Process Control & Digitalization

Modern Process Control Technology can help transform a chaotic & experience-based manufacturing to a systematic and data driven Process





Business Goals

- Enhance process stability
- Optimize equipment to improve throughput
- Ensure product quality and customer satisfaction



Our definition of the Key Components of Process Control

Four Pillar-Technology

- ♦ Instrumentation
- ♦ Data Technology
- ♦ Control System Platform (Hardware)
- ♦ Data Analytics





Example of New Process Control Technology Development Approach

Key Stages

- Benchmarking 4 key technical areas
- Conduct gap analysis to identify needs
- Develop technology roadmap
- Develop Key projects within given resources



Example of A Manufacturing Process Cloud Data Strategy



Example of An Advanced Process Control System Float Glass Process



Example of Data Analytics Technology

Process optimization

Knowledgediscovery;

Data Analytics Big data analytical techniques

Data preprocessing

Multiple data source platform

Understand process dynamics to achieve process optimization

Discover relationships and patterns in data (e.g. root cause); Generate hypothesis for further verification through experimentation

In-depth data analysis using methods such as traditional statistical methodology, data mining techniques, machine learning, etc.

Data selection, integration, filtration, sampling, cleaning and transformation

