Japanese R&D and engineering services provider is looking for partners in target EU countries under an outsourcing or commercial agreement

Summary

Profile type
Business Offer

Company's country
Japan

POD reference
BOJP20261028008

Profile status
PUBLISHED

Type of partnership
Commercial agreement
Outsourcing agreement

Targeted countries
- **Austria**
- **France**
- **Germany**
- **Italy**

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Term of validity
28 Oct 2026
28 Oct 2027

Last update
5 Nov 2026

General Information

Short summary

A Japanese contract engineering company offers fluid design and CFD (computational fluid dynamics) analysis, structural and thermal analysis by FEM (finite element method), 3D CAD mechanical design, prototyping and operation testing, and test equipment set-up and measurement support to development teams of companies in Austria, France, Germany and Italy. Outsourcing or commercial agreements are sought.

Full description

The company is a small contract R&D and engineering company based in Tokyo, Japan, founded in 2019. It handles technical work for other companies from problem definition to analysis, design, prototyping and testing. In-house, it develops a micro gas turbine (small jet engine) for radio-controlled models, covering aerodynamic design and analysis, 3D CAD mechanical design, prototyping and test runs.

Services offered:
- Fluid design and CFD analysis of flow paths and components, mainly high-speed rotating machinery such as compressors and turbines.
- Structural and thermal FEM analysis, for example strength, heat-load and thermal-stress checks of components.
- 3D CAD mechanical design of components, assemblies and test fixtures.
- Prototyping and operation testing: building prototypes, planning and running tests, evaluating test data.
- Test equipment set-up and measurement support: test rig set-up, measurement planning, data acquisition and analysis.
- Related: precision optical characterisation (absorption, scattering, transmission, reflection) and 3D modelling from point clouds.

Expertise of the proposer:
The company founder has about 30 years of experience in engineering and physics research build in the USA and Japan, spanning from development of high-pressure compressor of an aero gas turbine engine to laser and optical measurement instruments and cryogenic systems for gravitational-wave telescope mirrors.

Recent achieved projects include an optical evaluation instrument for a crystal materials manufacturer; a validated plant model used for operation optimisation for a semiconductor ultrapure-water client; software that builds 3D models from drone photogrammetry point clouds; and engineering support for a medical-device developer.

Way of working:
Work is done remotely from Tokyo, with reports in English. Occasional on-site visits within Japan are possible. A non-disclosure agreement can be signed before technical details are shared.

The company would target partners from Austria, France, Germany and Italy under an outsourcing agreement: development teams often need simulation, design or test-support capacity for a limited period or outside their core expertise. The partner keeps ownership of the product and requirements and outsources a defined work package, e.g. a CFD study, an FEM thermal-stress check, a test-fixture design or a test measurement plan. The company delivers against a written statement of work with agreed deliverables, schedule and fee. The desired outcome is a continuing relationship with repeated work packages.

Or a commercial agreement: for partners who prefer to buy a single engineering service, e.g. one analysis or a review of a design or test set-up, without a longer-term arrangement. It is ordered and invoiced per task under a simple service contract.

In both cases the expected process would start with a non-disclosure agreement, followed by a short online scoping meeting, written proposal with scope and fee, delivery with a report, and review with the partner.

After years of positive achievements in Japan the company is now approaching European companies to whom provide its services to enlarge its base of partners and strengthen the exchange of knowledge.

Advantages and innovations

Compared to similar R&D services providers the company can deliver below know-how and expertise.

- Founder’s industry and research background: Led the development of a high-pressure compressor for an aero gas turbine engine at a major Japanese manufacturer (CFD blade design, aerodynamic testing, FEM strength analysis) ,and later spent about ten years in precision laser and optical measurement research in the United States and Japan, with peer-reviewed publications.
- Analysis linked to hardware: through its in-house micro gas turbine for radio-controlled models, the company designs, builds and runs its own test hardware, so simulation results are checked against what happens on a test rig.
- Any proposed project will be handled by one allocated engineer following the task from problem definition through analysis, design and testing. All communication is between the partner and the engineer, with no need to coordinate several suppliers for a small task.
- Capacity to provide a cross disciplines approach: fluid, structural and thermal analysis, mechanical design, measurement and optics. This is useful for problems that cross disciplines, for example the cooling and thermal stress of a hot rotating part.
- Measurement experience at a demanding level: design and build of instruments that map absorption, scattering, transmission and reflection of large, ultra-low-loss optics, delivered to an industrial client.
- Models validated against real data: in a past project, a plant model was validated against measured data and the effect of the optimised operation was confirmed on the real plant.
- Small, fixed-scope work packages with agreed deliverables keep cost and risk low for a first-time cooperation.

Technical specification or expertise sought

Stage of development

Sustainable Development goals

- **Not relevant**

IPR Status

IPR Notes

Partner Sought

Expected role of the partner

The company can provide support to industrial companies of all sizes: from SMEs and start-ups to large companies, that have their own product development teams, as well as R&D institutions working on industrial projects.

Engineering service providers that need an external resource for CFD, FEM or test-support tasks are also suitable partners.

Partners with projects in the following field: development of rotating machinery and thermo-fluid equipment, such as compressors, fans, pumps, turbines and small gas turbines; propulsion and mobility systems; electric machines with high-speed rotors; thermal management; energy and industrial equipment; test and measurement equipment and optical instruments.

Role under an outsourcing agreement: the partner defines a work package (for example a CFD study, an FEM thermal-stress check, a 3D CAD design or a test-rig measurement plan), provides the input data and requirements, and commissions the work with agreed deliverables, schedule and fee. The partner reviews the results and owns the product and the deliverables as agreed in the contract.

Role under a commercial agreement: the partner buys individual engineering services per task (for example a single analysis or a design review) under a service contract.

Type of partnership

Commercial agreement

Outsourcing agreement

Type and size of the partner

- **SME <=10**
- **SME 11-49**
- **Big company**
- **SME 50 - 249**

Dissemination

Technology keywords

Market keywords

- **09003001 - Engineering services**

Targeted countries

- **Austria**
- **France**
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Sector groups involved