

Instruction Manual MillMaster® TOP

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1 General Information

1.1 About this document

This Instruction Manual helps users to work safely and efficiently with MillMaster TOP.



Clarify anything unclear or uncertainties concerning operation with the supplier!

Read this Instruction Manual in its entirety before starting up MillMaster TOP.

This manual is part of MillMaster TOP and must be kept accessible to trained operators at all times in the immediate vicinity of the device.

1.2 Scope of application

This document applies to:

The MillMaster TOP software tool.

1.3 Target audience

This document is intended for use by specialist personnel only. The descriptions given here assume that the reader is a qualified professional trained by the manufacturer. These descriptions do not replace training on product use.

1.4 Notes

Information symbol



This symbol indicates additional information for the user.

Images in the document



The images of the user interface (screenshots) included in this manual are examples, and do not necessarily contain relevant data.

2 Safety

2.1 Intended use

This software is intended exclusively for use as a data analysis and administration tool for yarn clearers that are linked to the central units of the spinning machines. Any other use, or any use that goes beyond the intended purpose, is considered improper. Loepfe Brothers Ltd. shall not be liable for any damages that result from improper use.

2.2 Safety Information and Warnings

Safety information and warnings draw attention to hazards and are marked with symbols and signal words to express the danger level.



⚠ DANGER

Indicates an immediate hazardous situation which will result in death or serious injury.



MARNING

Indicates a potentially hazardous situation which could result in death or serious injury.



A CAUTION

Indicates a potentially hazardous situation which may result in minor oder moderate injury.

NOTE

Indicates a potentially hazardous situation which may result in damage to property.

2.3 Explanation of symbols

Warning symbol



General warning symbol



Electrical voltage warning

2.4 Specialist personnel

The device and software manufacturer defines specialist personnel as follows:

«Foreman»

 The foreman is able to instruct operators in how to use the system, and may edit device and software settings and configurations.

«Flectrician»

Electricians are responsible for installing devices and connecting them to a network. Electricians
are professionally trained and qualified to work with electrical equipment, and are familiar with the
rules and safety regulations for working with electrical equipment.

«Service technician»

Service technicians are responsible for repairing and maintaining the devices and software. They
are trained and qualified Loepfe employees, or are expressly authorized by Loepfe to perform
service operations.

«Network administrator»

 Network administrators are responsible for connecting the devices and software to a computer network. They are professionally trained and qualified to work with IT networks, and have administrator rights for the installed network.

3 Product and Function

3.1 Product description

The software is a data analysis and administration tool that is linked to and periodically synchronized with the machine's LZE central unit. After the data import, all data collected from the LZE central unit can be displayed, analyzed, compared and archived.

3.2 Scope of delivery

The following components are included in the scope of delivery: 1 MillMaster TOP

3.3 Options

These components can be upgraded with the following options:

Option	Brief description	Reference
Data capture	Number of connected machines	_
Data collection, up to 7200 spindles	Expansion from 1440 spindles to 7200 spindles max	_
Lab Trends	Enhanced trend analysis over a longer period of time	Lab trends (optional feature) [▶ 77]
Planning board	Production planning and direct production control	Planning board (optional feature) [▶ 93]
Clearer setting assistant	Simulation of expected cuts	_
Fault images	Existing and individual fault images in the class matrix	_
Report configuration tool	Configure report settings	Custom reports [▶ 60]
Additional clients, max. 5	Expand to 8 workstations	_
Database interface	Extract production and quality data from the PostgreSQL database	_

Table 1: MillMaster TOP options

Option code

An option code is needed to activate a license or code.

To request an option code, send an email to service@loepfe.com. The following information is required.

- For machines with the LZE-II or LZE-III central units, provide the MAC addresses of all connected machines.
- For machines that use Informator units, provide the serial numbers of all machines.
- For machines with LZE-V central units, no option code is required. Machines can be added with the software (see Connect and add machines [▶ 62]).

