

A futuristic digital landscape with a glowing hand hovering over a globe with a square icon. The background is a dark blue, blurred cityscape at night with glowing lights and data streams. A hand made of blue digital lines is reaching down towards a glowing globe. The globe has a white square icon with a circular arrow inside. The overall scene is illuminated with blue light, creating a high-tech, digital atmosphere.

Energy and Media Analytics

Scalable, integrated and flexible analyses of the energy and media consumption in your line

 **KRONES**

Analytics

Scaleable, integrated and flexible



Advanced Analytics

Expandable

Integrated Analytics

Energy and Media Analytics

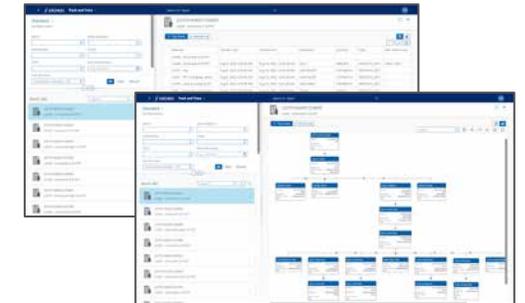
Track and Trace Analytics

- Data analysis in real time
- Analysis of the causes
- Line output reports/ performance and KPIs

- Customised reports also at corporate level
- Historical analysis of the line output/performance
- Contextualisation of the information (e.g. type comparison)
- Integration of external data (e.g. laboratory, warehouse)

- Reports on energy and media consumption
- Contextualisation of the information (e.g. type comparison)
- Integration of external data (e.g. processing and operating materials)

- Product tracking
- Material tracking
- Integration of external data (e.g. warehouse)



