

10 April 2025

## 2nd Czech-German Business Meeting

Transforming Industry  
with Intelligent Production  
and Energy Solutions

VSB TECHNICAL  
UNIVERSITY  
OF OSTRAVA

in cooperation with  
**Fraunhofer**

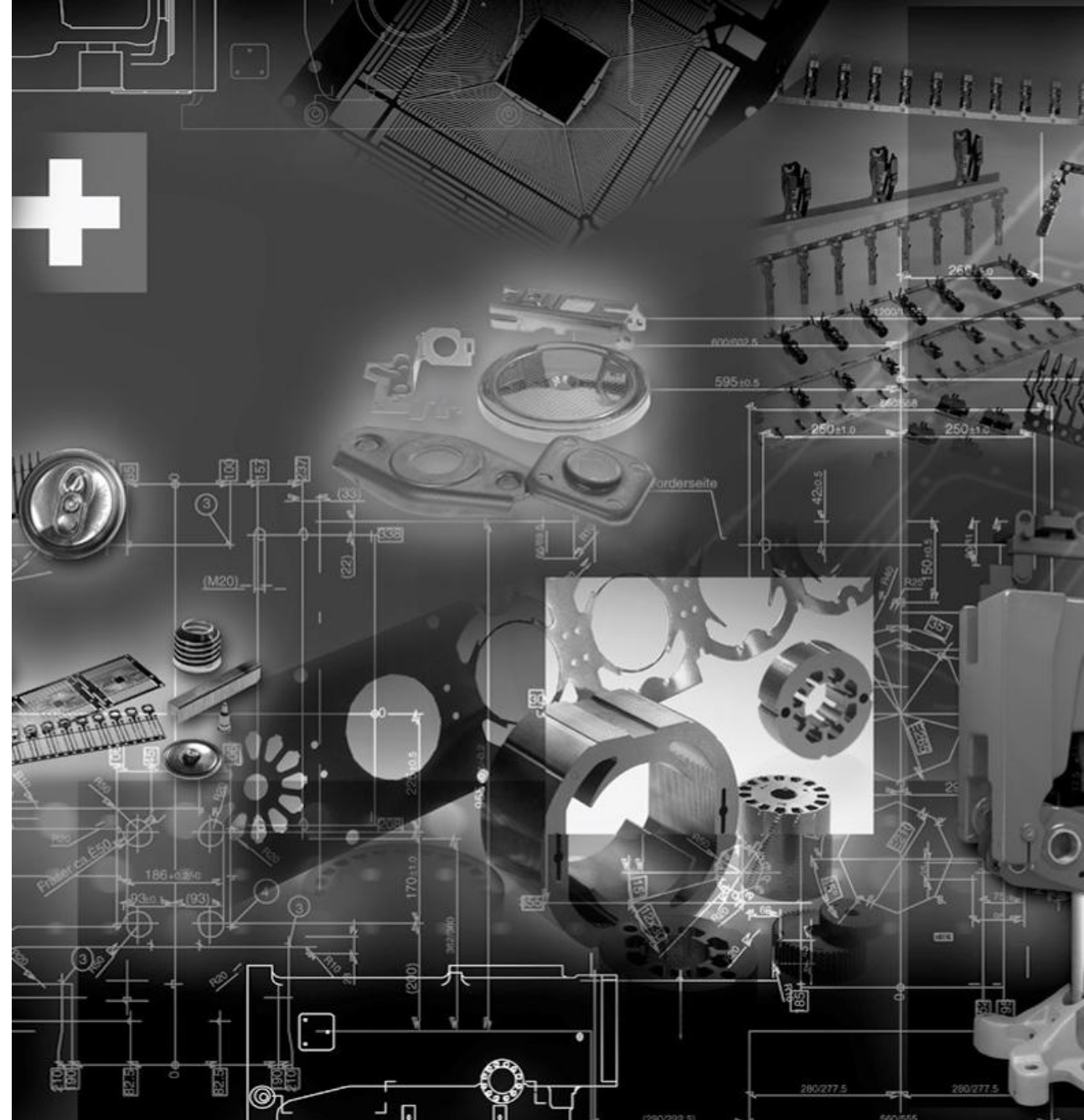
VSB - Technical University of Ostrava

# Products, Innovation, Sustainability

Precision produces perfection.

# Agenda

1. Press Control B3
2. BSP – Bruderer Lamination Control







# BRUDERER B3 press control

## New dimensions in operating

### Integrated modularity for maximum functionality

The BRUDERER B3 control multilanguage display provides continuous information on all relevant events and operating conditions across the entire production line.

Various possibilities for accessing the HMI, via machine screen, mobile devices, office PC

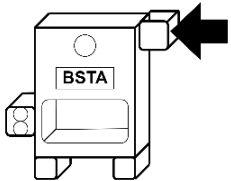
Status /Error  
Messages

Time | User

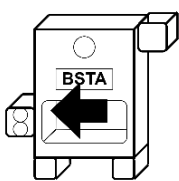
Navigation

- Menus
- Access Services

Stroke speed



Ram height  
adjustment



Messages

Disengaged

3/15/2024, 2:51:49 PM | Service

Note

Engage the machine at the console

BrudererDefaultTool

Information /  
User guidance

Actual tool

Navigation

Grid of icons for various functions: Home, Settings, Tools, Users, Reports, etc.

Set up | Inching

Icons for setup and inching functions.

Total 00:00:14

951 | 1,000 | 49

Operating mode



Stroke rate

400 1/min

100 1/min

0

100

Stroke position

0°

90°

180°

270°

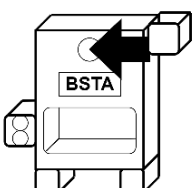
1.4

6

6.41

Hub

Eccentric shaft  
position/stroke



Ram

Corrected shut height

213.700 mm

213.470 mm

213.300 mm

213.470

-0.030

BSVL 1

0°

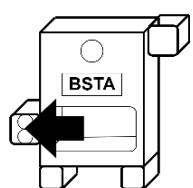
90°

180°

270°

Icons for BSVL 1 adjustment.