4 Installation

4.1 System requirements

Server	
64-bit operating system	Windows 10 Windows in English version or with Multilingual User Interface (MUI) package recommended
Processor	Intel Core i5, ≥ 4th Gen; recommended i7*, ≥ 4th Gen
Working memory	≥ 16 GB RAM
Disk storage	≥ 500 GB SSD
Network connection (Ethernet)	LAN 100/1000 Mbit/s
Ports	USB
Uninterruptible power supply (UPS)	recommended
Monitor	min. 24 inches
Monitor resolution	min. 1366 x 768
Client computers	
64-bit operating system	Windows 10
Processor	Intel Core i5, ≥ 4th Gen
Working memory	≥ 8 GB RAM
Disk storage	≥ 250 GB HDD
Network connection (Ethernet)	LAN 100/1000 Mbit/s
Ports	USB
Monitor (diagonal)	min. 24 inches
Monitor resolution	min. 1366 x 768

Software (required)	
.NET Framework 4.X.X	If not already installed, this software will be installed during the installation.
PostgreSQL	If not already installed, this software will be installed during the installation.
Internet Explorer 11	
GoToAssist	
Mobile devices (optional)	Recommended browsers
Smartphones and tablets	 Firefox ≥ 35.0 Internet Explorer ≥ 9.0 Safari ≥ 8.0 Google Chrome ≥ 42.0 Chromium ≥ 44.0 Opera ≥ 25.0
Network connection	
Ethernet cable	Do not use unshielded UTP cables! Cat5e, shielded, STP *** Cat6a, shielded, STP *** Cat7*, shielded, STP ***
Length	≤ 100 m
Switch	max. 4
Patch cable	Cat6a, shielded, STP ***
Length	≤ 10 m
Switch	1000 Mbit/s (Gigabit Ethernet Switch)
Router (optional)	1000 Mbit/s (Gigabit Ethernet Router)
Internet	Constant connection
Support	
Ports	reachable: TCP: 80, 443, 8200 UDP: 53, 514, 1853, 8200
Legend	
	* We recommend this version.
	** We recommend that you install the English version of the operating system so that the Technical Support team can change the language settings in case support is needed.
	*** compliant with IEEE 803.3, EN 50288-2-1:2013

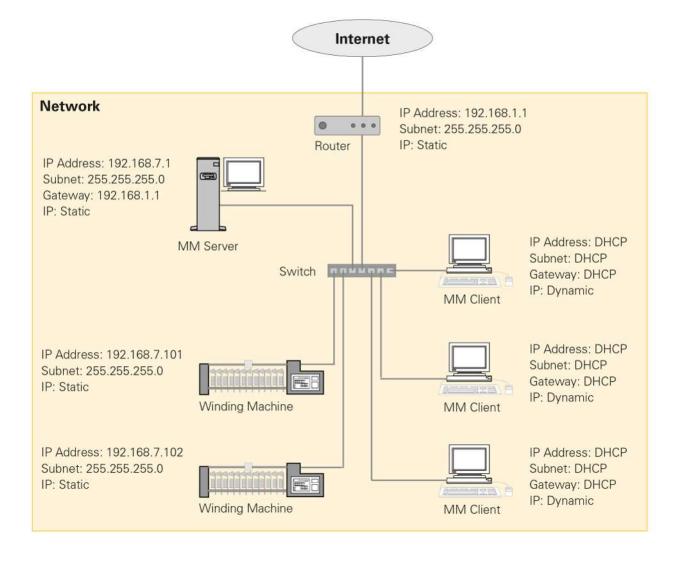
4.2 Network topology

This section presents examples of network connections.

Ñ

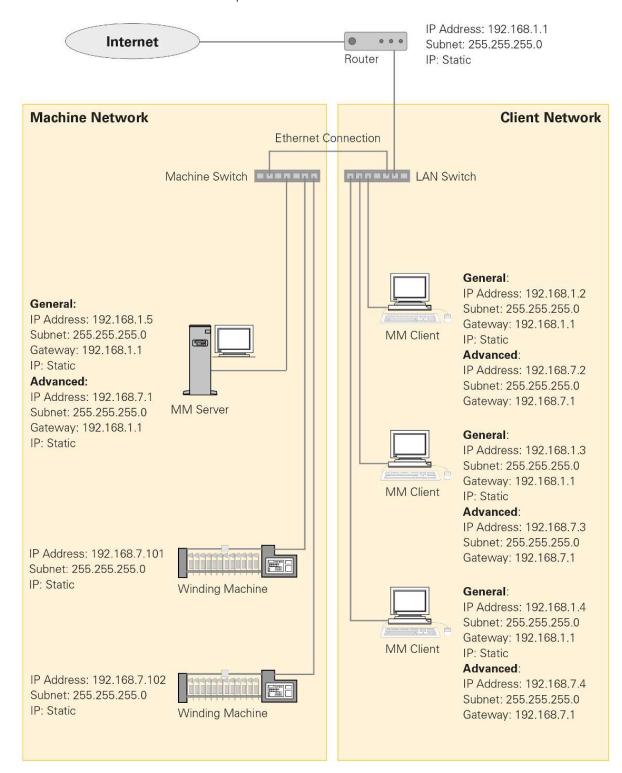
To ensure proper and error-free network connections, only "shielded" (STP) cables should be used.

