

INDUSTRY PLATFORM 4.0

**KLINKMANN**

# DREAM REPORT

Data Historian for collecting and converting industrial data into useful information with Klinkmann dashboards and ready templates.

AVEVA, Rockwell Automation, Schneider Electric and Siemens platforms compliant.

**World leader**  
in industrial data processing



LOGS AND STORES  
PRODUCTION DATA  
**INTO A DATABASE**



FLEXIBLE SYSTEM  
FOR CONFIGURING  
REPORTS OF  
**ANY COMPLEXITY  
LEVEL**



INTERACTIVE  
INFORMATION  
PANELS  
**(DASHBOARDS)**



TOOLS AND  
TEMPLATES FOR  
**IMPLEMENTING THE  
MES FUNCTIONS**



## + More than 110 communication drivers for connection

to real-time data sources

to sources of accumulated historical values

to sources of historical alarms and events

---

## + Connection to SCADA systems

Communication with popular systems and their data archives:  
InTouch, WinCC, Citect, FactoryTalk, StruxureWare, etc.

---

## + Protocols for communication with PLC

Rockwell Automation, Siemens S7, Schneider Electric, Mitsubishi and other equipment with open communication protocols: OPC, Modbus, ODBC, OLEDB, BACnet, SMTP, CSV, MQTT, etc.

---

## + Access to most Historian systems:

OSI PI/AF, AVEVA Historian, GE Proficy Historian, Influx, Yokogawa, Citect Historian, etc.

---

Connectivity to  
**various industrial  
data sources**

---





Integration with world brands of equipment and software

<b>AVEVA</b>	<b>Rockwell Automation</b>	<b>Citect</b>	<b>SIEMENS</b>	<b>Historian</b>
<b>Schneider Electric</b>	<b>Modbus</b>	Microsoft® <b>SQL Server</b>	<b>Truxware</b>	<b>Excel</b>
<b>PcVue Solutions</b>	<b>GE Digital</b>	<b>ORACLE®</b>	<b>aspentech</b>	<b>OPC®</b> Unified Architecture

**REAL-TIME VALUES**

- View added variables
- Read real-time values
- Value change events

**HISTORICAL VALUES**

- View added variables
- Open and proprietary databases
- Use raw data as well as calculated values

**HISTORICAL ALARMS AND EVENTS**

- Open and proprietary databases
- Reading event and alarm properties
- Filtering events by properties



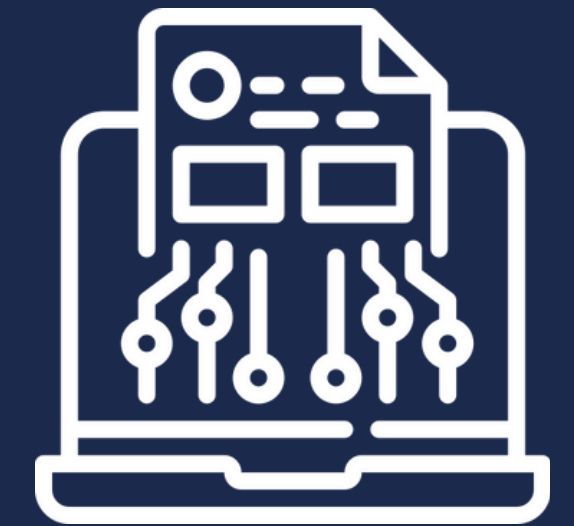
# Data Historian – logging and archiving

Data Historian to collect and store time - and event-series data from various sources around a process plant. It automatically logs process and production data and compresses it for more efficient storage.

- + Storing values to databases: MS SQL Server, Oracle, MySQL
- + Archiving is possible to local or remote database
- + Flexible setting of recording modes: by event, periodically, by time, etc.
- + Built-in archiving system with a performance of up to 400 values per second.
- + Ability to archive aggregated and calculated values
- + For example, the average for each hour, shift, day, etc.
- + Automatic limitation of the depth and duration of archive storage
- + Support for archiving redundancy
- + High stability

**DREAM REPORT IS BUILT FOR INDUSTRIAL DATA**

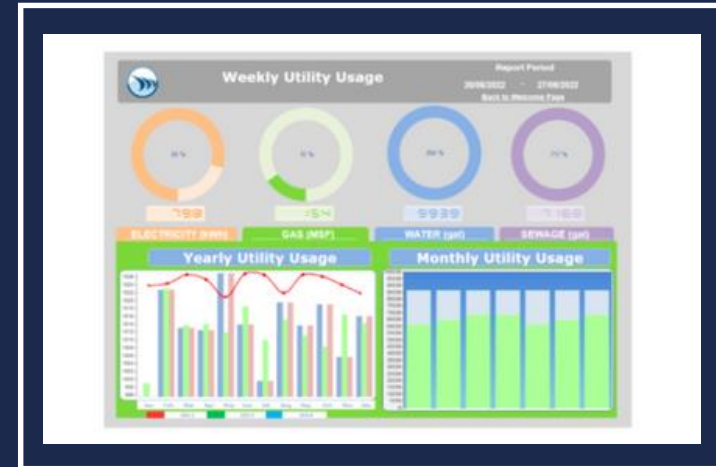
**POSSIBILITIES  
DREAM REPORT**





## STATISTICAL PROCESS CONTROL

- + Support for all SPC functions
- + Library of SPC objects
- + Statistical functions
- + Support of Nelson rules



