



See your production.  
Understand the process.  
Base your decisions on data.

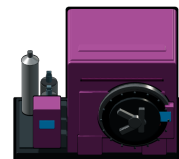
Review operator interventions. Investigate the causes of quality differences.  
Detect machine deviations early.



MONITORING



ANALYSIS



MANAGEMENT

## OVERVIEW

# One view from shop floor to management

VisionCore brings data from connected machines into the daily monitoring of production teams and the periodic evaluations of managers.



## Production supervisors

Monitor running and idle machines, active recipes, and alarms from the same workspace.



## Process teams

Examine manual interventions and machine responses; compare a recipe or batch with a reference to investigate the causes of quality differences.



## Managers

Compare load, duration, performance and consumption data within the selected area, machine and period.



## Maintenance teams

Detect deviations in command cycles, especially during high-speed extraction, at an early stage; use machine health findings to support technical diagnosis and maintenance reviews.

## Shared data, different perspectives

A review flow from the home page to machine details, recipe history and reports.

## LIVE MONITORING

# Keep the pulse of production in one place

Home and Live Monitoring make current machine status and ongoing jobs visible.

## Shift overview

Monitor the overall situation through online and idle machine counts, active recipes, alarms and shift indicators.

## Focus on the relevant machine

Narrow the scope with area, machine type and machine filters. Open machine details to view the ongoing recipe and process information.

## Keep the process context

Evaluate job order, operator, recipe and operation information together with the machine. Details shown depend on the data supported by the machine.

## View chemical requests

Track chemical requests from running recipes on the Live Chemical Warehouse screen. This screen shows live process demands; it is not presented as inventory accounting.

## At the start of the day

First select your area. Review active alarms and idle machines, then open the relevant machine detail.

## OPERATOR INTERVENTIONS

# From manual action to machine response

Examine in detail, through recorded data, the manual actions performed by the operator while a recipe is running and the machine responses.

## At what stage did the intervention occur?

Evaluate manual actions in the context of the relevant recipe, operation and command. See where and when the event occurred in the production flow.

## How did the machine respond?

Review process records, command flow and alarms before and after the intervention together. Investigate at which stage the response occurred.

## Operator and process together

Read operator events, automatic / manual operation information and available dosing records together. Evaluate interventions that may affect the production result.

## Detailed review flow

Open the relevant recipe; use the timeline, events and graphs to focus on the interval containing the intervention. Deepen the review with recorded machine data.

## Understand what happened in production

Manual action -> Related command and time interval -> Machine response -> Possible causes of quality or duration differences

## PRODUCTION PREPARATION

# Organize job orders and recipes

Carry out production preparation in one workflow using job orders, recipe sequence and batch barcodes.



## Create job orders

Create and update job orders. Arrange the recipes to be applied in production and their sequence.



## Batch barcodes

Generate sequential batch barcodes, review the print preview and print them.



## Recipe editor

Build recipes at operation and command level. Organize process definitions using the operation library.



## Transfer to machine

Send prepared recipes and operations to compatible target machines. Track progress and the result from the transfer screens.

## Example workflow

Create job order -> Sequence recipes -> Prepare batch barcodes -> Select target machine -> Check transfer result

## REFERENCE-BASED QUALITY EVALUATION

# Investigate the causes of quality differences

Compare a recipe or batch not only by total values, but also by the points where operation, command and process curves diverge.



## Compare the recipe with the reference

See where duration, consumption, operation, command and process curves diverge.

## Find the recipe where the batch starts to differ

Match corresponding recipes to investigate at which stage the deviation began.

## Key question: Where did we diverge from the reference?

Read the reference and comparison curves on the same time axis; identify the stage where the difference begins.

## PERFORMANCE

# Identify improvement areas with data

The Performance screen presents production in the selected period and differences between machines in a comparative view.

## Production and time

Evaluate the period through total load, production speed, work / active efficiency indicators and idle time per recipe.

## Process performance

On supported machines, examine heating, cooling and high-speed extraction performance; compare deviations in recipe and command durations.

## Machine comparison

Find notable differences in the machine table. Open row details to deepen the evaluation.

## Share through reports

Use performance and shift reports in meetings and periodic reviews. Interpret the selected scope together with the report.

## Meaningful comparison

Select the same period and an appropriate machine scope. Production-inclusion rules and measurements supported by the machine affect the results.

## CONSUMPTION

# View resource use together with production

Analyze water, steam, gas, electricity and chemical usage with common date and machine filters.

## Overall consumption

View total consumption from available meters and records. For appropriate machine scopes, evaluate consumption per unit load.



## Chemical usage

Access daily chemical usage and chemical totals from actual dosing records. Read quantity, unit and dose data together.

## Scope and grouping

Narrow the analysis with start / end time, area, machine type, machine and recipe selections.

## Compare before deciding

Evaluate differences between periods or machines in the context of load and recipe. Share findings through the consumption report.

## A foundation for measurable improvement

VisionCore makes consumption visible. Savings depend on process changes and field measurements; no fixed savings rate is assumed.

## HEALTH CHECK AND EARLY DETECTION

# Detect deviations early. Base diagnosis on data.

Use the health monitoring mechanism to review command cycles. Especially on washing machines with high-speed extraction, track values that begin to depart from normal behavior.

## Monitor command cycles

Evaluate command durations and process behavior together. Review cycles and deviations that move away from normal operating behavior.

## Focus on high-speed extraction

Track extraction performance and available process values on washing machines. Focus on early detection of behavior that starts to deviate from normal.

## From early detection to diagnosis

Review the deviation together with the relevant command, alarm and machine responses. Use the findings to investigate the possible source and support technical diagnosis.

## Turn findings into maintenance decisions

Evaluate health findings together with the maintenance schedule and history. Direct maintenance work by focusing on the machine and process stage requiring review.

## Goal: Start investigating before the problem grows

Command cycle -> Deviation from normal -> Related process and event records -> Technical review and diagnosis. Evaluation is supported by the measurements provided by the machine.

## MACHINE OPERATIONS

# Prepare definitions. Track transfers.

Machine Operations brings together the definition and transfer tools used for machines in the field.



## Backup and restore

Create machine backups, review previous backups and restore to the appropriate machine type. Track results by machine.



## Lists and operators

Edit waiting, pause and early-termination lists. Manage operator definitions, permissions and the transfer list.



## Chemical definitions

Prepare chemical and group definitions; send them to the relevant machines. Support recipe preparation with common definitions.



## Recipe-writing rules

Edit profiles and warning lists by area and machine type. Use recipe and operation transfer tools.

## Controlled transfer workflow

Select target machines, monitor transfer progress and, after completion, check the result for each machine.