



zenon Analyzer

DYNAMIC PRODUCTION REPORTING



zenon Analyzer

Use clever reports, identify hidden potential and advance your production.



COPADATA

zenon Analyzer

DYNAMIC PRODUCTION REPORTING.



Why wait to get the most out of your production data? In times of volatile raw materials prices, unpredictable demand and the cost pressure of global markets it is essential that your production facility is constantly finely tuned to produce as efficiently and effectively as possible. Having exact information on how well your equipment is performing is essential to help you take the right action.

Dynamic Production Reporting is what we call our approach to analyzing production data – as it happens. The reports generated reflect even the most recent events and production data.

Now you can create comprehensive reports containing both process data and historical data, which was previously only available after significant time delays. This enables you to diagnose underperformance and immediately take corrective actions.

Realtime production reports enable you to make immediate decisions on how to enhance your production efficiency and output. By dynamically optimizing production in this way you can achieve significant savings in costs and resources and match supply and demand far more closely.



PRODUCT OVERVIEW

zenon Analyzer is the reporting tool that enables Dynamic Production Reporting.

It is extremely easy to configure and install and has the capability to process and analyze data from all automated production equipment within your facility and other sources of data (e.g. manual data input). So you not only get immediate information, but also a complete picture of the status of productivity within your facility.

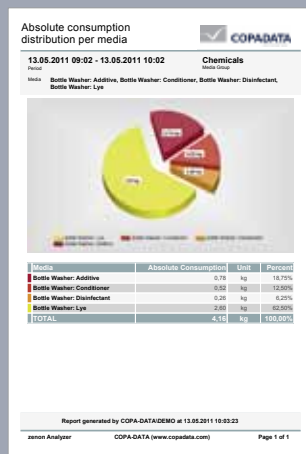
So you know exactly and immediately ...

... where you are losing money

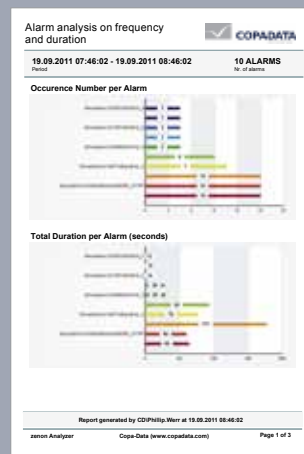
...where you can increase output

... where you can save resources.

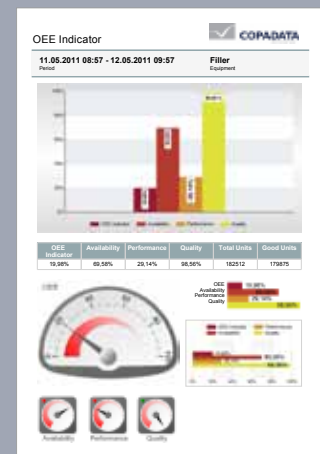
And much more.



Consumption analysis of different media



Analysis on frequency and duration of alarms



OEE Indicators to analyze Overall Equipment Effectiveness

Powerful, flexible

AND EASY TO USE

zenon Analyzer processes data both online – directly from your equipment – and/or offline from a central database.

This means you can combine the advantages of both online and offline reporting. Analyze up-to-date production data and do analyses of different production time frames.

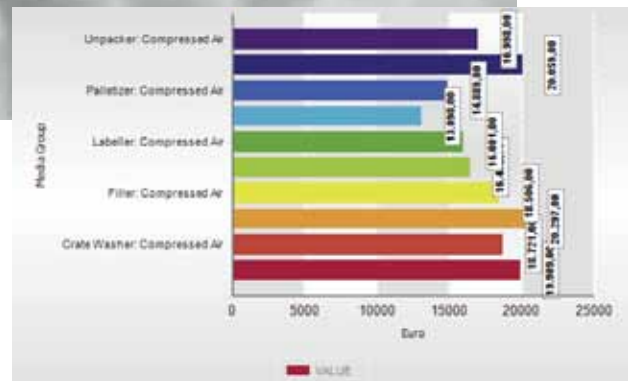
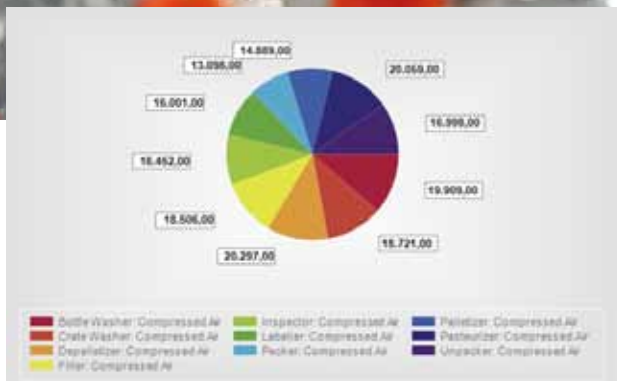
USING THE SYSTEM

zenon Analyzer delivers ready-made report templates and allows new reports to be created with an advanced graphic design. In addition the system is multi-lingual – you can implement your language of choice. Reports can be specified to reflect the needs of the individual production team member. Operations and maintenance staff get operational and maintenance data; management get management-relevant data, and so on.

