Cofinanciado por:

Project Title **| Sm@rt Edge - Desenvolvimento de Ferramentas Inteligentes**

Project Code | **CENTRO-01-0247-FEDER-017577; LISBOA-01-0247-FEDER-017577**

Main Objetive | **01- Reinforce research, technological development and innovation**

Intervention region | **CENTRO; LISBOA**

Beneficiary Entities | **TEANDM - TECNOLOGIA, ENGENHARIA E MATERIAIS S.A.**

INOVATOOLS PORTUGAL, LDA

INSTITUTO PEDRO NUNES

UNIVERSIDADE NOVA DE LISBOA

Approval Date | **12-12-2016**

Start Date | **01-10-2016**

Date of the Conclusion | **31-12-2019**

Total Eligible Cost | **958.512,16€**

European Union Financial Support | FEDER – **651.699,85€**

Objectives, activities and expected results:

This project aims to develop a new temperature monitoring system where the cutting tool integrates a thin film temperature sensor and the tool holder contains signal conditioning and wireless data transmission circuits.

The temperature sensor (thin film) should be deposited on the tool's face and positioned as close as possible to the cutting edge. The sensor must be suitable for measuring the temperature at the cutting edge, in a temperature range between room temperature and a maximum of 900 ºC. It is also intended that the sensor is stable for the life of the cutting tool.

The temperature sensor will be electrically connected to the tool holder for signal processing.