

Cryogenic Fluids & Process Engineer



Offer details

Full-time position, framework contract, according to French regulations, SYNTEC collective agreement

Location: Massy or Toulouse, occasional travel to customer and supplier sites (mainly within France and across Europe).

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Contact: contact@spacedreams.com

The SpaceDreams company

Established in 2021 and based in Paris and Toulouse, SpaceDreamS specializes in the architecture of spaceports. The company aims to enhance the competitiveness of launchers through the development of interoperable and modular launch pads. SpaceDreamS provides turnkey ground proximity solutions for launchers and spaceports, aiming to reduce the cost and time required for access to space. A multiple-time winner of the France 2030 program, SpaceDreamS is supported by the DGA, CNES and ESA, aiding the growth of its customers in France and Europe.

We are developing the NuPad (Next-generation Universal Pad), the first interoperable launch platform adaptable to any type of launcher, at different phases of the lifecycle, and capable of being transported between launch sites..

The TwinPad is the digital twin of the ground launch system, facilitating the development of software for implementing the launcher and the launch pad, as well as the virtual and real-time simulation of cryogenic, electrical and mechanical fluid processes.

SpaceDreamS is also conducting preliminary studies to develop ground resources for various mini and micro launchers.

Job

We are looking for a Cryogenic Fluids & Process Engineer to join our team. In this role, you will participate in the study, development and monitoring of the production of cryogenic and fluidic modules for both internal and external projects.

Main responsibilities:

- Analyze implementation and functional needs, design fluidic networks, pre-size processes, draft specifications, conduct risk analysis and prepare technical documents.
- Participate in digital process modeling activities and analysis of simulation results.
- Participate in the consultation and selection of subcontractors.
- Oversee the design and industrial production, including factory validation, on-site installation, and technical qualification of the system.
- Draft estimates and proposals for client projects.
- Support the company's R&D teams in your area of expertise

Experience and skills

Technical skills :

- Holder of an Industrial Process Engineering degree (Energy, Nuclear, Chemical, Aerospace, or equivalent).
- Significant experience in study design/realization/optimization of fluidic processes (preferably cryogenic) in an industrial environment.
- Mastery of software tools:
 - Autocad suite or equivalent, Matlab, Python,
 - Fluidic network modeling software (PipeFLO, FluidFLO or equivalent;
 - Simscape, Amesim, EcosimPRO or equivalent;
 - CAEPIPE, CAESAR II or equivalent),
 - Knowledge in CFD modeling is appreciated.
- Ability to read and interpret PFDs, P&IDs and isometric drawings.
- Knowledge of the fundamental principles of European directives (PED 2014/68/EU and ATEX 2014/34/EU mainly) and EN/ASME industrial standards are appreciated.
- Monitoring and management of subcontracting.
- Good knowledge of the space domain.
- Appetite for modeling fluid processes (mainly 0D/1D).

Personal skills:

- Rigorous and autonomous, you have very good organizational and adaptation skills.
- Strong analytical and synthesis skills.
- Critically interpretation skills of a physical process.
- Independent and self-driven, you know how to be creative and are proactive.
- Good interpersonal skills and team spirit which will allow you to successfully complete the projects entrusted to you.
- A confirmed level of English is necessary for this position.

Experience: Junior profile with 2 to 3 years of experience on significant cases.

Training: You have a Bac +5 degree in Industrial Process Engineering.

We offer

The opportunity to participate in a unique human and technical adventure within a diverse and experienced team.

Freedom to take action and organize your projects with appropriate resources.

A salary commensurate with your skills and the key position you will hold.

Additional social benefits

Advantageous, effective and straightforward health insurance.

The possibility of partial remote work.

Interested?

Send your CV and cover letter to contact@spacedreams.com.

We will contact you.