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services and the achievement of the company's goals. The first and most important phase of the process is production, understood as a purposeful and organized human activity, resulting in the production of material goods or the provision of services in order to satisfy the consumer's needs and bring profits to producers (Szczerba, 2014). This means that in economic processes a new economic value is created, the measure of which is the so-called added value (Korbiel and Kukurek-Górecka, 1999). If an economic process is carried out on a large quantitative scale and in repeated cycles, it is referred to as an "industrial economic process". The process is implemented in certain industrial plants and requires continuous optimization, herewith one of such nature (Brody, J. and Korczyk, M., 2016).

The production process can attain appropriate quality parameters as a multi-element process with a complex structure. This structure consists of successive stages divided into activities and technological operations. These stages are carried out in a certain time and space, by human teams using specific technical means (Brody et al., 2017a; Brody et al., 2017b).