BTS 500 & BTS 1000

Quick guide – control system

CE

Concrete filling station BTS 500 & BTS 1000

Version 4.0

Software-Version 1.22

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EN

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Foreword

Dear valued customer,

These operating instructions will familiarise you with the control functions of the concrete filling station.
As the control software is currently still in development status, the instructions may differ from the existing control system of your concrete filling station.

Identification

Machine identification data

Manufacturer:	**Fliegl Agrartechnik GmbH**
Product:	**Software-based control system for BTS concrete filling station**
Type:	**BTS 500 version 4.0** **BTS 1000 version 4.0**

Back office & technical support

Please contact:

Fliegl Bau & Kommunaltechnik GmbH
Bürgermeister-Boch-Straße 1
84453 Mühldorf am Inn, Germany

Tel.: +49 (0)8631 / 307 - 381
Tel.: +49 (0)8631 / 307 - 382
Fax: +49 (0)8631 / 307 - 553
E-mail: baukom@fliegl.com
Internet: www.fliegl-baukom.de

Contacts

Service & warranty:

Fliegl Bau & Kommunaltechnik GmbH
Service Department
Bürgermeister-Boch-Straße 1
84453 Mühldorf am Inn, Germany

Tel.: +49 (0)8631 / 307 - 385
Tel.: +49 (0)8631 / 307 - 465
Fax: +49 (0)8631 / 307 - 550
E-mail: baukom@fliegl.com

Local dealer & customer service:

Enter dealer and customer service contact details here

Formal details of document

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We are constantly developing and enhancing our products and therefore reserve the right to make changes to them without prior notification. This may result in differences in the illustrations and descriptions in this document.

1. User instructions

This manual provides information about the:

- Function
- Operation

of the concrete filling station's control system and ensures long, problem-free operation if it is carefully observed. Fliegl assumes no liability and honours no warranty for damage and malfunctions resulting from failure to comply with this quick guide.

1.1 Duty to inform

This quick guide is to be considered part of the control system of the concrete filling station.
If the machine is passed on to another party by the customer, this guide must also be passed on, and the party receiving the machine must be instructed regarding the regulations specified above.

1.2 Liability and damages

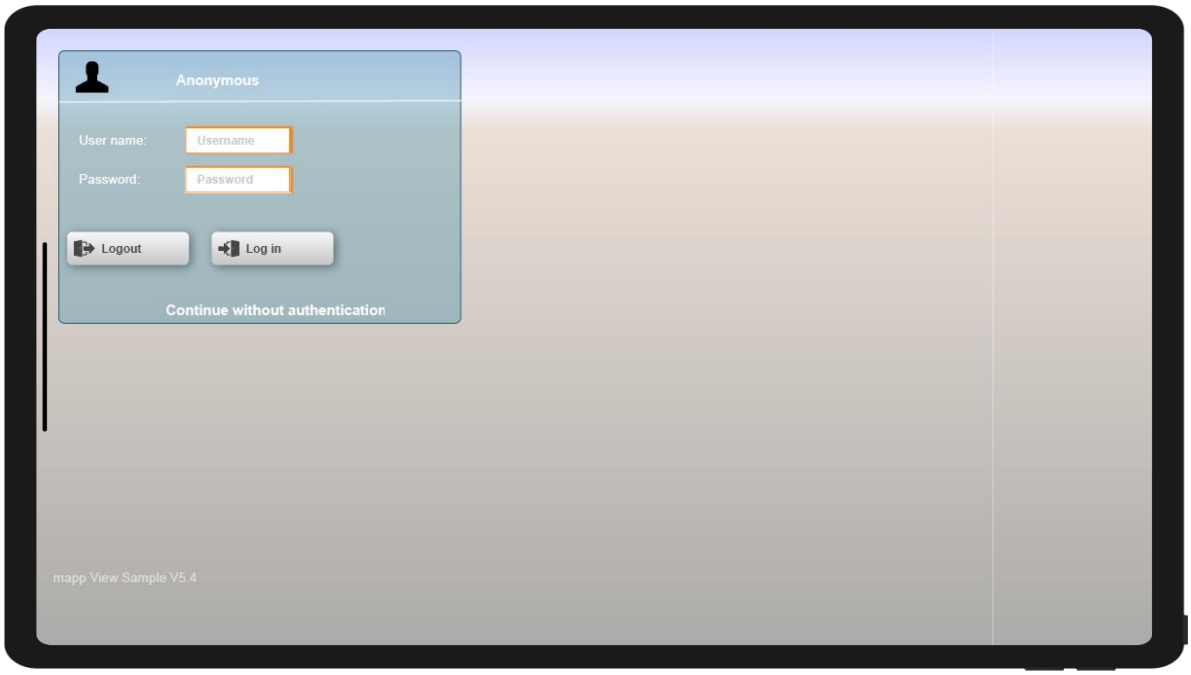
The product must only be operated by persons who are familiar with the instructions and the product along with the national laws, directives and regulations relating to occupational health and safety as well as accident prevention. We accept no liability for personal injury or material damage caused, or contributed to, by untrained persons due to non-compliance with regulations regarding occupational health and safety as well as accident prevention. Based on the specifications in these instructions, Fliegl Agrartechnik GmbH assumes no liability for direct or consequential damage attributable to improper operation or maintenance. Fliegl Agrartechnik GmbH assumes no liability for the use of other products and any resulting damage. No claims for modification of delivered products can be made on the basis of the information, images and descriptions provided in this manual.

1.3 Note regarding data specifications

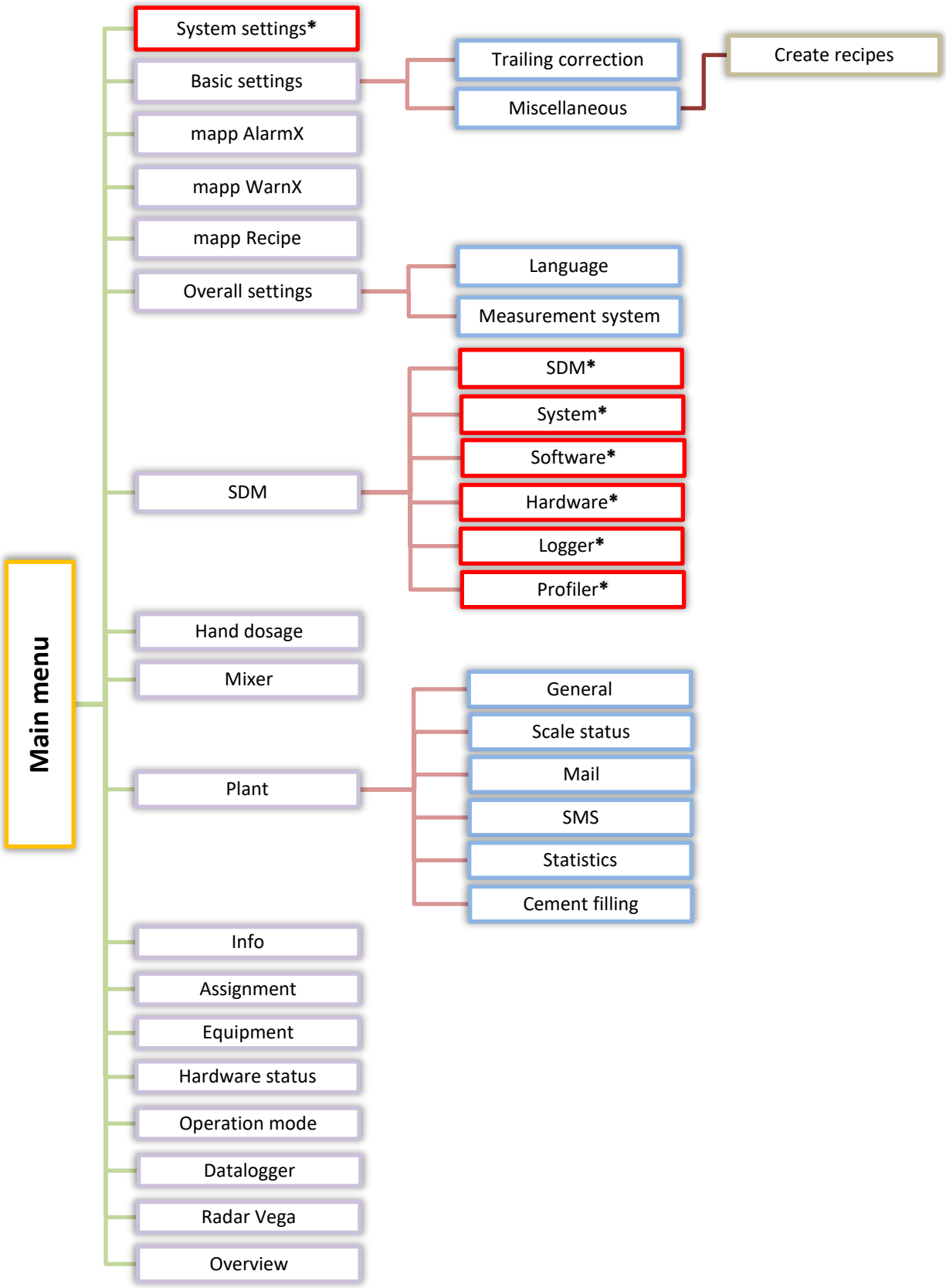
The values shown in the screenshots in this guide are **fictitious values** and may differ from your system.