Feeder



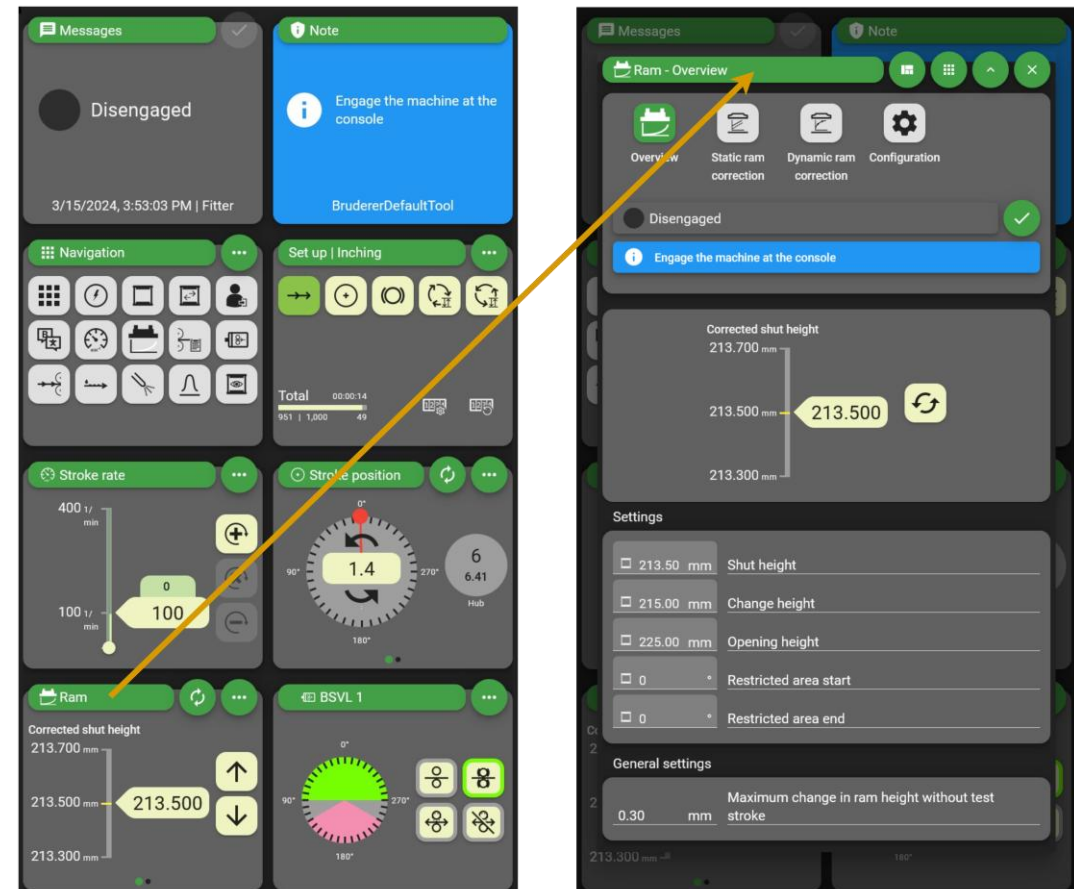
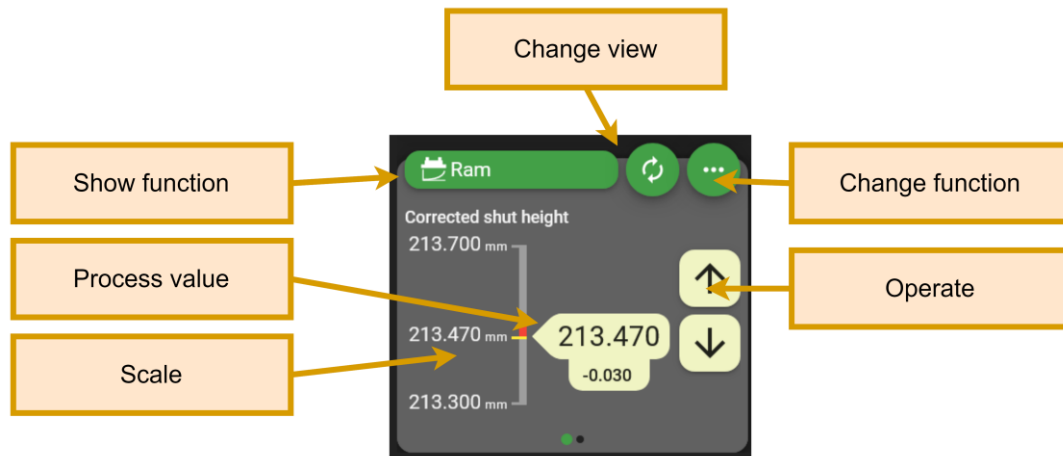
# BRUDERER B3 press control

## New Operating Concept

- Operating concept of max. 2 clicks to desired function
- User management with role-based access rights and customizable main page
- Web based visualization with responsive design – multiple access possibilities
- Possibility of mobile operation via WLAN

