

Kastor

Batch-oriented process control system for materials-handling technology

operation
control
visualization
batch tracking
documentation

Documentation – Process control system Kastor

Combination of the innovative development Kastor process leading system with a visualization on basis of standard tools, results in a central process leading and visualization system having the ability to carry out a multitude of workflow controls and checks. This can be the registration of raw material data as well as a definition of the rate of yield. Furthermore this central system

offers a complete documentation of production sequences – e.g. by batch reports, yield balances and a long-term archiving of collected data. In addition it offers an individual configurable access protection, system reliability and is capable for validation according to GAMP and FDA requirements.

Areas of application

- Industries: food, chemical, plastics, pharmaceutical
- Production environment Provision of raw materials, handling of large, small and liquid components, charging technology, explosion dangerous areas, too

The process control system Kastor has its own master data management, which is ajar against the defaults of the S88-guidelines. Likewise Kastor can be tied up to the transfer of recipe and order data to a supervisory customer system.

THE INNOVATION



Kastor offers a set of advantages:

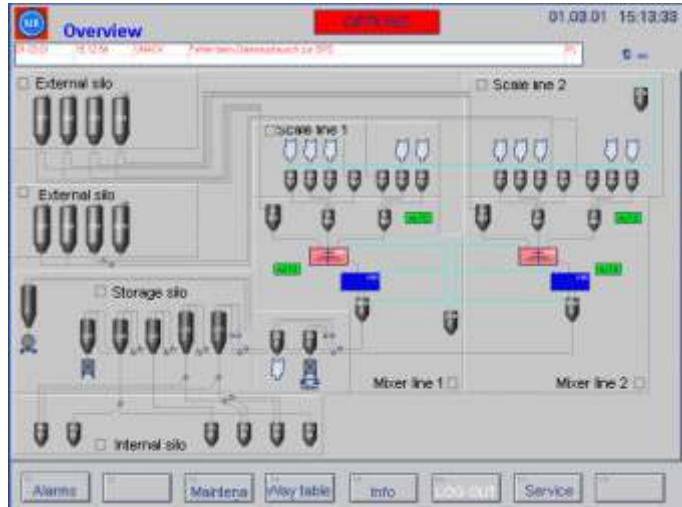
- flexibly applicable
- flexibly to specific customer requirements
- applicable as a standalone system
- developable to a comprehensive, interlaced batch production system
- raw material identification in connection with bar code scanners
- strict user guidance for the avoidance of weighing errors
- has independent master data management
 - order management
 - recipe management
 - storage place management
 - article management etc.
- documents all operating steps and weighing results
- provides calibration data
- fulfills all demands of the European Union regulation

178/2002

- labels the goal bundles for clear identification during a following subsequent treatment

Further features of Kastor are:

- Recording of raw materials, supply, storage, stock removal, filling, conversion, identification (by reading, writing, by barcode (39, 128, EAN), RFID), PDA-, WLAN-compliant
- I-points with display of production states (order progress), fault messages, necessary activities like silo refilling due to shortage of material, loading and unloading of lorries, etc.
- Delivery to succeeding packing machines
- Filling and emptying of Big-Bags, containers, pallets, ... (changeable bags, identification/labelling with barcode (39, 128, EAN), transponder, RFID)
- Possibility to have multi-stage production processes incl. tracing of raw materials used, overlapping of orders and batches
- Can be combined with manual weighing, synchronous and asynchronous
- Calculation of active agents, water content, production factors
- Handling of scale tolerances as requested according to order specifications, ingredient specifications or scale parameters/weighing ranges
- Cleaning check
- Determination of output



Visualization - overview



Production server example mask

Host connection

- Host – Kastor: order data and recipe data (parts lists), raw materials
- Kastor – Host: consumption data, order acknowledgements
- From and to:
 - SAP / R3 (by means of Idoc, RFC, TRFC, ASCII-files)
 - Other systems (via ASCII-

Complete documentation

- Batch record, production protocol, consumption balances, output, etc.
- Forgery-safe PDF-protocols
- Long-term archive

Access control, system security and validation

- Authentication, access control
- Audit Trail (login/logout, data modifications, user interference) according to GAMP
- additional demands according to FDA 21 CFR Part 11
- Traceability of batches according to EU Regulation 178/2002
- Validation documents acc. to GAMP
- Support of scale calibrations by freely definable calibration recipes, calibration intervals can be defined

Visualisation by means of standard tools (Wonderware, GE Fanuc, Siemens, ...)

- Graphic display of plant statuses
- Scale – and other manual operations
- Long term trends and short-term trends
- Fault messages



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