

A Slovenian company, designing and manufacturing custom-made devices and machines, seeks help in 3D scanning and digital twin development for generation of robotic machining paths through a research and development cooperation agreement.

## Summary

Profile type

**Technology request**

Company's country

**Slovenia**

POD reference

**TRSI20260526009**

Profile status

**PUBLISHED**

Type of partnership

**Research and development  
cooperation agreement**

Targeted countries

• **All countries**

Contact Person

**[Enrico FRANZIN](#)**

Term of validity

**26 May 2026**

**26 May 2027**

Last update

**26 May 2026**

## General Information

### Short summary

A Slovenian company, designing and manufacturing custom-made devices and machines, seeks help with 3D scanning and digital twin development for automatic generation of robotic machining paths for aluminium castings without changing grippers.

The company is interested in a research and development cooperation agreement.

#### Full description

A Slovenian company is mainly engaged in the production of various finished polyurethane (PU) products.

The company is looking for a 3D scanning and digital twin development for automatic generation of robotic machining paths for aluminium castings without changing grippers.

The company wants to develop a solution where a robot captures the geometry of an aluminium casting with a 3D scanner, then programmatically calculates workpiece alignments, offset compensations, and precise robot path/machining parameters (target accuracy up to ~0.1 mm) regardless of casting and gripper variations.

The core of the development is a digital twin of the cell (robot-tool-table-workpiece) for simulation, collision checking, and accuracy validation, followed by automatic transfer of the calculated settings and programs back to the robot controller for implementation in production.

The company is interested in research and development cooperation agreement.

#### Advantages and innovations

#### Technical specification or expertise sought

Type of Partner Sought: companies or research institutions that can offer help with the 3D scanning and digital twin development.

The company would like to establish cooperation with any type of client that could help them develop 3D scanners and a digital twin.

#### Stage of development

**Under development**

#### IPR Status

#### IPR Notes

#### Sustainable Development goals

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

## Partner Sought

---

#### Expected role of the partner

The partner is expected to provide the Slovenian company help with 3D scanning and digital twin development.

Type of partnership

**Research and development cooperation agreement**

Type and size of the partner

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

## Dissemination

---

Technology keywords

• **01001001 - Automation, Robotics Control Systems**

Market keywords

• **08002004 - Robotics**

Targeted countries

• **All countries**

Sector groups involved