## MONITORING THE OPERATING PARAMETERS OF AN ELECTRIC MOTOR

## Alexandru Daniel TUFAN <sup>1</sup>, Alexandru Iulian TOMA <sup>2</sup>, Miron ZAPCIU <sup>3</sup>

Rezumat. Automatizarea are scopul de a crește productivitatea și de a satisface toate cerințele și nevoile clienților. Această modalitate de dezvoltare intervine în momentul în care compania a ajuns la un nivel în care este necesară creșterea productivității pentru a satisface nevoile clienților. Automatizările industriale au rolul de a oferi productivitate maximă, de a ușura și de a mări volumul de muncă depus de operatorii unami într-un proces de producție de bunuri, putând, de asemenea, eficientiza furnizarea de servicii. Din această cauză se pune accent pe automatizările industriale, pe calitate, pe eficiență și pe tehnologie informațională.

**Abstract.** Automation aims to increase productivity and to meet all the requirements and needs of customers. This kind of development occurs when the company reached a level where it is necessary to increase productivity in order to meet customers' needs. Industrial automation is designed to provide maximum productivity, to ease and to decrease workload of human operators in a process of production of goods, which can also provide efficient services. That is why it is important to lay stress on industrial automation, quality, efficiency and information technology.

**Keywords:** Integrated automation, PLC, electric motor, monitoring.

## 1. Introduction

Industrial automation includes a range of equipment and processes designed to render all production lines more efficient. In other words, what was done in the past by human operators, now it can be done easily by automated equipment. Offering a clear advantage, automation has gained ground in almost all subbranches of industry and not only. Industrial automation is seen and considered as a necessity for the existence, survival and development of any company which has a high productivity [1]. Representing a vast field, automation is a complex branch of technique, without which the large and small producers cannot continue to work.

<sup>&</sup>lt;sup>1</sup>Eng. Alexandru Daniel TUFAN, Engineering and Management of Technological Systems, Politehnica University of Bucharest, Romania (alex\_tufan@yahoo.com).

<sup>&</sup>lt;sup>2</sup>Eng. Alexandru Iulian TOMA, Engineering and Management of Technological Systems, Politehnica University of Bucharest, Romania (jbone\_alex@yahoo.com).

<sup>&</sup>lt;sup>3</sup>Professor Dr. Eng. Miron ZAPCIU, Engineering and Management of Technological Systems, Politehnica University of Bucharest, Romania (miron.zapciu@upb.ro).