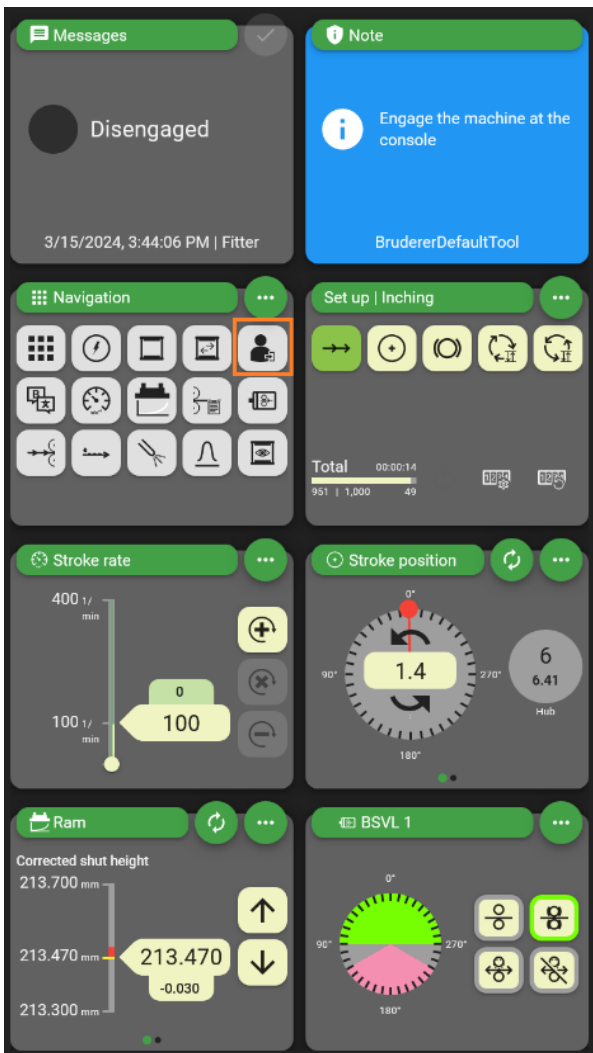
# BRUDERER B3 press control

## Operating Concept – Windows



# BRUDERER B3 press control

## Operating Concept – Users & Roles



### User / Role

### Permissions

#### Service

Bruderer Service – Setting and activating functions

#### Fitter

Tool Settings

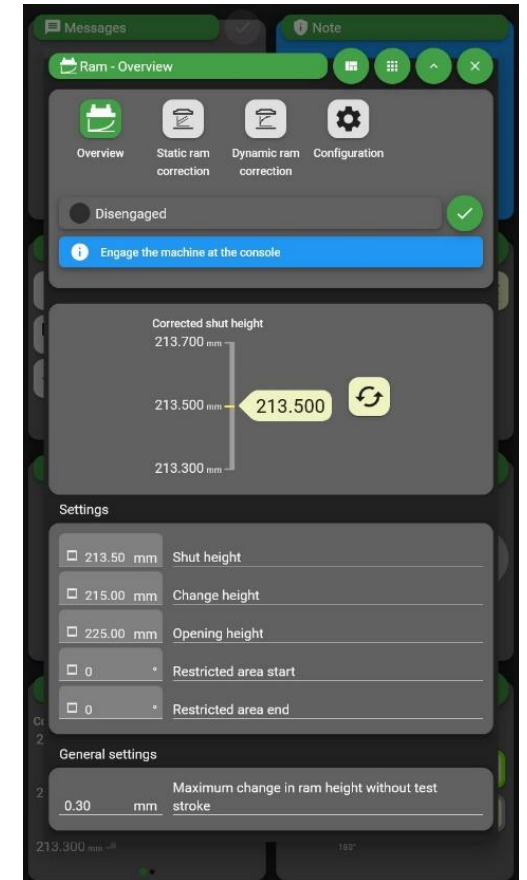
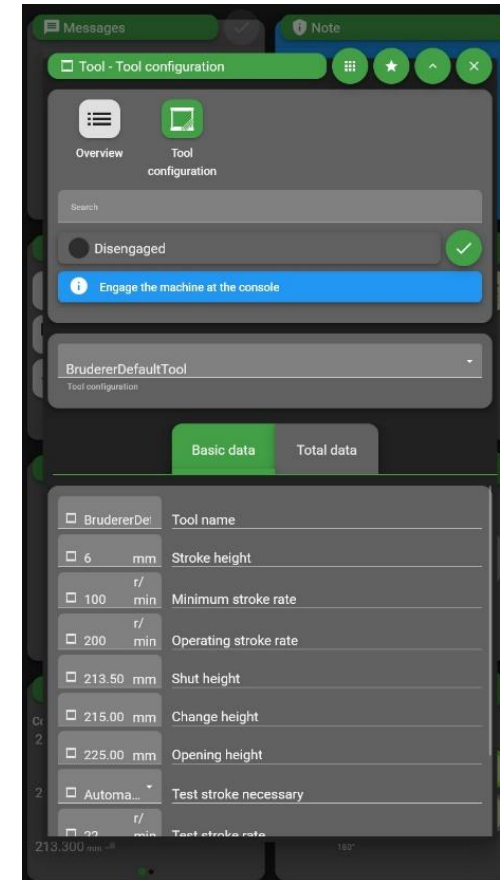
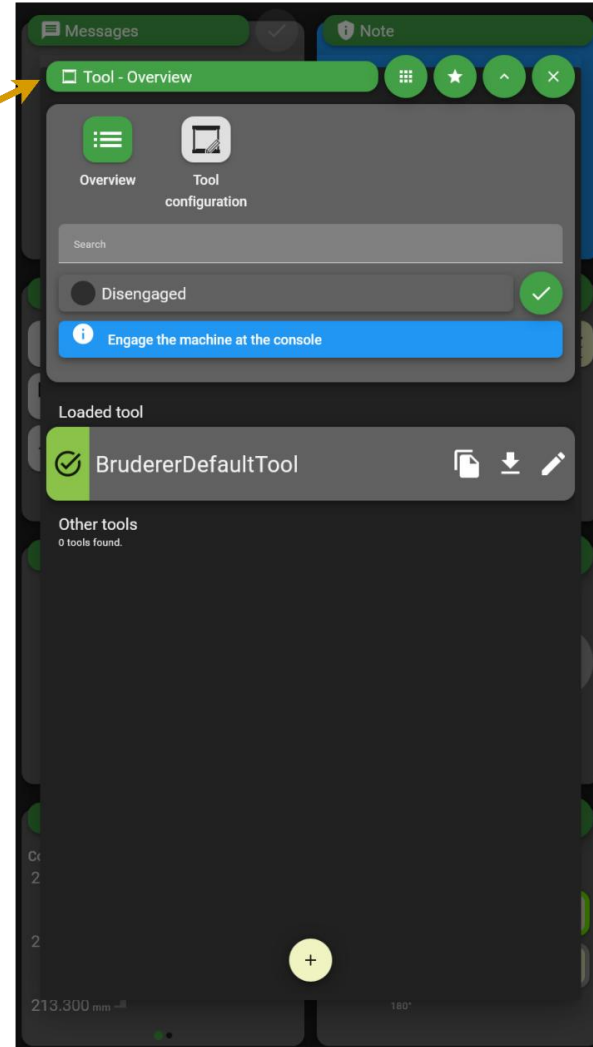
#### Operator

