

Real-time data for optimal processes and quality products

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Project on data-driven adaptive machining kicks off

Can your company benefit from real-time process data in the control of machining processes? Thanks to a new TETRA-AI project, you can find out! This innovative project, a collaboration between VIVES University of Applied Sciences and Sirris, opens the door to better results and takes another step towards Industry 4.0. Want to help shape this project? You can do so, by joining the steering committee we are now putting together!

Participating in this project steering committee will bring you numerous direct and indirect benefits.

What does TETRA-AI have to offer?

1. **Optimisation of process parameters:** How can sensors assist in vibration-free production and timely adjustment of processes?
2. **Quality control:** Early detection of deviations such as tool deflection to keep products within the necessary specifications.

3. **Efficient tool management:** Use sensor technology to determine when tools need replacement to ensure quality.
4. **Prediction of surface quality:** Use sensors as a predictive tool for surface roughness after machining.

Bridge between academia and industry

While much academic knowledge exists on these topics, the actual application in the industry often lags behind. This TETRA-AI research intends to bridge the gap by translating academic insights into a practical and industrially applicable TRL level. Working with commercially available data, sensors and tools, we target companies looking to optimise their production processes based on data analytics and AI. This opens up opportunities for faster, cheaper, more stable and energy-efficient production.

Practical application and cooperation

Every challenge is converted into a generic case, developed at VIVES (Kortrijk) and Sirris (Genk), based on real challenges of companies. This allows you as a company to learn how to apply and integrate these technologies into your own production environment. We encourage active translation to your production floor, and project partners can support and guide this journey.

Knowledge sharing and networking opportunities

As a participating company, you also gain a lot from regular follow-up meetings, thematic workshops and detailed publications on the project's progress and findings.

Participation and costs

Participating companies will have the unique opportunity to help shape the cases and follow the results closely. In doing so, we are looking for users, suppliers and integrators of the technologies.

The cost of participation is deliberately kept low to allow broad participation:

- Small company: €1,000
- Medium-sized company: €2,000
- Large company: €3,000

Interested? Contact us!

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