2. Control system

2.1 Start page



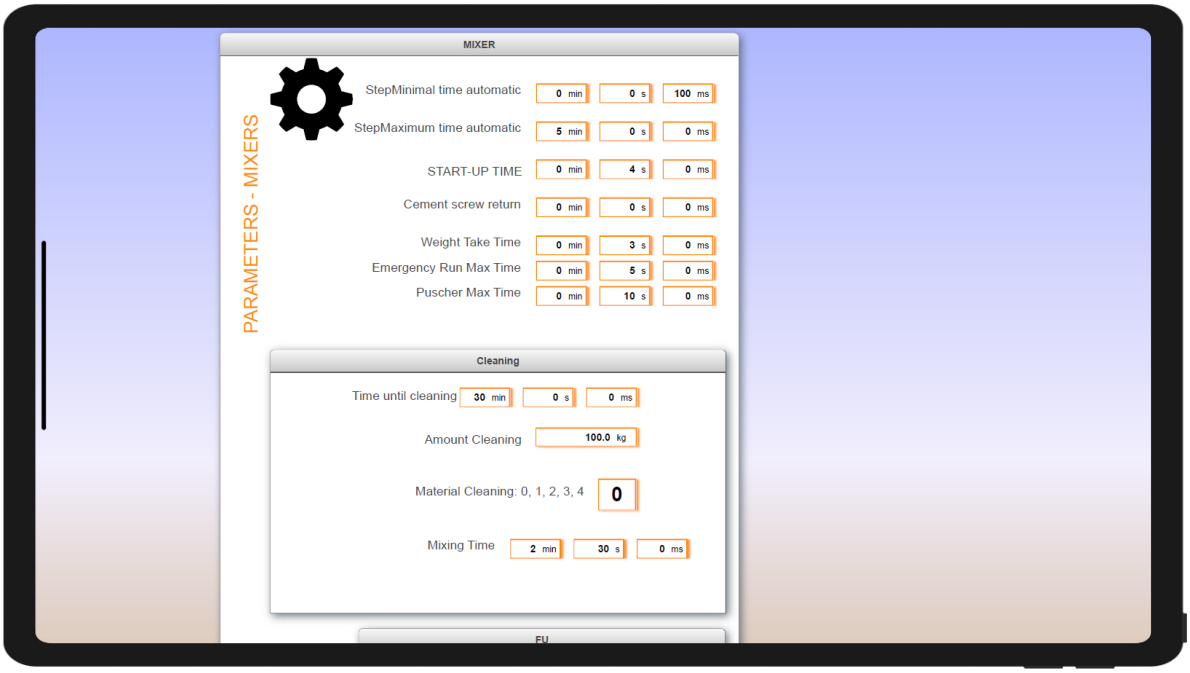
2.2 Main menu and folder structure

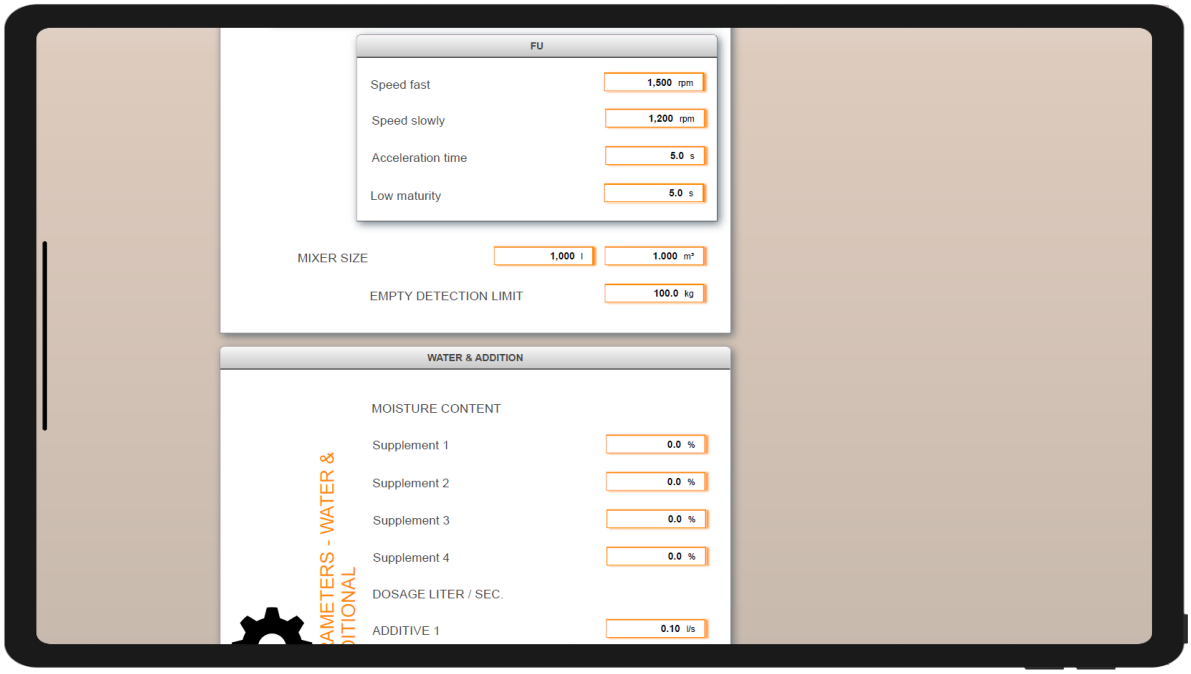


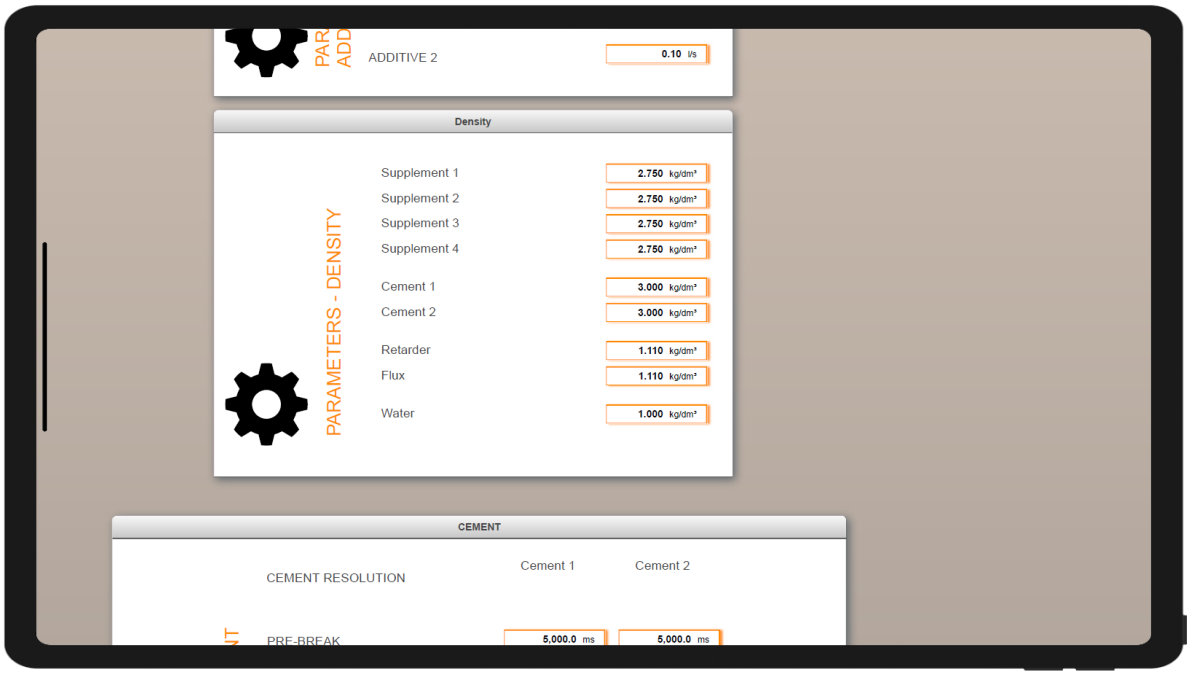
*** Settings must only be changed by or with the authorisation of customer service!**

2.3 Menu: System settings

Settings must only be changed by or with the authorisation of customer service!

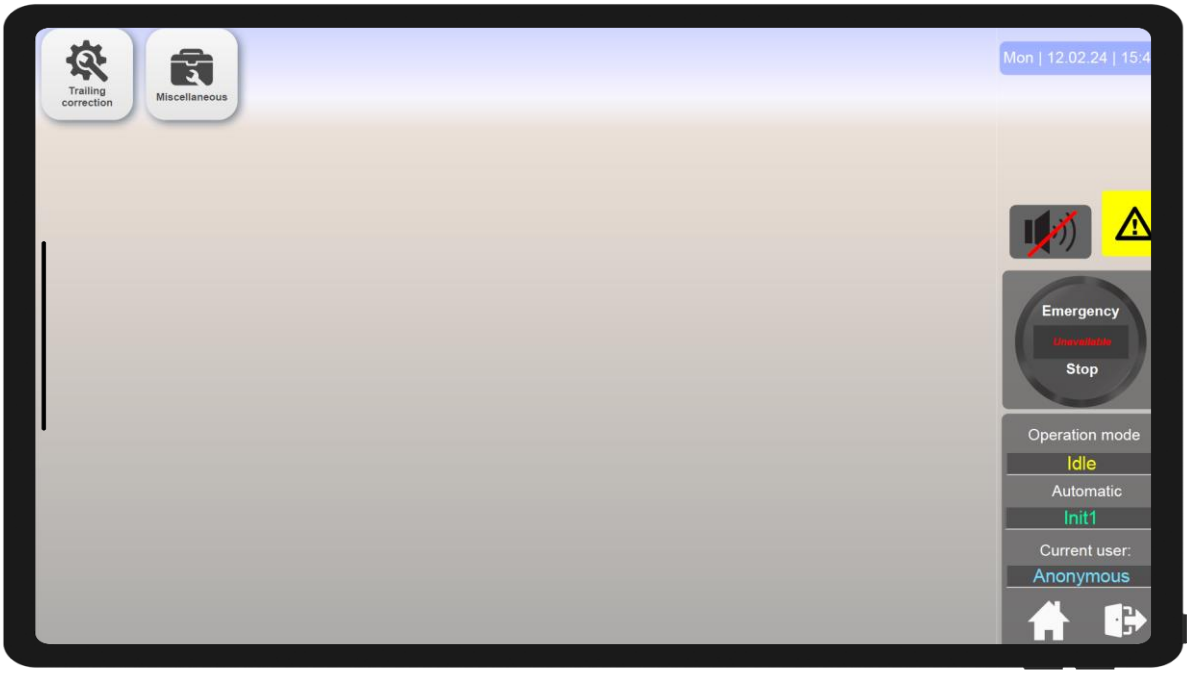




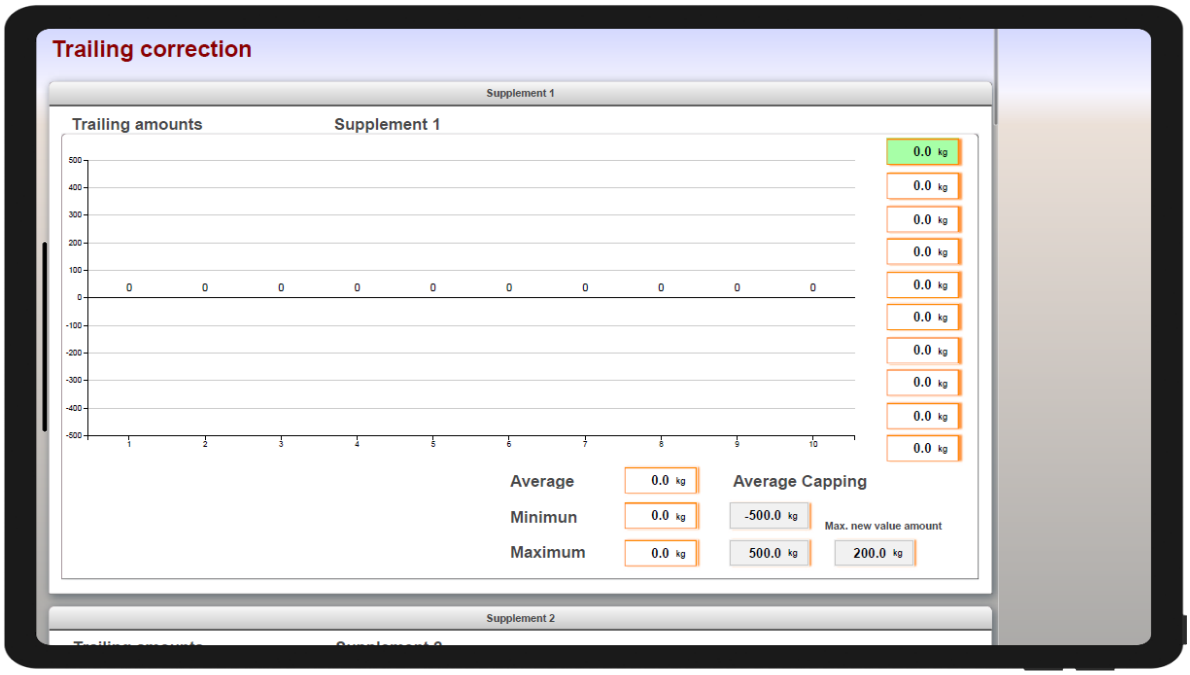

ADDITIVE 2
0.10 l/s
Density
PARAMETERS - DENSITY
Supplement 1
Supplement 2
Supplement 3
Supplement 4
Cement 1
Cement 2
Retarder
Flux
Water
2.750 kg/dm³
2.750 kg/dm³
2.750 kg/dm³
2.750 kg/dm³
3.000 kg/dm³
3.000 kg/dm³
1.110 kg/dm³
1.110 kg/dm³
1.000 kg/dm³
CEMENT
CEMENT RESOLUTION
Cement 1
Cement 2
PRE-BREAK
5,000.0 ms
5,000.0 ms

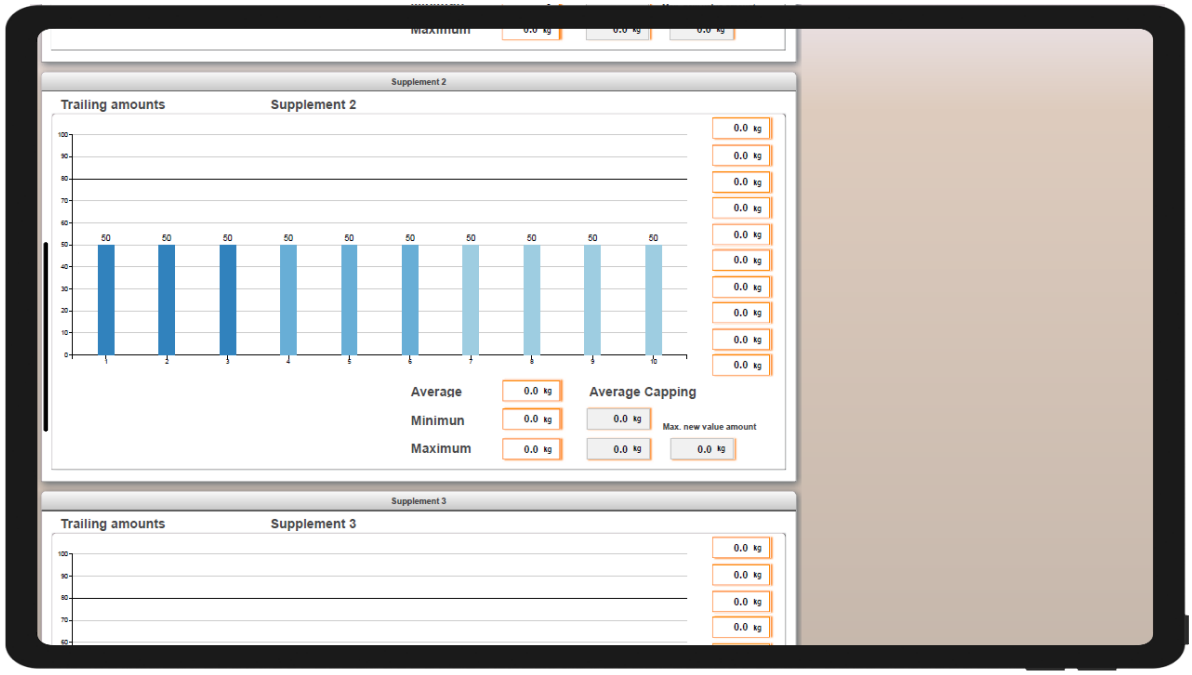
PARAMETER - CEMENT
PRE-BREAK
IMPULSE
PAUSE
5,000.0 ms
5,000.0 ms
2.0 s
2.0 s
5.0 s
5.0 s
DOSAGE
PARAMETERS - DOSAGE
SHAKER 1
SHAKER 2
PRE-BREAK
IMPULSE
PAUSE
5,000.0 ms
5,000.0 ms
2.0 s
2.0 s
5.0 s
5.0 s

2.4 Menu: Basic settings



2.4.1 Submenu: Trailing correction




Supplement 2
Trailing amounts
Supplement 2
Average
Average Capping
Minimun
Maximum
Max. new value amount
Supplement 3
Trailing amounts
Supplement 3

Minimun
Maximum
Max. new value amount
Supplement 3
Trailing amounts
Supplement 3
Average
Average Capping
Minimun
Maximum
Max. new value amount
Supplement 4
Trailing amounts
Supplement 4

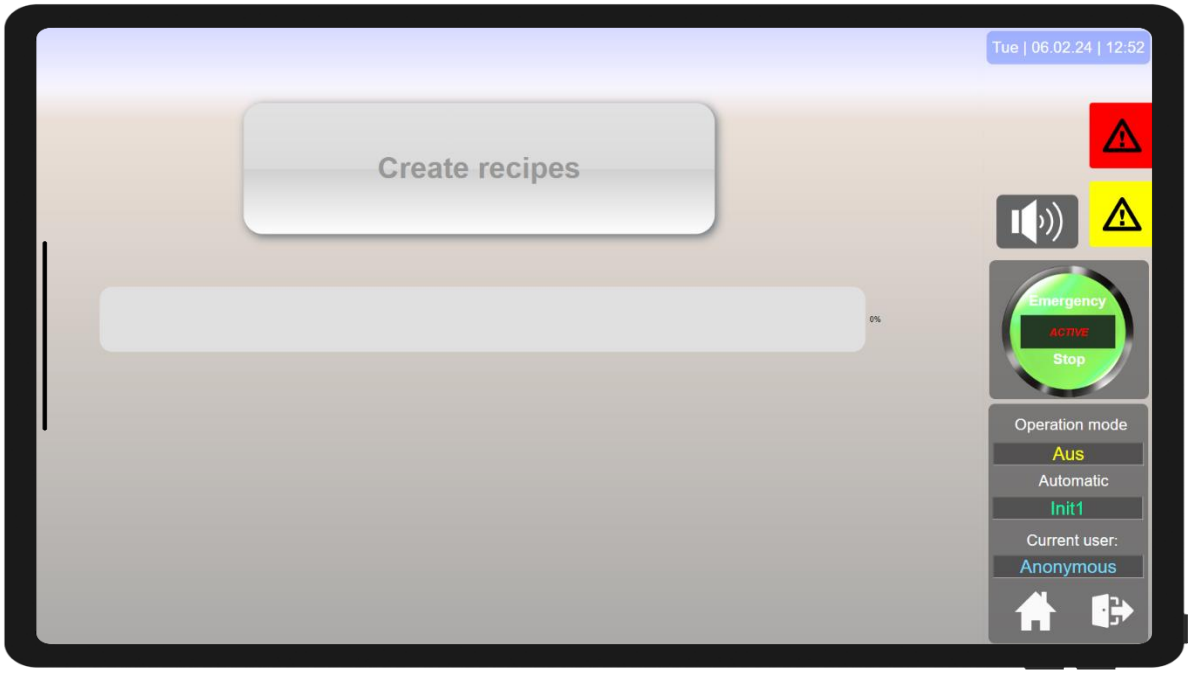
Minimun
Maximum
Max. new value amount
Supplement 4
Trailing amounts
Supplement 4
Average
Average Capping
Minimun
Maximum
Max. new value amount
Cement 1
Trailing amounts
Cement 1

