



Schneider Form

Moldes de Injecção e Fundição Injectada  
Injection and Die Casting Moulds

SF MOLDES S.A.

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## SF MOLDES - PROJECTO SI I&DT Empresarial

### Projecto i-M2S 4.0 – in-Mould Monitoring System

# EXECUTIVE SUMMARY

I-M2S 4.0 project aims the research and development of an innovative system for data monitoring and storage, provided with specifically dedicated instrumentation, integrating the moulding tool, in order to control, in real time, all parameters and variables that directly or indirectly influence the moulding injection process of polymeric materials and impact

- (i) on the quality of the resulting piece,
- (ii) on the injection process and
- (iii) on the mould tool functionality and its life cycle.

Indeed, if successful, a disruptive monitoring and control system of the entire injection moulding process will be achieved and integrate the moulding tool to allow:

- (i) to perform on real time moulding tool operability diagnosis by monitoring the quality of the cyclical processing;
- (ii) to perform on real time fault diagnostic of the moulding tool during its period of operation;
- (iii) to identify and establish on real time preventive maintenance actions on the moulding tool, on the basis of an ongoing monitoring;
- (iv) to obtain new knowledge to allow the development of innovative moulding tools that stand out by the superior quality of the output piece and by the moulding tool operability and durability.

Thus, SF Moldes intends to strengthen its competitiveness and positioning in the moulding sector for polymeric material injection of automotive parts and components industries by providing higher value added and distinctive products.

In order to achieve the objectives and innovative features proposed by the project, the SF Moldes has established a methodology including R&D activities, involving a total of 22 engineering technicians (including scientific and technological entities).

The Project will be ongoing during two years, between 02.10.2017 and 01.10.2019.

Cofinanciado por:



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