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Invited Session on:

Process optimization: Cases and Techiniques Demonstrations

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Abstract

The optimization activity has as basic objectives, the minimization of possible negative results of the processes such as: waste, losses, costs, slowness, etc. And on the other hand, maximize the achievement of positive results such as: profitability, speed, income, etc. In most cases of process optimization, when one of these goals is achieved, do the achievement of the other, partially or fully. As an example we can mention the case of minimization of production costs. When if obtains a reduction in costs, consequently there is an increase in profitability. Two other important aspects of the activity of optimization are, the social and the environmental. When optimizing a process, the use of resources is invariably minimized, being these of an environmental nature such as energy, water and raw materials of mineral, plant and animal origin. These resources are in the nature or are generated from other natural resources, and the decrease in their extraction (utilization) makes the process environmentally correct that is, more sustainable. On the social aspect, there is the possibility of decreasing prices of products and services resulting from the optimized process that may have their prices reduced due to increased profitability. Thus, these products and services they become more accessible to social classes with less purchasing power, thus making the process more socially inclusive. Therefore, the purpose of this session is to present studies that address cases and methods of process optimization in order to provide benefits to the environment and consequently to humanity.

Keywords:

Optimization, Process Quality, Sustainability, Continuous Improvement, Algorithms

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