Operating Functions



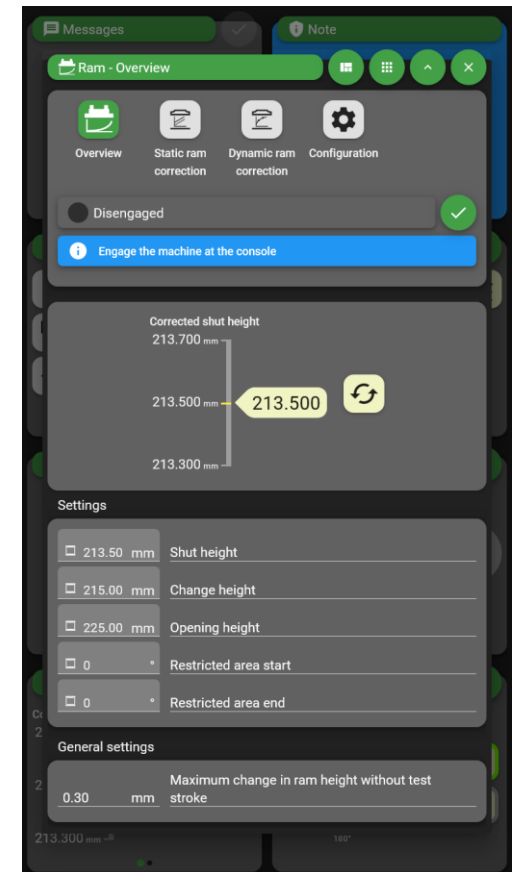
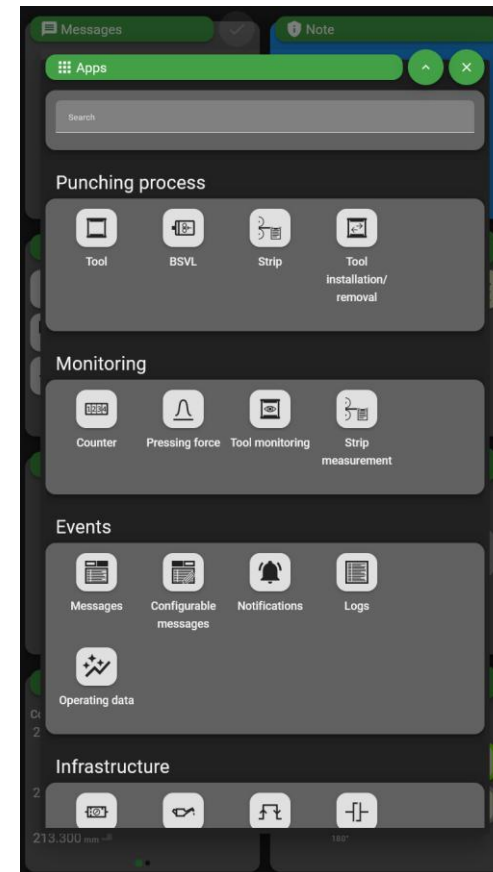
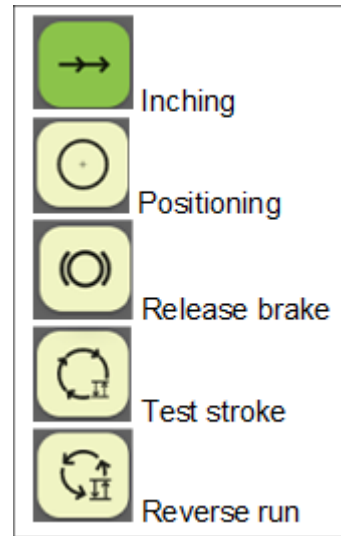
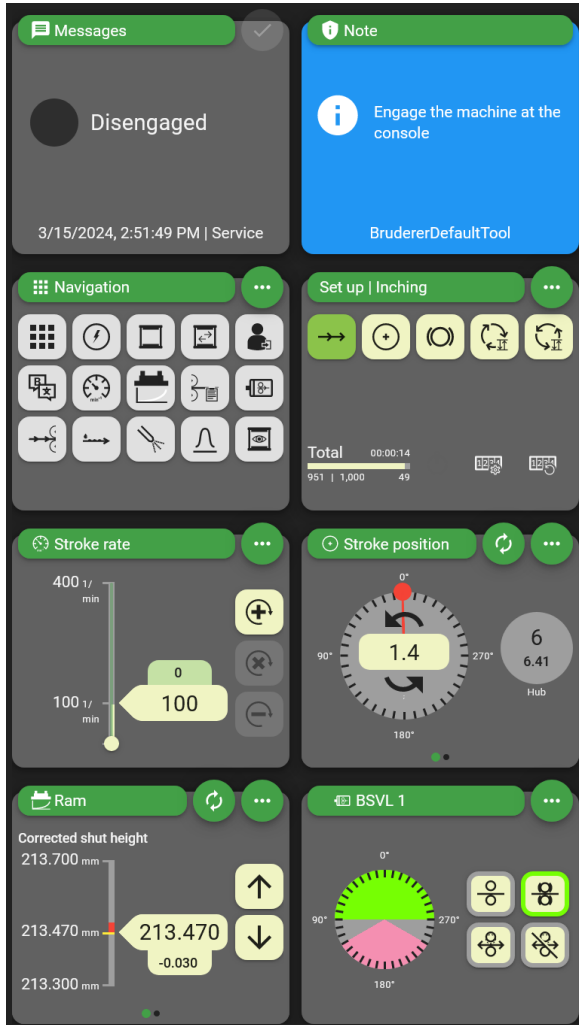
# BRUDERER B3 press control

## Operating Concept – Tool Settings



# BRUDERER B3 press control

## Operating Concept – Basic Functions Examples

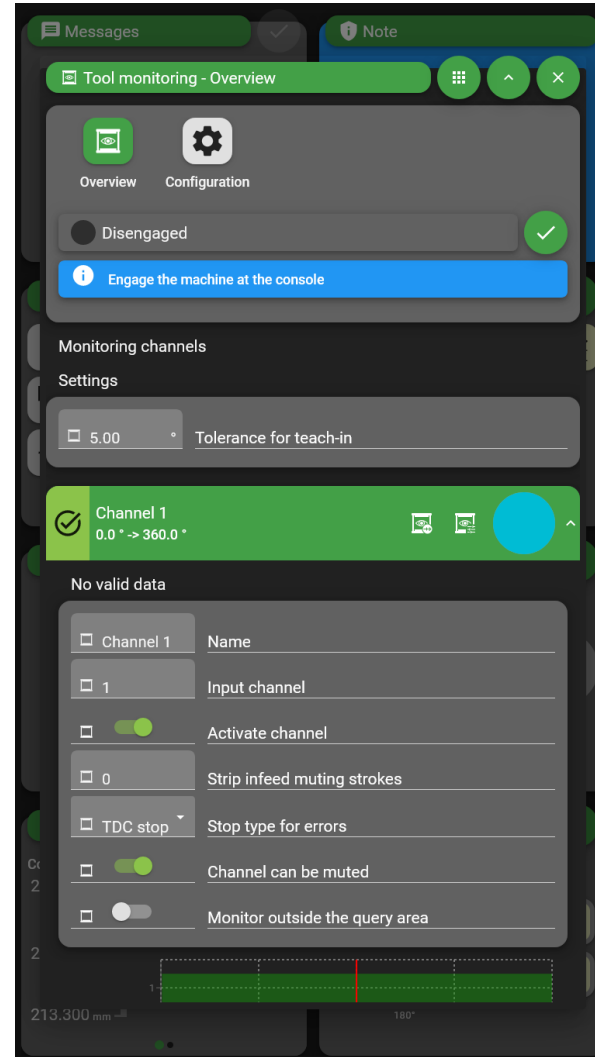
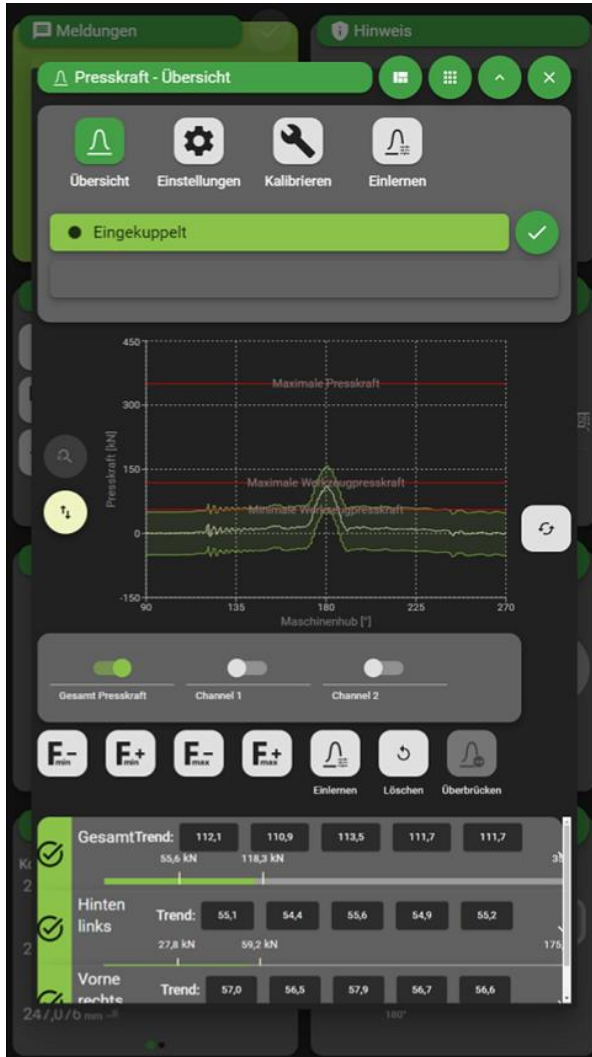