Average
Average Capping
Minimun
Maximum
Max. new value amount
Cement 1
Trailing amounts
Cement 1
Average
Average Capping
Minimun
Maximum
Max. new value amount
Cement 2
Trailing amounts
Cement 2

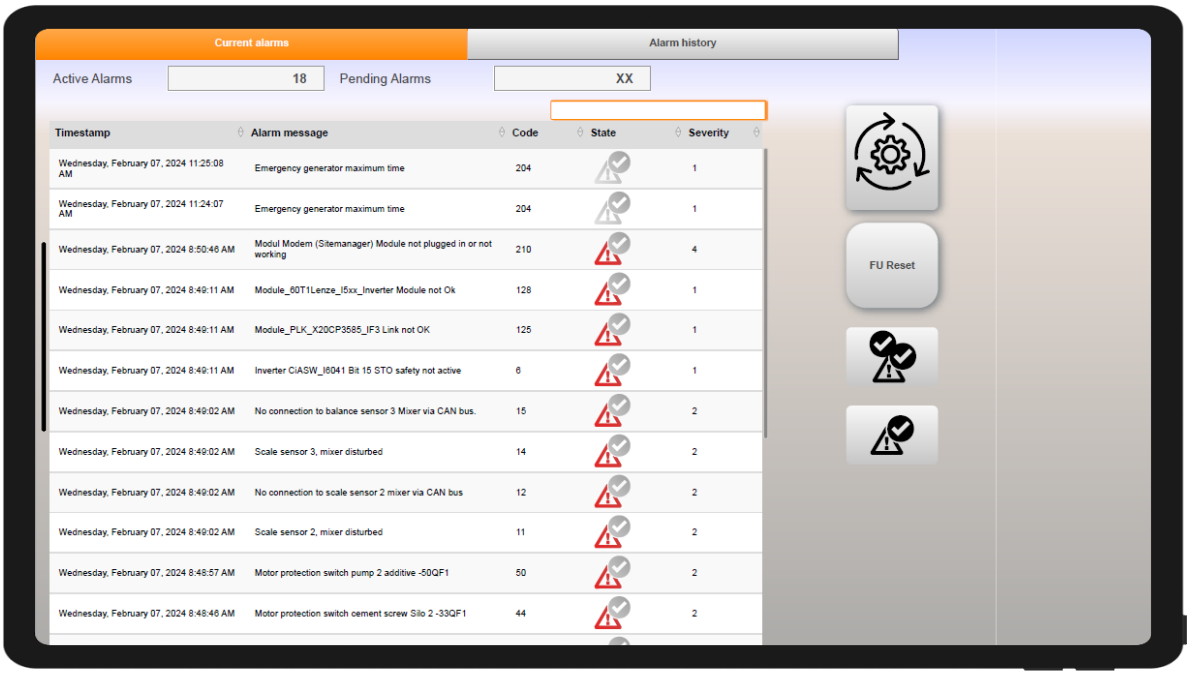
Minimun
0.0 kg
0.0 kg
Max. new value amount
Maximum
0.0 kg
0.0 kg
0.0 kg
Cement 2
Trailing amounts
Cement 2
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
50
50
50
50
50
50
50
50
50
50
Average
0.0 kg
Average Capping
Minimun
0.0 kg
0.0 kg
Max. new value amount
Maximum
0.0 kg
0.0 kg
0.0 kg
Water
Trailing amounts
Water
0.0 kg
0.0 kg

0.0 kg
0.0 kg
0.0 kg
0.0 kg
Average
0.0 kg
Average Capping
Minimun
0.0 kg
0.0 kg
Max. new value amount
Maximum
0.0 kg
0.0 kg
0.0 kg
Water
Trailing amounts
Water
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
0.0 kg
50
50
50
50
50
50
50
50
50
50
Average
0.0 kg
Average Capping
Minimun
0.0 kg
0.0 kg
Max. new value amount
Maximum
0.0 kg
0.0 kg
0.0 kg

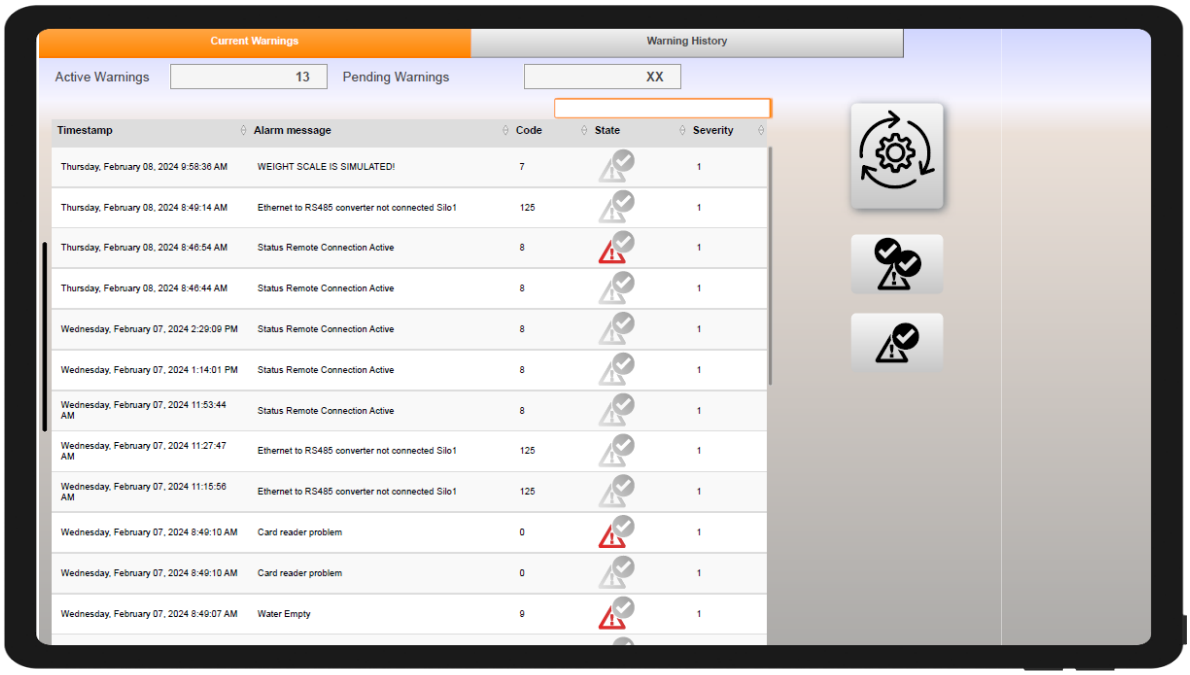
2.4.2 Submenu: Miscellaneous – Create recipes



