

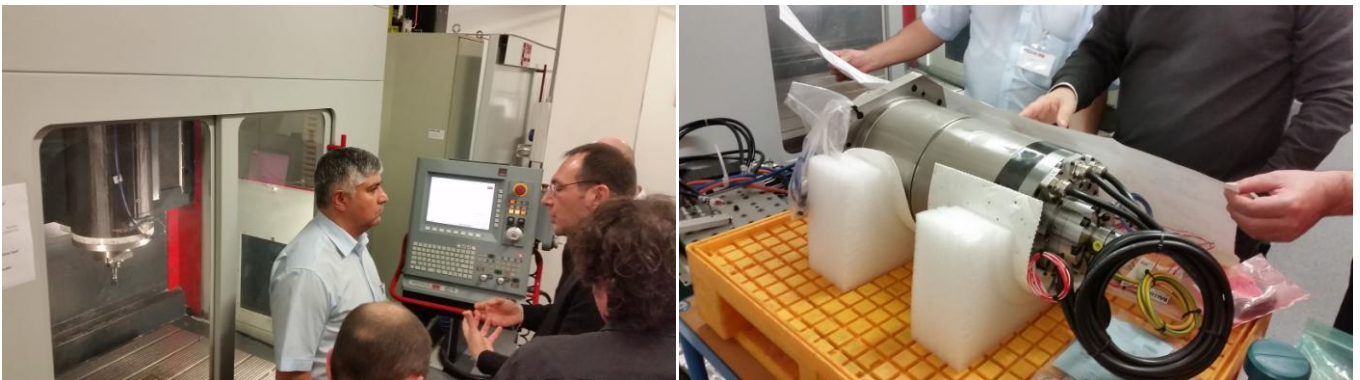
A new service solution of Condition based Maintenance (CbM) for machine tool electro-spindles

T-REX first results in the machine tool domain

- **Industrial objectives**

The T-REX partner FIDIA has presented first achievements reached within the project in maintenance improvements at service level. Being a machine tool builder in advanced sectors as automotive and aerospace FIDIA faces everyday a fierce competition in B2B market. That is why they have focused on the realization of Product Service System to gain competitive advantage among competitors trying to implement the so called "Servitization".

T-REX offered the right context for the combination of both technological and process innovation with business model innovation to pursue FIDIA industrial objectives.



- **Results**

The participation in T-REX of IMATECNO, one of the most important FIDIA's electro-spindle providers, facilitated FIDIA to reach its objectives within the project. The design of this crucial component has been revised trying to shift from a purely performance to a reliability driven concept. The component has been redesigned and also equipped with new sensors. New available sensors allow FIDIA to retrieve more information from the working and operating conditions of the electro-spindle.

The new monitoring SW tool that FIDIA has developed will enable the company to offer a new Condition based Maintenance (CbM) solution to its customers. Predictive capabilities will improve the productivity avoiding sudden interruptions in machining of workpieces due to breakdowns.



Project Mid-Term Review Meeting at FIDIA Turin

Consortium partners of the T-REX project recently gathered at FIDIA in Turin, Italy, from 23rd-25th March 2015 for their Mid-Term Review Meeting to share results and update everyone on the progress made so far towards achieving the project objectives. As the project is half way to its completion there were high expectations from the Project Technical Adviser, Prof. Koorosh Khodabandehloo, appointed from the European Commission as an external reviewer. The main developments presented covered all aspects, from business modelling innovation at management level to redesigning of existing products and services at production level, and to realization and first validation of use case demonstrators in the machine tool, transportation and robotic market sectors.

In addition to the technical achievements, activities like dissemination and exploitation were also highlighted and widely discussed.

The Project Technical Adviser indicated that there has been a very positive view on both the project activities and also technical progress in critical areas. For the forthcoming period the project will continue to complete each part of the T-REX use cases and concentrate on demonstrating and validating the advantages and the economic impact of relative applications in addressed sectors.

An Exploitation Strategy Seminar was also held the day before the meeting led by Prof. Giovanni Zazzerini, EC expert consultant, to support T-REX partners addressing specific issues such as characterization of exploitable results, risk assessment, IPRs identification and agreement on shared results.



Prof. Koorosh Khodabandehloo at review meeting held at FIDIA, Turin (IT)

Coming soon...

- Remanufacturing, 26 March 2015, Mondragon (ES)
- “How to develop successful service strategies” Workshop at University of Brescia, 9 April 2015, Brescia (IT)
- FIDIA Open House in Turin (IT) – May 2015
- 7th CIRP Conference, 21-22 May 2015, Saint-Etienne (FR)
- International trade fair Maintenance 2015, 27-29 May 2015, Bilbao (ES)
- Issue 4 of T-REX Newsletter released – Oct.2015

COORDINATOR



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