Complete functionality

Customisation

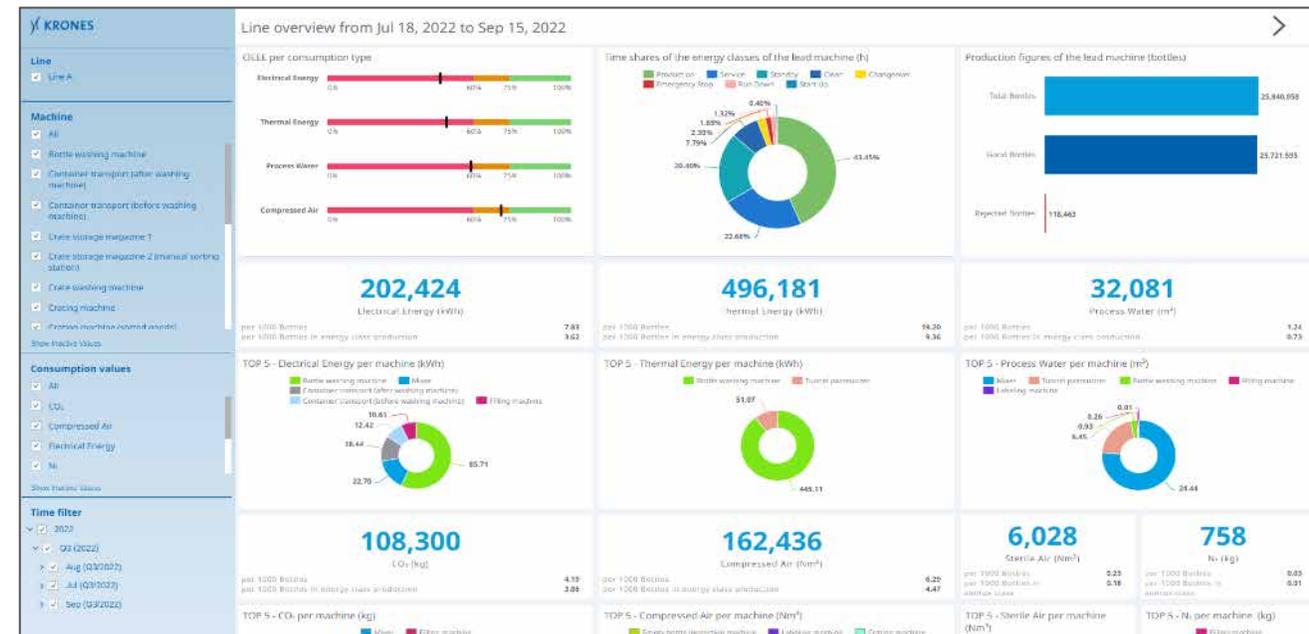
Flexible analyses and benchmarking



Utilise the comprehensive options that Energy and Media Analytics offers as a business intelligence solution specifically for filling and packaging analyses. The software always provides you with the correct solution – whether it be prefabricated reports or even reports customised to meet your needs and which you can generate yourself with just a few mouse clicks. This allows you to precisely define which parts of your production you can start taking action in order to save on energy and media.

At a glance

- Pre-defined and self-configurable reports on energy and media consumption
- Efficiency analyses for consumptions
 - Relative consumption
 - OEEE calculation (OEEE: Overall Environmental Equipment Effectiveness)
- Analysis of the energy class
- Comparison of the consumption per type
- Data plotting
- Calculation of the CO₂ emission
- Integration of external data (e.g. processing and operating materials)