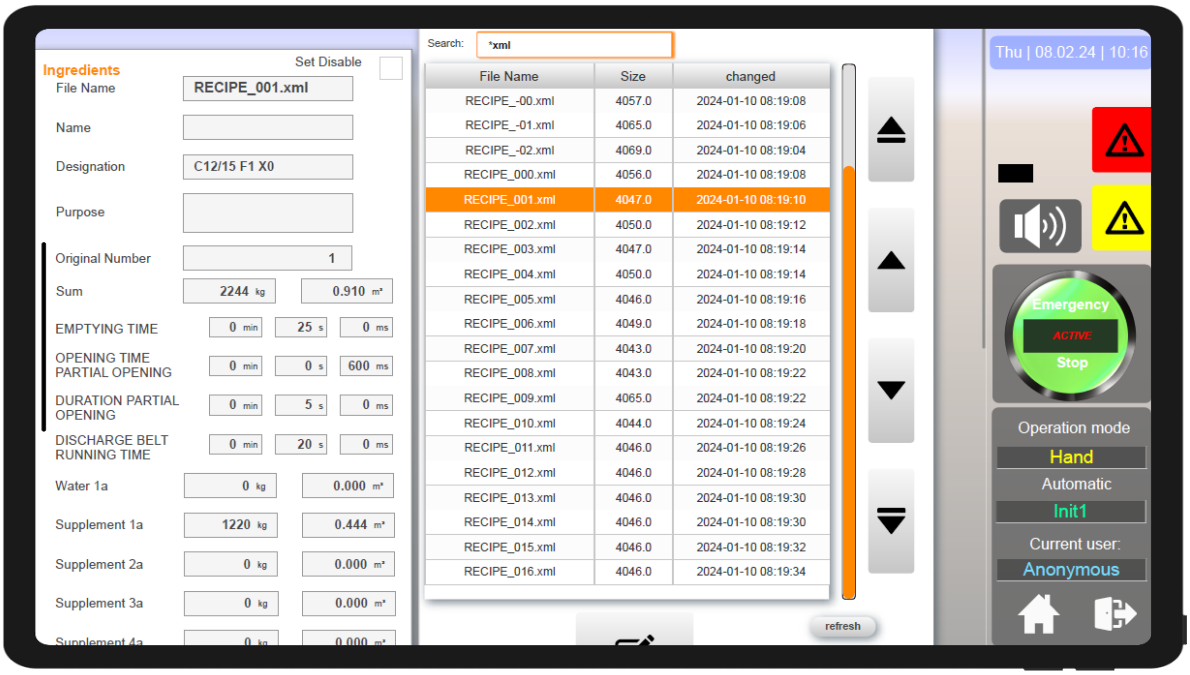
2.5 Menu: mapp AlarmX



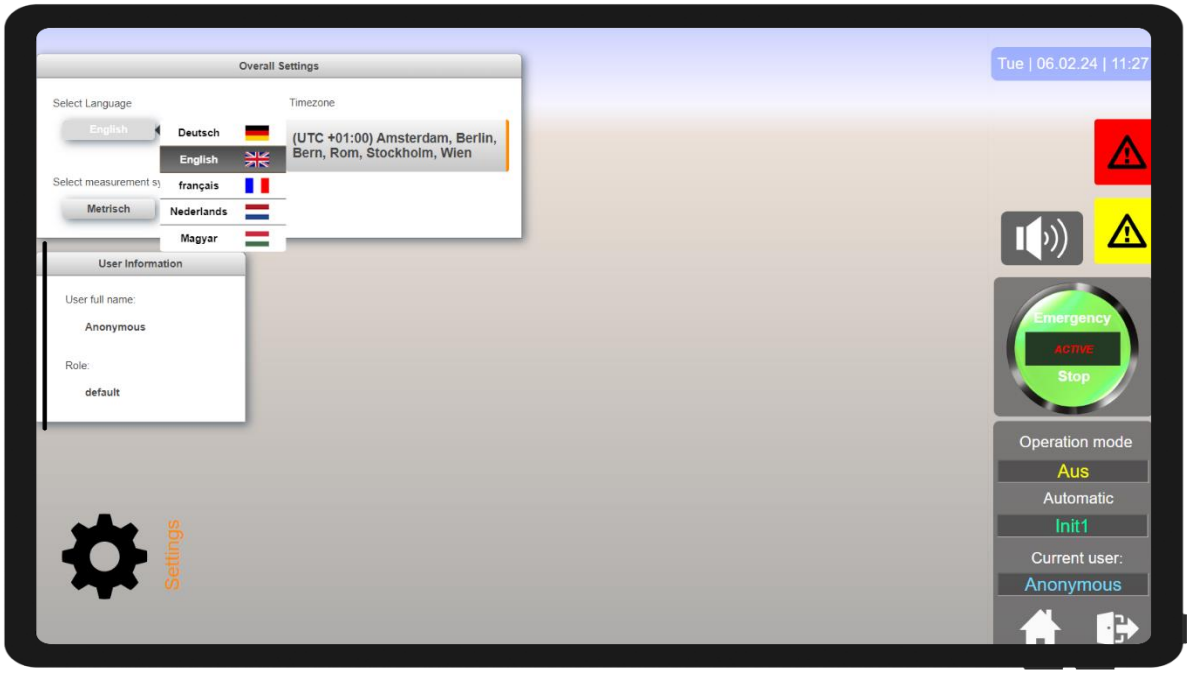
2.6 Menu: mapp WarnX

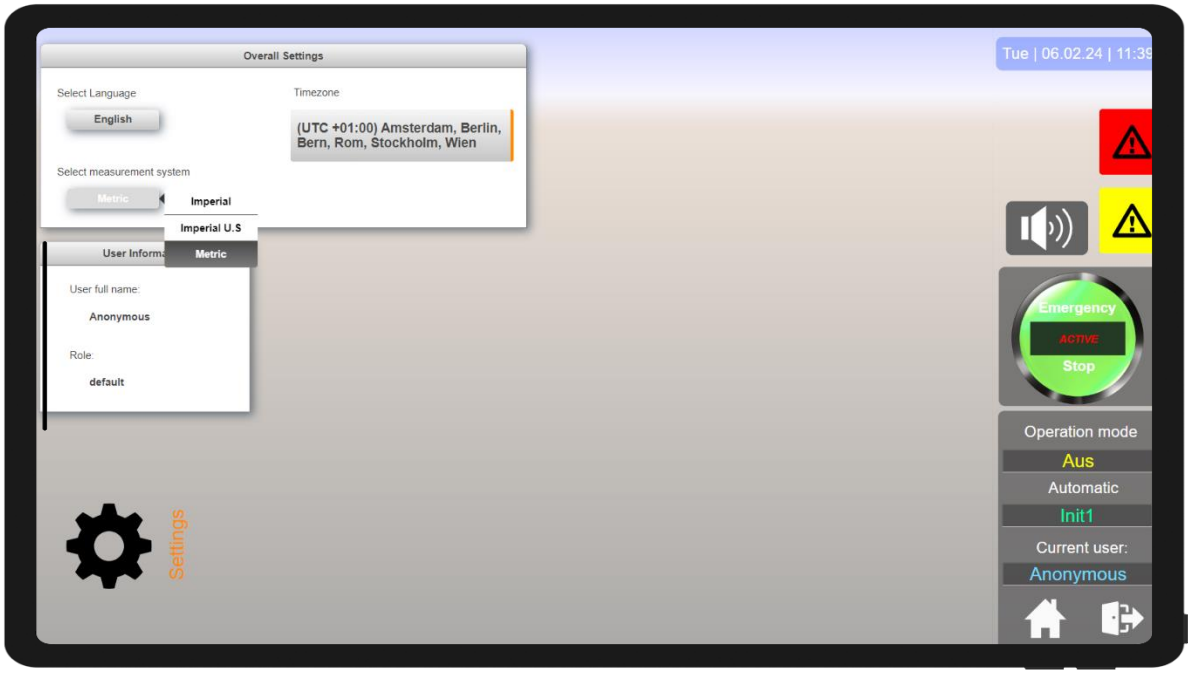


2.7 Menu: Recipe



2.8 Menu: Overall settings

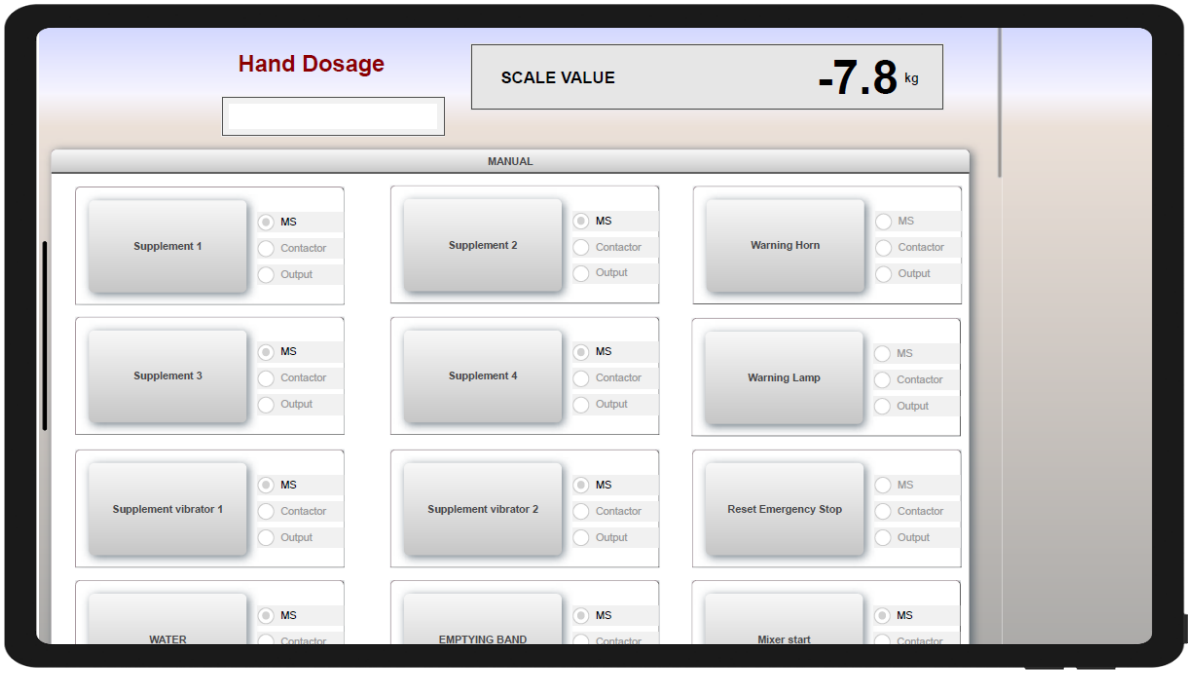




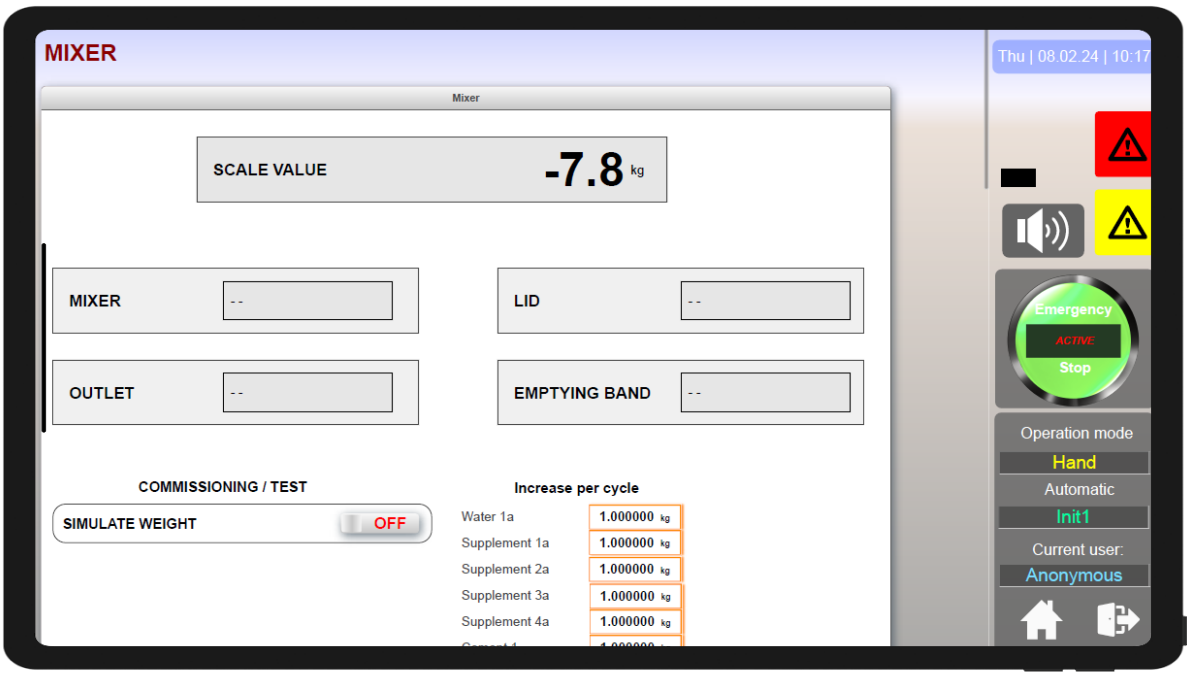
2.9 Menu: System Diagnostics Manager SDM

Settings must only be changed by or with the authorisation of customer service!
The customer only has to check whether the messages are displayed in green.