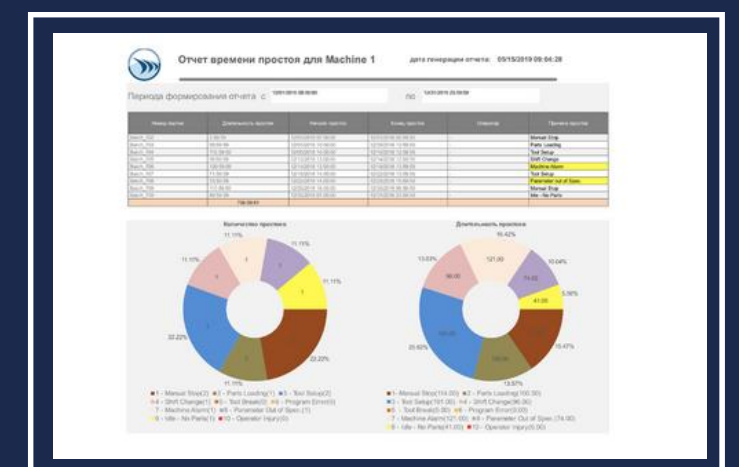
## ENERGY MANAGEMENT AND FINANCIAL ASSESSMENT

- + Complex calculation rules
- + Date and time tracking
- + Accounting for increased consumption
- + Total cost calculation



## VALUE ANALYSIS

- + Tracking of settings during the execution of the technological process for compliance with the regulations
- + Flexible rules for checking values entered by the operator
- + Automatic validation of values entered by the operator



## DATABASE DATA LOGGER

- + Archiving real-time data into a database
- + Archiving of aggregated and calculated values into a database
- + Defining archiving rules for variable groups
- + Automatic database creation

# Flexible reporting configuration system

POSSIBILITIES  
DREAM REPORT

## BATCH REPORTS

### + Batch Management System

Batch information definition – ID, Start and End Time

### + Automatic report generation at the end (beginning) of the batch

Creating events to generate and send reports at the end or start of a batch

### + Automatic Batch ID assignment

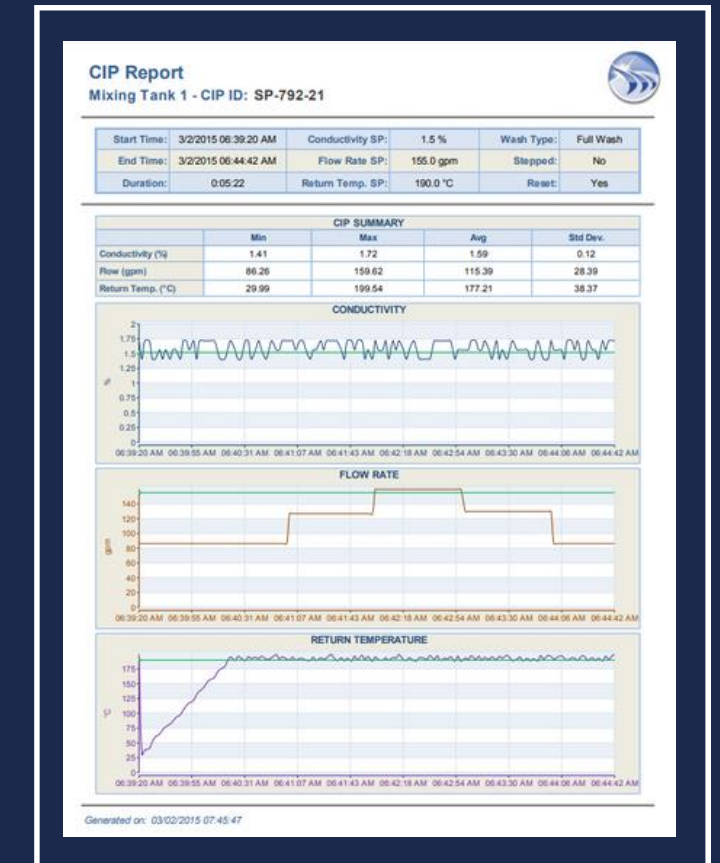
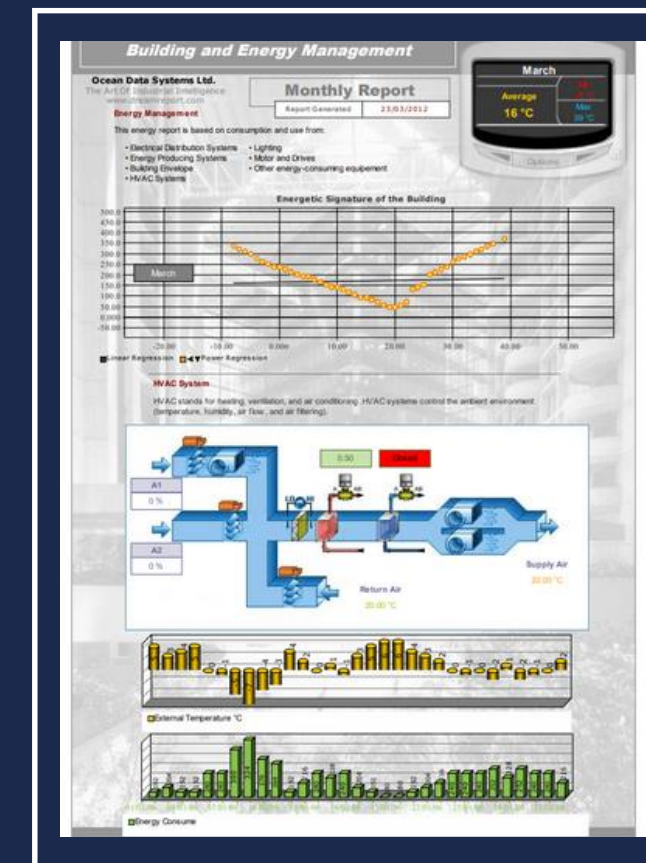
Batch information is stored based on  
a selected or automatically generated  
Batch ID