4.2.1 Network with one IP address



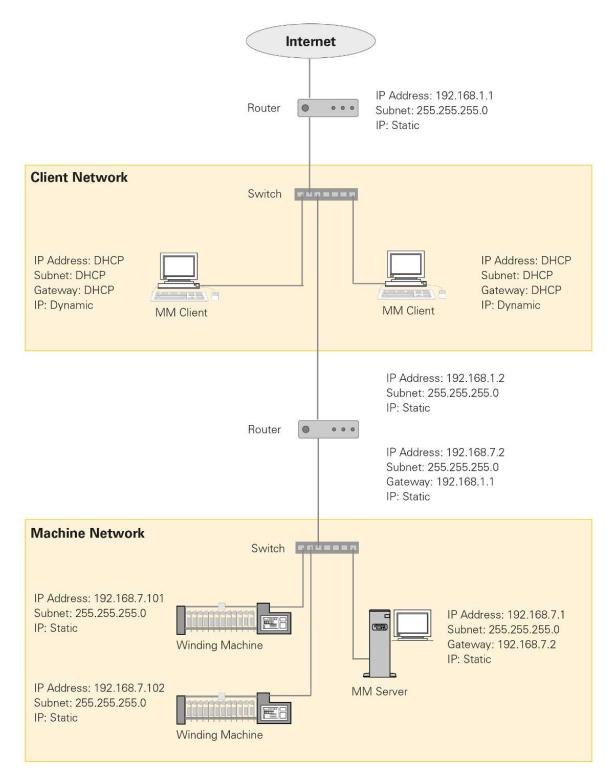
4.2.2 Network with multiple IP addresses

The machine network and the client network are connected by means of a connection between the two switches. A static IP address is required for a connection from the software via VNC.



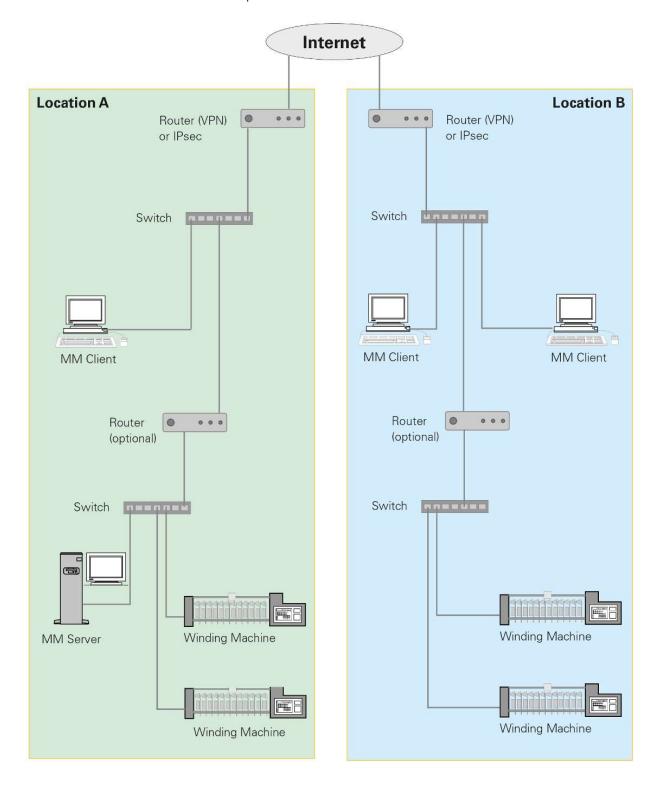
4.2.3 Network via routers

The machine network and the client network are connected via routers.



4.2.4 Network with VPN

The machine network and the client network are connected via VPN through two routers. This type of connection is used when two separate networks need to be connected to one another.



4.3 Configuring central units and connecting them to the network

This section describes the different connections to the network and the associated configurations for the central units.