2.10 Menu: Hand dosage

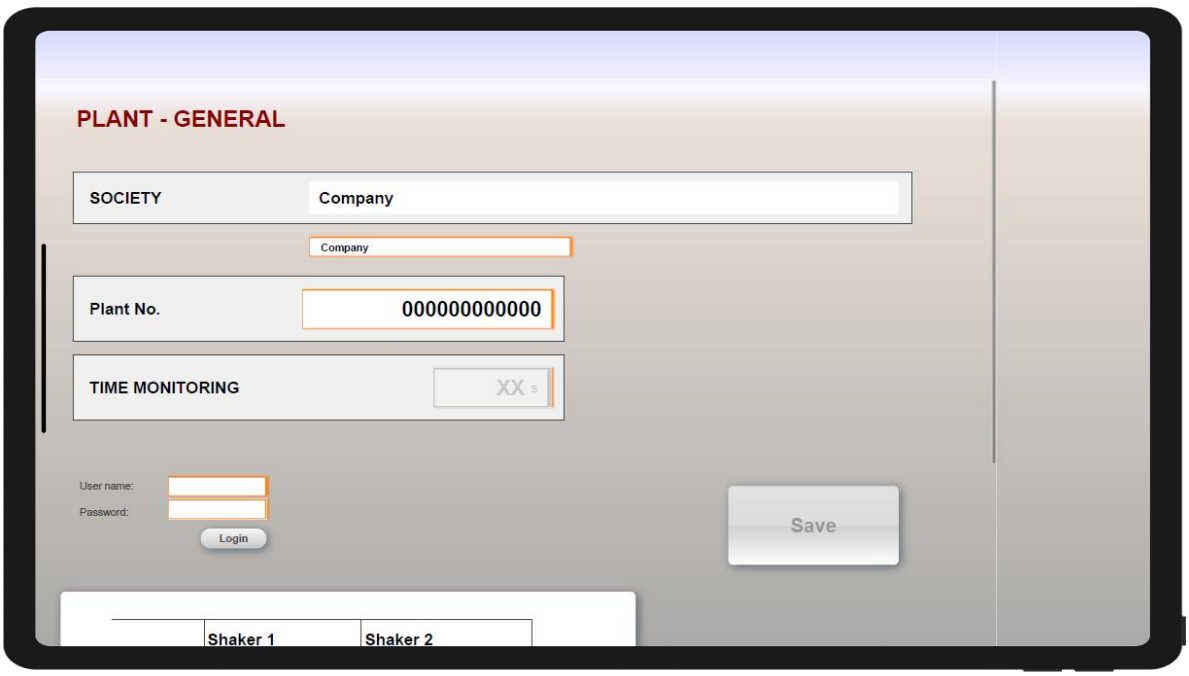


2.11 Menu: Mixer

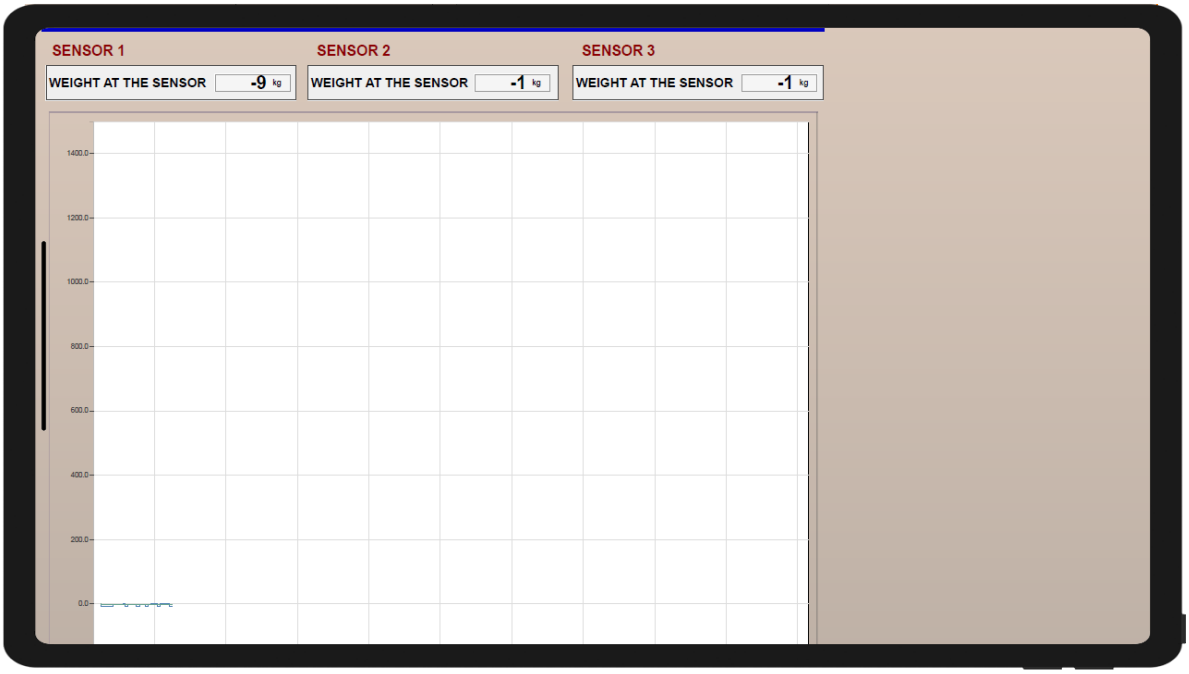


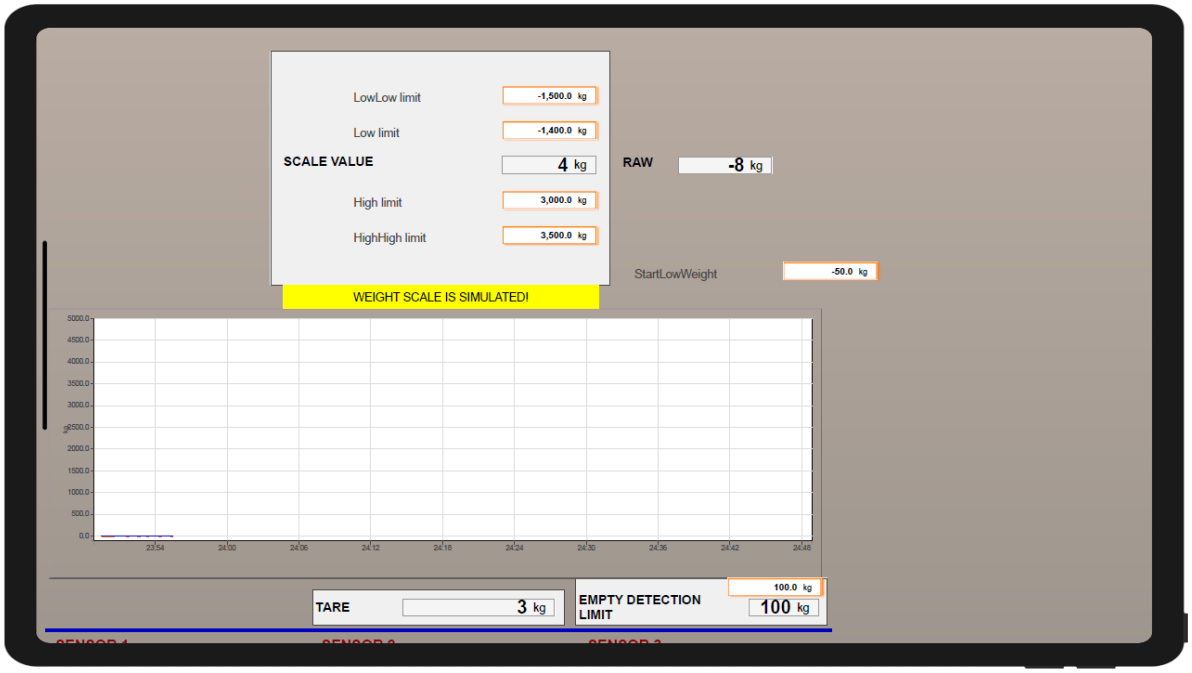
2.12 Menu bar: PLANT

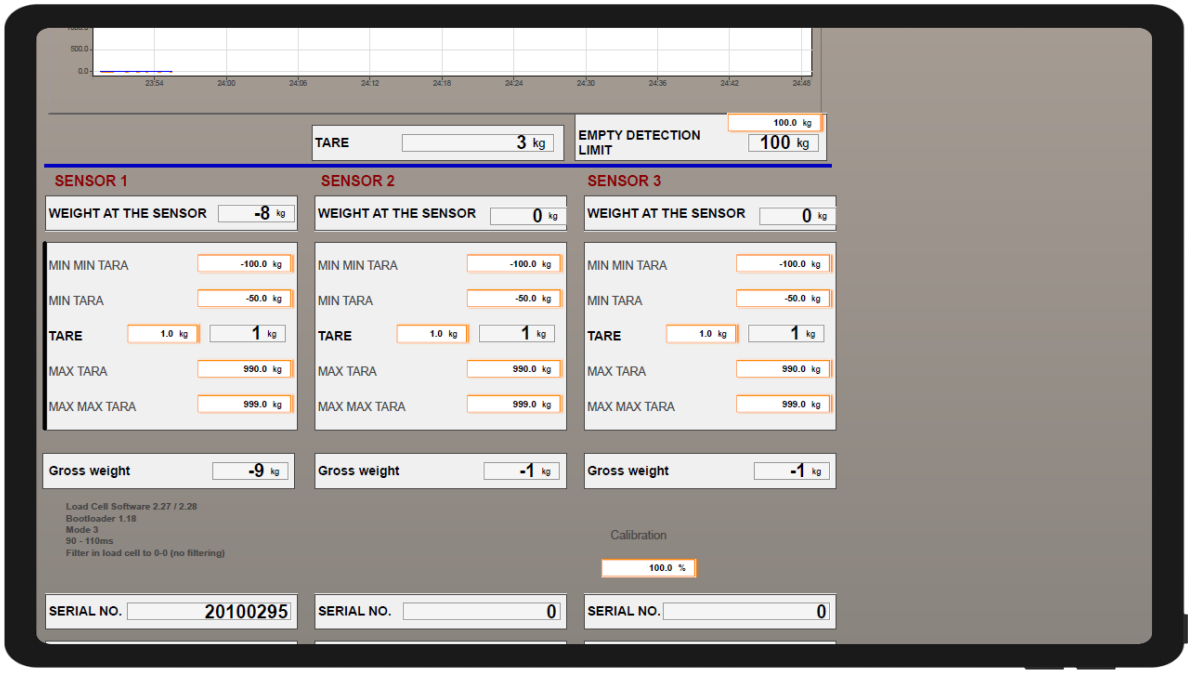
2.12.1 Submenu: General



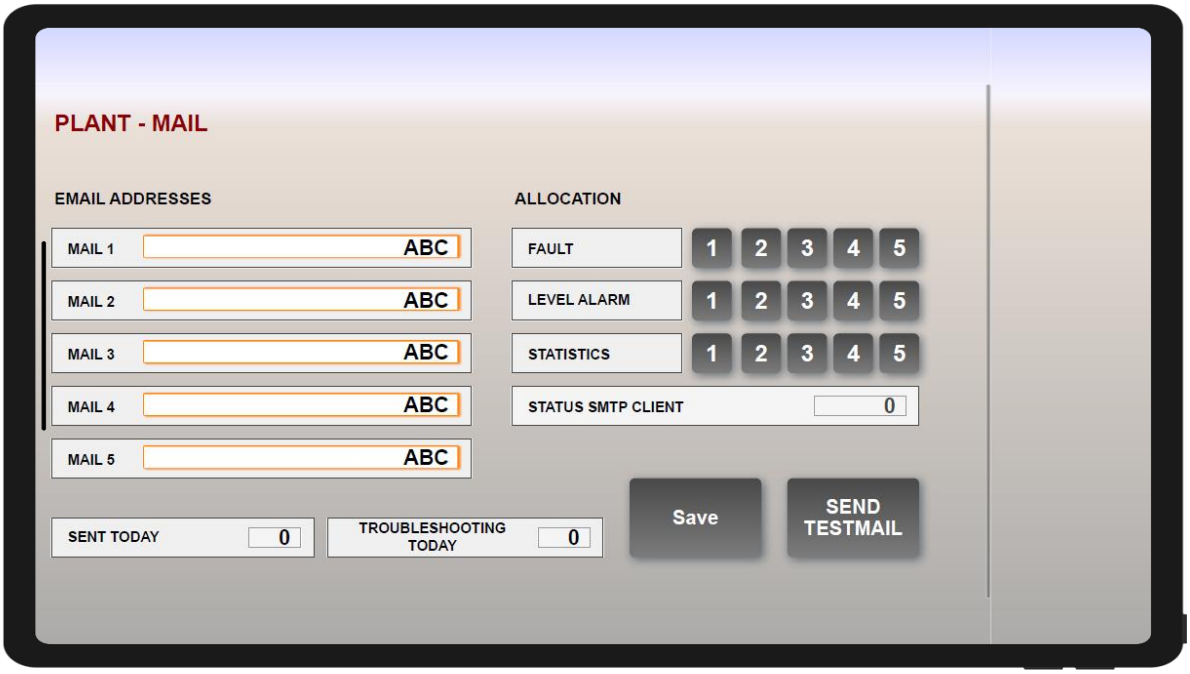
2.12.2 Submenu: Status scale



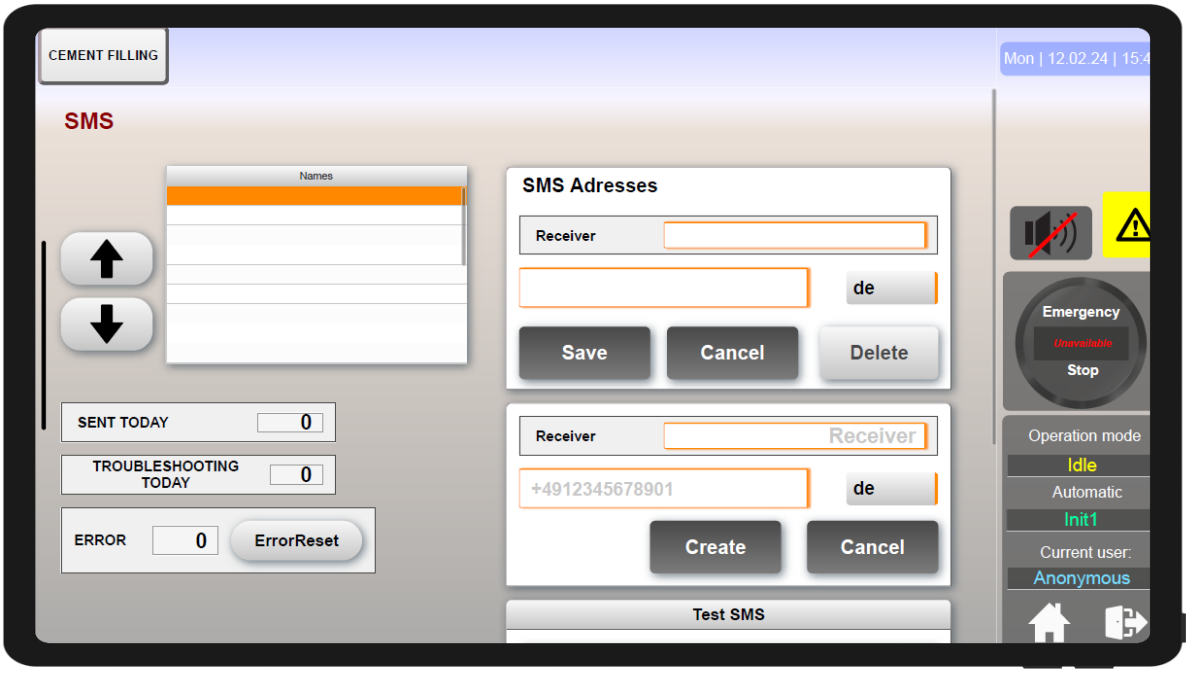

LowLow limit
-1,500.0 kg
Low limit
-1,400.0 kg
SCALE VALUE
4 kg
RAW
-8 kg
High limit
3,000.0 kg
HighHigh limit
3,500.0 kg
StartLowWeight
-50.0 kg
WEIGHT SCALE IS SIMULATED!
TARE
3 kg
EMPTY DETECTION LIMIT
100.0 kg
100 kg


TARE
3 kg
EMPTY DETECTION LIMIT
100.0 kg
100 kg
SENSOR 1
SENSOR 2
SENSOR 3
WEIGHT AT THE SENSOR
-8 kg
0 kg
0 kg
MIN MIN TARA
-100.0 kg
MIN TARA
-50.0 kg
TARE
1.0 kg
1 kg
MAX TARA
990.0 kg
MAX MAX TARA
999.0 kg
Gross weight
-9 kg
-1 kg
-1 kg
Load Cell Software 2.27 / 2.28
Bootloader 1.18
Mode 3
90 - 110ms
Filter in load cell to 0-0 (no filtering)
Calibration
100.0 %
SERIAL NO.
20100295
0
0