### + Golden Batch

Definition of the reference batch for comparison

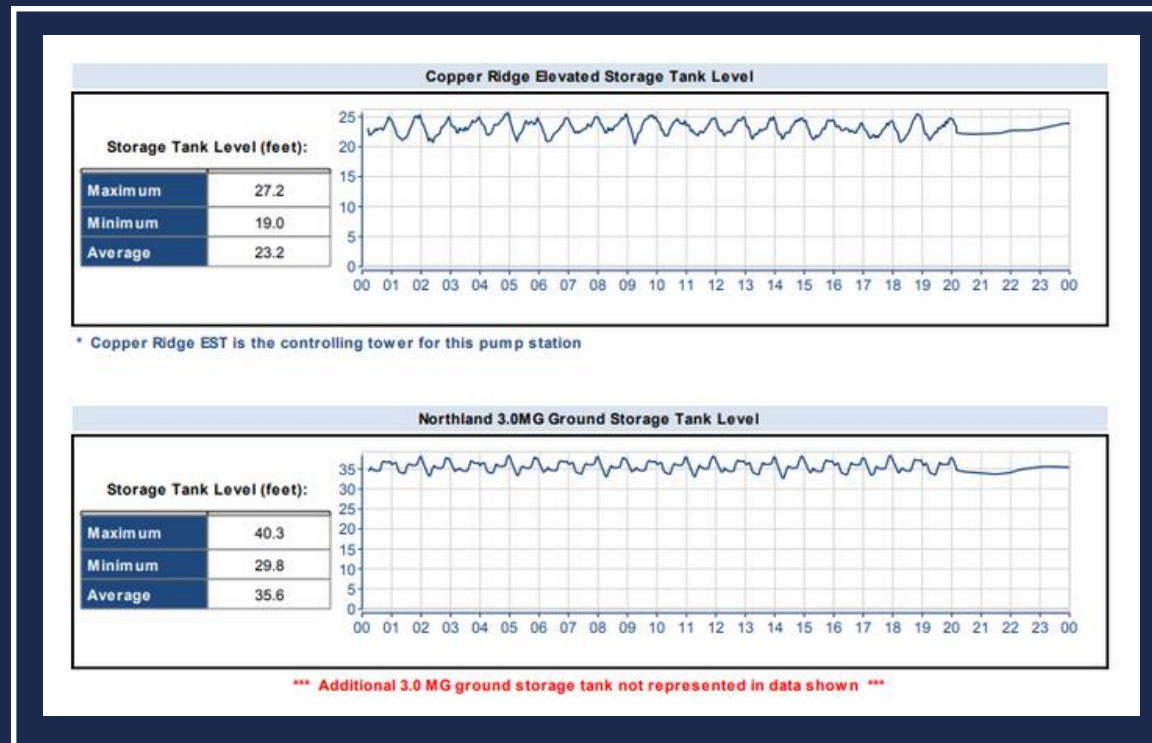
### + Integration with standard and custom systems

SQL Server, Wonderware InBatch, Aspentech Batch 21, Emerson, GE, etc.



