A strategic solution for the textile dyeing and finishing industry



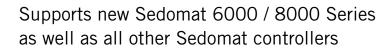
SedoMaster

SedoMaster is a Manufacturing Execution System (MES) designed to manage the dyehouse or an entire textile finishing plant. It provides everyone – from the operator to the CEO – with an integrated solution, allowing them to manage recipes, processes and reports. With the SedoMaster Management Dashboard, also a powerful monitoring tool is available. The Windows-based system has an intuitive user interface which makes it easy to use. SedoMaster supports all required interfaces to other systems such as chemical dispensing, recipe management and ERP. This results in an increased efficiency of the processes as well as in the optimization of all machinery and thus in cost minimization. The system is a modular package that can be implemented in stages as and when required.











Provides IIoT-enabled production for the Smart Factory



Production control leads to increased productivity and quality improvement



Real time interactive planboard, powerful reporting and dashboard



Single, integrated view of production data for improved decision-making



Less CO₂ emissions through optimized processes

The System

SedoMaster is available as SedoMaster Basic, SedoMaster Advanced and SedoMaster Professional package. In addition to the functions provided in the packages, several options are available. Detailed user rights enable an optimal adaption to customer needs.

SedoMaster Basic

- · Process editor system
- Graphical planboard
- Controller intervention
- Monitoring/Reporting (excl. Dashboard)
- Dyestuff and chemical products inventory

SedoMaster Advanced

(Incl. 1 workstation)

- Process editor system
- · Graphical planboard
- Controller intervention
- Monitoring/Reporting incl. Batch Reporting + Dashboard
- · Dyestuff and chemical products inventory
- Interface ColorMasterConnect

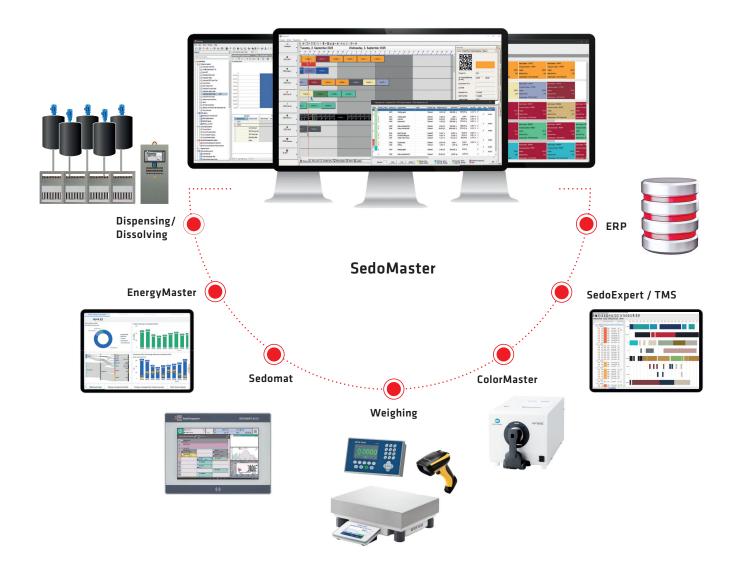
SedoMaster Professional

(Incl. 3 workstations)

- · Process editor system
- · Graphical planboard
- · Controller intervention
- Monitoring/Reporting incl. Batch Reporting + Dashboard
- Dyestuff and chemical products inventory
- Interface ColorMasterConnect
- Planning with order support
- Interface to ERP system

Applications and Interfaces

SedoMaster connects all systems of the dyehouse or textile finishing plant in one system. For production planning from batch start to batch end and all related processes.





Applications

Editor

With the graphical process editor, production processes (programs, settings, treatments, etc.) can be created for each defined machine. It is possible to define processes for discontinuous as well as continuous machines. After creating the processes, they can be downloaded to the machine controllers enabling a central management of the production processes for the different machines.

Using the Editor will be an easy task, because the module is based on the "Windows Explorer" concept.



Graphical Process Editor for creation of production processes



The Planboard optimizes the production by calculating the most probable start and end date of each batch.

Planboard

The graphical interactive planboard schedules batches to the selected machine. Based on production calendar and shift times, it calculates the most probable start and end date of each batch and optimizes the production sequence. The batches – together with their corresponding process – can be downloaded to the machines. The Planboard automatically updates according to the actual production status of the running batches, showing the actual status (run/stop, alarms) using different color codes.

Controller Intervention

SedoMaster also allows a direct controller intervention. Processes can be started, halted or stopped and functions or parameters can be changed. The actual status of all machines like function, temperature and speed is continuously updated and displayed.

Reporting Explorer

The SedoMaster Reporting Explorer is a powerful reporting tool used to create production reports as well as current data reports, machine blocks planned batches reports, reports, consumption reports (dyestuffs and chemicals) and more. All reports are fully configurable using a report wizard which allows various evaluations and analyses. Reports can be displayed in table and/or chart form and contain data on selected data items for a defined time period. Report design features manage the initial stages of report creation and data is extracted, organized and prepared for visualization. Elements available through the reporting tool determine how your report will look and convey the information presented. Components such as graphs, maps and more provide options for data visualization. Reports can be converted to other file formats like Excel.