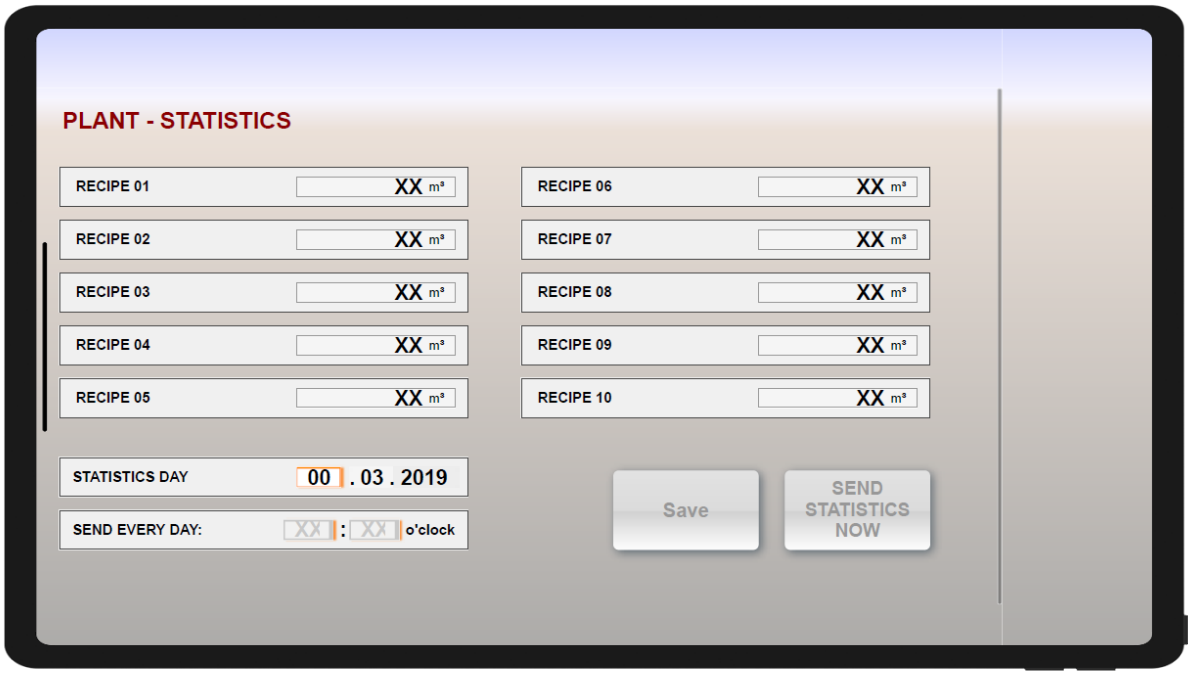
2.12.3 Submenu: Mail



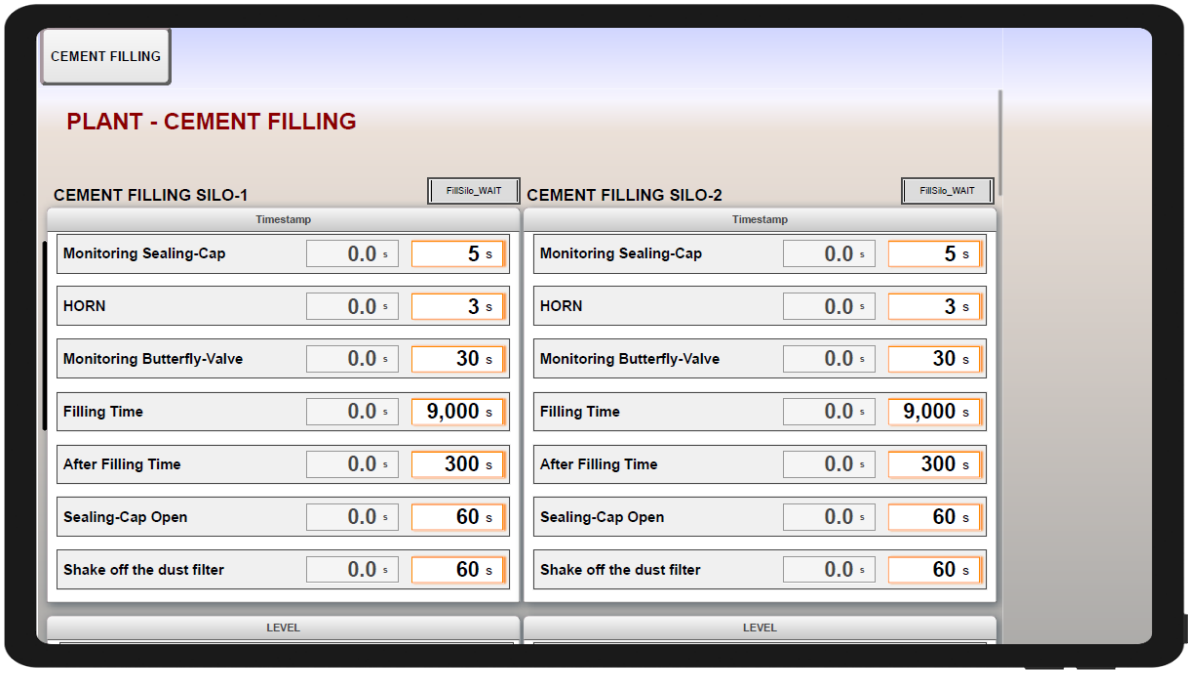
2.12.4 Submenu: SMS

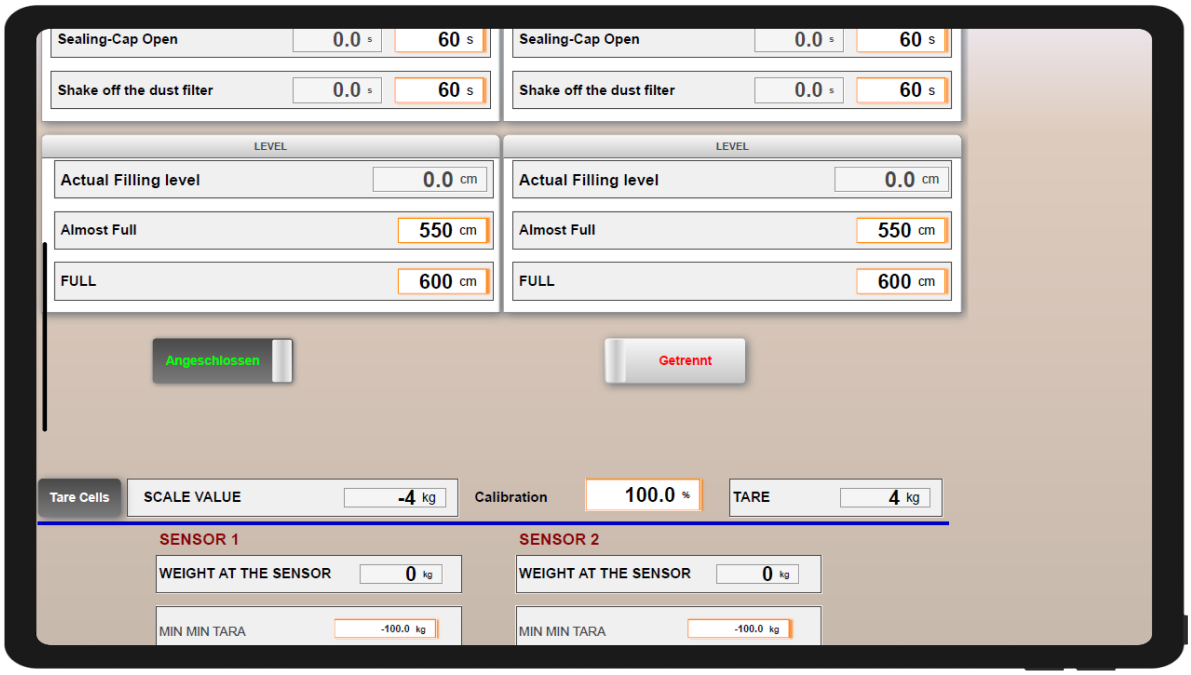


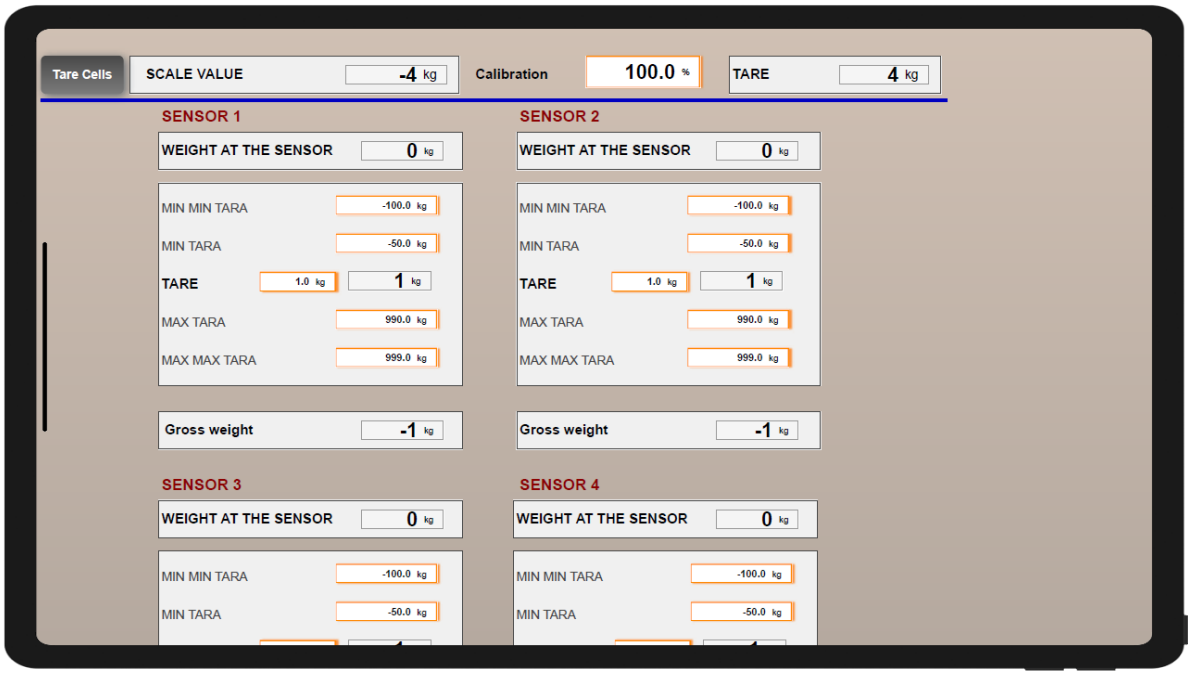
2.12.5 Submenu: Statistics



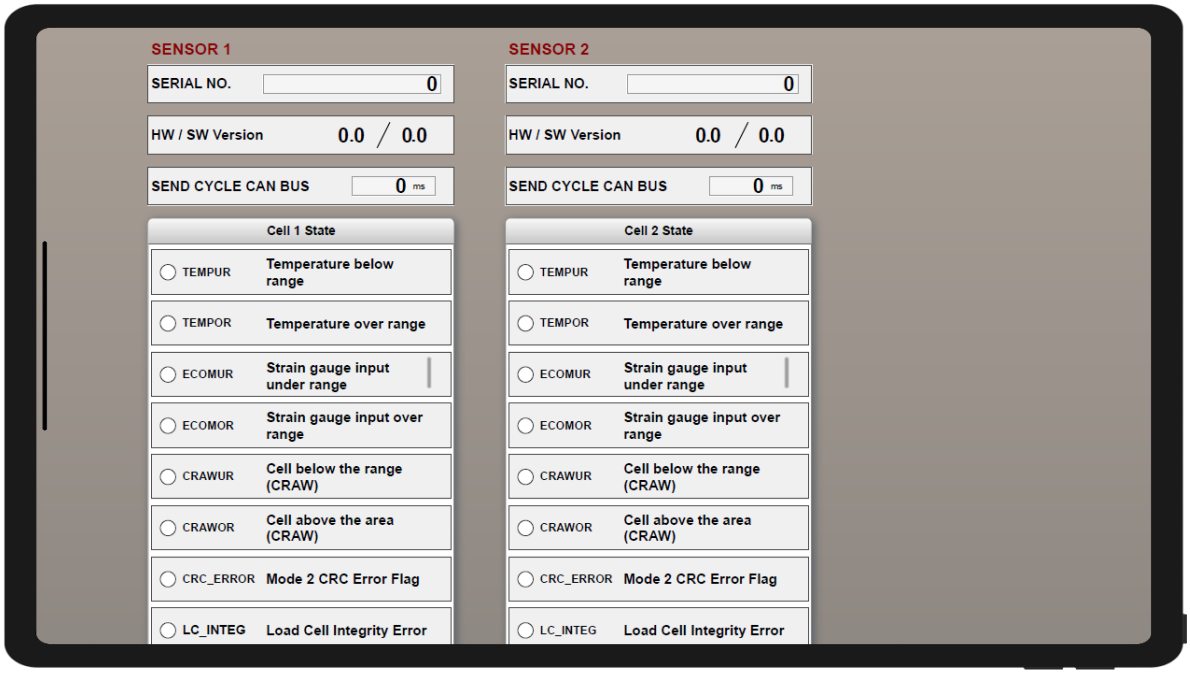
2.12.6 Submenu: Cement filling

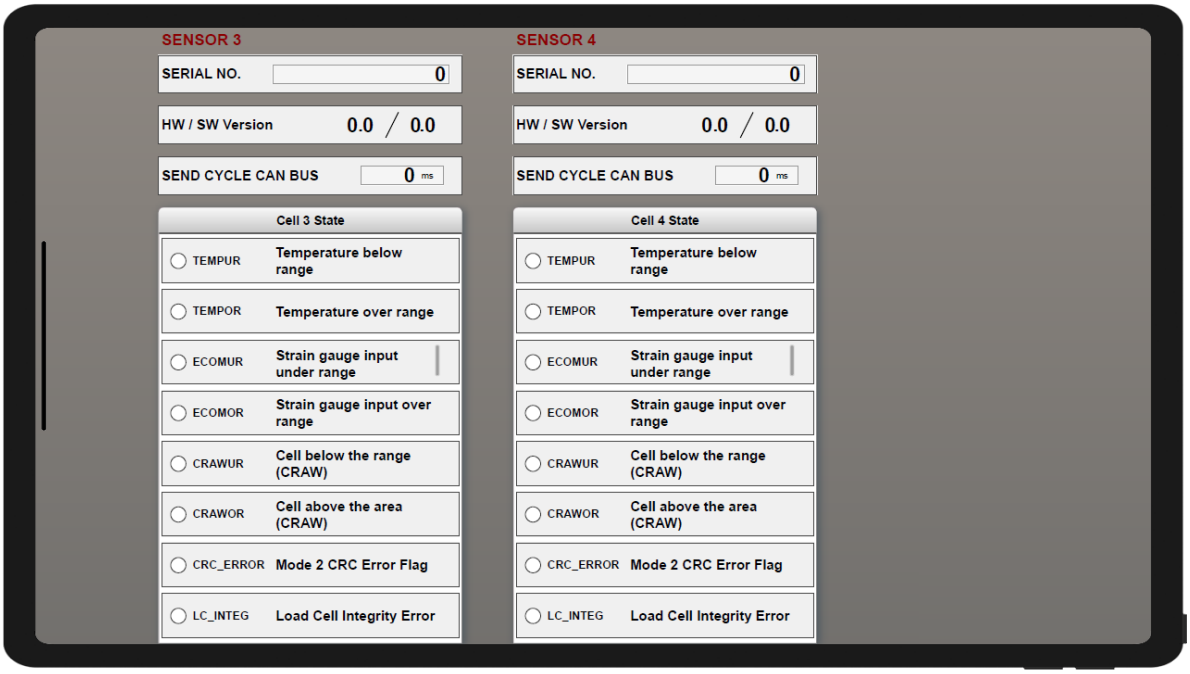




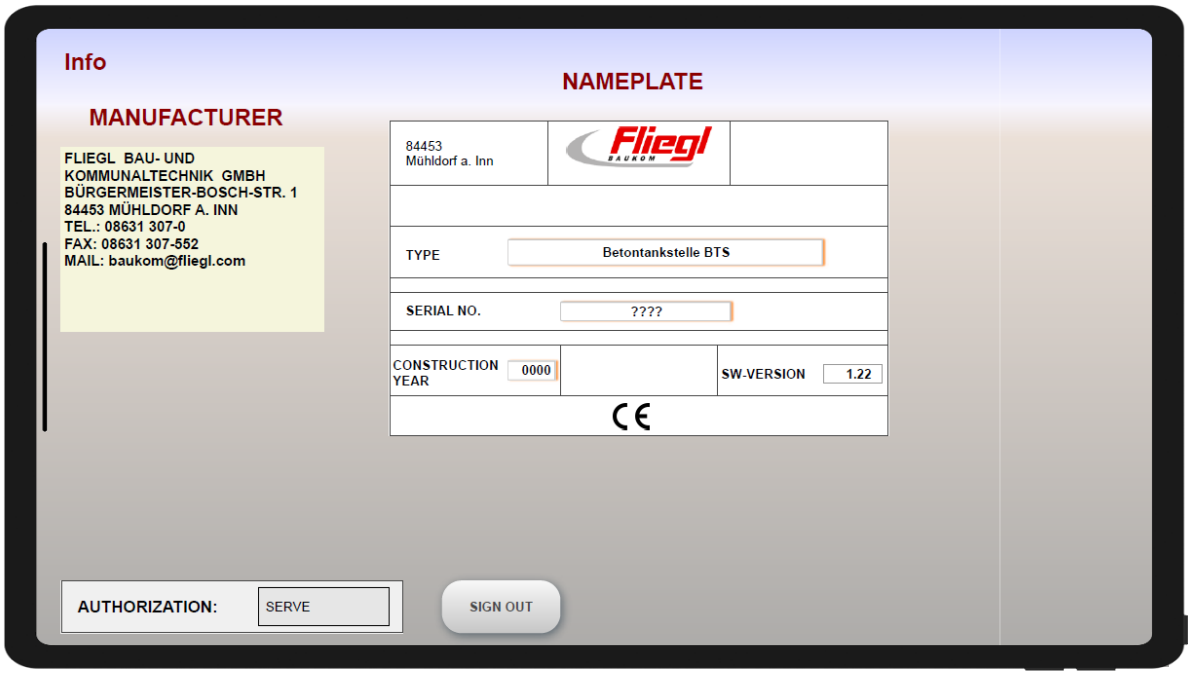

Tare Cells
SCALE VALUE
-4 kg
Calibration
100.0 %
TARE
4 kg
SENSOR 1
WEIGHT AT THE SENSOR
0 kg
MIN MIN TARA
-100.0 kg
MIN TARA
-50.0 kg
TARE
1.0 kg
1 kg
MAX TARA
990.0 kg
MAX MAX TARA
999.0 kg
Gross weight
-1 kg
SENSOR 2
WEIGHT AT THE SENSOR
0 kg
MIN MIN TARA
-100.0 kg
MIN TARA
-50.0 kg
TARE
1.0 kg
1 kg
MAX TARA
990.0 kg
MAX MAX TARA
999.0 kg
Gross weight
-1 kg
SENSOR 3
WEIGHT AT THE SENSOR
0 kg
MIN MIN TARA
-100.0 kg
MIN TARA
-50.0 kg
SENSOR 4
WEIGHT AT THE SENSOR
0 kg
MIN MIN TARA
-100.0 kg
MIN TARA
-50.0 kg

Gross weight
-1 kg
Gross weight
-1 kg
SENSOR 3
WEIGHT AT THE SENSOR
0 kg
MIN MIN TARA
-100.0 kg
MIN TARA
-50.0 kg
TARE
1.0 kg
1 kg
MAX TARA
990.0 kg
MAX MAX TARA
999.0 kg
Gross weight
-1 kg
SENSOR 4
WEIGHT AT THE SENSOR
0 kg
MIN MIN TARA
-100.0 kg
MIN TARA
-50.0 kg
TARE
1.0 kg
1 kg
MAX TARA
990.0 kg
MAX MAX TARA
999.0 kg
Gross weight
-1 kg
Load Cell Software 2.27 / 2.28
Bootloader 1.18
Mode 3
90 - 110ms
Filter in load cell to 0-0 (no filtering)
SENSOR 1
SERIAL NO.
0
SENSOR 2
SERIAL NO.
0