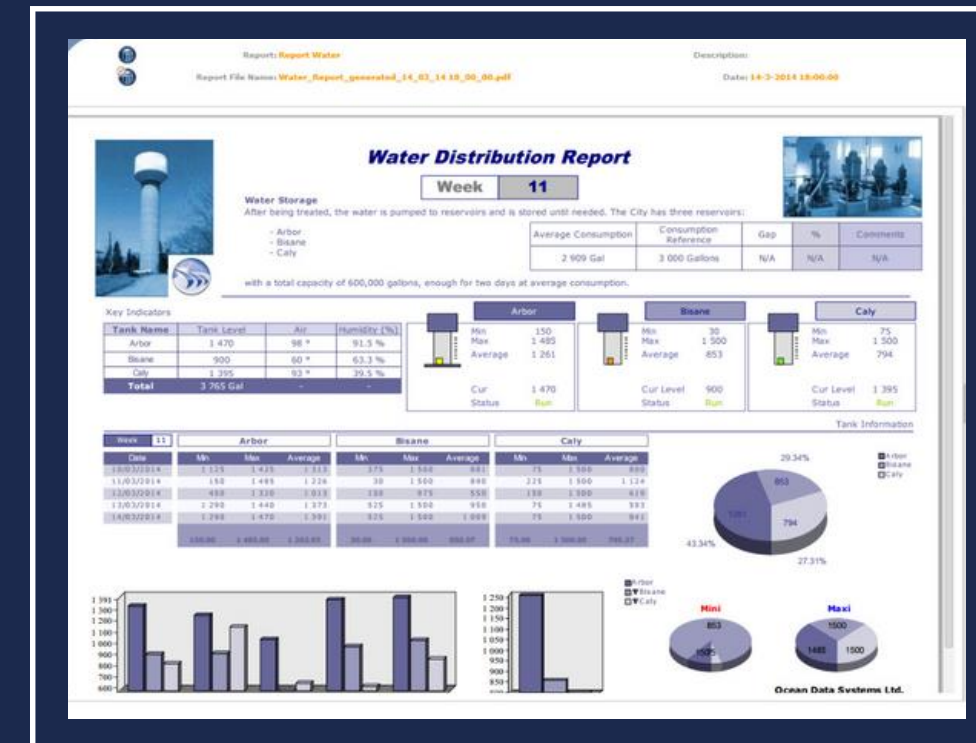
# Built-in Calculation Functions

OEE, performance, downtime analysis



## BUILT-IN FUNCTIONS FOR CALCULATIONS

- + Equipment running time
- + Downtime
- + Counters
- + System Availability
- + Production Efficiency
- + Conditional Calculations



## PROACTIVE MAINTENANCE REPORTS

- + Report generation based on up-time
- + Report generation based on equipment running time
- + Automatic analysis of maintenance needs



# Alarm reporting

09

- + **Alarm filtering**

By source, area, operator, priority, status, etc.

- + **Alarm statistics**

Create events to generate and send reports at the end or start of a batch.

