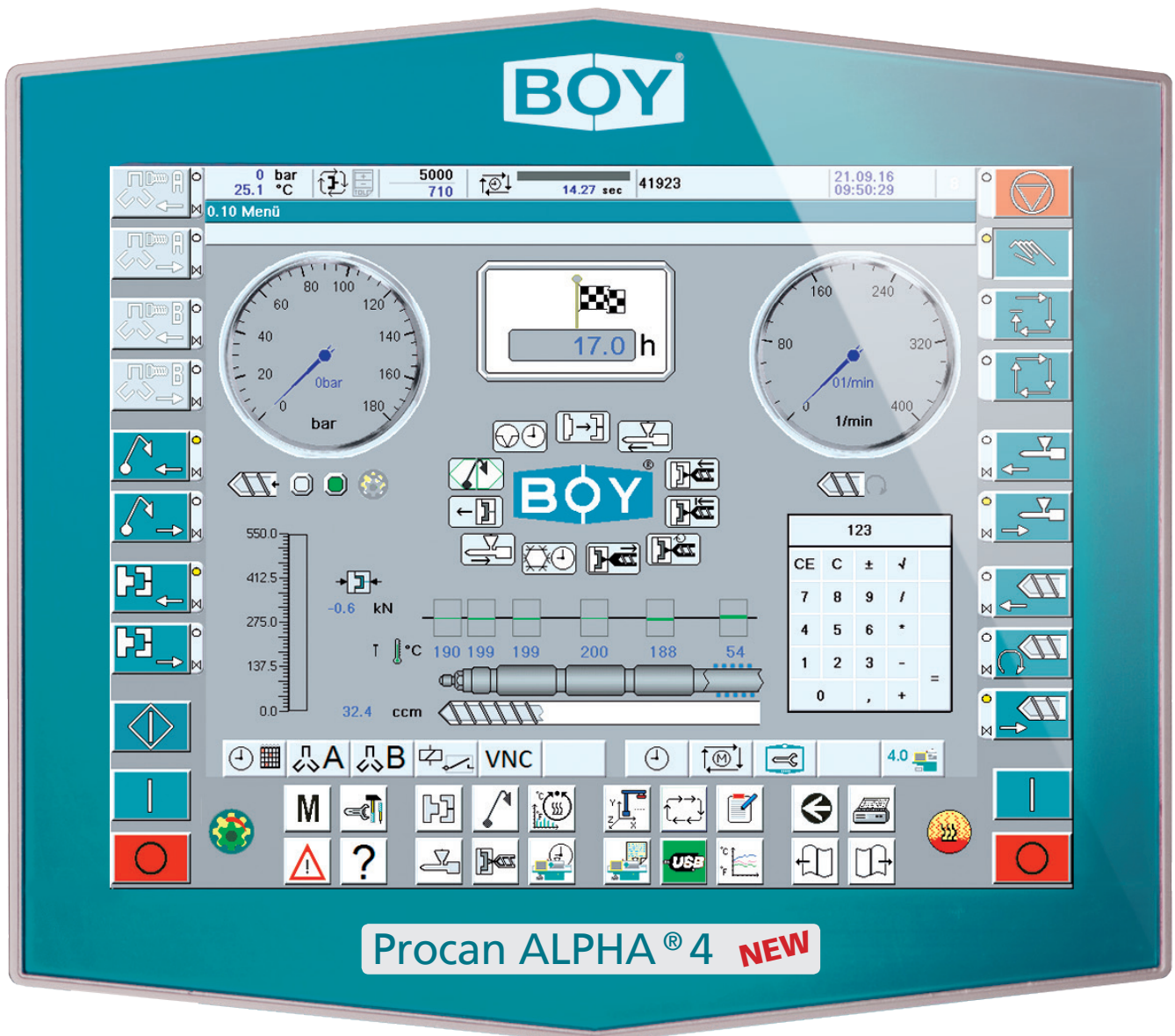


# Innovative into the Future – the new machine control



Connectivity



Procan ALPHA® 4

## Easiest Operation – Maximum Information

- Reduce your operation- and set-up times by the intuitive and fast Touch-Screen operation.
- Switch your BOY injection Moulding Machine online and use, for example, the BOY-Status-App.
- Precision, information and operation – in these fields the BOY controls have been market leaders for many years.



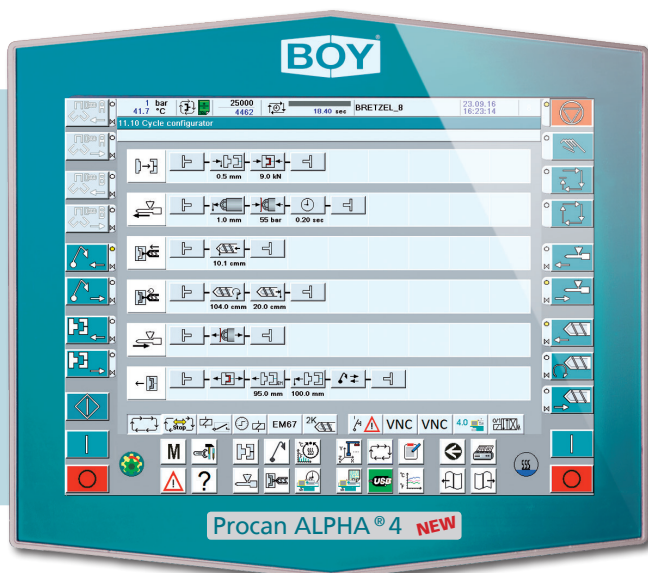
Demo of the  
Status-APP  
free of charge at  
<http://status.dr-boy.de>