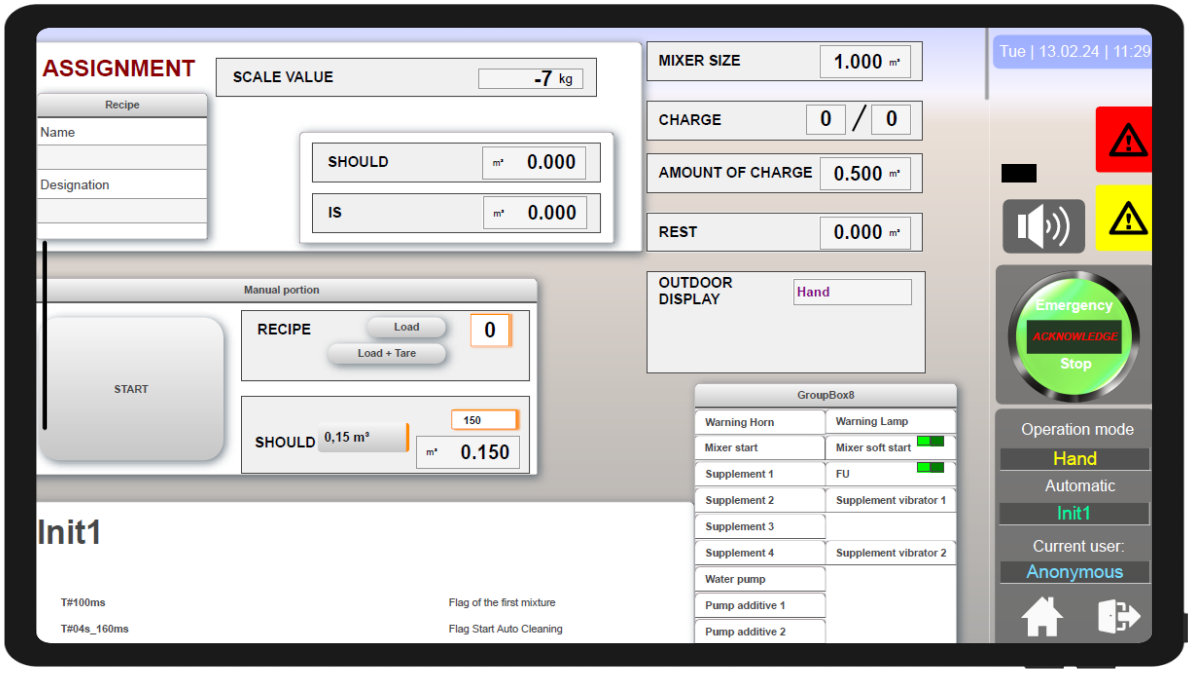

SENSOR 1
SERIAL NO. 0
HW / SW Version 0.0 / 0.0
SEND CYCLE CAN BUS 0 ms
Cell 1 State
TEMPUR Temperature below range
TEMPOR Temperature over range
ECOMUR Strain gauge input under range
ECOMOR Strain gauge input over range
CRAWUR Cell below the range (CRAW)
CRAWOR Cell above the area (CRAW)
CRC_ERROR Mode 2 CRC Error Flag
LC_INTEG Load Cell Integrity Error
SENSOR 2
SERIAL NO. 0
HW / SW Version 0.0 / 0.0
SEND CYCLE CAN BUS 0 ms
Cell 2 State
TEMPUR Temperature below range
TEMPOR Temperature over range
ECOMUR Strain gauge input under range
ECOMOR Strain gauge input over range
CRAWUR Cell below the range (CRAW)
CRAWOR Cell above the area (CRAW)
CRC_ERROR Mode 2 CRC Error Flag
LC_INTEG Load Cell Integrity Error

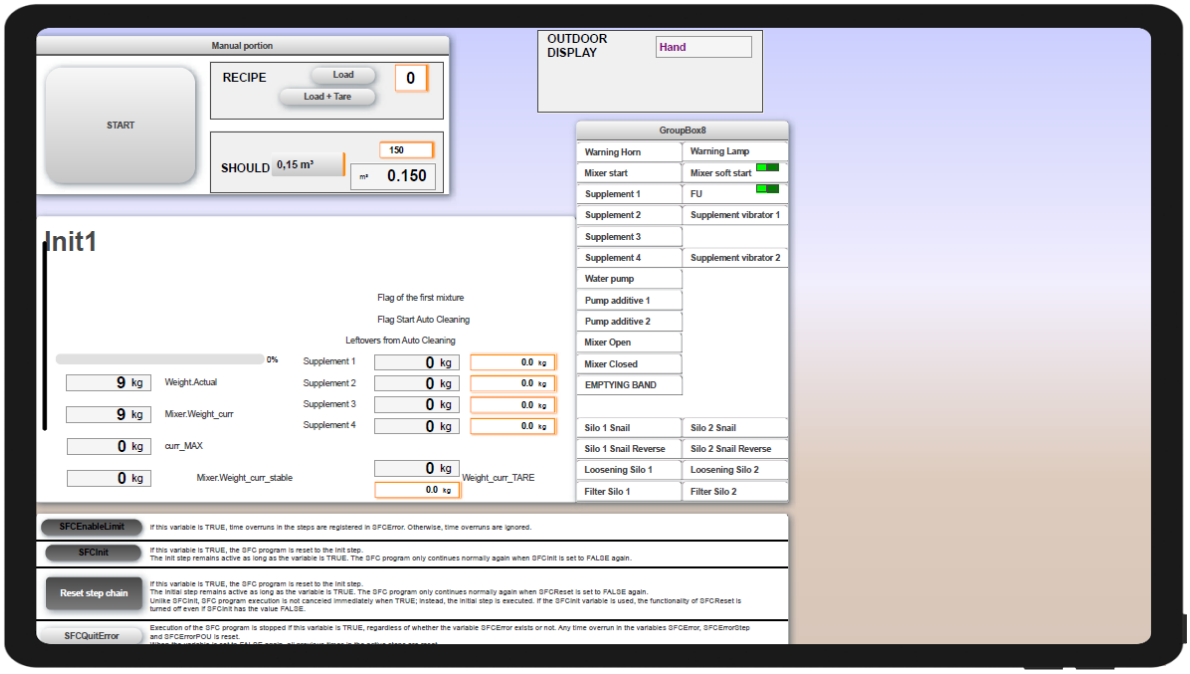

SENSOR 3
SERIAL NO. 0
HW / SW Version 0.0 / 0.0
SEND CYCLE CAN BUS 0 ms
Cell 3 State
TEMPUR Temperature below range
TEMPOR Temperature over range
ECOMUR Strain gauge input under range
ECOMOR Strain gauge input over range
CRAWUR Cell below the range (CRAW)
CRAWOR Cell above the area (CRAW)
CRC_ERROR Mode 2 CRC Error Flag
LC_INTEG Load Cell Integrity Error
SENSOR 4
SERIAL NO. 0
HW / SW Version 0.0 / 0.0
SEND CYCLE CAN BUS 0 ms
Cell 4 State
TEMPUR Temperature below range
TEMPOR Temperature over range
ECOMUR Strain gauge input under range
ECOMOR Strain gauge input over range
CRAWUR Cell below the range (CRAW)
CRAWOR Cell above the area (CRAW)
CRC_ERROR Mode 2 CRC Error Flag
LC_INTEG Load Cell Integrity Error

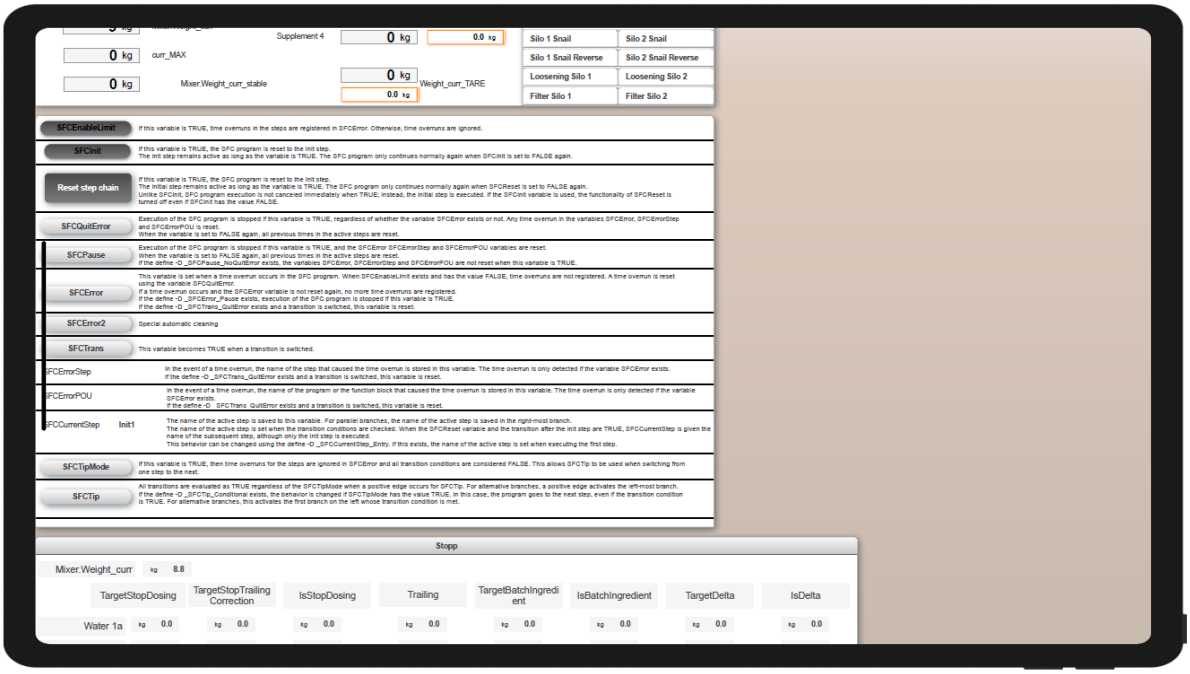
2.13 Menu: Info

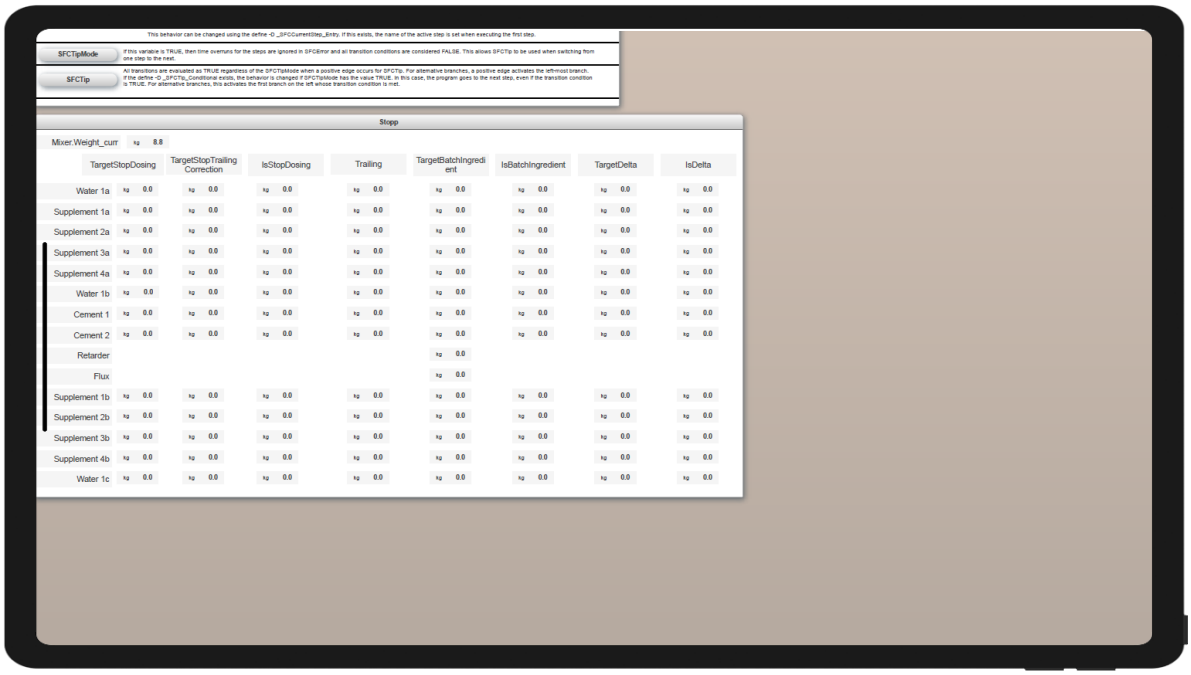


2.14 Menu: Assignment



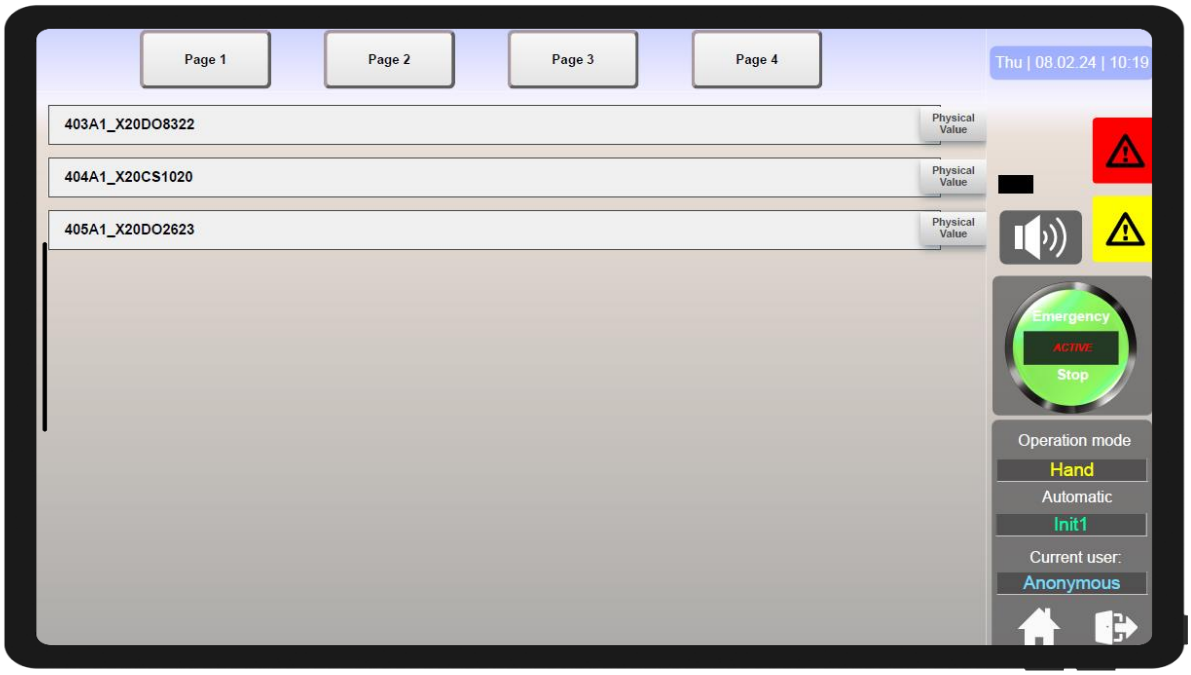



Supplement 4
0 kg
0.0 kg
curr_MAX
Mixer.Weight_curr_stable
Weight_curr_TARE
Silo 1 Snail
Silo 2 Snail
Silo 1 Snail Reverse
Silo 2 Snail Reverse
Loosening Silo 1
Loosening Silo 2
Filter Silo 1
Filter Silo 2
SFCEnableLimit
SFCInit
Reset step chain
SFCQuitError
SFCPause
SFCError
SFCError2
SFCTrans
SFCErrorStep
SFCErrorPOU
SFCCurrentStep
Init1
SFCTipMode
SFCTip
Stopp
Mixer.Weight_curr
TargetStopDosing
TargetStopTrailing Correction
IsStopDosing
Trailing
TargetBatchIngredient
IsBatchIngredient
TargetDelta
IsDelta
Water 1a


