



Filling and Packaging – Worldwide

MORE EFFICIENCY FOR YOUR FILLING LINE

LINE OPTIMIZATION

Your line can do more and we know how!





YOUR SITUATION

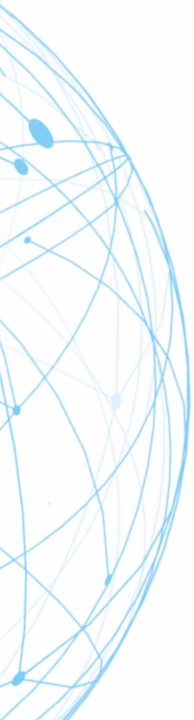
GRADUAL DROP IN EFFICIENCY

When your line efficiency gradually decreases, this is often not immediately apparent – yet it can have severe consequences. On a line with an output of 60,000 containers per hour, for example, each lost percentage in line efficiency results in a production loss of approx. 2.5 million containers per year.

There can be many reasons for a drop in efficiency, including:

- A decrease in the technical availability of the individual machines
- Changes in the production material in combination with new products, formats or types
- Replacement or site-specific relocation of individual machines on the line and thus changes in the system control
- The number of format and product changeovers
- Fluctuation in personnel
- Modifications to the conveying system control.

Minor influencing factors often have a major impact. In most cases around 20% of all events generate 80% of all problems which restrict the availability of a line.



YOUR CHALLENGE

DETECTING AND ELIMINATING CAUSES

In order to produce economically, bottling plants have to ensure the continuously high availability of their lines – a task which is difficult for two reasons:

Firstly, the **exact causes** of the drop in efficiency must be identified and secondly, **effective countermeasures** must be taken. Completely replacing a machine or the entire system cannot always be the answer.

OUR SOLUTION

LINE OPTIMIZATION

With its **line optimization** service KHS inspects the technical and organizational processes on your line, making effective suggestions for improvement and supporting the implementation of measures for KHS equipment. In detail, these services entail:

- Assessment of the **current state** of the line with a risk and **weak point analysis**, separated into external malfunctions and those caused by the system, and fault analysis by means of a PARETO chart, V chart and pie chart
- **Report**, presentation and discussion of the results
- Creation of a **prioritized action list** with the development of **concrete suggestions for remedies** to boost efficiency
- Consistent tracking of the **implementation thereof for KHS equipment**.

Line optimization is performed by our specialized auditors from KHS Service with the support of our regional centers in a process which is uniform the world over. You benefit from the expertise and many years of experience of our KHS engineers.

YOUR RESULT

INCREASE IN EFFICIENCY BY UP TO 30 % *

You find out where you are losing productivity and how you can best correct this. **You gradually improve the efficiency of your lines** and make the best possible use of your production time. With line optimization you benefit in the long term from the following:

- Increase in the efficiency of your individual machines
- Portrayal of optimum measures for a gradual and long-term boost in line efficiency
- Best possible use of production time
- Maintained operational reliability and adherence to your quality criteria.

The result of **line optimization** is that you will be able to exploit your full potential in the future.

*Potential depends on the current level of efficiency.

YOUR CONTACT

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FURTHER INFORMATION

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