# BRUDERER B3 press control

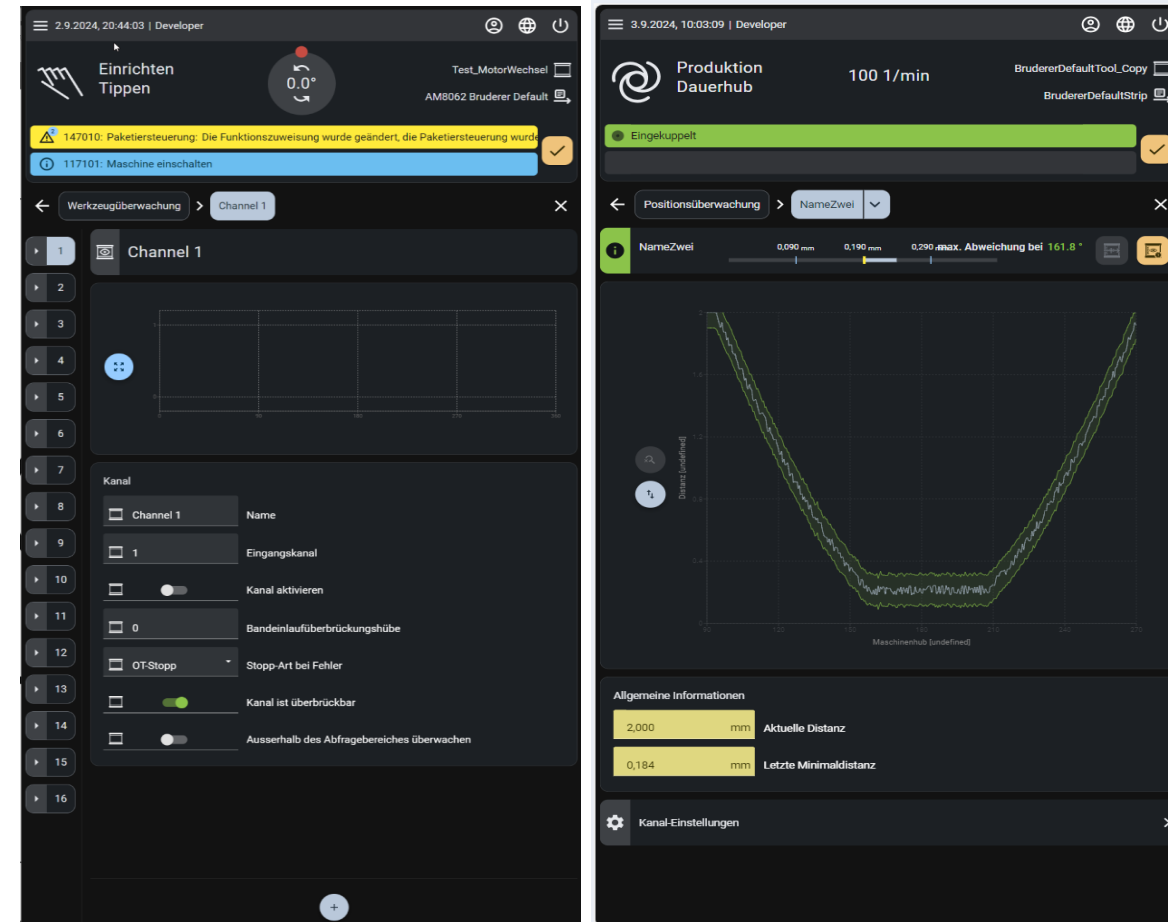
## Operating Concept – Monitoring Systems

- Automatic teach-in for all monitoring services (digital & analogue)
- Envelope curve for analogue monitoring services



# Surveillance functions

- B3 tool monitoring  
up to additional 16 channels
- B3 position monitoring  
max. 8 channels with envelope monitoring 0-10V Sensors

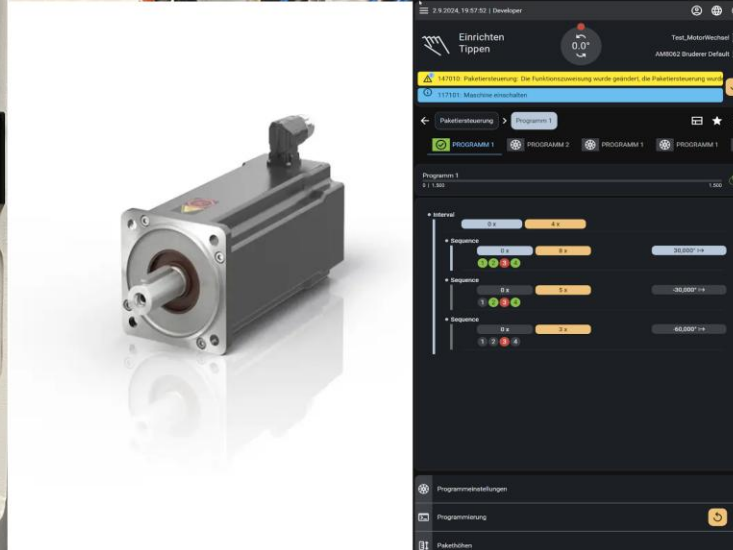
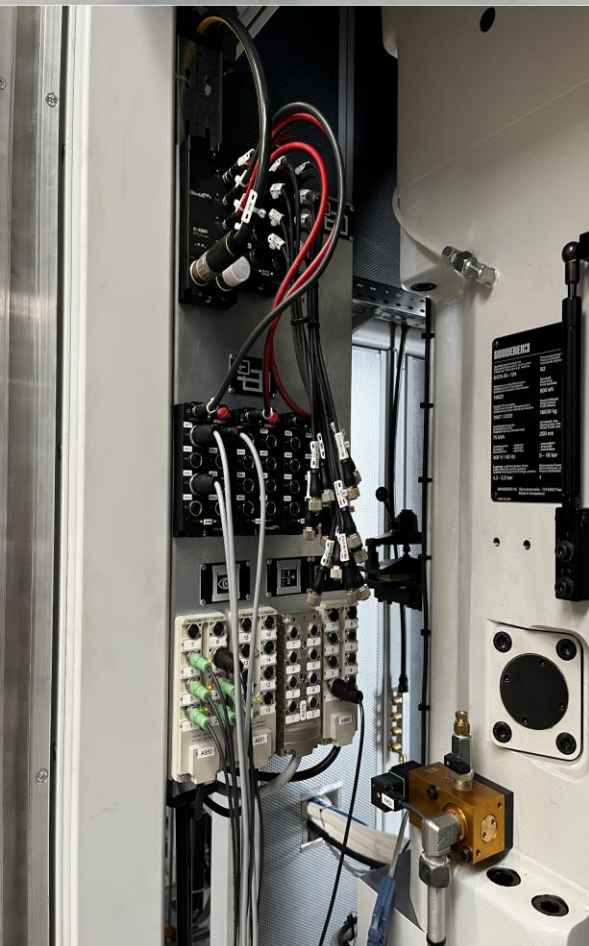


