

## **Metrological determination of torque for monitoring during composite drilling process**

G. Dinu<sup>1</sup>, C. Bisu<sup>2,\*</sup>, M. Zapciu<sup>2</sup>

*University POLITEHNICA of Bucharest, Department of Robotics and Production Systems*

### **Keywords.**

torque, monitoring, drilling, composite

### **Abstract.**

Drilling of composite materials is difficult to carry out due to the non-homogeneous and anisotropic properties. Many composite materials are subjected to the drilling process and at the same time a series of problems are generated which lead to the difficulty of processing. Among these problems are those related to the errors of the machined hole as well as the premature wear of the drill tool. In this context, a method of monitoring the torque during processing can provide important information on the quality of the process. A metrology method allows determining the torque and its correlation with the tool position during the drilling process. A measurement procedure based on dynamometric technology is designed to highlight the various parameters required for processing.