

"MUSIC"-Project



On 17-18 September 2012, MAGMA took part in the kick-off meeting of the project "MULTI-layer control & cognitive System to drive metal and plastic production line for Injected Components" (given the acronym MUSIC) in Vicenza, Italy. The project, partially funded by the European Commission, will last 4 years and involves 15 further partners: EnginSoft SpA (acting as project

coordinator), Aalen University, Ascamm Technologic Center, AUDI AG, Electronics GmbH, Oskar Frech GmbH + Co. KG, Fraunhofer IFAM, Maier S. Coop., Motul SA, University of Padova, rds Moulding Technology SpA, Regloplas AG, Fundacion TEKNIKER, Toolcast snc, and ASSOMET Servizi.

The intention of the project is to develop an innovative control and cognitive system for die casting and plastic injection molding, which is linked to real-time process monitoring, allows an active control of quality, and avoids the presence of defects by directly acting on process variables. This intelligent manufacturing approach will work at the machine-mold level, to optimize the

production cell through the collection and management of manufacturing data. An intelligent sensor network will monitor production parameters in real-time, acquiring data simultaneously from different sensors and equipment. An extended meta-model will correlate the input parameters and sensor data with quality indexes, energy consumption and costs. Advanced process simulation, data management and the meta-model are key factors to achieve a cognitive system capable of improving manufacturing efficiency.

The MUSIC project's final target is the transformation of conventional manufacturing sectors such as high-pressure die casting of light alloys and injection molding of polymers into intelligent manufacturing systems, moving towards zero-defect production, energy savings and cost reductions. ■



The MUSIC kick-off meeting in Vicenza