# BRUDERER

## Lamination Control

## Lamination Control System

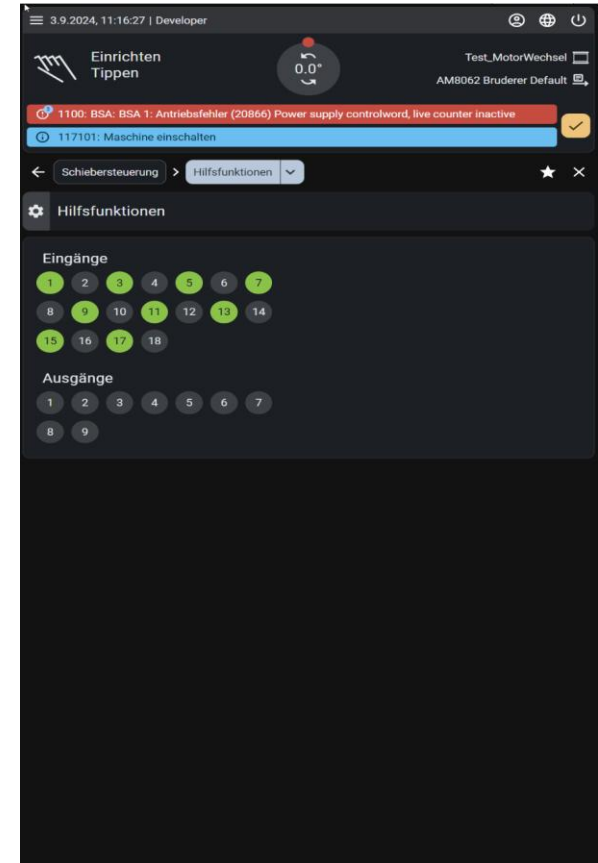
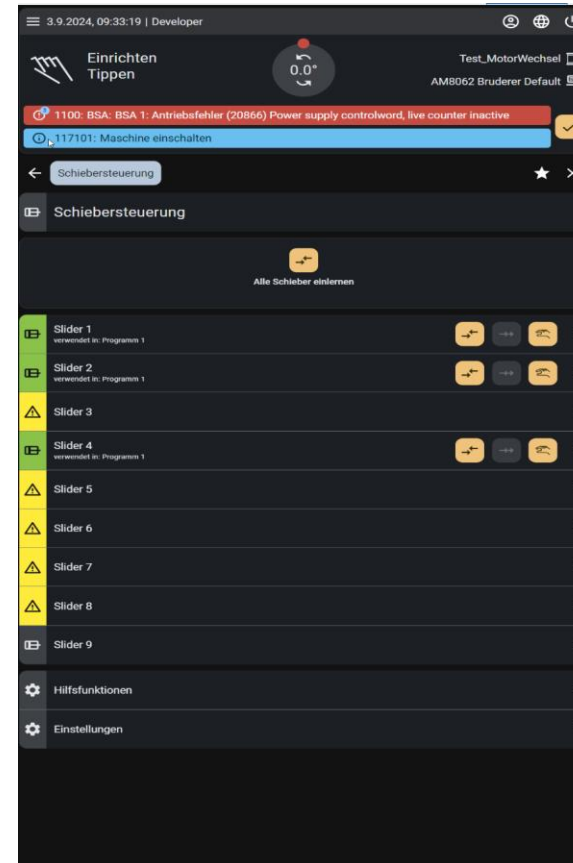
- 1 – 6 turning stations (indexing)
- 1 – 6 conveyor control
- 1 – 8 channels for position monitoring
- 4 – 16 tool monitoring
- Up to 32 free programmable sliders and package height control
- Patented integrated strip thickness measurement
- Data export/import
- Standalone or integrated in press control B3





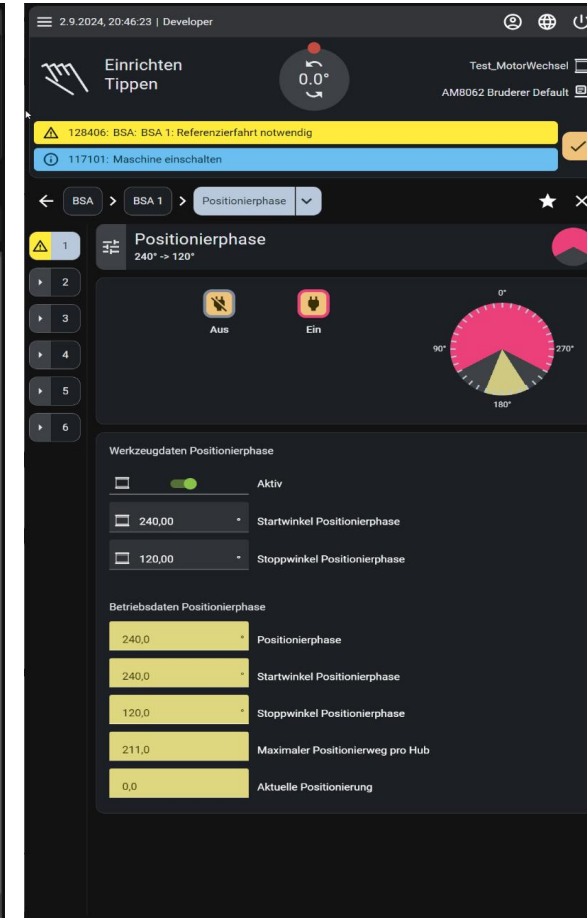
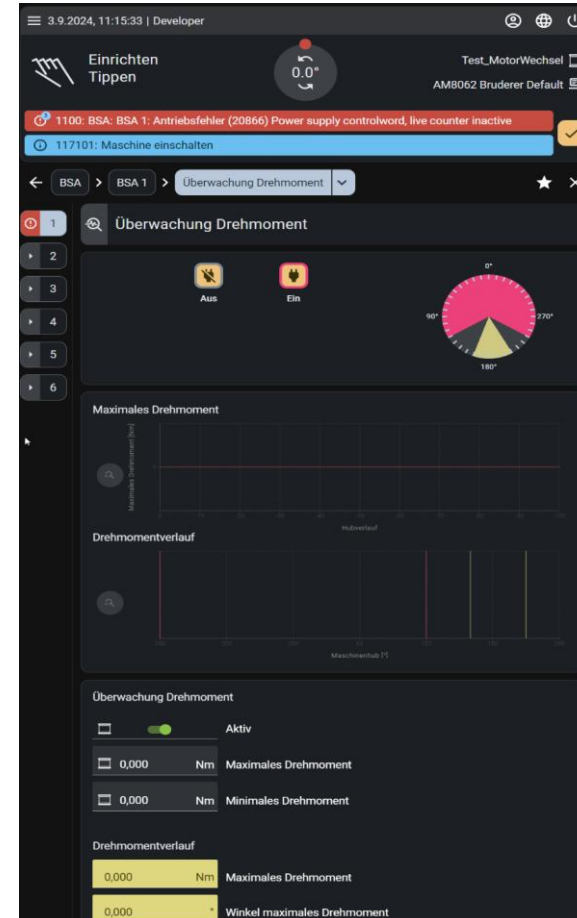
# Main functions

