ABOUT US

| Erwin Schmid | Manuel Schmid | Jürgen Tharmann |
|---|--|---|
| Mechanical Engineer Specialization Manufacturing Controller | Technical Supervisor Service Engineer Toolmaker | Industrial Engineer Specialization Conveyor and Warehouse Logistics |
| Krones - Thyssen Krupp - O & K Otis elevators - Siemens | Krones - Bitburger - Coca Cola Heineken - Radeberger - SMP | Krones - BSH - Toshiba - MAN VW - Siemens - Lufthansa |
| Maintenance and repair of beverage bottling plants | Optimization of beverage bottling plants | Optimization and new planning of business processes in logistics |
| Planning and execution of maintenance | · | Planning and execution of new |
| work on refinery plants | Complete new construction of factories in the bottling industry | warehouse buildings and expansions |
| Planning and calculation of repair and | | Programs for rapid efficiency |
| modernization work on elevators and escalators | Maintenance and repair of industrial presses | improvement along the supply chain |
| | | Outsourcing projects in logistics |
| Production controlling in manufacturing | | |



Increase production through process control



| You | provide us with your filling and packaging line data |
|----------------|--|
| We | technicians and engineers with decades of experience evaluate and analyze the data |
| You + We | find solutions together for troubleshooting to increase the productivity of your plant |

| | We often hear | "process control, we don't need it!" We monitor and evaluate the data ourselves. | | |
|---|---|---|--|--|
| | A case from real life | During the assembly of a new plant we noticed that the existing plant frequently breaks down and production is sometimes interrupted for up to 20 minutes | | |
| | Cause according to the operating personnel | No malfunction! Refilling the labels takes so long, it's a long way to the warehouse | | |
| 1 | Discovery of the "malfunction" | Coincidence | | |
| | Elimination | Put the pallet with labels next to the machine | | |
| | Costs | Zero | | |
| | Result | Production increase of more than 2% | | |
| | | | | |

Do you want to leave the increase of your production to chance?

No matter where your data is to be found, we integrate it, evaluate it and, using modern software and statistical methods, derive forecasts and probabilities for the future.

This is how we handle things:

1. Define goals

First, we sit down with you and define the goals you want to achieve with your data. You may already have specific goals with your data, or you may not even know what potential your data has in store. That's what we are here for!

2. Where is what?

In the second step we take a look at your storage systems. Where is the data and how do we integrate it in close cooperation with you? Once this is accomplished, we have created the basis for the subsequent data analysis.

3. The data analysis

We analyze data and create charts that help quickly identify visual patterns. By transforming data into actionable insights, we empower you to make optimal business decisions. Your data can reveal more than you think - often even new planning models for the future.

4. The analysis

A team of experts with many years of experience in the filling and packaging industry, as well as in warehouse logistics take over the evaluation of your data and are there to support you with advice!

EXAMPLE CALCULATION FOR ANNUAL OUTPUT

| | Example 1 | Example 2 |
|--|--------------|--------------|
| Filler capacity (container size 0.5 liter) | 20,000 Fl/hr | 60,000 Fl/hr |
| Production hours per week 40 – 10 (hrs. for retrofit and fault repair) | 30 | 30 |
| Production weeks per year | 45 | 45 |
| Output in hectoliters per year | 135,000 | 405,000 |

YOUR OUTPUT SHOULD NOT BE LOWER THAN THAT !!!



