

French company seeks European partner to manufacture and supply metal cast parts according to drawings and machining specifications.

Summary

Profile type	Company's country	POD reference
Business request	France	BRFR20251217018
Profile status	Type of partnership	Targeted countries
PUBLISHED	Outsourcing agreement Supplier agreement	• World
Contact Person	Term of validity	Last update
<u>Enrico FRANZIN</u>	17 Dec 2025 17 Dec 2026	19 Dec 2025

General Information

Short summary

A French manufacturing company working in the chemistry sector is seeking to cooperate with a foundry able to manufacture and supply cast parts. Looking for a long-term collaboration, the company will provide detailed drawings and machining specifications to their partner.

Full description

The French company works in the chemistry business and produces, among others, cellulose. Faced with increasing demand, they seek to enhance the reliability of their production capacity as well as to improve and optimize their cellulose refining line. For that purpose, they wish to enlarge their supply chain in Europe and are looking for a manufacturer of refiners.

In order to procure spare parts for their refining line, they wish to find a partner that can produce and supply metal cast parts according to the company's drawings and machining specifications.

The refining line is composed of 10 pairs of conical refiners in series of 3 different geometries.

This production line operates continuously. There is only one technical stop for annual maintenance. (ref. schema)

Each model is composed of pair of full cones: 1 rotor and 1 stator.

1 stuff models medium and 1 stuff models small geometry is the 2 first refiners requested. These ones have to be full cones that they will be able retrofit with segments in the future.

The partner will have to construct 10 conical refiners. A first batch of 4 refiners will be used by the company for a proof of concept that needs to be validated by its R&D and maintenance departments. Upon validation, the company will place an order for 6 additional refiners etc. The company has specific requirements regarding the mechanical and physicochemical characteristics of the refiners, namely in terms of hardness, dimensional accuracy, durability etc.

Deadline for the POC: February 2026.

Plans are available in 3D scanned parts, 2D original plan.

Advantages and innovations

Technical specification or expertise sought

Shape and dimensions of cast parts:

There are 4 conical refiners, with specific conception named "stock model":

- Overall dimensions about:
- o rotor: L: 740 x : 500 mm
- o stator: L: 500 x : 600 mm
- Weight about 200 – 250 kg

There are 6 more refiners, with specific conception named "stuff model"

- Overall dimensions about:
- o rotor: L: 860 x : 500 mm
- o stator: L: 660 x : 520 mm
- Weight about 200 – 250 kg

The company has requirements regarding the mechanical and physico-chemical characteristics of the refiners:

- Stainless steel as Z10 C13. The SME is open about other metal that offers at least the same performance than usually used for those conical refiners. All non-stainless martensitic materials are excluded
- Hardness – 210 -240 HB min
- Accuracy to one hundredth mm : the dimensions specified on the company's 2D and 3D plans must be accurate to within one hundredth of a millimetres.
- Low heating
- Durability more than 1 year under continuously operating
- No mechanically welded part

No machined part

POC delivery deadline: February 2026

After validating by R&D and Maintenance departments of the SME, the company will order for spare parts for the full refining line and segments for retrofitting cones each year.

Stage of development

Available for demonstration

IPR Status

IPR granted

IPR Notes

Sustainable Development goals

- **Goal 9: Industry, Innovation and Infrastructure**
- **Goal 17: Partnerships to achieve the Goal**

IPR Notes

Partner Sought

Expected role of the partner

Reactivity and professional, mechanical assets are expected.

The partner must comply with the French company's plans and specifications.

POC delivery deadline: February 2026

Upon validation of the 4 first full conical refiners as POC, the 6 must be quickly delivered by following.

Type of partnership

Outsourcing agreement

Supplier agreement

Type and size of the partner

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

Dissemination

Technology keywords

- **02007008 - Iron and Steel, Steelworks**
- **02007010 - Metals and Alloys**
- **02007011 - Non-ferrous Metals**

Market keywords

- **08001012 - Speciality metals (including processes for working with metals)**
- **08003001 - Machine tools, other metal working equipment (excl. numeric control)**

Targeted countries

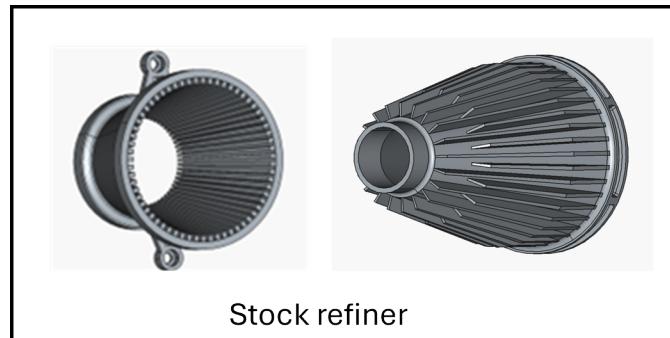
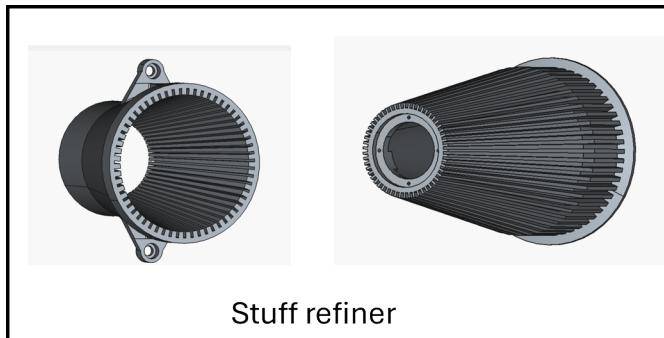
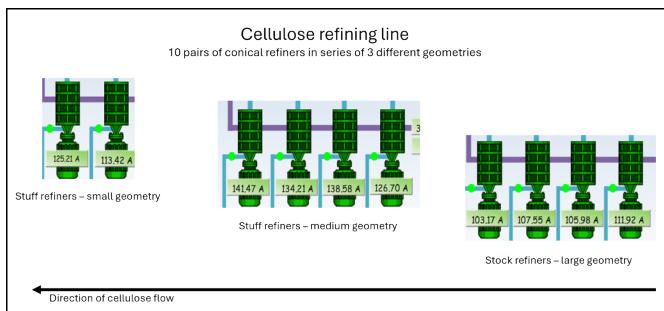
- **World**

Sector groups involved

- **Energy-Intensive Industries - Materials**

Media

Images

[Stuff refiner](#)[stock refiner](#)[refining process diagram](#)