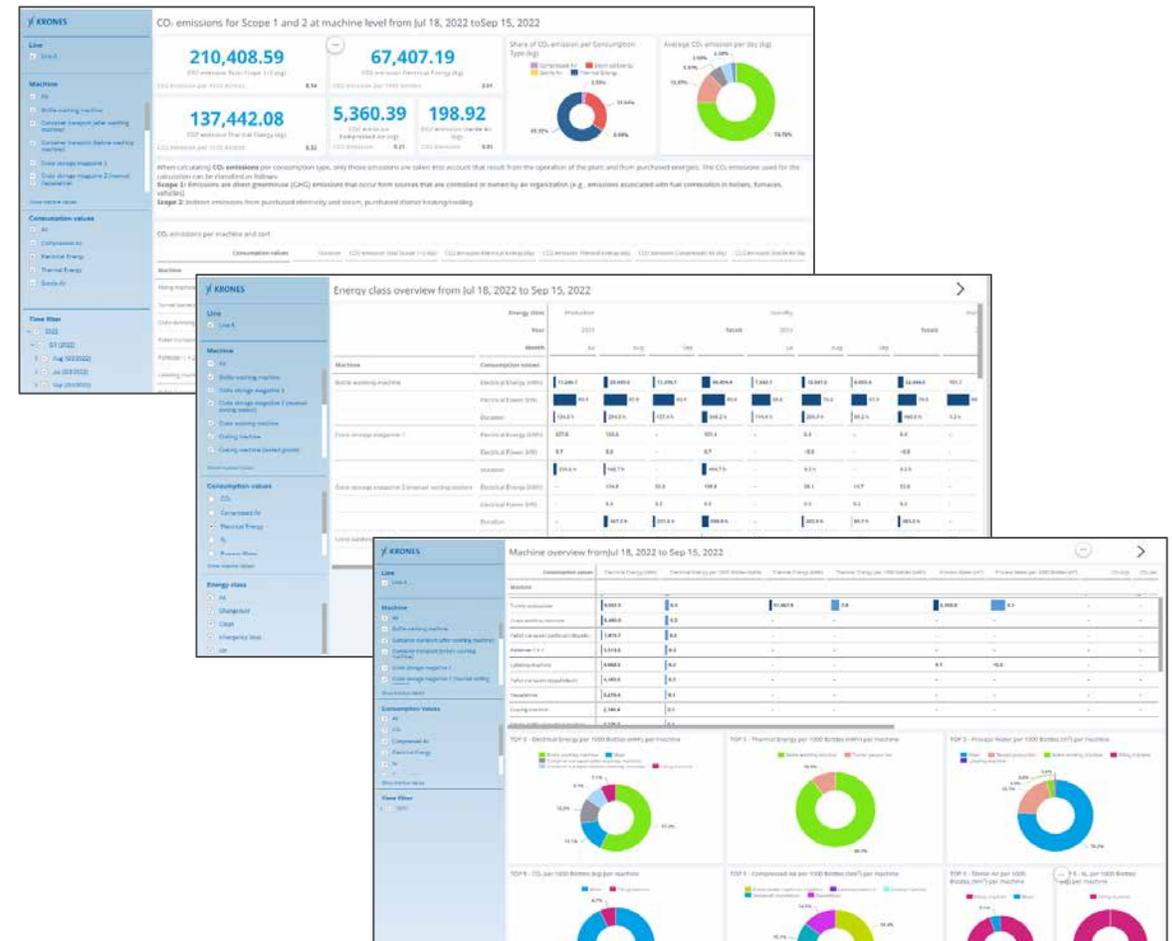


Requirement: the V1 energy and media package must be installed in the line as a data source (meters and sensors).

Flexible analyses and benchmarking



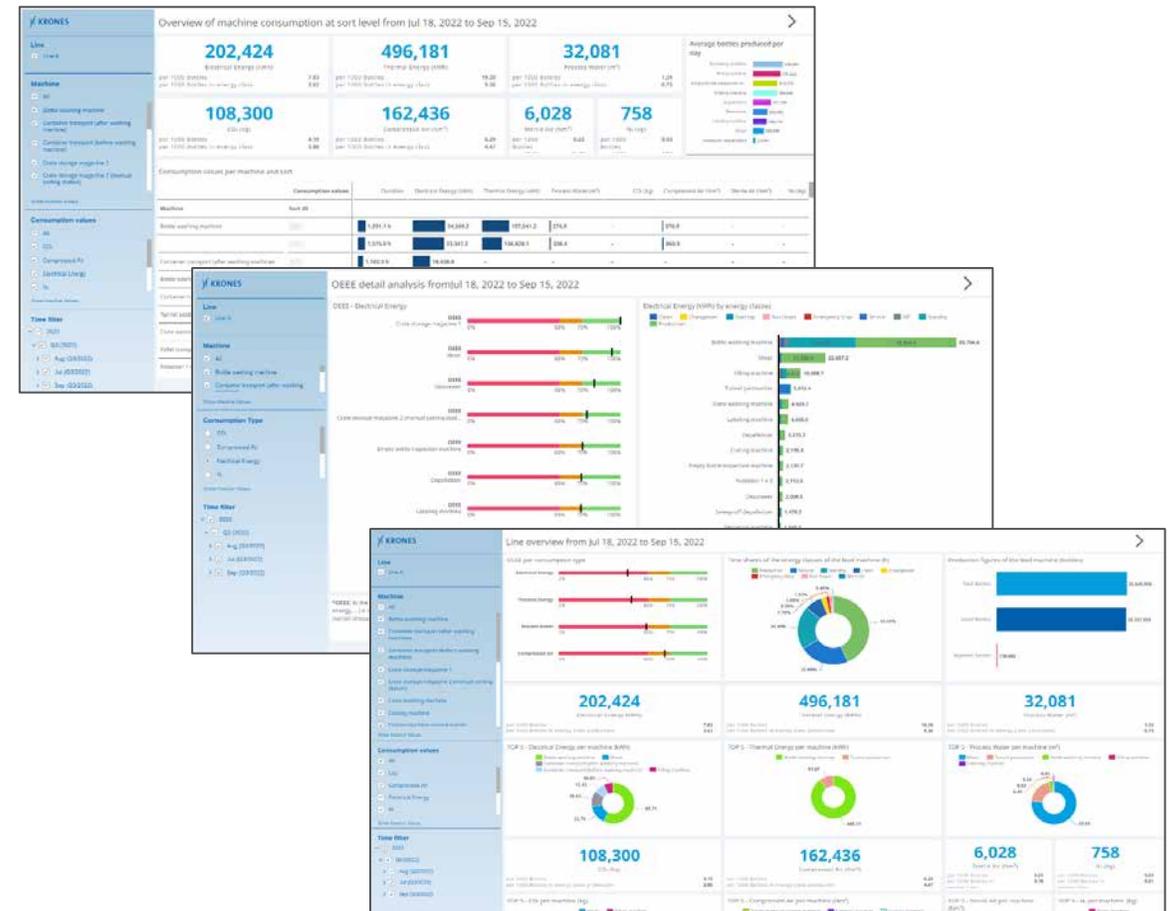
- Combining and contextualising of data
- Reports customised to meet individual requirements
- Analysis of historical data
- Customised standard and ad-hoc reports
- A range of options for data illustration (diagrams, correlation data, cluster diagrams)



