

Research program

MACHINING OF METAL AND COMPOSITE MATERIALS

Research on technology regarding machining classical metal and composite materials in terms of cutting conditions and their optimization. Cutting tools and machined material, evaluation of technological characteristics concerning process liquids without environmental impact, evaluation and optimization of tools with defined and undefined cutting geometric stability after machining process.



Research Activities

MACHINING OF CLASSICAL METAL MATERIALS

- ▶ Research and evaluation of technological characteristics and reliability of cutting tools.
- ▶ Evaluation of technological characteristics of process liquids.
- ▶ Determination of cutting conditions and their optimization in terms of cutting tool and machined material.
- ▶ Evaluation of chip forming during machining with tools with defined and undefined cutting geometry.

MACHINING OF COMPOSITE MATERIALS

- ▶ Research on machining of composite materials with different matrix and types of fillers.
- ▶ Determination of cutting conditions and their optimization in terms of cutting tool and machined composite material.
- ▶ Evaluation of technological characteristics concerning process liquids for composite material machining.
- ▶ Evaluation and optimization of tools with defined and undefined cutting geometry for composite material machining.
- ▶ Evaluation of surface quality and dimensional stability after machining of composite materials.