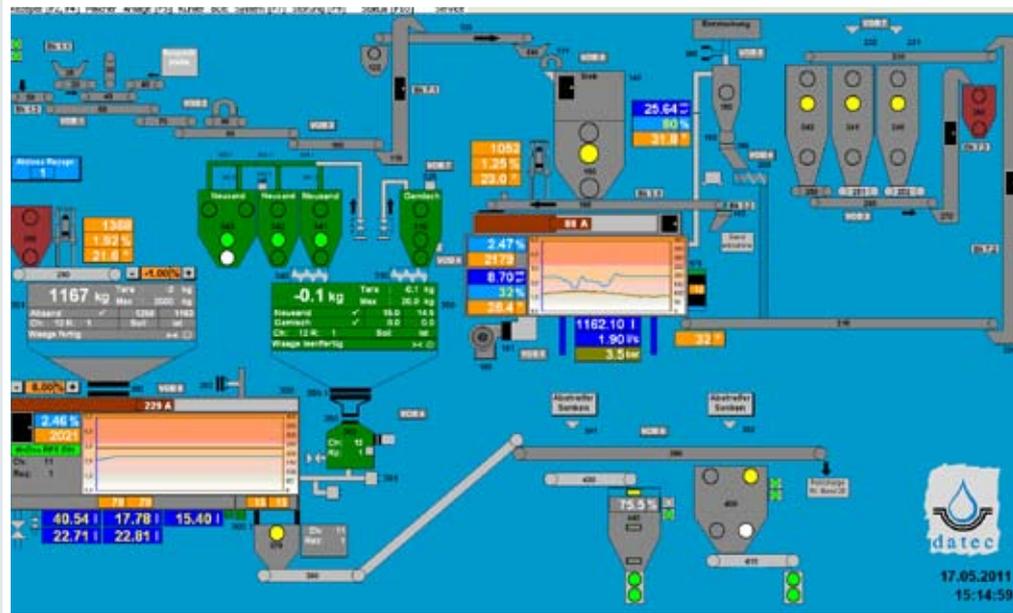


Dosing and mixer control system

DView



The task

Following successful conversion of an existing sand conditioning plant with a complete **datec** control system, a second new sand conditioning plant was constructed four years later. On account of the favourable experience gained from operating the first plant, a **datec** control was to be fitted again. It was designed to control all the units in the sand cycle.

The dosing and measuring devices for weighing and adding water were to be operated with a uniform menu-driven control system. The complete control system comprised the power section, process control and measuring techniques, as well as processing for process visualisation in colour.

Approach:

An integrated concept for all control and measuring units was to integrate the whole process recipe-dependent weighing and moisture-dependent water dosing. The operation and display of all operating states and samples were to be performed on a common process visualisation system.

Solution:

System integration is performed by combining tasks in special process control computers and intercommunication takes place over industry-standard bus systems.

The measuring techniques for moisture, temperature and weighing are taken care of by **datec**'s **EWMS** dosing and measuring computer. It is also responsible for the high-level automation of the different basic measuring functions such as water dosing, weighing etc. Similarly responsible is a PLC for the batch control process. It monitors and controls the different units. A visualisation system on a PC is permanently connected to both computer systems and receives all the data required for processing in the colour picture. Operating states, measured value display, alarm message acquisition, printout and menus are the responsibility of the PC.

Advantages:

The subdivision into three computer units corresponds to the three major functioning units on a modern control system. Every one of its three systems are used with their specific strong points:

1. Process visualisation on a PC makes an uncluttered display possible – everything can be viewed at a glance.
2. Uniform operation is guaranteed for all functions.
3. All samples and control values are visible on a standard display.

up to **datec**

datec

Dosier- und Automationstechnik GmbH · Alte Salzdahlumer Str. 203 · D-38124 Braunschweig
Fon +49 531 26408-0 · Fax +49 531 26408-20 · E-Mail info@datec.org · Internet www.datec.org