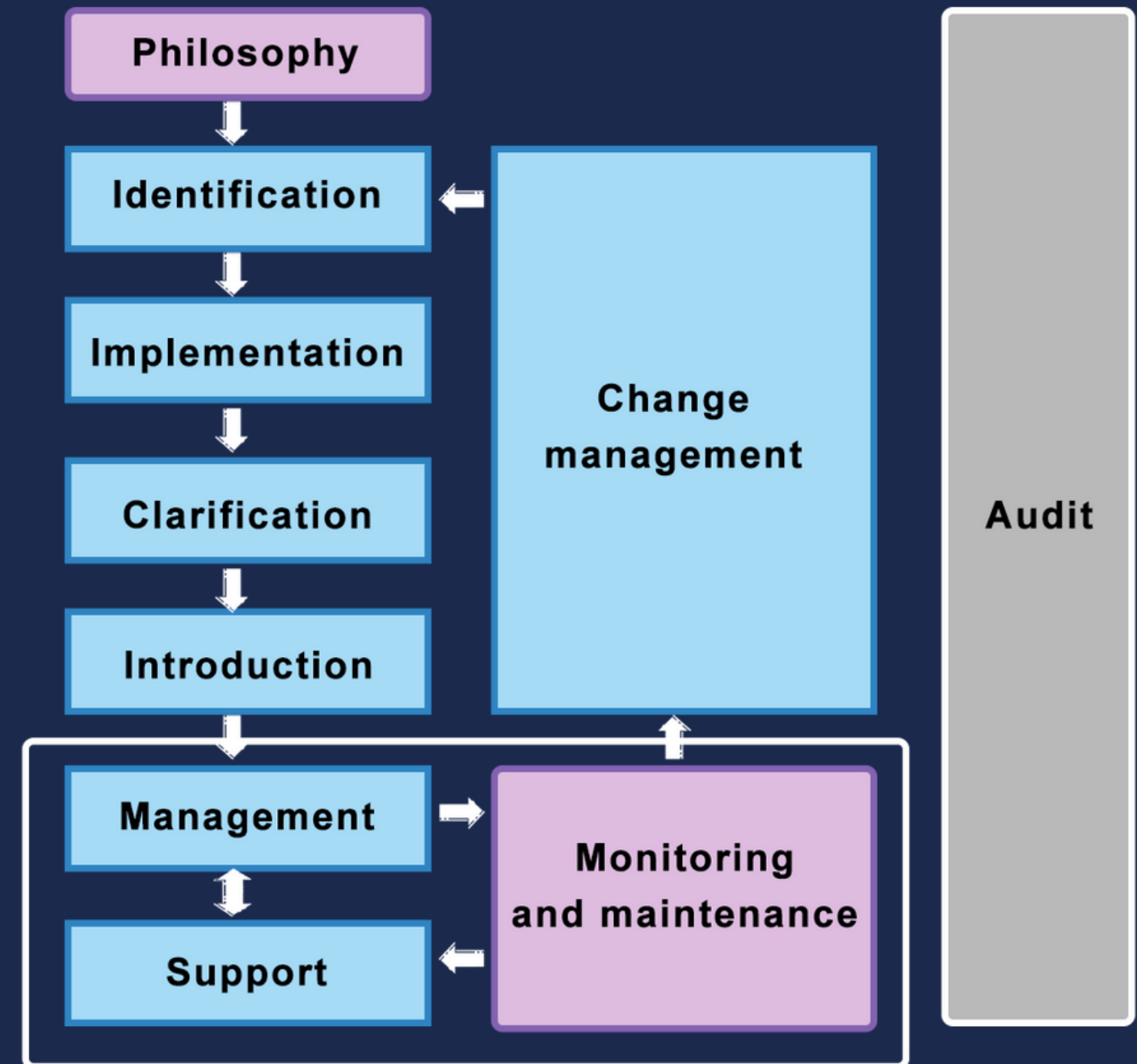
- + **Alarm analysis**

Duration, number of repetitions, solution time.

- + **Alarm reports**

Report generation with the ability for distribution or archiving

- + **Automatic delivery of generated reports**



# Interactive Web Portal



## + Open web technologies

HTML5, Java Script, compatible with all browsers

## + Administration

HTTPS, Restricted access by username

## + Automatic publishing of reports

Ability to generate a report in the required format

## + Dynamic Reports and Dashboards

Combo boxes, buttons, hyperlinks, check boxes, etc.

## + Slideshow

Generation and display of slideshows from reports

## + Dynamic URL and WebAPI

Report generation with external parameters

## + Manual data entry

**Ability to check the correctness of the entered values**

Input restriction based on username

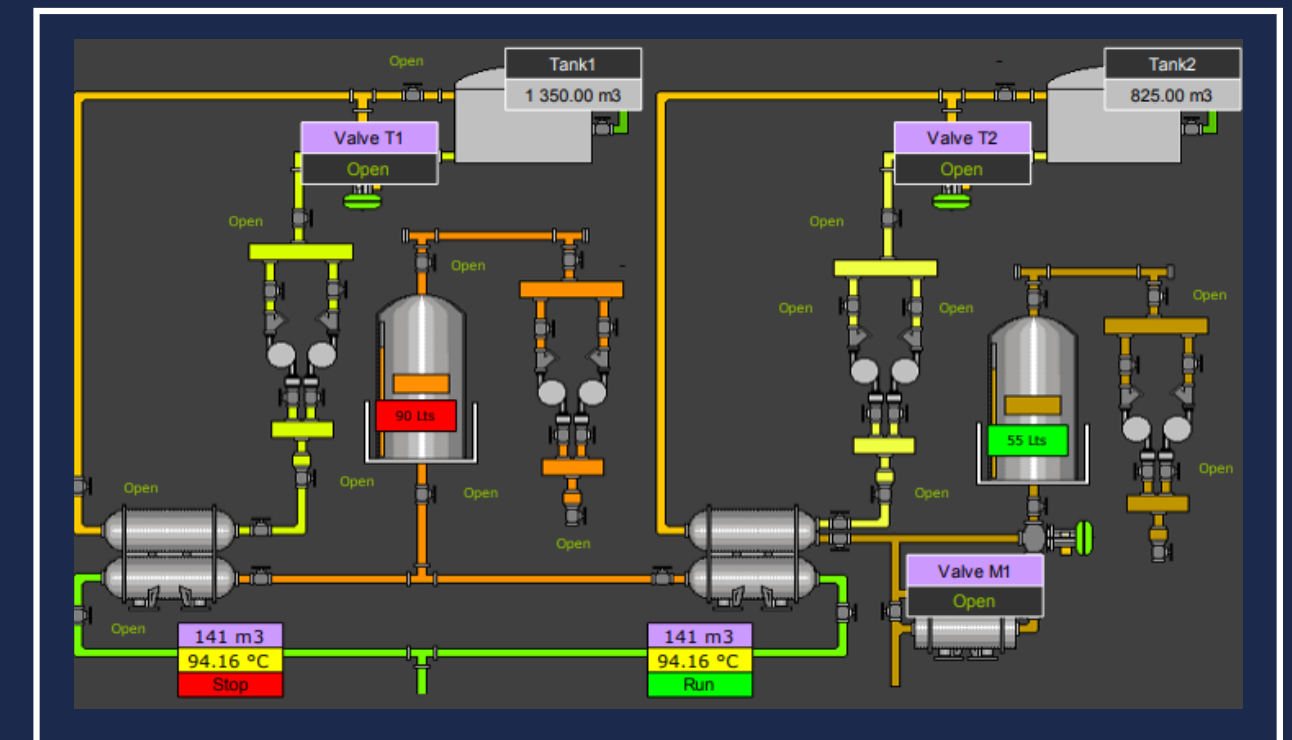
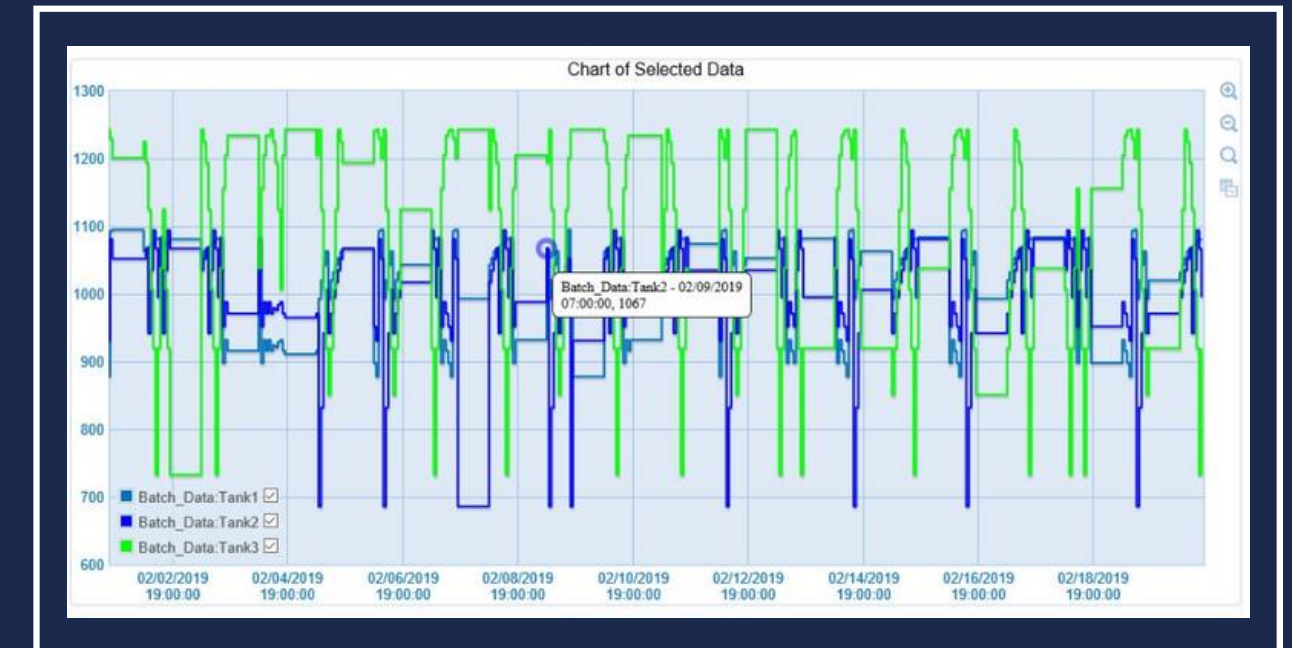
## + Accessibility on mobile devices

