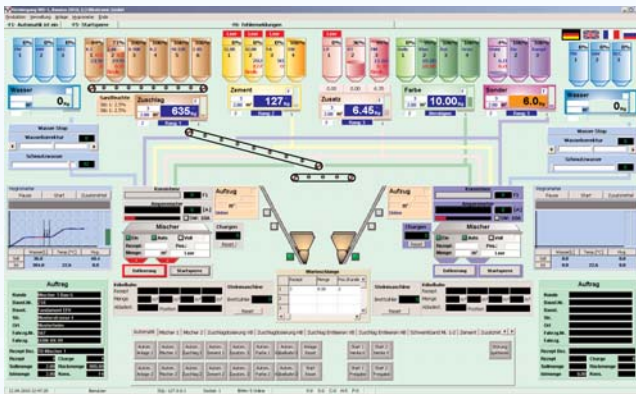




Beton-WIN

Control System for Concrete Mixing Plants



The Beton-WIN process control system allows the manual and automatic control of the processes in the concrete mixing plant. Thanks to its modular structure a tailor-made plant control can be created. For this, only the hardware and software modules necessary for the specific production process will be compiled.

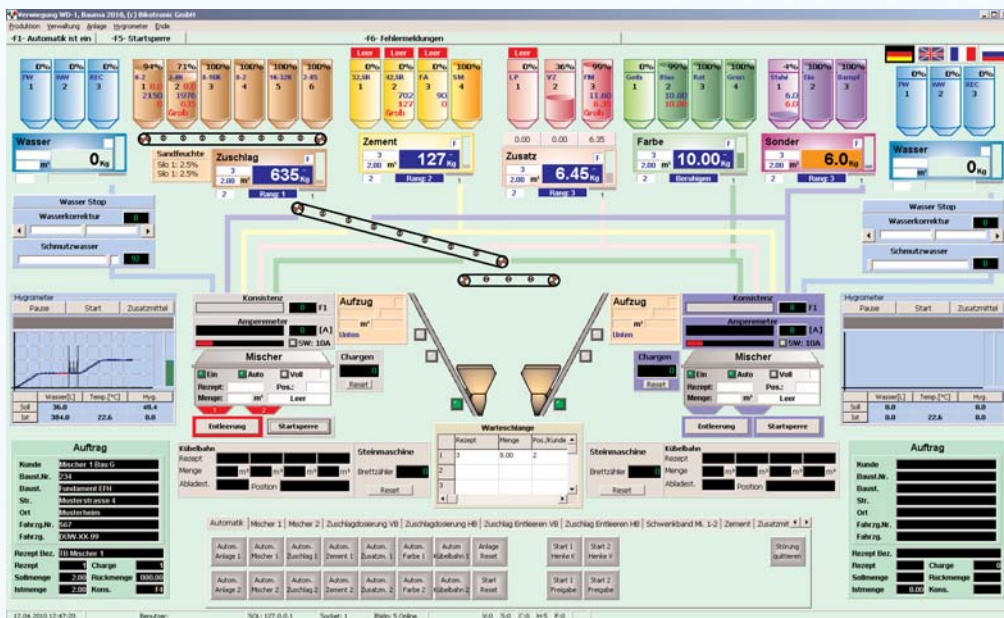
The Beton-WINL process control system consists of:

- | | |
|-------------------------|---|
| 1 Siemens industrial PC | 1 Beton-WIN administration and process control software |
| 1-4 LCD displays 22" | 1 Operating system Windows 7 |
| 1 Keyboard | 1 SQL database |
| 1 Mouse | 1 Soft PLC |
| | 1 Software for remote maintenance |
| | 1 MWS calibratable memory for measured values |

Production

The process control software control the batching procedure in manual and automatic operation. The mixing equipment is displayed schematically. All relevant processes and equipment states as well as exact and clear error messages with time and date are displayed graphically.

- Recipe controlled production process
 - Graphical production overview, displaying all scales on the screen
 - Operating system Windows 7
 - Adjustment of the water correction and the mixing rate fresh / recycling water with the mouse
 - Display of the processes
 - Continuous automatic overrun calculation
 - Water stop function by mouse click
 - Change of the loading quantity during production
 - Change of silo during batching
 - Double filling lock for mixer
 - Individually adjustable control times
 - Easy operation of the plant
 - Output of the error messages
 - Operating hours meters for all drives
 - Cycle counters for all drives
 - Maintenance module
- Every motor, valve and every limit switch can be monitored. If a beforehand defined condition is fulfilled, a plain text will appear which will also be saved in a file for later processing.