Advanced filtering functions allow you to analyze data interactively according to multiple parameters, such as:

- by equipment: area, line, machine etc.
- by time: month, week, day, shift, hour, from/to
- by production entities: article, batch, order
- by length or number: of e.g. breakdowns or alarms
- by consumption of media

In all cases you can drill down and through to the details to get to the bottom of specific events.



“ Your production line is producing a large batch, but how efficient are you compared to your benchmarks? With zenon Analyzer you can find out while production is still running and take corrective measures where necessary. ”

With zenon Analyzer you have complete data transparency across your entire production. This wealth of production data and meta data (e.g. shifts, alarms, prices) is made accessible and understandable by the concise reports that the system generates.

The Reports

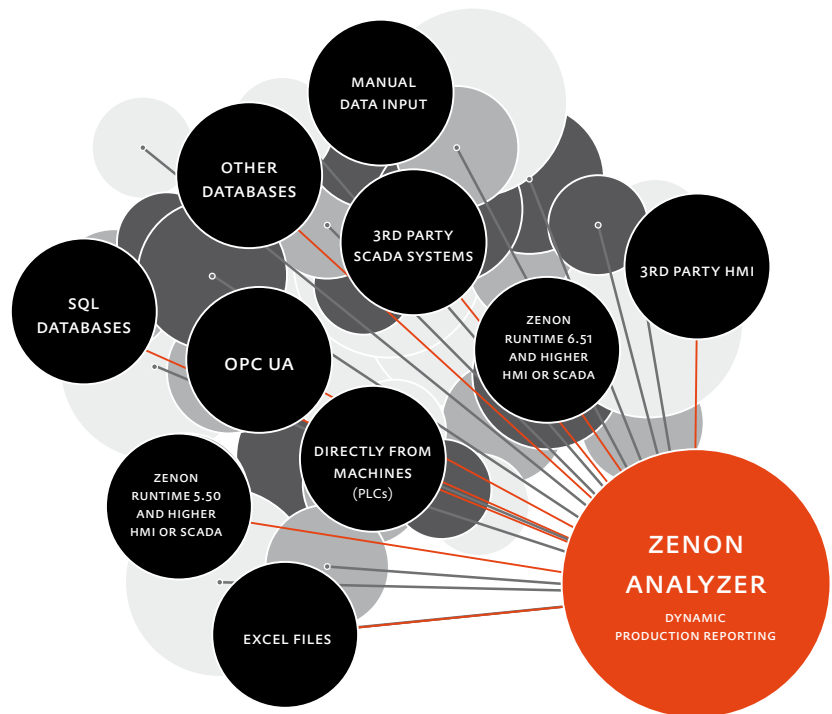
INFORMATION IN A CONCISE
AND UNDERSTANDABLE FORM



*GANTT Chart processing data according
to Weißenstephan standards*

TYPICAL EXAMPLES OF THE REPORTS ARE

- ▶ Production reports, which aggregate different kinds of information (efficiency, consumption, alarms, etc.) per batch, article, or time filters, e.g. per shift
- ▶ Consumption optimization reports showing consumption evolution, cost distribution and correlation with the production, for media such as water, energy, compressed air, chemicals etc.
- ▶ Efficiency reports that calculate KPIs such as OEE (Overall Equipment Effectiveness) over a selected period of time and production equipment
- ▶ Alarm breakdown Analysis
- ▶ and much more...



access all kinds of historic and real-time data

“Your management wants complete KPI analyses for every shift? No Problem – zenon Analyzer can create the reports automatically after each shift and send them to specified recipients.”

REPORT TEMPLATES

zenon Analyzer provides ready-to-use templates. Alternatively, the report templates can be custom-designed regarding content and graphical appearance. User-defined algorithms can be implemented to allow company-specific KPIs to be generated – so you get exactly the information you need. Both report generation and archiving can be configured to be carried out automatically.

EXPORT FORMATS

Reports can be exported in many formats, depending on how and where you wish to present them or further process the data.

REGULATORY COMPLIANCE

The reports also function as a digital protocol for traceability and future reference, for example to prove compliance to legal requirements.

“ Struggling with volatile raw material prices?
Why not include price information from external
sources into your production reports? Close the gap
between production and business reporting! ”

Getting started –

SETTING UP THE SYSTEM
EASY, FAST AND COST EFFICIENT

zenon Analyzer is extremely easy to implement – connecting to various data sources e.g. to zenon HMI/SCADA systems or PLC Systems. It can be integrated into any existing automation and IT environment with no or only minor changes to the infrastructure.

