

## HARDWARE APPROACH TO ELECTRICAL DISCHARGE MACHINING MONITORING

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**Abstract:** The paper especially describes an experimental system that is used to monitor the electrical discharge machining (EDM) process characteristics. The paper presents the main characteristics that describe the EDM process and the experimental system that is used for the EDM process monitoring. Because the paper is focused on the EDM process surveillance, the signal conditioning and data acquisition modules are especially described. It is described the configuration of the signal conditioning system, which allow the measure of the pulses characteristics, with galvanic insulation between the electrodes and the measurement system. Also there are presented the data acquisition board configuration and its specifications.

**Key words:** electrical discharge machining, monitoring, in-process measurement, data acquisition, machine design.