



## Logical operation.

### Quick installation and configuration

You define your lines and scales in tables. You organise your programs on the vacuum fillers directly from the PC.

- Renaming and standardising
- Transferring from one line to another
- Saving and printing

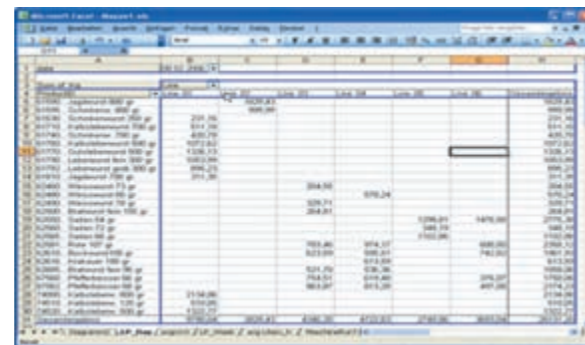
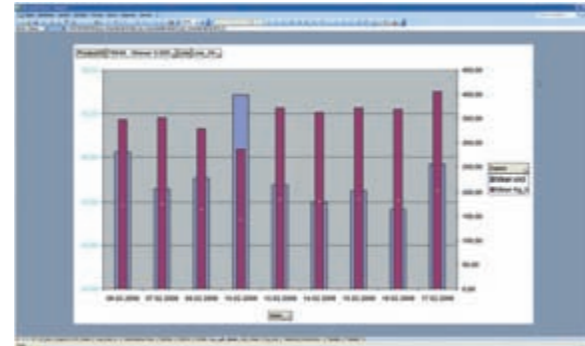
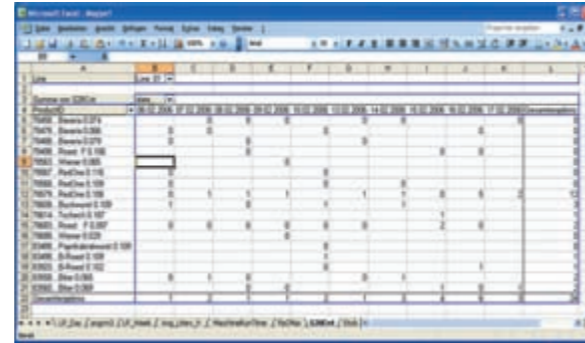
You monitor the current production directly from the control centre. Immediate intervention is possible in the event of deviations from the plan.

### Simple data transfer

Various pivot tables and graphs are automatically created when the data is exported to Excel:

- ◆ Machine operating time per day
- ◆ Quantities per day or month
- ◆ Signals from the metal detector per machine, article or day
- ◆ Hourly output per line, article or day

The data is saved in a database. Using the HCU Viewer you can select the information and export it directly to Excel. The database is open and can also be read out directly by higher-level systems (e.g. PPS system, materials management system).



