

(54) Title of the invention : AN EXPERIMENTAL STUDY CARRIED OUT IN ORTHOGONAL SECTION ON THE TITANIUM ALLOY Ti-6Al-4V USING THE KINEMAT

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(57) Abstract :

This work conducts the experimental study carried out in orthogonal section on the titanium alloy Ti-6Al-4V. The kinematic and thermal field measurement device (VISIR) installed as well as its calibration are first presented. Then, the study material and the post-mortem approaches will be detailed. The work make it possible to understand the evolution of the quantities measured in-situ (thermal and kinematic fields, cutting forces) and a posteriori (contact zones, chip morphology, micrographs) for different cutting conditions.

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