- Slider control for pneumatic cylinders  
Supports a maximum of **32 sliders**, including monitoring



# Main functions

- Programmable turning stations  
max. 6 turning stations with torque-reduction  
& free angle in both directions

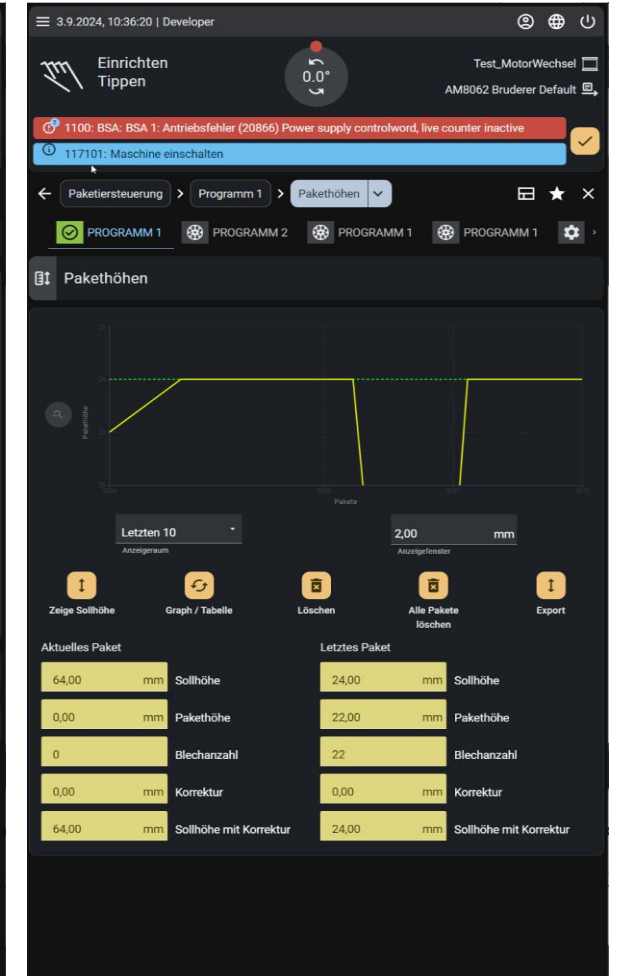


# Overview motors for turning stations:

small load 3.22 Nm	medium load 11.4 Nm	high load 21.1 Nm
<b>AM8033 - 1JHo</b>	<b>AM8553 - 1LHo</b>	<b>AM8062 - 1LHo</b>
Example: T1/4 , 600 Stroke/min, 3Kg, Angle: 60°	Example: T1/4, 300 Stroke/min, 15Kg, DW: 120°	Example: T1/4, 300 Stroke/min, 25Kg, DW: 90°
		

# Functions

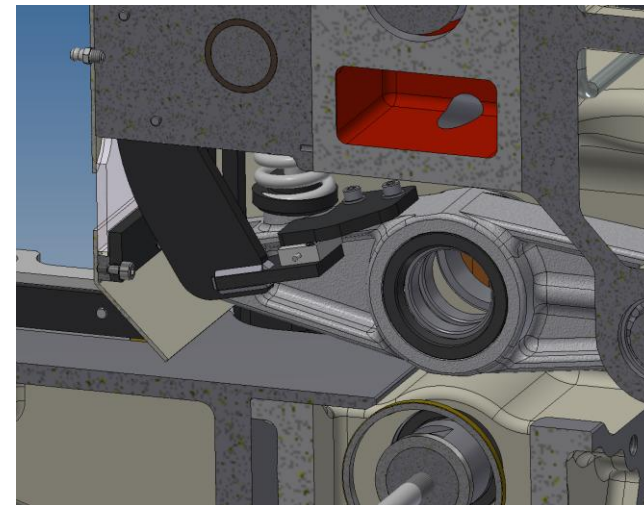
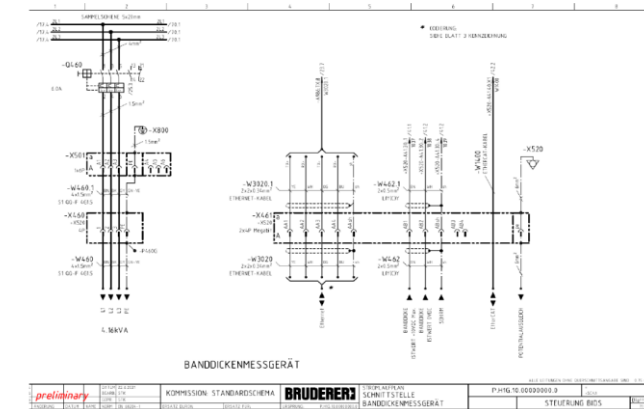
- Strip-thickness measurement and package height control inductive / tactile measurement integrated in BSVL & BSV or external system





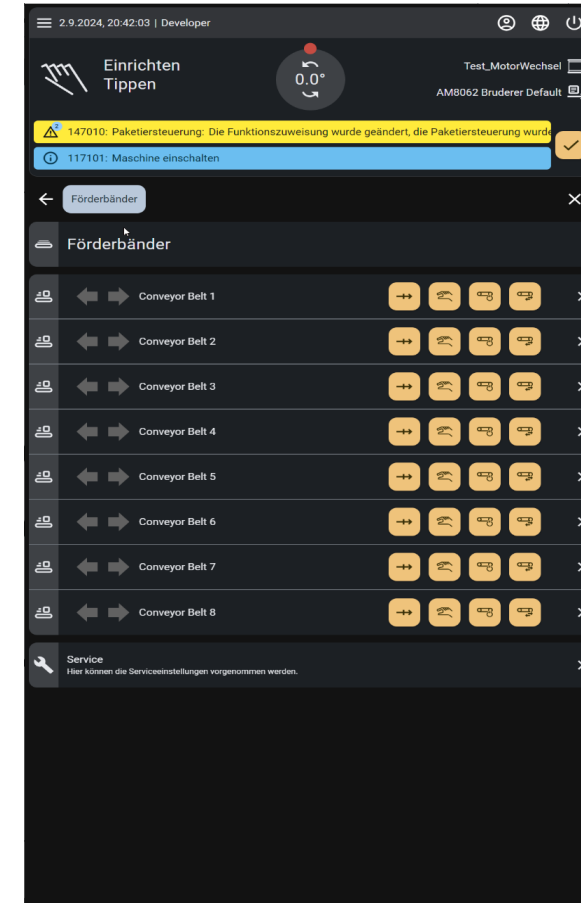
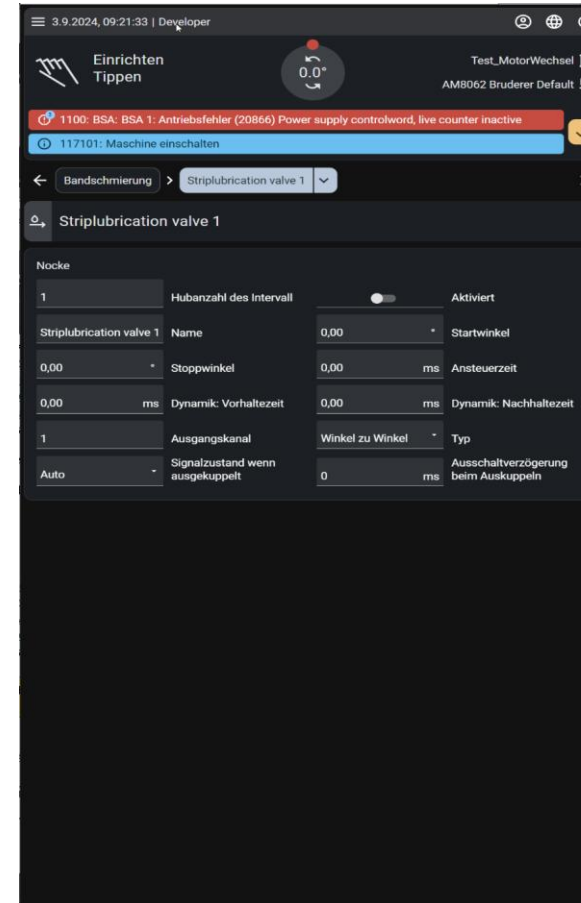
# Strip-thickness measurement options