The system works with both centralized databases such as Microsoft SQL, as well as decentrally, sourcing data directly from the production equipment, thus collecting online and offline data. In the latter case, no additional database is needed. Manual data input is also possible.

Both data structure and interfaces are well-documented, enabling you to more easily integrate your own customer-defined features. The latest encryption technology ensures the highest level of data security.

A wizard to import meta data into zenon Analyzer is included. Meta data can also be automatically updated through the wizard. Integrated connectors collect the necessary data.

zenon Analyzer generates reports from many different types of data e.g. Alarm, shift-related, user-related, historical, real-time, batch. The advantage to you: a reduction in complexity, as only one system needs to be installed rather than needing multiple systems to acquire and convert these different types of data.

zenon Analyzer has a web-based interface. This means that no additional maintenance of clients is needed and no revalidation of the existing environment is necessary. This is particularly helpful for heavily regulated industries such as Food & Beverage or Pharmaceutical. The users have flexible access to reports from any workplace in the network.



Fast Facts

zenon Analyzer is a web-based tool for dynamic production reporting. It can operate completely independently or be fully integrated into the zenon product family.

ZENON ANALYZER

- ▶ improves your production by increasing production effectiveness
- ▶ eliminates waste by optimizing energy and material consumption
- ▶ enables up-to-date benchmarks with historical production data
- ▶ supports quality control
- ▶ supports daily activity of production teams with reports focused on production entities (batch, articles, shifts, etc.)
- ▶ supports “continuous improvement” processes

EASE OF USE

- ▶ easy-to-use reports
- ▶ easy access to sophisticated production information
- ▶ interactive reports with “drill through” capabilities
- ▶ modern and clear report layouts

INTEGRATION AND SETUP

- ▶ unintrusive installation
- ▶ easy integration of different data sources
- ▶ convenient design and update of new reports etc.
- ▶ built-in Microsoft SQL Server 2008 R2

CONNECTIVITY AND INTEGRATION

- ▶ integration of offline and online data sources
- ▶ high connectivity to many different kinds of machines and hardware
- ▶ easy integration of new equipment
- ▶ direct connection to automation infrastructure
- ▶ integration of meta-data from HMI/SCADA Systems
- ▶ possibility of manual data input

“ *Calculating standard KPIs like Overall Equipment Effectiveness (OEE) or company specific KPIs? Do it with zenon Analyzer and present them in nice graphical reports!* ”

The zenon philosophy

HIGHLY DYNAMIC
PRODUCTION OPTIMIZATION



zenon SCADA screens

The zenon product family is unique in its approach to production data, visualizing and controlling automated production processes and using reporting data to optimize them dynamically when demand or the factory environment changes.

zenon is at home in the world of production. Regardless of the age or make of your machinery zenon can interface to it in an unobtrusive way that will not affect production or cause the need for reengineering or revalidation.

In addition to *Dynamic Production Reporting*, the zenon product family includes solutions such as *independent SCADA systems, embedded HMI Systems, or integrated PLC Systems*.



About COPA-DATA

**THE PRODUCTION DATA
SPECIALISTS**

The zenon product family has been developed by the software lab COPA-DATA with headquarters in Salzburg.

COPA-DATA prides itself on being an independent company, developing platform-independent products for the world of production data. Innovation is a challenge we readily take on to develop the best possible solutions in terms of functionality, user experience and security.

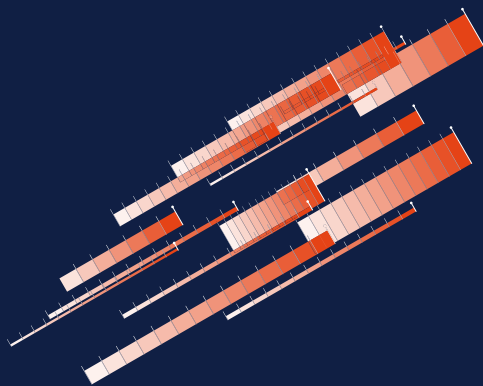
COPA-DATA has been the technology leader in the area of HMI/SCADA systems for many years and has profound knowledge not only of production

automation but also of industry-specific conditions and requirements. This has made zenon a standard name in process control, production supervision and operational management in industries such as Automotive, Food & Beverage, Pharmaceutical, Energy & Infrastructure.

All solutions are backed up by full support services to ensure constant reliable system operation.

Grafik zur Produktfamilie

do it your way



zenon Analyzer

“ *Get your production data out
of the black box –
and optimize your business
in real-time.* ”

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worldwide HMI/SCADA Solutions

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