

Multivariate process control and real time sensors in practical use

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Implementing multivariate process control and/or real time sensors gives opportunities to achieve several improvements like productivity, scrap rate, improve and optimize product quality etc.

This becomes possible because the production organization gets a fast response on the process state and key quality parameters of raw materials and products. Hence they can very quickly take corrective actions when the process or the material in process is not in an optimal state.

The fast response also improves the possibilities to optimize the process and product quality. This requires however in many cases a change of mindset in the production organization.

The technical performance is of course very important, the system has to generate reliable output in terms of accurate description of the process and predictions and it has to be running stable.

However, the gain in production efficiency and/or improvement of the product quality that is the main driver for implementing the system in the first place is not made directly by the system but through active use of it. This part has to be made by the production organization of the company. Examples from case studies and some statistical results and considerations will be presented.