



POR FESR 2007-2013, Action 5.1.1

Veneto, a region of Europe

The research program is funded by the Veneto Region, within the 2007-2013 Regional Operative Program, in relation to the regional competitiveness and employment objective, Call No. 2/2013 Action 5.1.1. – DGR 632/2013 Bando POR CRO parte FESR 2007-2013, “Funding industrial research and experimental development projects with an interregional scope”, and has the following title:

“On-line prediction of ductile iron mechanical properties using a shared software interface between ITACA and MAGMASOFT®”

The objective of this project is to couple information from thermal analysis using ITACA and casting process simulation using MAGMASOFT®. The objective of ProService in the project is to identify quantitative relations between metallurgy, process conditions and resulting properties including the assessment of possible defect tendencies for ductile iron. In this respect, casting related information provided by process simulation shall be used to better relate the information about the melt state to a specific casting.

MAGMA intends to take advantage of information about the metallurgical state of the actual melt in a foundry to better align the input parameters regarding nucleation and shrinkage tendency to actual production conditions.

The mutual goal of the project is to provide ductile iron foundries information which helps them to better assess the robustness of their casting methoding as well as melting and metal treatment practice under real production conditions resulting in significant cost savings.

Software for the calculation of predictive control results



MAGMA
Casting Process Simulation

ITACA
Thermal Analysis



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