SFCTipMode
SFCTip
Stopp
Mixer.Weight_curr
TargetStopDosing
TargetStopTrailing Correction
IsStopDosing
Trailing
TargetBatchIngredient
IsBatchIngredient
TargetDelta
IsDelta
Water 1a
Supplement 1a
Supplement 2a
Supplement 3a
Supplement 4a
Water 1b
Cement 1
Cement 2
Retarder
Flux
Supplement 1b
Supplement 2b
Supplement 3b
Supplement 4b
Water 1c

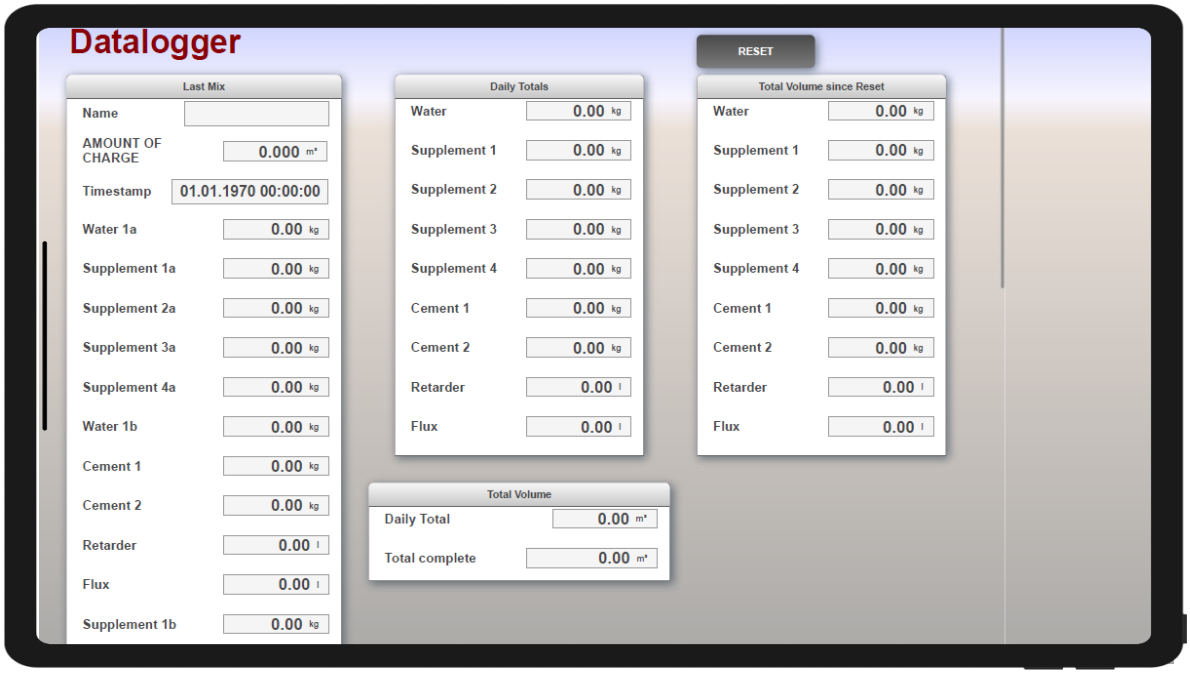
2.15 Menu: Equipment

2.16 Menu: Hardware status

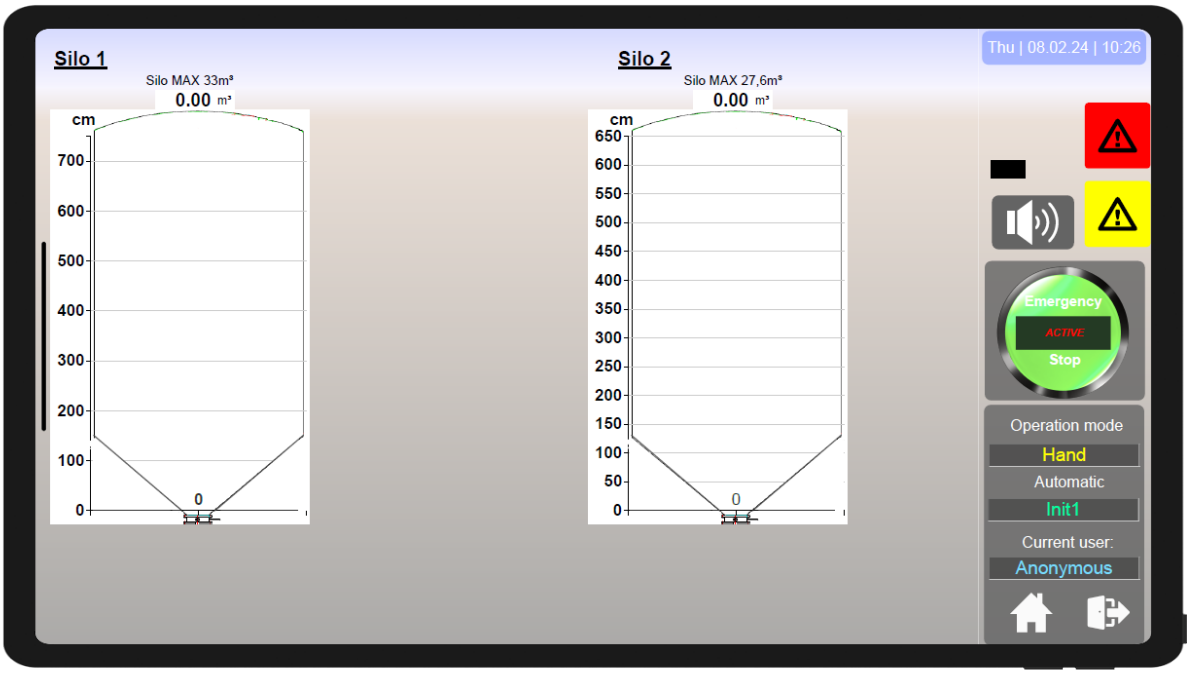


2.17 Menu: Operation mode

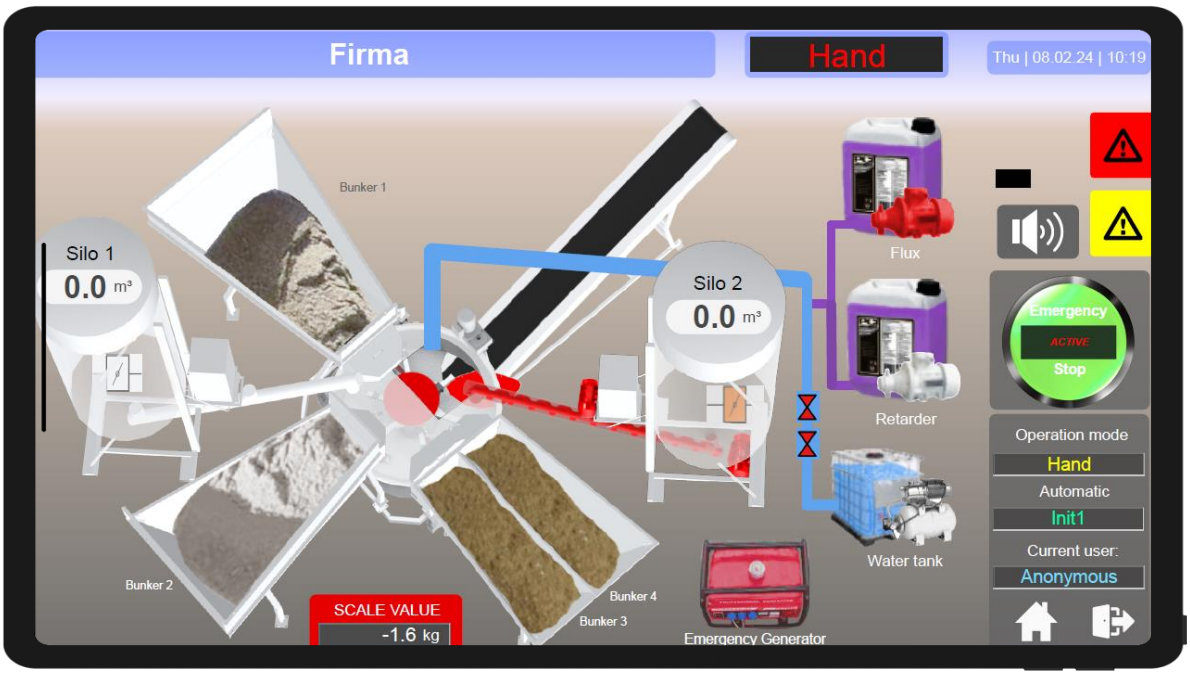
2.18 Menu: Datalogger

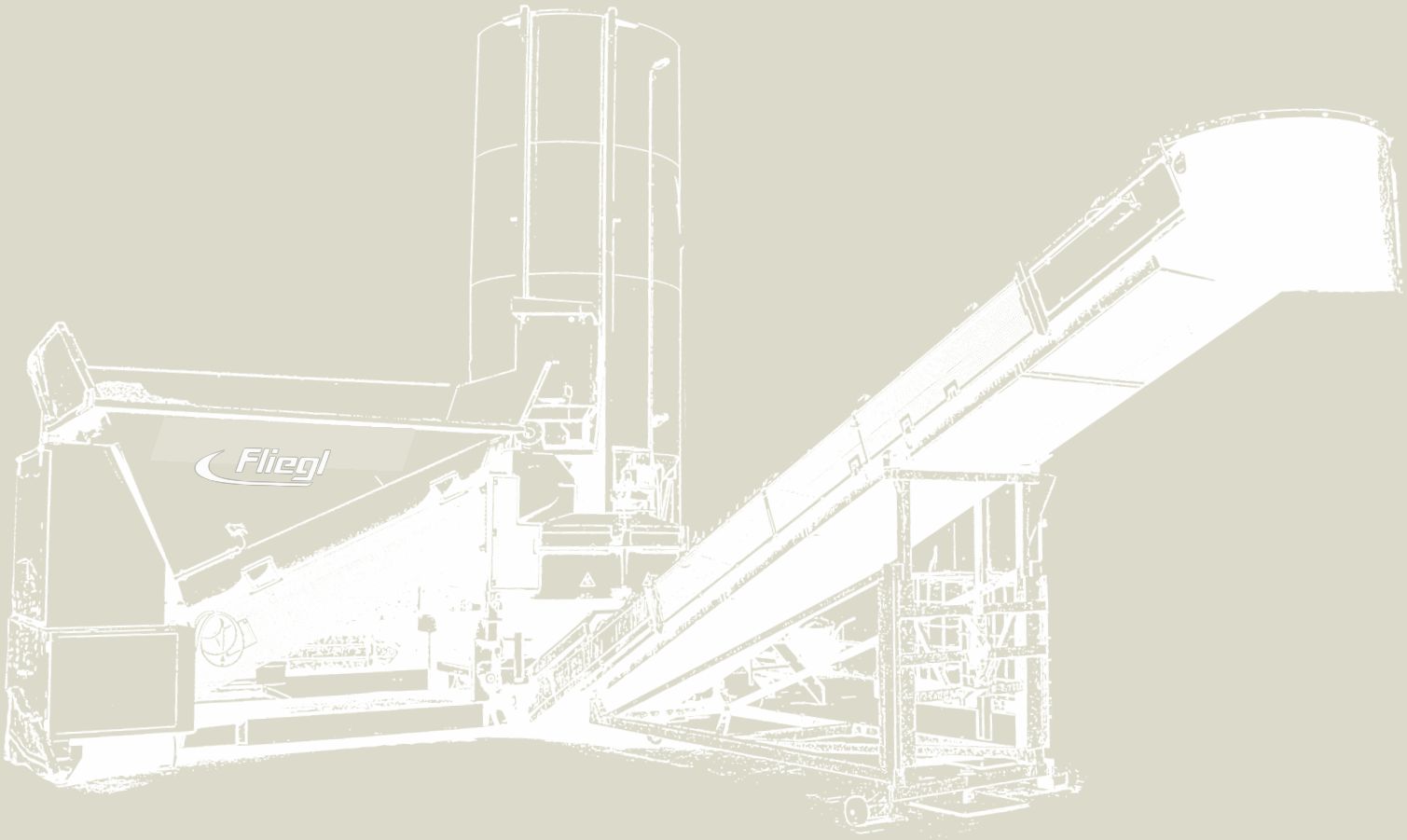


2.19 Menu: Radar Vega



2.20 Menu: Overview





Fliegl
BAU- & KOMMUNALTECHNIK

Fliegl Bau- und Kommunaltechnik GmbH
Bürgermeister-Boch-Str. 1
D-84453 Mühldorf a. Inn
Tel.: +49 (0) 86 31 307-382
Fax: +49 (0) 86 31 307-553
e-Mail: baukom@fliegl.com

We are Fliegl.

www.fliegl.com

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