







# Start 01.01.2021 (continuation of 2020)

€ 603.662,- total, ~30% cofunding

Milestone 1 **Process optimization** strategies derived

Milestone 2 Algorithms for milling process control

Milestone 3 Development of advanced prototypes

Milestone 4 System integrated at end-user

Milestone 5 System validated

**Future Goal** Miniaturization to aim for a larger market

#### CHALLENGE



- milling under harsh conditions
- tool wear and tool breakage
- chatter and instabilites

Development, manufacturing and implementation of a sensory milling head with cutting force, vibration and temperature measurement functionalities

**'** Thanks to EIT we were able to provide a 6<sup>th</sup> sense to machine operators



Manufacturing



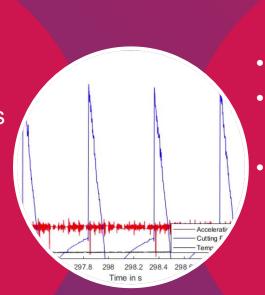
Co-funded by the **European Union** 



## SOLUTION



implement sensors in indexable cutting tools interface them to electronics wireless data transmission



### **BENEFITS**



- sensory milling head
- integration in the production facilities
- visualization, quantification and optimization of process parameters

# MAIN PROJECT RESULTS

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PAUL SCHÖRGHOFER Activity Leader