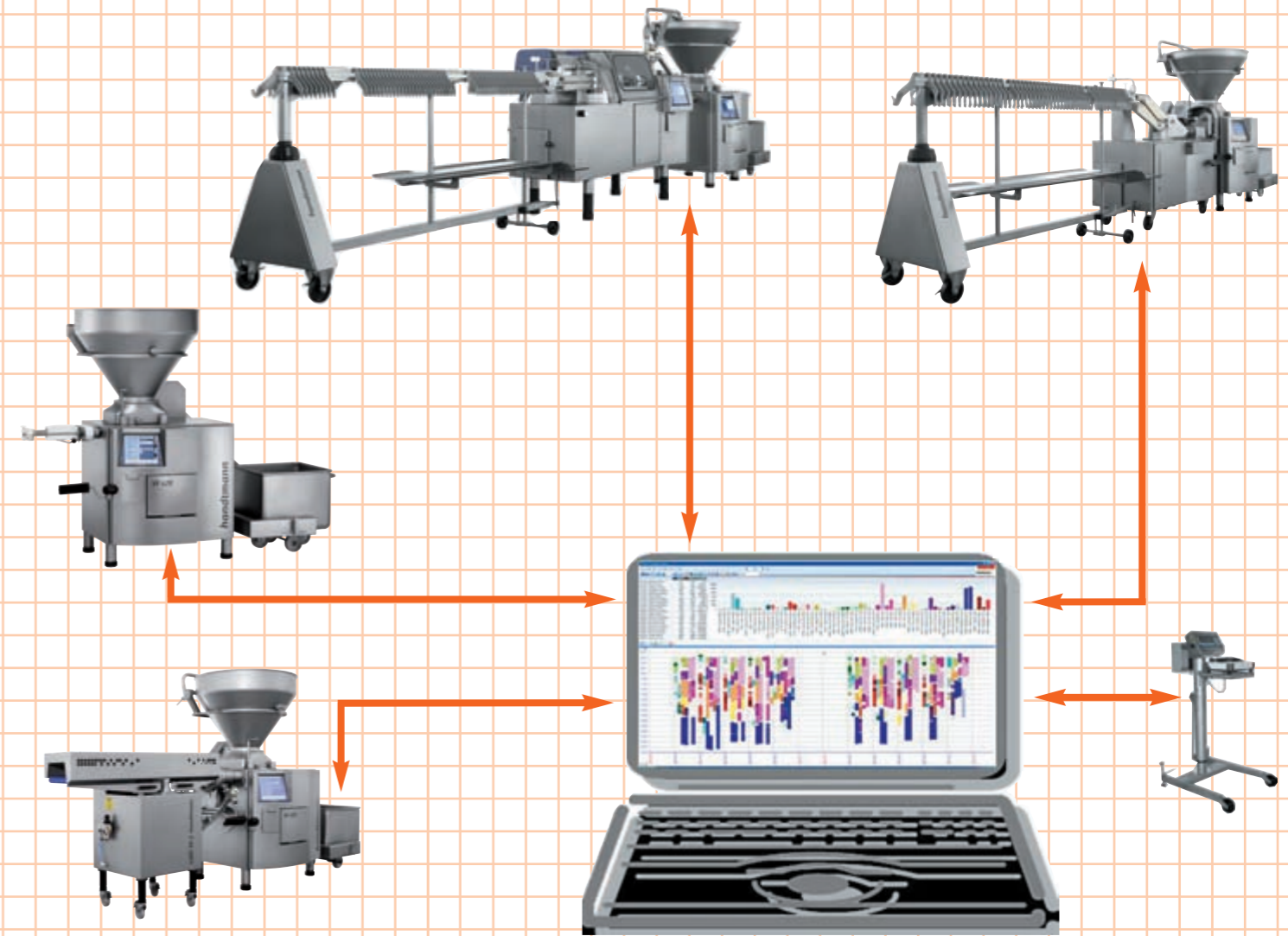
#### Prerequisites for using HCU

- ◆ All vacuum fillers with monitor control
- ◆ Commercially available PC with Windows XP and Office XP
- ◆ Screen resolution at least 1024\*786
- ◆ Ethernet networking (RJ45 cable to each filler and scale)

#### Integratable scales

- ◆ Bizerba
  - ST terminal with Ethernet
  - BCT software for PC
- ◆ Mettler Toledo
  - IND690 with Ethernet connection and SysPac software
  - MTScaleConnection software for PC

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Ideas for the future.



## handtmann HCU.

### Production data acquisition for perfect process analyses

- ◆ Automatic documentation
- ◆ Monitoring of production
- ◆ Transparency of processes
- ◆ Confident planning and controlling
- ◆ Minimisation of overfilling
- ◆ Significant cost savings

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Ideas for the future.



## The network solution.

### Perfect analysis options

Production overviews  
Line comparisons  
Daily comparisons  
Production history

Navigate from the overview to the detailed history for the individual production process by simply clicking on the charts.

- ◆ Compare the efficiency of different production dates, lines and production types
- ◆ Synchronise the production parameters for your lines
- ◆ Analyse the production history and uncover any weak points
- ◆ Improve the utilisation of your machines
- ◆ Use the analysis options as a basis for your decisions

### Down-time acquisition

- ◆ Acquisition of all machine stops
- ◆ Documentation of the shift and number of operators
- ◆ Individual assignment of the down-times (breaks, cleaning, conversion, etc.)
- ◆ Continuous acquisition online

### Article-dependent parameter restriction

The parameters 'portions per minute', 'portion weight', 'length' and 'number of twists' can be individually restricted per article. This prevents production errors in periods of reduced monitoring (e.g. night shift).