All functionality is available on Android and iOS

# Tools for MES system

11

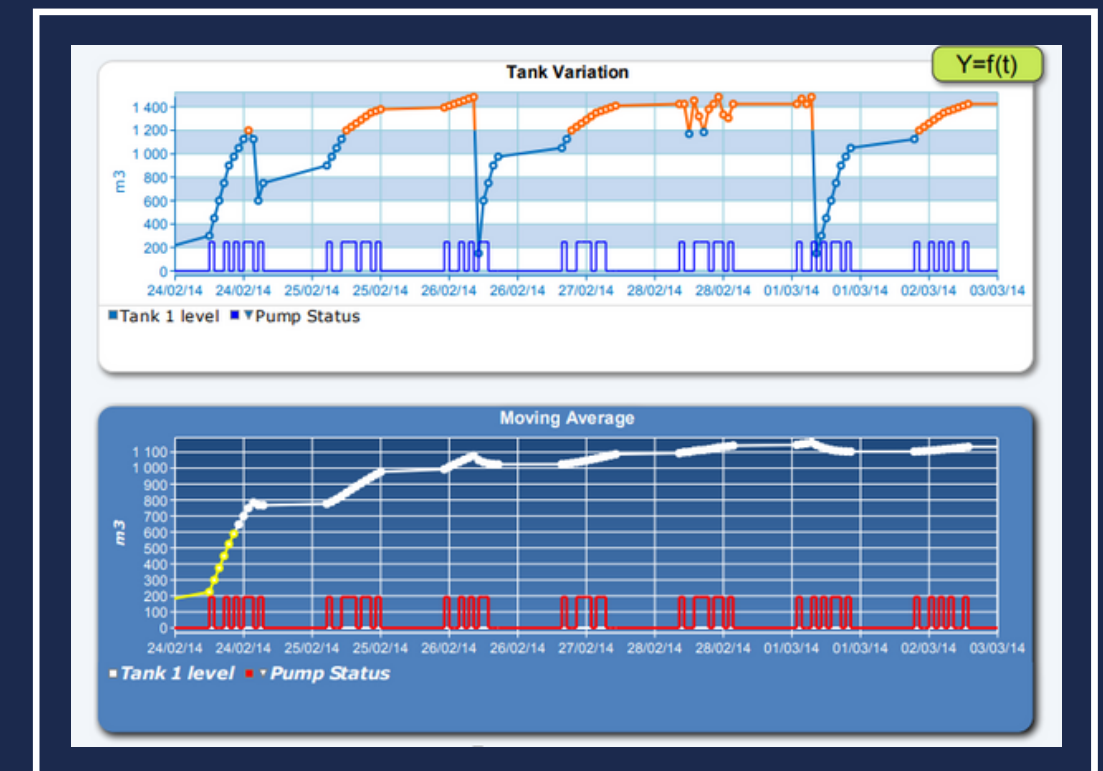
- + **Ability to build a MES system** for small and medium projects.
- + **Transparent integration with external databases**
- + **Convenient implementation of navigation between screens**
- + **A set of tools for building Web interface:** input fields, timestamp selection fields, drop-down lists, checkboxes, etc.
- + **Ability to manually record the entered data** to the database and their further use in reports
- + **Administration of access to reports and screens for users and user groups**
- + **Direct integration with reporting system and dashboards**



