

Bühler Control
Systems.
**User-friendly
solutions for
maximum
efficiency.**



Every business and every product is different. We make sure you benefit from an automation solution that is perfectly tailored to your needs.

Benefits of Bühler Control Systems

- Intuitive design for maximum productivity
- Ideal product and machine handling for optimal profitability
- Auxiliary features for higher process reliability
- Elaborate data management for quality assurance
- Remote access for easy process monitoring

Bühler Control Systems.

Flexible solutions – tailored to your needs.

You must be able to rely on your processes. They need to run smoothly and handle countless demands, such as for maximum product safety, efficient energy use or easy operation. As a solution provider with decades of experience in automation, Bühler sets industry standards and delivers the highest possible quality.



COMFORT

Convenient solution with manual operation.

The machine is controlled entirely by pushbuttons whereby signal lamps and displays indicate the machine status. Depending on the process, the rotor speed can be selected.



PREMIUM

First-class solution with PLC and touchscreen.

A new user interface with PLC programming and touchscreen allows easy and intuitive operation of the machine. The job-related analysis and diagnosis of the operating data informs the operator about the machine status.



PREMIUM PLUS

Enhanced solution with extendable functionalities.

The Premium Plus control offers advanced features and can integrate the control of tanks, peripherals and pre-grinding machines.



WINCOS®

Comprehensive plant control system for fully automated processes.

With WinCos®, we offer a plant control system that fulfills every demand – module by module, characterized by great flexibility and individual support.

Premium and Premium Plus solution.

Excellent process control.

Job wizard

02/03/2017 12:57:52 PM Automatic User6 6

Job details Step 1 Step 2 Terminate

Job number [input field]

Batch size [input field] 0 kg

Loaded recipe Black-367K

Start Job Process values

Cancel Next

Integrated machine visualization with menu options

01/03/2017 0

Job: Test-2 Recipe: Black-367K

tel 0:06 h:m

tre 0:08 h:m

Es 21 kWh/t

P 13.2 kW

vR 11.0 m/s

To 49.2 °C

Main menu

02/03/2017 01:34:01 PM Automatic User2 2

Job: Test-01 Job stopped

Overview Recipes Machine Settings

Process Values Curves Jobs System Settings

Cockpit Walk-by Maintenance User Management

Recipe menu (example)

02/03/2017 02:12:05 PM Automatic User8 8

Recipes 001 - 003 (of 003)

Black-367 18.01.2017 10:02:31	Black-367K 18.01.2017 11:56:11	Blue-302 18.01.2017 10:02:31	Blue-367 18.01.2017 10:02:31	Blue-386 18.01.2017 10:02:31
Gr-384 18.01.2017 10:02:31	Gr-386 18.01.2017 10:02:31	Kreis 14.01.2017 11:21:10	Kreis-2 14.01.2017 11:21:10	Red-100 18.01.2017 10:02:31
Red-105 18.01.2017 10:02:31	Red-108 18.01.2017 10:02:31	Spuelen 14.12.2016 09:01:13	Yel-105 18.01.2017 10:02:31	Yel-156 18.01.2017 10:02:31

Delete Statistic Load

Maintenance menu (example)

02/03/2017 04:17:36 PM Automatic User8 8

Maintenance Selection

Alarm history	Operation hours Energy	I/O status
Alarm ranking	Maintenance intervals	
System message history	Maintenance protocol	

Control and status bar

4:12:25 PM Automatic Admin 9

1 New Job

4

5

6

7

pi 0.65 bar

mi 2400 kg/h

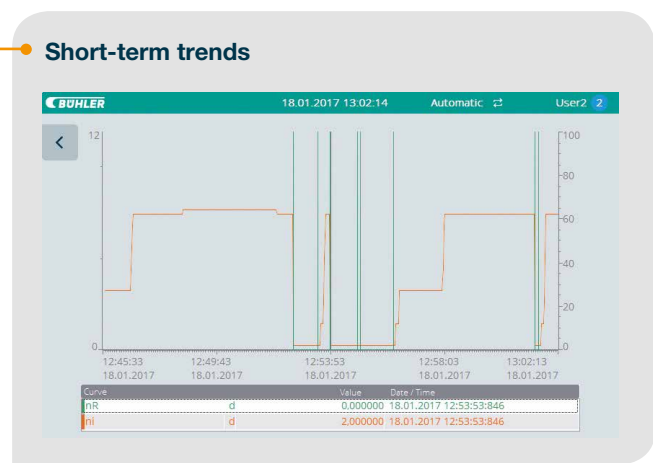
ni 60 %

Process values (actual/target)