- External  
Attached over HW-interface
- Integrated in BSVL  
max. 1 Sensor (inductiv) / option pendular roll
- Integrated in BSV170 / BSV300  
max. 2 Sensors (inductiv) / option pendular roll



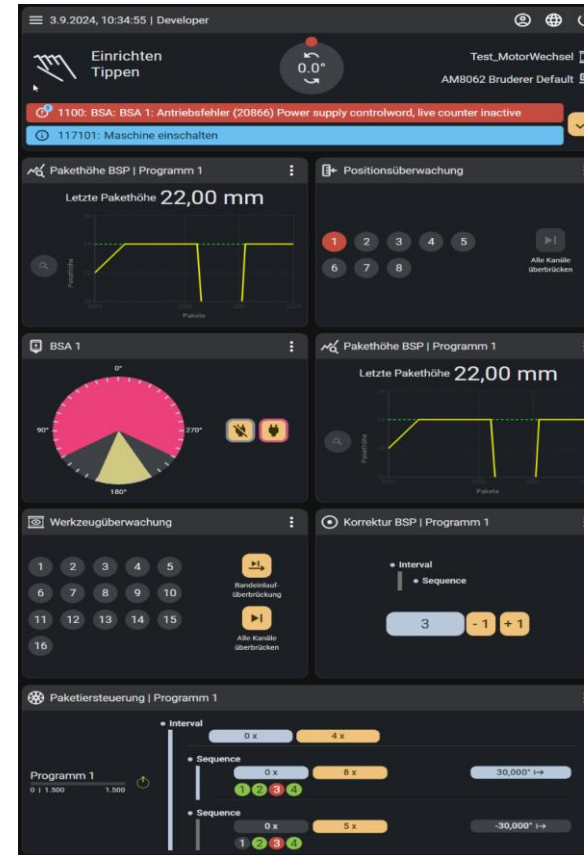
# Additional functions

- Strip lubrication  
Interface to external strip lubrication
- Conveyor control  
Supports a maximum of 6 conveyors including monitoring



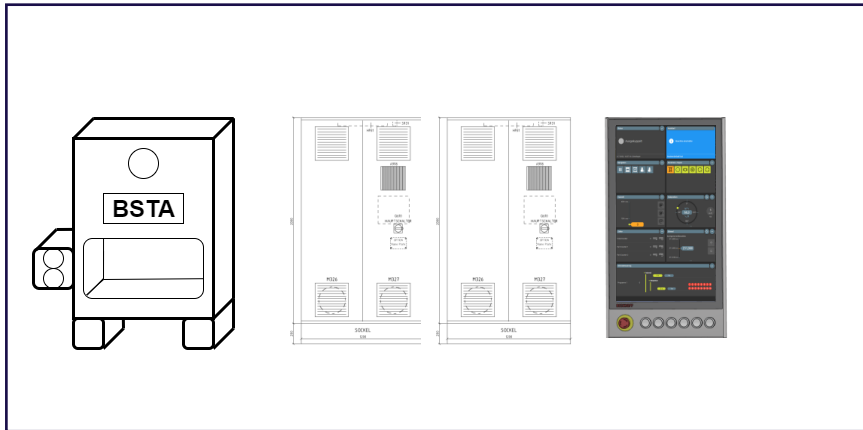
# Additional functions

- Free programmable main screen  
User dependent mainscreen

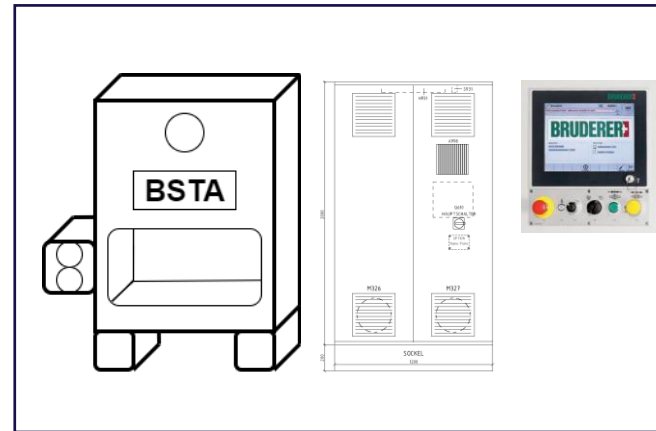


# Fully integrated or standalone

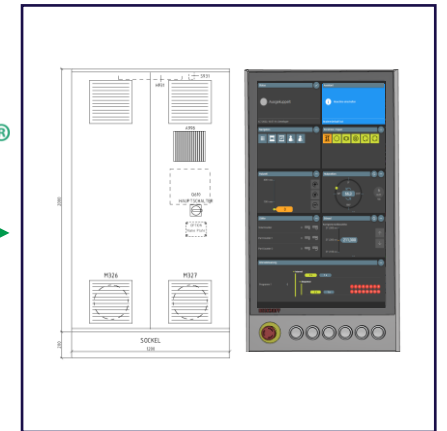
## Integrated with B3 technology



## Attachment to a B2 control



## BSP standalone





A grayscale photograph of a large industrial machine, likely a press or stamping machine, with the brand name 'BRUDERER' visible on its side. The machine is complex, with various mechanical components, pipes, and electrical wiring. The background is slightly blurred, focusing attention on the machine and the overlaid text.

**Thank you  
for your attention.**