

COMET Project on its trajectory towards success

The COMET project consortium gathered for the 7th General Assembly meeting, held at the striking BTU University Library, Cottbus, Germany from 26th – 28th September 2012. With the end date of the R&D work just around the corner, final polishing of the COMET developments is taking place. Starting from November 2012, the COMET consortium will be focused on demonstrations and training on the COMET platform.



The COMET consortium during 7th GA meeting in Cottbus, Germany.

The theoretical models of KDMIR (WP1) are currently being applied to the COMET robot machining cells, with the focus on the kinematic calibration application and the Joint Based model final integration in the programming and simulation environment for Industrial Robots (PSIR) developed in WP2, together with the simplified backlash model. The advanced tracking system of WP3 (ATIR) is now being finalized, while a preliminary model is already working in selected partners cells to establish a solid base for the final implementation of this major part of COMET platform. In WP4, the High Dynamic Compensation Mechanism (HDCM) system's controlling circuitry is now also in its final stage of fine tuning, having already provided some very promising results.

The combination of continued development of all COMET platform pieces has resulted in very encouraging results that now have led to the planning of a very ambitious training program to disseminate the project results so that the wider audience know in depth the new opportunities that COMET robot machining is bringing to the high-end manufacturing scene.

During the meeting the consortium visited the BTU University laboratory and saw a variety of demonstrations, both closely related to the COMET project and also other robotics' applications which were of great interest as the demonstrations included real-time robot machining of "Carmen": the well-known and respected freeform milling test piece.

Present from the European Commission was Prof. Vincenzo Nicolò, Project Technical Advisor and Advisory Board member Prof. J.P. Kruth. Prof. Nicolò, when summarizing his opinion on the project till now stated, "When a project is successful, it is because of the fact that each person working on it is 100% devoted to the project. COMET is one of these cases." Prof. Kruth noted that he is impressed by the improvement of the project in just over 1,5 year, and more specifically on the way that the COMET consortium integrates all the development into a purpose oriented platform.

It is clear that much has been achieved over the last six months. The partners have invested a lot of effort to overcome the challenges of the project and it is evident that there is a strong commitment within the consortium to meet the project target.

In the remaining six months of the COMET project the consortium will focus on proving that robot machining is a cost-effective and reliable manufacturing solution by demonstrating the platform across a variety of real-world applications and providing training session to the key members of EU manufacturing.

For more information about the COMET project visit <http://www.comet-project.eu> and the project's social media pages, including Facebook (Comet project) and Twitter (@COMET_project).

Acknowledgements:

This project is co-funded by the European Commission as part of the European Economic Recovery Plan (EERP) adopted in 2008. The EERP proposes the launch of Public-Private Partnerships (PPP) in three sectors, one of them being Factories of the Future (FoF). Factories of the Future is a EUR 1.2 billion program in which the European Commission and industry are collaborating in research to support the development and innovation of new enabling technologies for the EU manufacturing sector.

For further information please visit:

http://ec.europa.eu/research/industrial_technologies/lists/factories-of-the-future_en.html