

Production under control

Gerd Schuetz discusses the HiShield plant management system and its benefits for glass container producers.

When assessing glass plant efficiency, it is helpful for the plant manager to know what troubles exist and why, precisely where production is being lost and which defects are produced. The HiShield plant management system is a designated software solution that helps to centralise, structure and display all of this information. Data from sheer cut to palletiser will be used to obtain a complete overview of production. The operator can comment on each event in the system and the next shift can see what happened and why in the shift before.

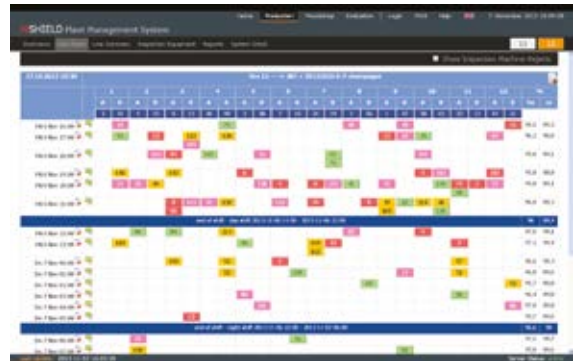
Events from the last 24 hours are displayed by a line sheet. This includes defects that have occurred, works/adjustments carried out, as well as the efficiency split realised at the hot and cold end. Inspection equipment is displayed on a separate page. A summary of detected defects, sorted by value, defect type or most detected gives users a helpful hand to check current production status. All data is linked to the mould cavity number, which allows the operator at the hot end to react quickly and in a target-oriented manner.

It is possible to trace the success of improvements made via long-term trend charts. They help to determine the stability of production and to work against negative trends before poor efficiencies are reached.

Users are prepared for daily production meetings by using the predefined reports, which summarise the daily production data. How many downtimes have occurred and for what reason? Which defects, classified in categories like risk, critical, visual etc and where are they arising?

IMPROVEMENT POTENTIAL

It is also possible to evaluate potential for improvements. Self-definable evaluation sheets build the basis for trouble-oriented assessments. Sometimes, the reason for the problem is not directly visible, it is more in-depth. The evaluation sheet helps users to determine from where the trouble really comes. In addition, it tracks the results of improvement measures. Do they remove the problem or do they make it worse? Essential hints can be found by checking these sheets.



Linesheet function.

INFORMATION TRANSFER

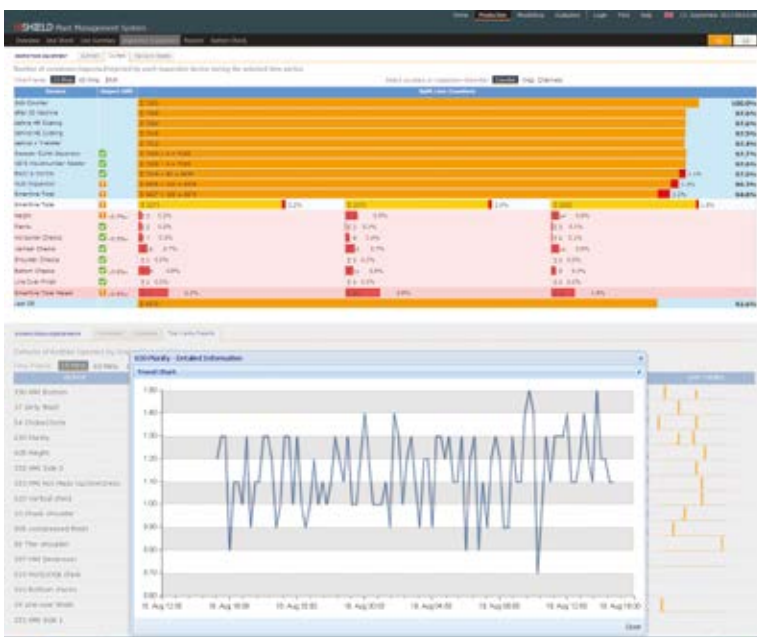
Information transfer is a key for success. This includes, for example, the mould shop module. If the tools at the IS machine are changed, the operator documents the reason for the change, information that is displayed in the mould shop module. Consequently, workers in the mould shop know what happened with the tool and can carry out target-oriented repairs. Assisted by time stamps, it is possible to calculate the run time of the tools. By using this information, glassmakers are able to create a uniform run time over the whole mould set. These mould shop modules give the possibility to build a history of the tools, including their lifetime.

The HiShield production management system is an evolution of the well-known Heye Information System (HIS). It is performed as a browser-based system. This means that particular software is not required at the workstations and the existing IT infrastructure can be used. This builds the base for further developments, including a mobile version.

TRACKING AND TRACING

All existing data is safely stored in a database, giving the opportunity to access information about previous production runs. This is helpful for comparisons, as well as providing proof of production quality levels for a certain moment.

Interfaces are available to common IS machine control units, as well matches to common inspection machines. The HiShield QCLab software for the laboratory can also be linked to the system, thereby integrating off-line inspection data as well. ■



The HiShield plant management system includes a defect counter and trends function.

ABOUT THE AUTHOR:

Gerd Schuetz is Cold End Product Manager at Heye International

FURTHER INFORMATION:

Heye International GmbH, Obernkirchen, Germany
 tel: +49 5724 26 653
 email: marketing@heye-international.com
 web: www.heye-international.com