# Dashboards

Full integration with the Web portal

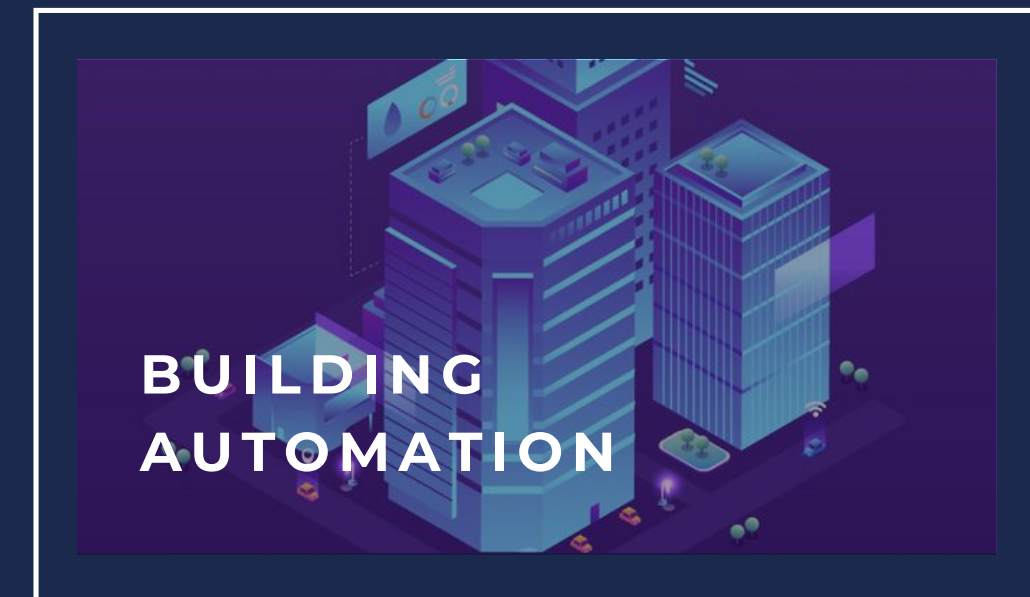
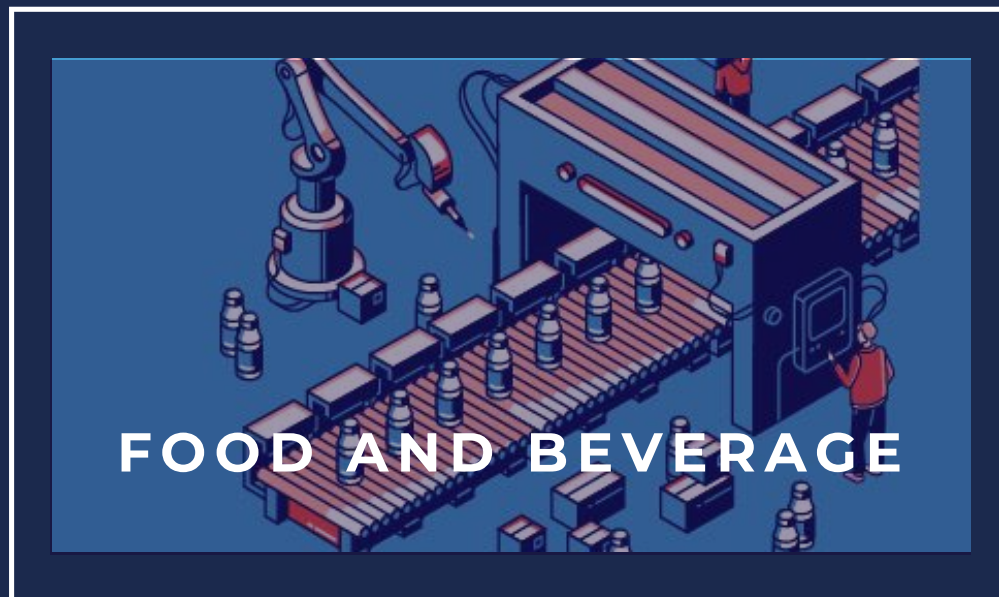
- + **Display any data**  
Dream Report in the form of dashboards
- + **Preinstalled template library**
- + **Filtering of displayed values**  
Web interface
- + **Unique “2 in 1” solution:**  
Reports and Dashboards



REAL-TIME INFORMATION UPDATE

# Solution for industries

13



Dream Report does not have a narrow specialization, but a number of specific functions are provided for separate industries.