BOHLER 02/03/2017 12:45:32 PM Automatic User2

Process Values 1/2 Black-367K

Rotor		Pump		General	
vR	10.0 10.0 m/s	ni	15 15 %	OpM	Circle
nR	544 544 1/min	pi	0.2 bar	Tmax	60.0 °C
P	12.0 kW	m'i	600 kg/h	Es	25 8 kWh/t
To	55.0 46.7 °C				
I	20.0 A				



Walk by screen

BOHLER MyMill 18.01.2017 13:02:43 Automatic User2

tre (h:min)	ni (%)	vR (m/s)
1:22	62	11.0
pi (bar)	P (kW)	To (°C)
1.8	10.2	56.4

Cockpit

BOHLER 18.01.2017 13:25:55 Automatic Admin 9

Job	Test-07	Es [kWh/t]	vR [m/s]
Recipe	Black-367K	21	10,5
Status	Running		
Started	02/03/2017 02:56:54 PM	P [kW]	To [°C]
Run time [min]	0.1	9,8	54,4
Down time [min]	0.0		

Smooth operation with maximum benefits. **Taking efficiency to the next level.**



Intuitive design for maximum productivity

The intuitive design and user guidance simplify the correct operation of the machine. The control is easy to use which makes extensive trainings unnecessary. Additionally, a walk by screen with color coding shows warnings and standstills at a glance even from a distance.



Ideal handling of product/machine for optimal profitability

With Bühler control systems the machine can be used to its full extent. An intelligent cockpit shows current process parameters including the optimum range of operation, which allows immediate adjustment. Further features, such as a job wizard, support the correct and fast start-up of the machine.



Auxiliary features for higher process reliability

Integrated recipe assistants allow a production process with up to five steps enabling an ongoing adjustment of process parameters to the changing product characteristics. Additionally, various start ramps ensure a fast production start tailored to the product. The result is higher process reliability in less time.



Elaborated data management for quality assurance

The control system uses intelligent data management for quality assurance and optimization. The user is able to access the past 200 jobs allowing replication and traceability of the production. Further optional measuring systems show improvement potential and enable inline quality control. Additionally, in order to preventively maintain the machine, the occurring errors are tracked and ranked. This allows an easy monitoring and scheduling of maintenance.



