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### **Abstract**

With the increase of modern industries use of metal cutting procedure, it is evident that the tools used for this processes required proper care and monitoring. Tool wear one of the most important factors in machining processes as it greatly affects the tool life, which is important in metal cutting because of its direct impact on the quality of the finished job and also affect the efficiency of industries. Hence, ways to observe cutting tool and monitor its wear are needed for optimal use. An effective system can reduce machine downtime and economic losses. The paper presents a overview of many Tool Condition Monitoring Systems.

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### Index Terms

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### Keywords

Decision Making Systems, Condition Monitoring, Neural Networks.