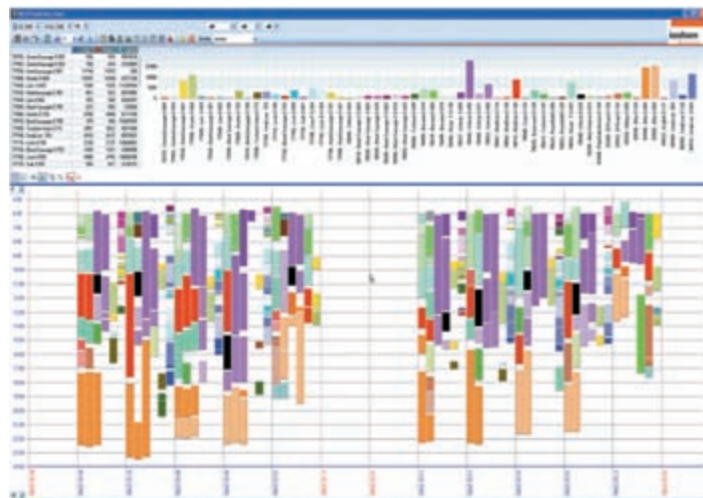
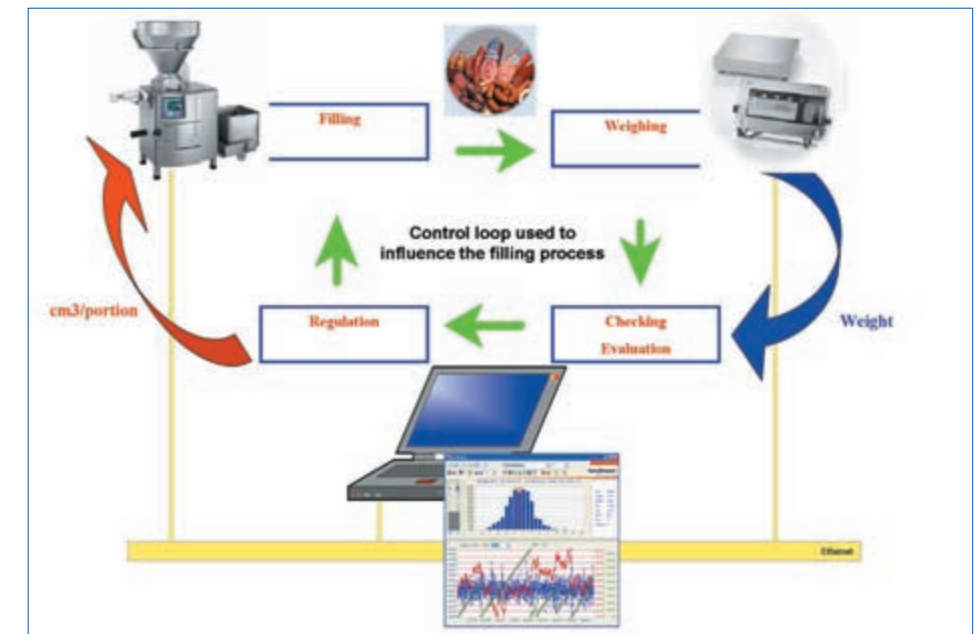
The elimination of operating errors in conjunction with the weighing frequency guarantees a constant mean value from day to day.

### Automatic weight regulation

Use of networkable check-weighing scales

The scales are connected to the network just like the handtmann fillers. A scale can be used by a number of vacuum fillers simultaneously.

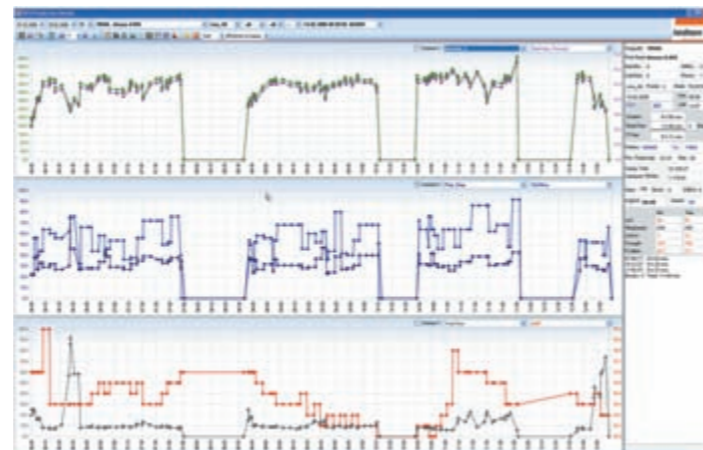
The operator simply enters the number of the filling line into the scale and places the article on the scale. Adjustment of the filler and documentation of the information then take place automatically. The operator can be prompted to weigh by means of a signal or the machine stopping.



