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CORO-NEWS N3

INTELLIGENT, FLEXIBLE AND SAFE ROBOT FOR THE MANUFACTURING OF METAL AND COMPOSITE PARTS

INDEX

3 Years

7 Countries

16 Partners

Disseminating COROMA

"Great activity of dissemination of the COROMA project to different industrial sectors in the last quarter"

COROMA project partners continue making a big effort in disseminating COROMA to different audiences to show how project outcomes are relevant to their everyday activity. COROMA seeks to develop a new concept of robotic system with capacity to carry out multiple industrial tasks.

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Project developments have been communicated focusing on key project innovations. The specific benefits of these new robotic systems, have been presented to robots users of several sectors at events as IEEE-RAS International Conference on Humanoid Robots, at the REP Theatre in Birmingham, UK, on the 15th - 17th November 2017. The same day, COROMA was presented in the workshop Next Generation Robots for the Factory of the Future, at The Royal Society, in London, as a development of a new generation of modular industrial robotic solutions that are suitable for efficient task execution in collaboration with humans, in a safe way, and are easy to use and program by the factory workers.

The new developments and future prospects of COROMA have been shown at different industry sector environments, through the individual contribution of each partner. In this scenario, this robotic project, attracted the attention of Oil & Gas sector, collaborating at the Oil & Gas Technology Centre's Robotics Week, from 30th October to 2nd November, to identify 15 potential projects that could accelerate the use of robotics offshore.

On 13th December, two partners were invited to present project innovations to Naval sector in a local conference on Naval Economic Challenges and Opportunities at the Techno Campus Ocean in Bouguenais, France.

EMO fair is the biggest European fair on machine-tools and related technologies and sets new standards for the world of metalworking. From

18th to 23th of September, in Hannover, we had a first-class opportunity to make COROMA project visible to this driving sector of the European economy.
Taking advantage of partners with stands there, we exchanged project information and goals between manufacturing and robotic technology suppliers and user. We also contacted industrial companies to increase their confidence in robots, as they can evaluate the performance and effectiveness of the COROMA systems at other users' businesses.

Apart from these events, this innovative project that pretends to boost the global position of the European manufacturing industry and to contribute to technological development in the manufacturing and robotics fields, attended Innovate 2017, UK's leading innovation event, from 8th - 9th November 2017. On November 3rd, in the 7th NDA Estate Supply Chain Event, an event with a particular focus on SMEs, the aim was also to attract new businesses to the nuclear sector.

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INTERVIEW TO PARTNERS:

Nicolò Boscolo, from IT-Robotics, talks about the benefits of the implementation of CORO-SENSE module.

Why did IT-Robotics decide to be part of the consortium of the COROMA project?

We decided to take part in the project because of two reasons. The first reason is that we love do networking. That give us the chance to collaborate with industrial partners all around the Europe which is always a good chance.

The second reason is that we want to exploit our 3D technology in new fields. So this project gives us the possibility to use new technologies and knowhow, in different user cases. It is an extraordinary scenario to exploit new products coming from this technology.

What is the work carried out by IT+Robotics in the project?

IT-Robotics inside the COROMA project is developing the CORO-SENSE system. That is, basically, a 3D vision system able to recognise de scene and the surroundings of an industrial workshop. The other feature of this vision system is that it is able to localise precisely the part that is going to be manufactured.

Which results do you expect from the COROMA project?

What we expect inside COROMA is to do practical developments, concrete innovation. We want to bring scientific part of the project inside the new products. In this way, of course, new products means new work and means new employees, both of them good achievements for the company.

Benefits and advantages of the implementation of COROMA project.

Basically, using CORO-SENSE module in machining system will dramatically decrease the machine configuration times. The module has its own intelligence, so the time needed to configure the machine will slow down. Decreasing machine configuration time, a lot of money can be saved: that is the main objective of the CORO-SENSE module.

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INTERVIEW TO PARTNERS:

Fernando Sánchez, from ENSA talks about the benefits of the implementation of CORO-SENSE module.

Why did ENSA decide to be part of the consortium of the COROMA project?

We decided to be a part of the COROMAs consortium because of two main reasons related to the ENSAs Corporate Strategy.

The first reason is to reduce our technological gap with respect to other companies in the market. Currently, this task is carried out inside ENSA by our ATC (Advanced Technological Center), where all the improvements are born and then transferred to production flow on the workshop.