The most significant difference is in the graphical sequence programming. This upgrading offers a complete new openness in the programming of the machines and the injection moulding processes. Functions like core pulling processes, delay times, freely programmable inputs and outputs and much more are now freely programmable in the control sequence.

When developing the new control, BOY has consciously taken into consideration to maintain the existing intuitive user interface to the greatest possible extent.

The display with the Touch-surface still offers the advantages of a clear and intuitive machine control. Thus the changeover to the new control will be as simple and easy as possible for the users.

### Screen page Cycle Configurator:



Optional the new machine control **Procan ALPHA<sup>®</sup> 4** offers the possibility to integrate much more different languages. Of special advantage is this possibility for the machine hand books which are included in the control and for the help functions as well.



## Networked machines – a big part of Industry 4.0

An important option of **Procan ALPHA<sup>®</sup> 4** is the availability of an integrated OPC-UA Server in the machine control. Among other

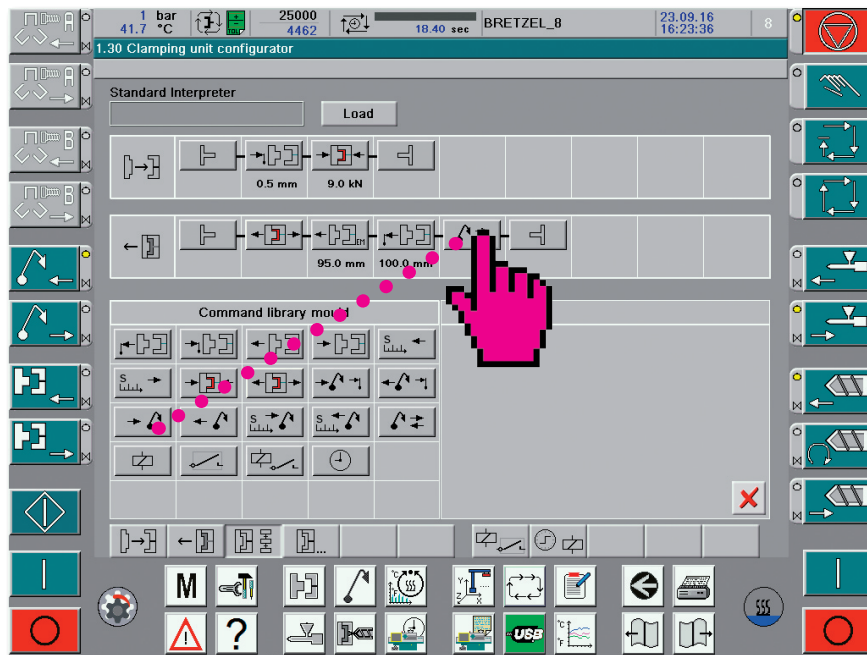
things this Server improves the connectivity of the injection moulding machine and is directly integrated in the control, which means the saving of high additional costs for the external OPC-Client and the wrapper. Therewith the master computer interface EUROMAP 77/78 will also be on hand. The OPC-UA Server is part of the optional interface package.

**Euromap 77** - advanced OPC-UA based data interface for injection moulding machines, including

**Euromap 83** - extension

- The PCT-Technology (Projective Capacitive Touch) provides longer-lasting functionality without recalibration of the screen.
- More powerful CPU, which allows faster screen refresh times by 50 %.
- The touch surface has been protected with a stable safety glass cover.
- Due to the multi-touch technology, it is now possible to activate machine control buttons and simultaneously make set point inputs.

# New: The graphic process programming



## Screen page Clamping unit Configurator:

For the design of a perfect programming process the individual “elements” from the command library can be integrated into the programming process by the graphic process editor.

Simply touch the corresponding symbol, hold it and move it to the desired position in the programming process. Just as quick and easy are their changes of the positions within the process. For each process sequence within the injection moulding cycle the graphic process editor offers the appropriate command library. In the picture on the left the graphic configuration of the clamping unit is shown as a sample.

## Description of some basic symbols



### „Delay time“

Delay time that is running until the next action is performed.



### „Switch user exit“

- programmed element can be deactivated without removing it from the process.



