

# Getting “In Touch” with Machine Control

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**At the trade fair “K” in October of 2004, Battenfeld Extrusionstechnik GmbH, a subsidiary of SMS Plastics Technology based in Bad Oeynhausen, presented the prototype of a newly developed system controller. The Battenfeld Machine Control series, which includes the proven models BMC Smart and BMC Plus, now includes BMC Touch, a new variant with additional functionality.**

“We have been relying on B&R for control and automation components since 1995 and are very happy with both the products and the support,” explains Michael Käthler, Head of Automation Development at Battenfeld Extrusionstechnik.

Thanks to the success of this cooperation, B&R has since won the business of all members of the SMS Plastics Technology group. It is this type of close collaboration that enables B&R to become integrated in its customers’ decision-making processes and react swiftly to changes. Conversely, the customer receives the newest information regarding new developments and trends in technology.

## The Complete Solution

As a provider of complete extrusion systems for the production of film, profiles, sheets, and pipes, Battenfeld Extrusionstechnik places great value on expertise across the entire product spectrum. With this as a priority, the manufacturer must provide its customers with not only coordinated machine components, but also with high

performance control and automation solutions.

That is why the company began very early on to develop their own software and hardware solutions. The ground-breaking BMC Plus made its debut at K 1998 as a solution to all the demands of machinery automation. Together with its little brother BMC Smart, which was used for newer components and coextruders, BMC Plus established itself in the market. The standards that were set six years ago are just as relevant today. Like its predecessors, BMC Touch provides networking of sensors and actuators with a standardized CAN fieldbus system,

as well as process visualization with Windows.

“From a functional and technical standpoint there was no reason for a change. Our BMC Plus is state of the art and has proven itself in practice. Nevertheless, we have continued to tinker with it and have come up with some new functions that will impress our customers,” says Michael Käthler.

## Intuitive System Access

As the name BMC Touch implies, the new member of the control family is operated with a touch screen. “The advantage of a touch screen is that the user has intuitive access to the sys-

*“Battenfeld has succeeded in developing a highly flexible automation concept with maximum functionality, ease of operation, and serviceability.”*

**Armin Reichelt**  
Director, Technical Office North  
B&R



tem,” explains Käthler. “Nevertheless, we have retained the additional machine buttons to ensure that operators wearing gloves have safe access at all times.” To produce an especially clear and user-friendly display, Battenfeld chose a 15” color monitor. One of the most fundamental improvements of the high end product BMC Touch is its high degree of configurability. This flexibility makes it possible for end users to customize the display layout and optimize the visualization for each of their processes.

### Flexible Machine Operation

The second fundamental improvement is decentralized operation. A client/server architecture allows the user to observe and operate all the extruders connected to the plant network. Every extruder is equipped with an APC620, the latest IPC generation from B&R. The APC620 acts as the server, allowing all machines to communicate with each other and with a central location via Ethernet.

In practice, this architecture has decisive advantages: If need be, the operator could access the system through machine 6 and intervene in the control of machine 25, for example.



Image source: SMS Kunststofftechnik

Each user can configure the display layout to fit their needs.

In closing, Käthler asserts: “There are still many possibilities in this concept we have developed. It is an exceptional foundation for the future, for us and for our customers.”



Image source: SMS Kunststofftechnik

At K 2004, the worldwide leading trade fair in the plastics industry, Battenfeld Extrusionstechnik presented their groundbreaking system controller: BMC Touch. Mr. Michael Käthler, Head of Automation Development, with a BMC Touch unit at the Battenfeld exhibition booth.