Production

- Allocation table for articles
- Colormix
- Start of production with recipe no., article or place of discharge

Article Administration

- Selection of several recipe numbers for one article
- Start parameters

Recipe Administration

- Entering recipes with recipe numbers, designations, components, theoretical values, hygrometer control etc.
- Daily recipe management

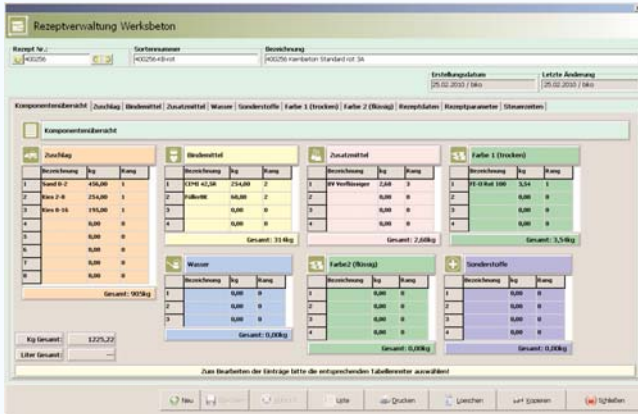
Forms Administration

- Entering forms, also of foreign plants
- Number of cycles statistics for each form
- Form repair management
- Form statistics with article management
- Connection to the machine

Statistics

- All statistics can be output with any time frame
- Consumption statistics with administration of the used material, theoretical and actual values with difference equation
- Recipe statistics
- Article statistics: Listing according to produced articles with consumption of aggregates, cement, additives, colour and water for every article
- Production statistics with all components included in the recipe with itemization of theoretical and actual values including difference equation
- Statistics of the mixing protocols for every single batch
- Daily production
- LOG File – All processes of the system are recorded and stored in a LOG file

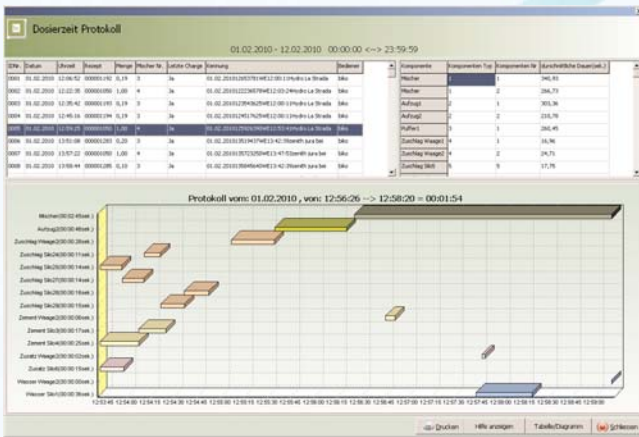
Administration Computer Beton-WIN



The administration computer Beton-WIN manages all master data like recipes, clients, construction sites, materials used, statistics etc.

Clearly laid out menus and self-explaining buttons give the operator a maximum operating comfort and a very good overview. Basic knowledge of the operating system Microsoft Windows is enough to operate Beton-WIN rapidly and without problems.

All lists and statistics can be accessed with different sorting orders and output with any time frame. All statistics are displayed tabularly or graphically. Beton-WIN has a data export module which exports all statistics in an ASCII or Excel format. With Microsoft Excel, the data can be examined or prepared for the annual financial statement.



Beton-WIN has data export module which can export all statistics in the formats xls, xml, csv, txt. Thus, the data can be individually checked or edited.

Beton-WIN can record unlimited data quantities. Data size does not matter, the speed does not diminish significantly with bigger data sizes. This data can be transferred to a central ERP with a USB stick, modem or through a network.

All master data of one or more plants can be administered centrally and transferred to the plant.



The operator in control of the mixing process does not need to enter data, if that is what you wish. Furthermore, the consistency of the data between the mixing control and the ERP is guaranteed.

With the Beton-WIN SQL server, you can access the data bases rapidly and safely. It is a server-client application and disposes of an independent backup system which saves the data of the complete data bases time-controlled.

Data Backup

- Automatic data backup of all data on a USB stick, CD-ROM or server

Database

- SQL Server
- Server-Client Application
- Independent backup system

Data Export

- Data export in ASCII or Excel Format for later data preparation with Excel

Additional Features

- Protocol printout with any time frame
- All protocols can be stored on external data media: CD-ROM, USB stick
- Recording of all operating functions and system errors for later analysis of the equipment
- Change languages by pushing one button (if delivered with a foreign language)
- Data transmission
- Interfaces to the invoicing / ERP
- Drilldown function

Recovery Set

To restore all Bikotronic software packages and databases easily. The recovery can be managed by the client without any problems. The Recovery Set consists of:

- Bikotronic Recovery CD with instruction manual to restore all Bikotronic software packages
- Acronis TrueImage software package with manual
- USB stick as storage medium with min. 1 GB memory capacity

Remote Maintenance Beton-WIN

Through this connection, all functions of the plant can be tested, accepted or changed.

- Via ISDN, network or Internet
- Remote maintenance software
- Remote maintenance for BT-7000
- Remote maintenance for BTS-WIN
- Remote maintenance for I/O interface (PLC)

Spare Parts Provision

The hardware of the Beton-WIN SQL system is based on standard industry computer hardware. Thus, a fast and easy spare parts provision is ensured by standardized PC components.

Options:

Water Batching System BT-7000

Nowadays, the concrete quality is of vital importance for the industrial production process. In order to meet the increasing quality demands, it is essential to control and regulate the moisture content. The Water Batching Computer BT-7000 determines the moisture of the concrete in the mixer fast and exactly. It calculates and doses the water to be added and is thus the basis for a constantly optimal concrete quality.



Sand Moisture Measurement Device BTS-WIN

The BTS-WIN measures the moisture continuously while the batching is running. Afterwards the sand / water correction will be executed during the batching. The measured sand moisture values are displayed in the corresponding silo.