Power BI

The data can also be analysed with Microsoft Power BI.

Dashboard

The management dashboard is a useful add-on which shows important performance information in a graphical layout. The visualised data comes from reports the user creates with the Reporting Explorer. It is a powerful way to monitor your business and see important production metrics at a glance.



Scale and wireless scanner for weighing station



This overwiev shows the planned batches for several machines at a defined period of time.





Example of production report and Power BI report.

Weighing Station - Scale

The weighing station for dyestuffs and chemicals can be connected to the SedoMaster system.

The production recipe is displayed on the PC at the weighing station and the operator can start to weigh the dyestuffs and chemicals within the defined tolerances. All weights are assigned to the batch, and the consumption is automatically updated in the inventory. To minimize the risk of human error, it is also possible to use barcode labels.

Interfaces | Link to all systems

Link to ColorMaster / Recipe system

SedoMaster can be linked to the ColorMaster color matching and recipe management system and can also be connected to other recipe systems. Batches are entered in SedoMaster and automatically transferred to the recipe system which calculates the corresponding optimized production recipe (dyestuffs and chemicals) and transfers it back to SedoMaster. ColorMaster takes into account all process-relevant data and optimizes it according to rules defined by the customer.



SedoMaster can be linked to ColorMaster for color management, calculation of the production recipe.



SedoMaster with link to SedoExpert for optimized production planning

Link to TMS and SedoExpert

To add further intelligence to SedoMaster, it can be linked to TMS (Textile Manufacturing Simulation). With production simulation and rules, TMS creates the most efficient production schedule for all active production orders (SFOs). For a fully automated and integrated production, SedoExpert can handle customer orders, production orders, inventory, planning, billing, MIS and much more.

Link to ERP system

In many cases, batch information is already available on the plant's ERP system. This data can be transferred to SedoMaster to avoid re-entry of the same data. When a batch is finished, registered data such as times, consumption, costs, etc. can be sent back to the ERP system for lot tracking or calculation purposes.

Order processing

Orders coming from the ERP system can be combined to one batch or splitted into several batches.

Data acquisition

The system can also be used to acquire machine data (e.g. machine or operator log-in/log-off, declared stops) that can be analyzed with the included flexible data acquisition reports.

Link to Dispenser

Automatic dispensing stations for chemicals and dyestuffs are a standard in many dye houses and finishing plants, as they reduce costs and increase the reproducibility.

SedoMaster can link to the different subsystems in the plant (machines, recipe system, dispensing system). The machine controllers will trigger when a dispense is required and the recipe system will have calculated the production recipe.

SedoMaster centralizes this information and passes the correct products to the dispensing station when they are required.



SedoMaster can be linked to the dispensing system to provide the correct dyestuffs and chemicals to the machine.



With link to the inventory, SedoMaster ensures that it is always up-to-date.

Link to Inventory

When batches are planned, the required quantities of chemicals and dyestuffs are reserved and checked in the inventory.

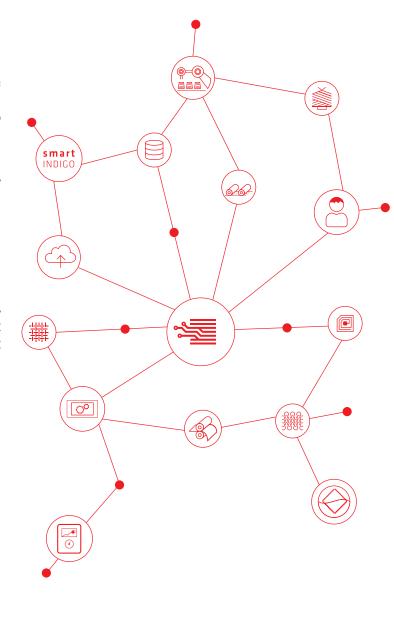
After weighing or dispensing is finished, the reservations are cancelled and all registered product consumptions are updated in the inventory and stored against the corresponding batch. Minimal inventory levels and consumption reports by day, week and month are also available.

Ready for Industry 4.0

The production of a Smart Factory should be intelligent, efficient and connected. A modern MES is needed as the foundation to bring the vision to life and realize the full benefits.

SedoMaster has all the advanced functionalities and capabilities to create a connected production environment in a dyehouse or textile finishing plant.

With interfaces to machines and other required systems, the ERP system and the Production Planning System (PPS), SedoMaster is a central tool for the entire workshop to get real-time insights for better production and business performance. It helps to better understand operations and to get more out of workforce, equipment and materials.



Interface

PPS
SedoExpert/TMS

Interface

MES
SedoMaster
EnergyMaster | ColorMaster | PrintMaster

mterrace

Machine control/DAQ

Lab | Discontinuous | Continuous | Printing | Dispensing

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Technical specifications are subject to change without prior notice. 10/25