Energy and media reports



- Monitoring and analysis of energy and media consumption values
- Deriving of measures for saving and optimising the energy consumption in systems operation
- Line view: overview of the energy and media consumption for a selected period at machine and line level with machine-specific energy types and classes
- Adding of external data sources (e.g. processing and operating materials)



Provides support in decisions at management level



Shift supervision

Overview

- Informative reports
- Remote access with mobile devices
- Identification of trends and patterns
- Analysis of the causes
- Free time for action
- Supports the defining of priorities and preventive measures



Management

Benchmarking

- Clarity and comparability
- Real-time and historical analysis
- Tamper-proof flow of information
- Fact-based decision making

CO₂ emissions
reduced by up to

↓ 5 %

Energy costs
reduced by

↓ 10 %

Benefits to you



Cost-efficiency



Cost drivers for energy and media consumptions are identified and continually reduced.

Time savings



Optimise your time requirements thanks to the fast and comprehensive processing of all data.

Global availability



Use Energy and Media Analytics 24/7 – regardless of your location and selected end device.

Increase of the OEEE (Overall Environmental Equipment Effectiveness)



Get an overview of machine data and create the basis for increasing your OEEE (Overall Environmental Equipment Effectiveness).

Transparency



Energy and Media Analytics aggregates all consumption data from the available reports on your production line.

Overview



The system translates a large amount of complex information about your line into informative key figures and thus makes it possible to develop sound actions.

Added value for our customers



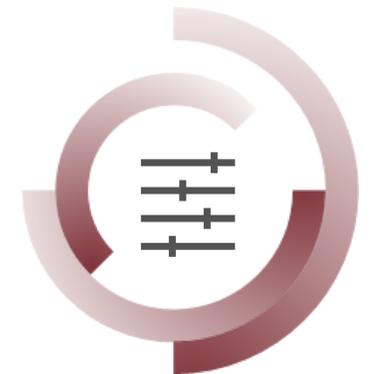
Downtimes



Waste



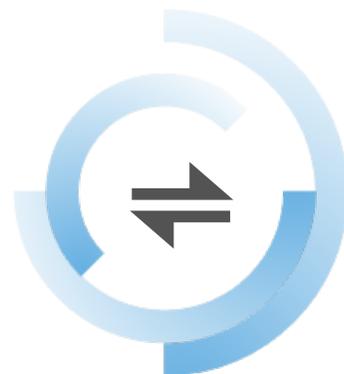
Maintenance planning



Production parameters



Employee training and knowledge



Change-overs



Consumption



Material management

Our solutions

To make complexity manageable, lower costs and maximise output through intelligent solutions



Shopfloor Guidance

Notification – prioritisation – instruction



Analytics

Advanced – Integrated – Energy and Media – Track and Trace Analytics



Line Control

Managing complex production – reducing manual interventions – scalability



MSA Performance

Krones Service supports customers – mutual transparency – causes – action plans



SAP-Based Solutions | SAP Integration

Standard solutions – development – engineering – implementation



Automated Parameter Optimisation

Services for "intelligent machine generation" – AI – machine learning



**SOLUTIONS
BEYOND
TOMORROW**

