

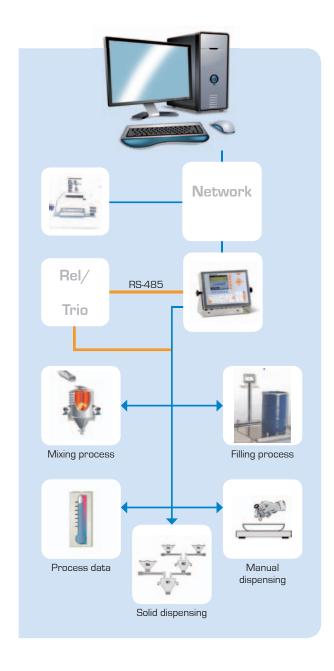
Recipe System

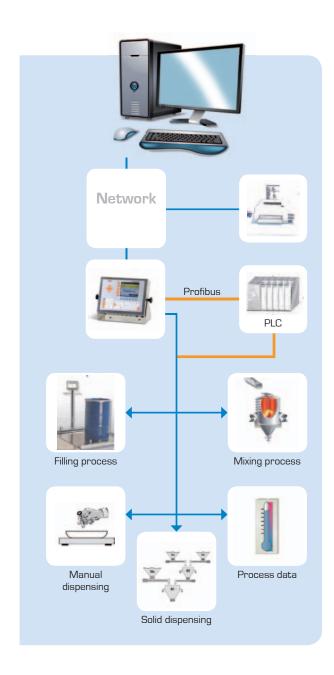
exact | reliable | flexible



Absolutely practical

- Dispensing control from screen
- For monitoring and control of manual as well as automatic dispensing processes for the chemical, pharmaceutical and food industries





Recipe system variants

- Automatic multiple component dispensing into containers, mixers or tanks
- Weigh out recipes on floor scales or on built-in scales, even with manual additions
- Dispense from container scales

Advantages

- Supports all industrial scales
- System for single and multiple workplaces
- Completely compatible to
 Microsoft Windows 7®
- Simple and easy to use

Recipe system functions

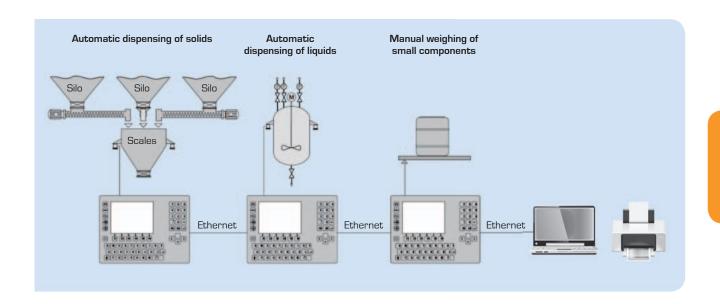
- Operation and control of the processes with overlapping batches
- Constant monitoring of the dispensing station and indication of alarms
- Management of jobs and recipes
- Management of stock and consumption
- Editing of file containing parameters of raw materials
- Editing of file containing parameters of scales
- Printing of batch log and alarm log
- Administration of passwords and user rights
- System and service settings for the PC software and all dispensing control

Simple integration

- Connection to SQL database via ADO interface
- Connection to host system to accept jobs and to supply actual batch is possible
- Networking of the dispensing control either via an RS485 multiDrop network or via Ethernet

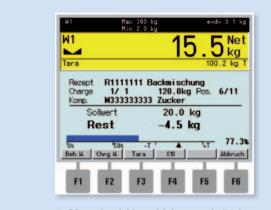
Supported recipe functions

- Automatic dispensing 1 or 2 level, with tolerance check
- Manual weighing with/without possible tolerance acknowledgement
- Emptying of scales with adjustable zero range
- Scales null check
- Container tare check
- Text display on the scale terminal for information of operator
- Addition of components weighed in advance
- Control of equipment e.g. heating/cooling system
- Specify time e.g. for operation of mixer
- Communication with PLC controllers via Profibus DP
- Summary of recipe parts into functional blocks



Recipe system - user application

- Dispensing is recipe-controlled
- The raw materials can be dispensed via valves, dispensing worm drives or rotary feeders in the coarse or fine flow
- The recipes contain functions for automatic or manual dispensing, to check weight, for operator intervention and synchronizing steps



Manual weighing with bar graph display



Automatic dispensing

Generating jobs and starting

Job data can be entered at the recipe system and released for the individual terminals.