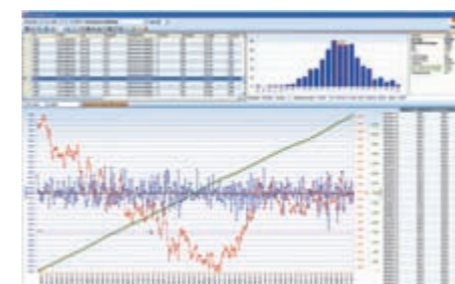
Graphical overview of production capacity

| Production | Production/line  | Count | Line 1 | Avg. Line 1 | Line 2 | Avg. Line 2 | Line 3 | Avg. Line 3 | Line 4 | Avg. Line 4 | Line 5 | Avg. Line 5 |
|------------|--|-------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|
| FR000      | Wheat 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 | 1000  | 1000   | 1000        | 1000   | 1000        | 1000   | 1000        | 1000   | 1000        | 1000   | 1000        |
| FR001      | Wheat 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 | 2000  | 2000   | 2000        | 2000   | 2000        | 2000   | 2000        | 2000   | 2000        | 2000   | 2000        |
| FR002      | Wheat 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 | 3000  | 3000   | 3000        | 3000   | 3000        | 3000   | 3000        | 3000   | 3000        | 3000   | 3000        |
| FR003      | Wheat 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 | 4000  | 4000   | 4000        | 4000   | 4000        | 4000   | 4000        | 4000   | 4000        | 4000   | 4000        |
| FR004      | Wheat 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 | 5000  | 5000   | 5000        | 5000   | 5000        | 5000   | 5000        | 5000   | 5000        | 5000   | 5000        |
| FR005      | Wheat 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 | 6000  | 6000   | 6000        | 6000   | 6000        | 6000   | 6000        | 6000   | 6000        | 6000   | 6000        |
| FR006      | Wheat 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 | 7000  | 7000   | 7000        | 7000   | 7000        | 7000   | 7000        | 7000   | 7000        | 7000   | 7000        |
| FR007      | Wheat 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 | 8000  | 8000   | 8000        | 8000   | 8000        | 8000   | 8000        | 8000   | 8000        | 8000   | 8000        |
| FR008      | Wheat 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 | 9000  | 9000   | 9000        | 9000   | 9000        | 9000   | 9000        | 9000   | 9000        | 9000   | 9000        |
| FR009      | Wheat 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 | 10000 | 10000  | 10000       | 10000  | 10000       | 10000  | 10000       | 10000  | 10000       | 10000  | 10000       |

Quantities across articles and lines



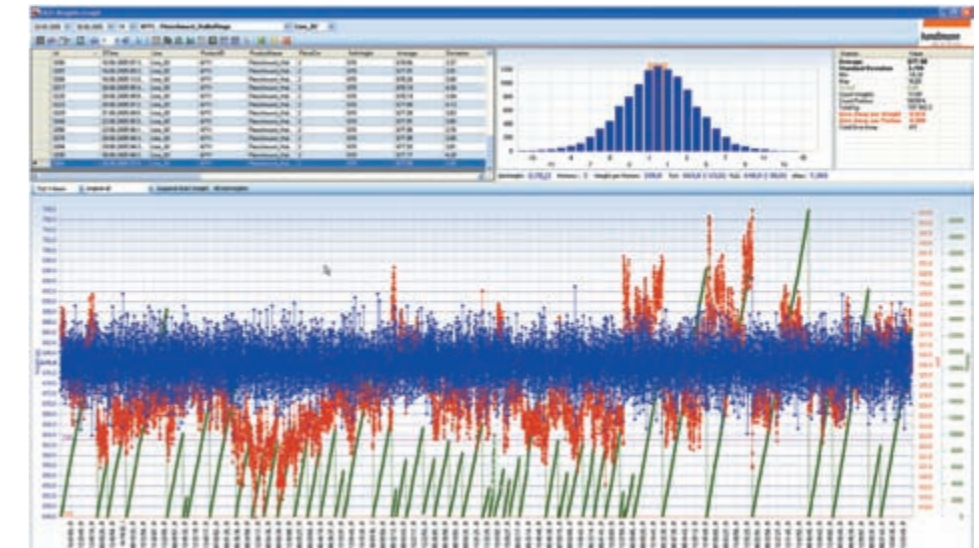
Detailed information on the history



Overfilling is reduced, which means less waste

In addition to the weight, the date and time, portion counter and current volume setting of the filler are also stored. This permits subsequent analysis of the process. Impermissible fluctuations in the material due to density deviations and fluctuating air content can be detected and quantified.

Article information (setpoints, weighing frequency, etc.) are centrally maintained in a table and apply to all machines. As a result, any changes to the nominal weight (e.g. Friday due to longer storage time) can be quickly and easily made.



Article regulated over an extended period of time: perfect weight check