The second reason is to keep in touch with universities and Research Centers abroad, to take an active part in the current state of the art is in robotics and also is core for ENSA to know which are the demands of other industrial sectors in this area.

Other relevant aspect for us is having IDEKO as a manager of the project, since we have some collaboration in the past, we are very satisfied with the final results of those projects.

What is the work carried out by ENSA in the project?

ENSA has the role of end user in the project. In the first part of the project we have to define one of the three industrial cases with the rest of the partners, and to provide them with dummy parts for them to carry out tests. In the last part of the project, we will have to supply the real components to make the final trials, and to check how well the developments of the project cope with our industrial environment and needs.

In the meantime, we also support the partners, from ENSA ATC, in all the technical questions that arise in the project

Which results do you expect from the COROMA project?

Our main goal in the project is to obtain improvements in the industrial case that we had proposed to the consortium, and to enhance our technological capability and background. We think that we can replace some manual tasks, and some tasks with little added value in our workflow, with some more automated ones.

COROMA will help us to reduce our technological gap with respect to our competitors in the market.

Benefits and advantages of the implementation of COROMA project.

The key point of the COROMA project is the modular concept. It is true that during the development phase it can be very challenging, because of the complexity of integrating all the modules in a single functional system. But at the same time it is a great opportunity for ENSA ATC to incorporate these modules in our own developments beyond the end of the project.

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COROMA's engagement

14 MONTHS

4.615 WEBSITE VISITS

144 FOLLOWERS

Meetings

In the last quarter the COROMA partners, have been involved in strategic meetings focused on leading the work made on the construction of flexible robotic prototypes for manufacturing industry to project goals.

AMRC, KTC, SORALUCE and IK4-IDEKO Research Center have been witnesses of the successful progress of the project in this period and the closer engagement and good collaboration among the partners in all the workpackages.

In the ninth month of the project, the consortium met to review the technical results in order to progress in the PEDR (Plan for the Exploitation an Dissemination of Results). In that meeting, it was established the way COROMA is going to communicate the good job already done to scientific community, and the specific steps to exploitation.

Developments aimed to the goal of a single enhanced robotic system, were evaluated by key representatives of different areas the project approach. On the 10th of October, the consortium met in IK4-IDEKO's facilities with the Independent

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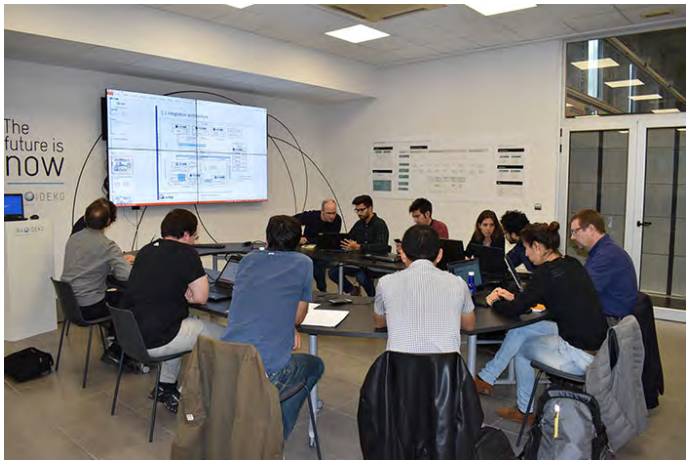
Coroma

Advisory Board. Inviting these experts helps to make sure the success of the final developments, as it creates real time correction of the project direction.

Although it cannot be said with certainty what makes a project successful, it is plausible that the evidences presented in the 12 months General Meeting in SORALUCE, after a one-year course, will turn it into visible applications very shortly, which surely will attract the attention of the European Industry.

Another Modules Integration Workshop took place at IK4-IDEKO facilities, where the Workflow of ENSA rack grinding, ENSA NDT inspection and ACITURRI jet part grinding were reviewed and their level of detail increased.

All these work meetings demonstrate that some steps have been taken in the process of the construction of the modular robotic system, and the work have indeed been broadened and deepened throughout the whole consortium.



Upcoming events

- March 13rd-15th, European Robotics Forum 2018, Tampere, Finland
- April 23rd-27th, HANNOVER MESSE 2018, Germany
- May 18th-June 01st, BIEMH 30th, Spain
- August 19th-25th, CIRP2018, 68th General Assembly, Japan

Project consortium

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