Depending upon the configuration, the jobs can be automatically released and started in a specified order or can be individually released and started by hand. Before starting each job, the program checks the job data for plausibility and the availability of the materials to be dispensed. After this check, the partial recipes

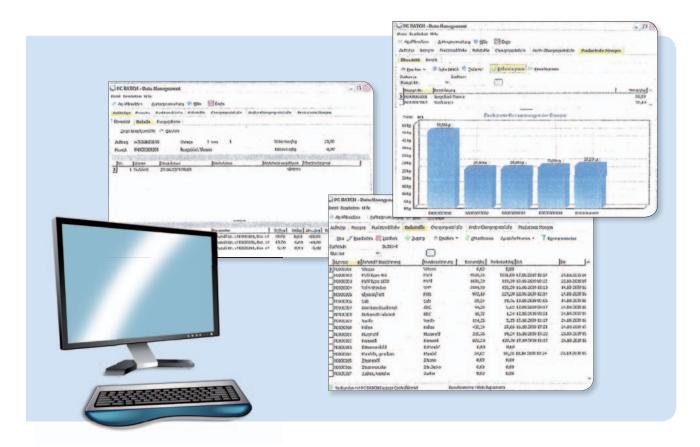
are transmitted to the dispensing control units involved to be processed there.

Via the integrated phase control, the process can be subdivided into partial processes (phases). The individual phases are then started depending upon the start, the release or the reported completion of other phases.



■ The recipe system can be combined with a variety of terminals

Recipe system data management



Production management

With the recipe system, several batches of a recipe can be processed within one production line. Production plans can be produced individually for each production line and both automatically as well as being started after being released by the user. At all times the user has a clear overview over the entire production and can intervene if necessary. An integrated security system means that several users can be logged on with differing access rights. This prevents faulty operations by the user and avoids unnecessary faulty batches.

Recipe management

The intelligent recipe management makes it possible to define recipes with special process steps such as mixing, heating, cooling etc. in the familiar Windows user interface. Recipe steps can also have complex script functions executed to synchronize process steps or to display user dialog.

Material management

The recipe system can manage a large number of materials relating to production lines. With a few steps by the user, the quantities of used raw materials and produced recipe amounts can be called up. Automatic stock monitoring is integrated. Optionally, material tracking can be activated with three freely selectable batch parameters and a date field.

Log management

When the processing of each recipe ends, the system generates a batch and production log. The materials management provides logs of consumption, production quantities and stock levels. All of the logs are easy to be individually customized.

Technical data

Dispensing

- Automatic dispensing in coarse/fine flow with display of remaining value and tolerance check
- Automatic conversion of target values to the specified batch quantity
- Manual dispensing with numeric display of remaining amount and bar graph display recording the batch numbers
- Manual dispensing with change of position and horizontal scale
- Automatic trend-controlled optimization of lead amount (selectable)
- Automatic extra dispensing on negative tolerance violation (selectable)
- Flow control with alarm signal (selectable)
- Automatic intermediate emptying if the batch quantity is larger than the maximum weight (selectable)
- Recording of personnel numbers

Logging

- Batch log
- Fault reports
- Files, balances, parameters
- Print out via connected printer and/or storage in file (internally or on a USB stick)

Use

- The user interface is via a high contrast, bright TFT color screen, with data input via an alphanumeric keyboard under an acid resistant film or via an optional PC keyboard
- Procedures and the operation can be individually configured so no superfluous steps are needed
- Input, print out and transmission of applicationspecific data e.g. job no. or batch no.
- User interface in German, English, French other languages on request

Files

- Recipe file with 5000 function entries (recipe lines)
- Raw material file with 300 raw material entries
- Parameter files
- Personnel file with 100 entries

Simple integration

- Stand alone or remotely controlled operation is possible – parameters, recipes, etc. can be entered via the keyboard or loaded via the interface
- Acknowledgement, start, interruption possible via external pushbuttons