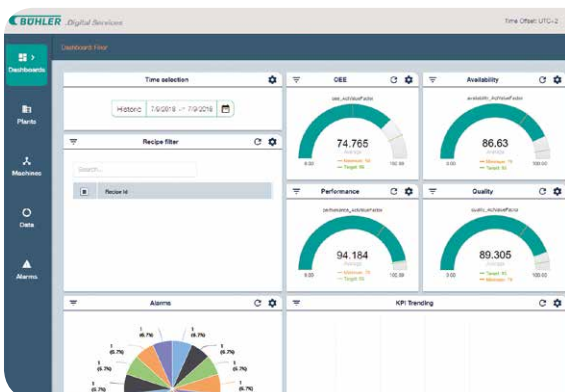
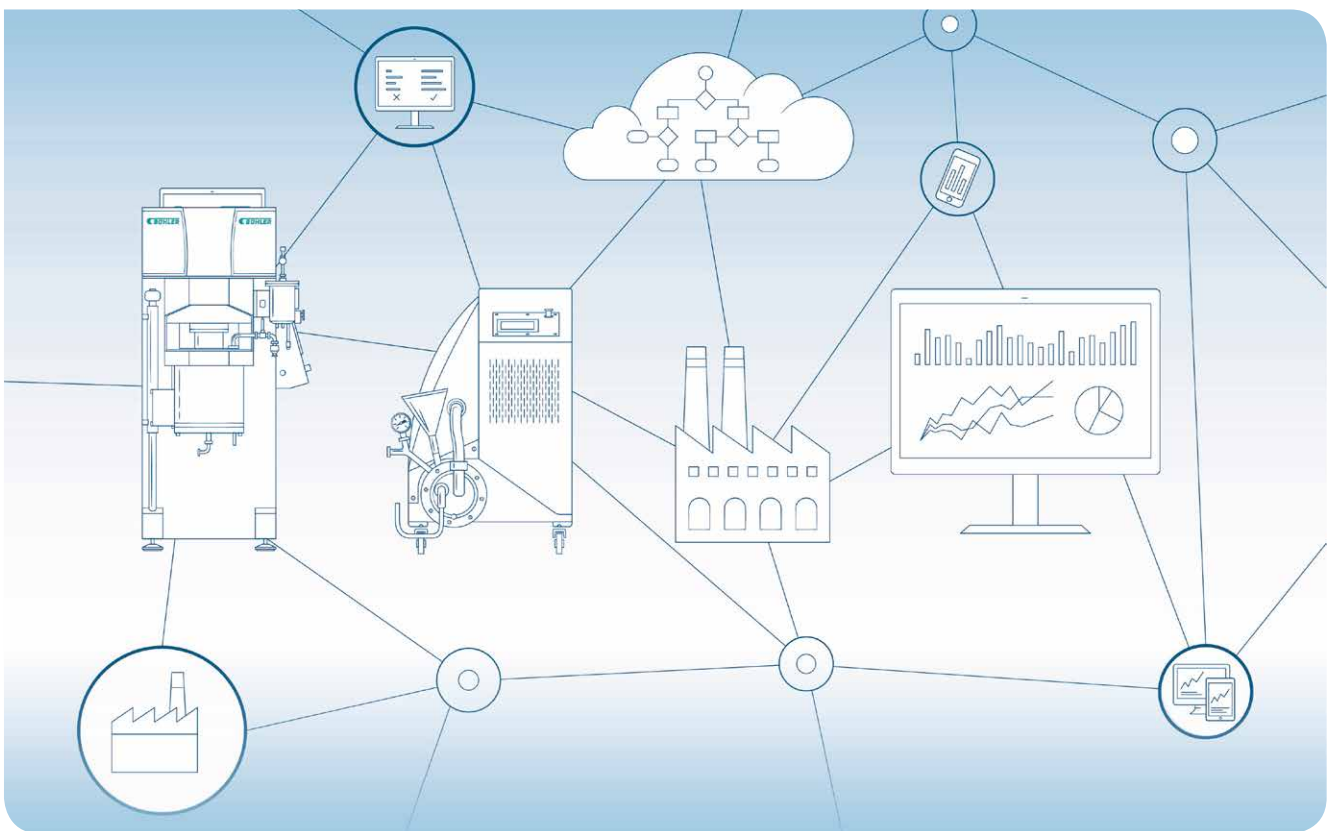
Remote access for easy process monitoring

The Premium Plus solution gives remote access to the control system, which greatly improves process monitoring. Standstills are detected more quickly and can potentially be resolved without being on site. This saves costs and increases productivity. When required, Bühler Customer Service representatives can remotely access the system ensuring quick and inexpensive servicing.

Digital Services.

We are your trusted partner in digitalization.

Our vision is to enable fully connected plants that improve themselves autonomously by continuously exchanging information between machines. Your plant is fully connected and improves itself autonomously by exchanging information from machine to machine.



SmartPro™

SmartPro™ is our solution to digitalize the wet grinding process. It allows higher traceability, better process control and benchmarking, which results in significant optimization of production. The upload of data into the cloud with maximum data security allows access to the data anytime and anywhere.

Bühler AG

CH-9240 Uzwil
Switzerland

T +41 71 955 11 11
F +41 71 955 31 49

grinding.dispersion@buhlergroup.com
buhlergroup.com

180910_Automation_EN_A4

BÜHLER