# Data logging, storing and reporting

Optimal concept – fast and cost-effective digitalization projects

Klinkmann has a large customer base with Dream Report (Aveva Reports for Operations) as the Data Historian platform. Klinkmann supplied platforms support digitalization in all the main industries:

- + **power and energy**
- + **oil and gas, petrochemical**
- + **hydrogen and nitrogen production**
- + **mining and metal**
- + **food and beverage, agro**
- + **building management**
- + **ask more from Klinkmann**



Klinkmann specifies and consults the optimal concept for data management platform using various centralized and hybrid concepts – as is the best for each application and to allow future development. With the optimal concept, Klinkmann Partner companies and System Integrators make the project with optimal budget in the shortest time – ask more from Klinkmann.

COMPLETED  
PROJECTS

# Finesse Solutions

California, USA



15

Finesse Solutions (Thermo Fisher Corp) has 15 years of experience in the bioreactor and bioproduction systems, so the company perfectly understands all the needs of this market with fast development. Finesse uses Dream Report for analysis and reporting.

TPA is a long time Klinkmann Partner company making industrial IT-projects. TPA has established with the Dream Report platform, an application library to allow fast project making especially in Food & Beverage and Agro-industries.

“With the Dream Report based application library, we can use our long experience of the industrial best practices to improve reporting and operations in our industrial customers – to digitalize their production for modern data-driven operations. The ready Dream Report interfaces with all main PLC and other automation systems, allow fast project making and MES-performance operations in various industries”, confirms TPA Director Mr. Alvydas Andrijauskas.

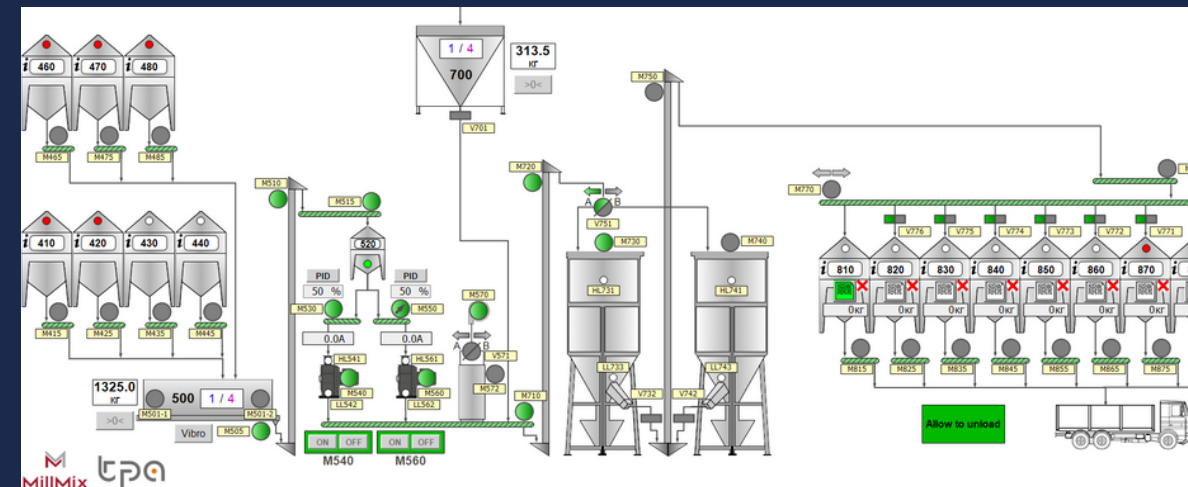
New Order

### Order management

Order No.: **180123#03**      Order weight, kg: 8000      Total mixings: 4  
 Client: **op**      Single weight, kg: 2000      Current mixing: 1

Recipe: **Recipe1**           

No.	Component name	Recipe percentage %	Weight SP kg	Weight PV kg
410	Wheat	18.0	360.0	352.0
420	Barley	5.5	110.0	104.5
430	Corn	23.2	464.0	88.0
440	Soybeans	15.1	302.0	297.0
460	Rapeseed	14.8	296.0	286.0
470	Peas	6.2	124.0	121.0
480	Rice	1.5	30.0	27.5



## COMPLETED PROJECTS

### TPA (Lithuania)

Fast data management and production projects with Dream Report for various industries.



# Ask more – ask a fast pilot

From Your local Klinkmann company in

Finland

Estonia

Latvia

Lithuania

Kazakhstan and Central Asia

Ukraine