

# SML

EXTRUSION LINES – ENGINEERED TO PERFORM ▶



**bit.Wise**

DIGITAL SOLUTIONS



# bitWise is SML's digital transformation solution for extrusion lines.

It breathes life into the buzzword "Industry 4.0". bitWise provides for a wide range of entirely new opportunities for data driven decisions with a clear focus on the optimisation of production processes and the final product.

**Completely developed in-house, it incorporates SML's decades of experience in automation with the latest technologies in data analytics and visualisation.**

## In-depth process insights

SML extrusion lines are equipped with hundreds of data-generating sensors. Following the principle of "stop guessing – start knowing", bitWise collects, records and visualises this data up to 10 times per second. This gives manufacturers a 360 degree in-depth view of all the details involved in a production process, both in the present and in the past.

## Optimising quality

bitWise is a powerful tool to optimise any aspect of the production process with a direct effect on product quality.

- In-depth monitoring of all quality-related process parameters, allowing quick corrective action
- Comprehensive tracking and documenting of product quality
- Making quality reproducible

## Maximising output

Data recorded, aggregated and visualised by bitWise helps to raise overall line utilisation and deliver a faster return on investment (ROI).

- Discovering hidden or unused output capacities
- Preventing downtimes by detecting potential problems at an early stage
- Minimising maintenance times through optimised scheduling and structured access to documentation and service support



## Minimising production costs

bitWise is the central tool to measure and visualise all production-related costs. It forms a strong and reliable basis for the continuous cost-optimisation of production processes.

- Detailed monitoring and reporting of energy and raw material consumption
- In-depth optimising, tracking and reporting of Overall Equipment Effectiveness (OEE)
- Full end-to-end cost transparency through third-party integration

