
Contact Person	**Term of validity**	**Last update**
Enrico FRANZIN	**2 Sep 2025** **2 Sep 2026**	**2 Sep 2025**

General Information

Short summary

A French company specialized in additive manufacturing has developed a stereolithography-based 3D printing technology tailored for the production of high-performance technical ceramic parts. Designed for the aerospace and defence sectors, the solution enables lightweight, complex-shaped components with exceptional thermal resistance. The company seeks industrial or partners for commercial or technical cooperation.

Full description

A French SME with over 15 years of expertise in ceramic additive manufacturing offers an industrial solution based on stereolithography (SLA) technology. This technology enables the production of advanced ceramic parts with high dimensional precision and complex geometries that are impossible to achieve with conventional manufacturing methods.

The technology includes:

- A fully modular 3D printer platform suitable for R&D or series production; (Sizes of 100 x 100 x 150 mm; 320 x 320 x 200 mm; 600 x 600 x 300 mm)

- A portfolio of high-performance ceramics (e.g. alumina, Si3N4, Zirconia, AlN…) adapted to harsh operating environments

- A complete process chain including debinding, sintering, and finishing adapted to aerospace and defence requirements

The system is particularly suited for applications requiring:

- High thermal and mechanical resistance (e.g. components exposed to high temperatures or abrasion);
- Weight reduction through internal lattices or hollow structures;

- On-demand manufacturing of low-volume critical parts with short lead times.

The technology is already in use by major aerospace actors and research institutions.

With a worldwide presence the firm is willing to extend its business on the international scene by searching industrial partners for commercial, technical or research cooperation.

Advantages and innovations

- Production of ultra-complex parts with internal channels and lattices, impossible with traditional ceramic shaping methods
- High purity ceramics with resistance to high temperature
- Modular platform adaptable to R&D or industrial production
- Design freedom enabling mass reduction while maintaining strength
- Localized, safe, and scalable production (key for strategic sectors like defence)
- Reduced tooling costs and production delays

Technical specification or expertise sought

The company seeks partners in:
- Aerospace & defence (OEMs, integrators, equipment manufacturers)
- Research institutes working on propulsion, thermal protection systems, sensors or structural components
- Technology integrators exploring advanced materials and additive manufacturing

Stage of development

Already on the market

IPR Status

Secret know-how

IPR Notes

Sustainable Development goals

- **Goal 9: Industry, Innovation and Infrastructure**

IPR Notes

Partner Sought

Expected role of the partner

The partners sought are:

- industrial partners in the aerospace and defence sectors, research institutions
- governmental/defence agencies for pilot adoption or co development.

The roles of the partners:

- Technical cooperation to adapt the solution to specific operational needs
- Manufacturing agreement for production of parts

Type of partnership

Commercial agreement with technical assistance

Type and size of the partner

- **Big company**
- **SME 50 - 249**
- **SME 11-49**
- **SME <=10**
- **R&D Institution**
- **University**

Dissemination

Technology keywords

- **02007003 - Ceramic Materials and Powders**
- **02011001 - Aeronautical technology / Avionics**
- **02007019 - Lightweight materials**
- **02011006 - Propulsion**
- **01002002 - 3D printing**

Market keywords

- **08001013 - Ceramics**
- **08003007 - Other industrial equipment and machinery**
- **08001009 - Speciality/performance materials: producers and fabricators**

Targeted countries

- **World**

Sector groups involved

- **Aerospace and Defence**
- **Energy-Intensive Industries**

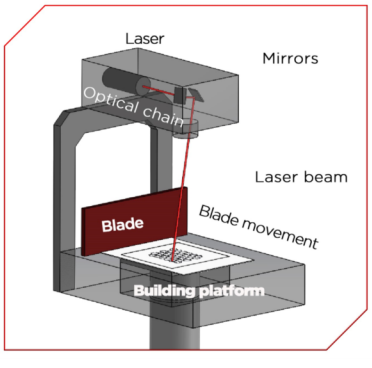
Media

Images

Alumina structural satellite part.jpg

Silicon nitride mirror for satellite (Si3N4).jpg

Silicon nitride radome (Si3N4).jpg



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