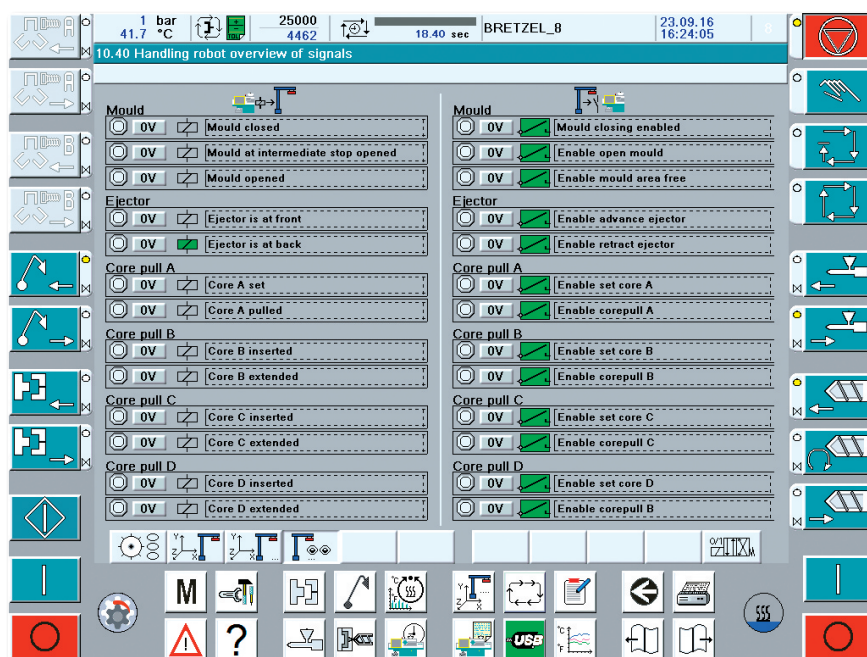
### „Ejector“

Ejector moves to the fixed position.



### „Wait for position“

This symbol marks the beginning of a parallel movement and can only be used in conjunction with other „blocks“.



## Screen page

### Handling device overview signals:

This screen page of the **Procan ALPHA® 4** shows the status information of the handling device interface. All release signals between injection moulding machine and handling are checked and clearly presented. (EM 67)



Procan ALPHA®



Machine status



Industry 4.0



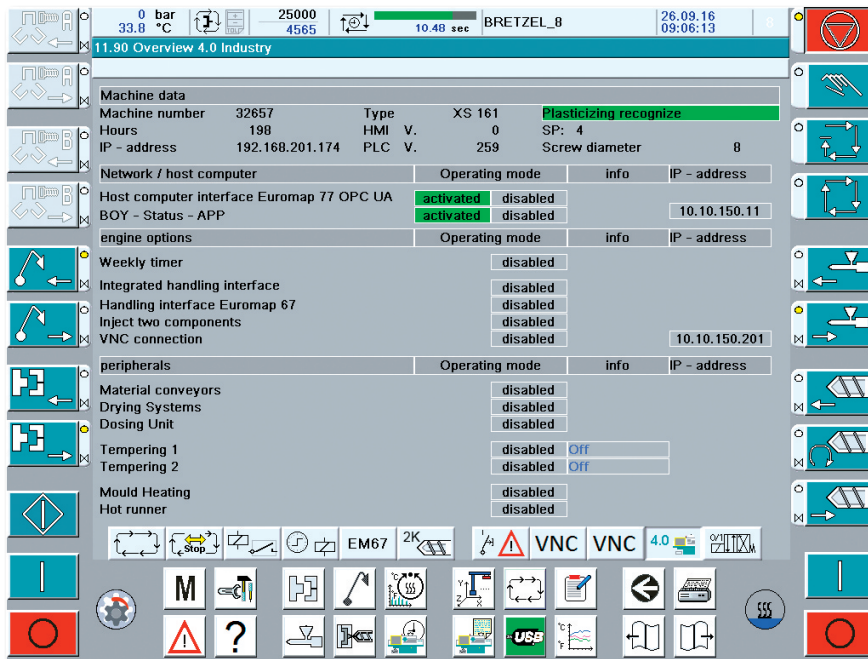
Made in Germany



Spritzgiessautomaten

The **Procan ALPHA® 4** offers a variety of modified functions:

- Significantly improved MES-functions (Manufacturing Execution System) with optionally OPC-UA server
- Better position accuracy due to improved analog registration; the registration accuracy of the position sensors has been increased by the factor 10
- Doubling of the temperature control accuracy and halving of the tolerances
- Application of optimized fieldbus systems
- Improved processor performance; separate processors for display and control
- Hydraulic pressure-dependent switchover to holding pressure with stroke monitoring
- Improved constancy of cycle time; tolerance deviation less than 10 milliseconds
- Prepared for all drive technologies of the injection moulding machines



Screen page Industry 4.0:

This page shows the peripheral equipment, connected to the injection moulding machine and the correspondingly activated / deactivated communication reports.

You would like to learn more about BOY ?



Data and Equipment (complete overview)



Competence brochure



#### Dr. Boy GmbH & Co. KG

Industriegebiet Neustadt / Wied  
Neschener Str. 6  
53577 Neustadt-Fernthal  
Germany

Phone: +49 (0)2683 307-0  
Fax: +49 (0)2683 307-4555  
E-Mail: [info@dr-boy.de](mailto:info@dr-boy.de)  
Internet: [www.dr-boy.de](http://www.dr-boy.de)



BOY-APP  
free of charge at  
<http://app.dr-boy.de>