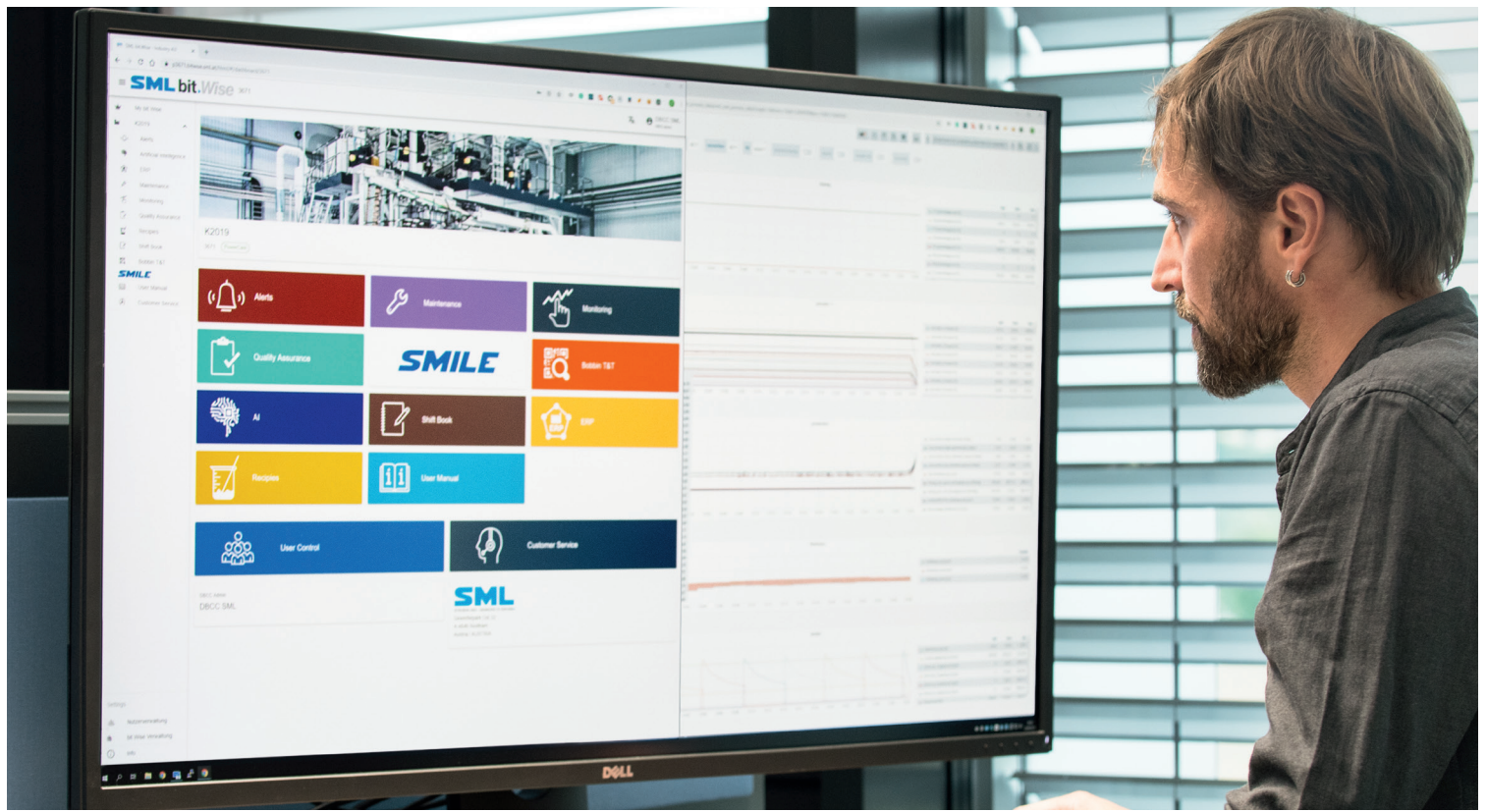
## On-premise solution

bitWise is a 100 % on-premise solution. Your data stays in your company, on dedicated and secured hardware, no cloud services required.

## Why bitWise?

- 1 For process insight – stop guessing, start knowing
- 2 For product insight – stop promising, start showing
- 3 For vertical integration – stop improvising, start integrating





## Customisation and Retro-Fit

As with most technologies developed by SML, bitWise is highly customisable. bitWise can be retro-fitted to many existing SML extrusion lines optimising production processes, cutting costs, raising the OEE and ROI of existing investments.

## Open for vertical integration

Extrusion lines are a key part in a wider production chain. For end-to-end optimisation, bitWise supports data exchange and vertical integration with third-party systems, e.g. Manufacturing Execution Systems (MES), Enterprise Resource Planning (ERP) or Quality Assurance (QA).

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VIRVMC

Starttime:	9/10/2019, 3:45 PM
Endtime:	9/10/2019, 3:49 PM
Thickness (µm):	12.6585
Width (mm):	500
Diameter (mm):	245.694
Length (m):	2665.01
Order Nr.:	bitWise
Recipe:	12mic_K-Messe
Trial:	K-SHOW_12mic
Shift:	KW37
Rolls:	5
Shaft:	3
Station:	A

SHOW METRICS

GENERATE A REPORT ▼

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CRTJ8U

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## bitWise Modules:

### Core Modules

- ▶ **Monitoring** – in-depth view to any detail of the production process
- ▶ **Alerts** – customisable alerts on the screen, via e-mail, messenger or other tools
- ▶ **Shiftbook** – automatic or manual documentation of any relevant event in production
- ▶ **Customer Service** – fast and structured communication processes with SML's service team
- ▶ **User Manual** – user manuals and maintenance information available at your fingertips
- ▶ **Maintenance** – data-driven optimisation of maintenance activities

### Add-on Modules

- ▶ **Roll Monitoring T&T** – fast and comfortable end-to-end tracking of all product-related details
- ▶ **Quality Assurance** – module for product assessment and in-depth quality control
- ▶ **Recipes** – comprehensive and comfortable recipe management system
- ▶ **ERP** – quick and easy vertical integration of third-party systems like MES, ERP or QA into bitWise
- ▶ **bitWise AI** – advanced modules with artificial intelligence built-in



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