



A PRECISE LOOK

Software oscilloscope shows its strengths

The Swiss company *soplar sa* based in Altstätten, Switzerland, is a leading technology company in the development, manufacture and maintenance of plastics machines for the worldwide packaging industry. The specialists in extrusion blow molding and stretch-blow molding machines use the M1 automation system for all its systems. The Scope 3.0 software oscilloscope has also proved to be useful here in daily tasks.

A tool for data logging and analysis are indispensable, particularly with the development of new machines and plants. Bachmann's Scope product series has been used at *soplar sa* for a long time. These products are thus in use everywhere in the company – by the developers and mechanics, as well as by the process and service technicians.

High speed troubleshooting

"We primarily monitor path generators during the development phase, and any timing problems occurring in positioning tasks are examined," Stefan Spiegel, working in the

Control Engineering department at *soplar sa*, describes one of the main applications of Scope. "A number of process variables are recorded in a 2 millisecond cycle here. A task that does not present any problem for the highly capable M1 controller with the Scope software module."

With a few clicks of the mouse in the analysis tool, the data can then be presented in a graph for further processing. "The differentiation of curves with equally spaced X data is often used by us in order to immediately highlight any errors in path movements and positions," Stefan Spiegel continues. ▶▶



soplar sa was founded in 1978 and is one of the leading manufacturers of extrusion blow molding and stretch-blow molding machines. The company is based in Altstätten, Switzerland, and has 180 employees worldwide.

➤ www.soplar.co



▲ Rapid troubleshooting: Scope 3.0 provides valuable services during the development and commissioning of machines and plants.

►► The display makes the difference

The powerful recording module produces an extensive data set in no time. However, this data only becomes useful if the right analysis tool is available as well. That is why at soplra we appreciate the functions of Scope 3.0: "The data is often not displayed over time at all, but in relation to another data sequence, the so-called X/Y chart display," Stefan Spiegel explains and adds: "This allows us for example to visualize and examine the collision space of two axes simply – a task that could not be completed so easily without this kind of tool."

Ideal also for productive operation

However, the data recorder is not just suitable as a tool in development and commissioning. It has a large number of applications in production. "Service technicians are often deployed on site if problems occur on a machine. They

then have to wait until the fault occurs again and can be reproduced," Stefan Spiegel describes a typical scenario and adds: "Only in this way can the fault also be rectified quickly and reliably."

The new Scope 3.0 makes this waiting unnecessary since the data recorder is supplied with the machine. Appropriate start trigger configurations make it permanently ready to record so that a fault can be logged already the first time it occurs. Several of these recording configurations can be stored in order to cover all relevant faults.

Easy collaboration

It is often necessary to involve several

experts in the troubleshooting process or in finding a solution. "It is tremendously important here to be able to exchange the data between each other simply and to also display it in exactly

the same way," Stefan Spiegel explains. Only in this way can trouble-free collaboration and the correct interpretation of an instruction given over the phone be ensured. With Scope 3.0 these kinds of tasks

» **Bachmann has once more demonstrated its leading position with Scope 3.0.** «

*Stefan Spiegel,
Control Engineering at soplra*

are easy: Only one file is used for each recording, both on the M1 controller and on the PC. A local technician can open a file, select the relevant data and position the appropriate measuring cursors. If he then sends this file to someone, the recipient will see exactly

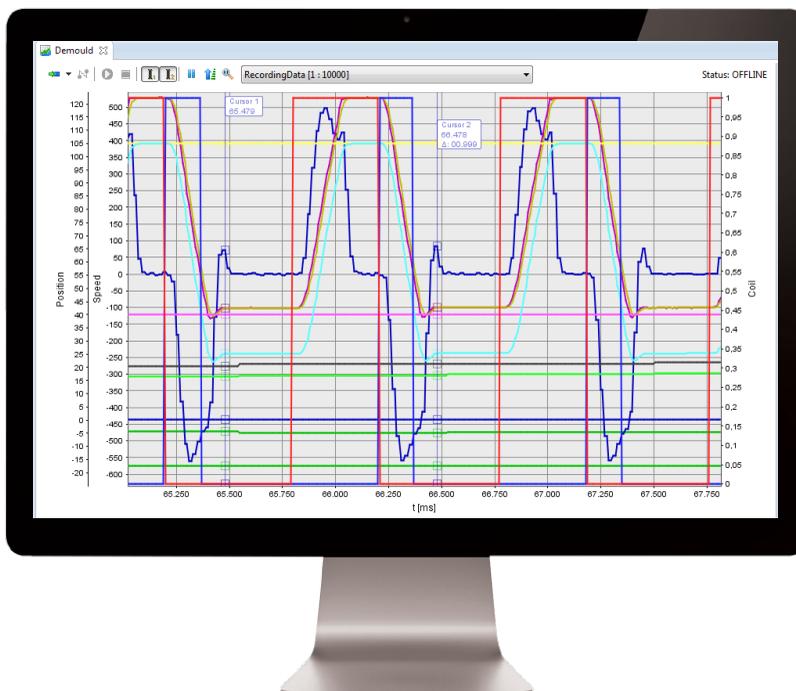


▶ Very satisfied: The team at soplar sa has been using the Scope products from Bachmann for a long time.

the same display, since everything is displayed exactly as it was saved, right through to the zoom level.

Performance with tradition

“We have been working with the software oscilloscopes of Bachmann for a long time and appreciate them very much,” Stefan Spiegel sums up and states: “Bachmann has once more demonstrated its leading position with Scope 3.0 – and has once again simply done something very good!”



▶ High precision: The time relationships of various process variables are analyzed and the exact values can be read out with the measuring cursor.