Example - Error evaluation for

complete plants

and

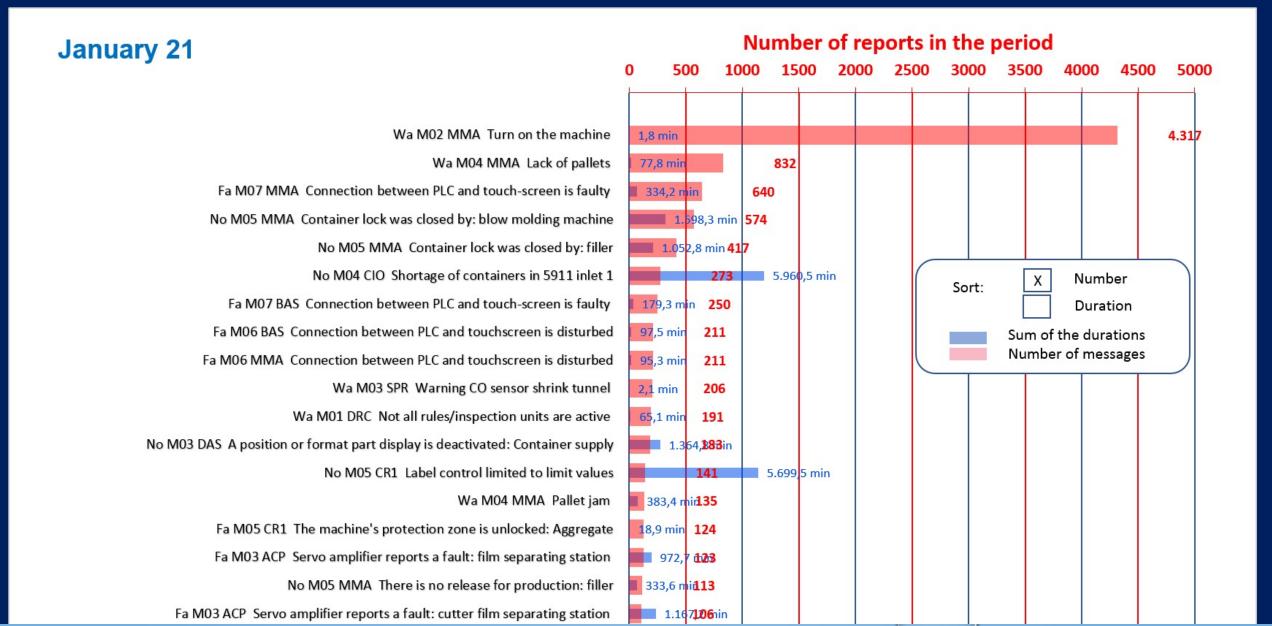
single machines

Number of reports in the period

Overall system January 21



709 various messages



Number of reports in the period

Jan 01, 21 Jan 31, 21

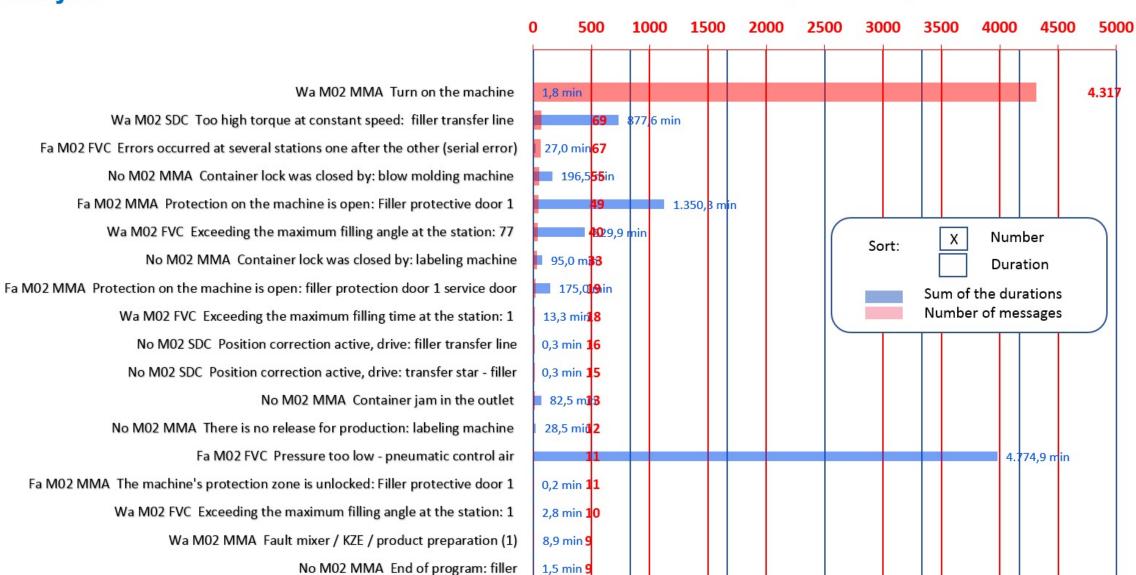
Number of reports in the period

various

messages

106

M02 Filler January 21



January 21