The software can be connected to the following central units and Informator units:

- Central unit: LZE-I, LZE-II, LZE-III and LZE-V
- Machine type: Schlafhorst AC 338 and Schlafhorst Oerlikon AC5, ACX5 and AC6 Informators

Requirements for configuration and network connection

- RJ45 cables are available.
- Plan at least 0.5 meters (1 foot 8 inches) of additional RJ45 cable length.
- RJ45 cables are laid in a cable tray or other appropriate device.
- RJ45 cables are not laid together with cables that carry a live voltage.

4.3.1 IP addresses

This section provides suggestions and examples of IP addresses and subnet masks that can be used to connect the winding machines.

No.	Machine name	IP addresses	Subnet mask	Host name	LZE type	Yarn clearer type	Spindle
PC	MillMaster	192.168.7.1	255.255.255.0				
01	Winding ma- chine 1	192.168.7.101	255.255.255.0				
02	Winding ma- chine 2	192.168.7.102	255.255.255.0				

Notes:

Table 2: Example IP addresses and subnet masks

The following local IP address ranges are also available; these ranges are not reachable on the Internet and can therefore be used for the software.

IP addresses
10.0.0.0 – 10.255.255.255
172.16.0.0 – 172.31.255.255
192.168.0.0 – 192.168.255.255

Table 3: Examples of additional IP addresses

4.3.2 LZE-V

Connect the LZE-V to the client computer

A DANGER

4

Danger of electric shock

Touching live components and electrical connections can lead to severe injury or death.

- ▶ Unplug the device from mains power before performing any repair or maintenance work.
- Unplug the device from mains power before removing device enclosure or opening side panels.
- ✓ Use the IP address 192.168.1.200 as the default.
- 1. Connect the client computer to the LAN 2 port with an RJ45 cable.
 - ⇒ The software is now connected to the LZE-V central unit.



LZE-V rear panel

Configure network settings

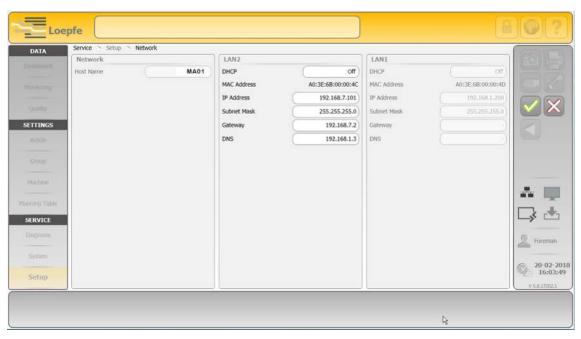
- ✓ The LZE-V has been started up.
- 1. Open Settings > Machine > Base settings.
- 2. Press
 - \Rightarrow The login window opens.
- 3. Enter username (Foreman) and password.
- 4. Press to edit settings.
- 5. Machine Name: Enter the name of the machine.
- 6. MillMaster Link: Select "On".
- 7. Confirm with <a> .
- ⇒ The settings are saved.



Please note the following restrictions for the hostname:



- use 8 characters max, no spaces
- Use the letters A-Z, a-z and digits 1-9
- The first character must be a letter
- Hostname and machine name can be identical
- 1. Open Service > Setup > Network.
- 2. Press
 - \Rightarrow The login window opens.
- 3. Enter username (Service) and password.
- 4. Press ot to edit settings.
- 5. Select the «Network» tab.
- 6. Host Name: Enter the hostname, e.g. MA01.
- 7. Select the «LAN 2» tab.
- 8. DHCP: Select "Off".
- 9. IP Address: Enter the IP address.
- 10. Subnet Mask: Enter the subnet mask, e.g. a value from the IP addresses [▶ 18] table.
- 11. Gateway: Enter the gateway IP address.
- 12. DNS: Enter the DNS IP address.
- 13. «LAN 1» tab: Do not make any changes, except for SAVIO machines.
- 14. Confirm with
 - ⇒ The settings are saved.
- ⇒ The software restarts.



Service > Setup > Network settings

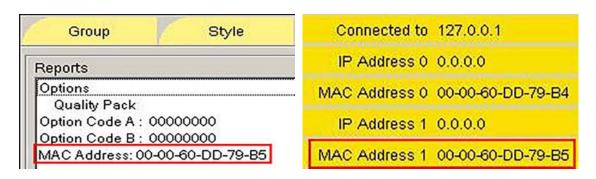
4.3.3 LZE-III

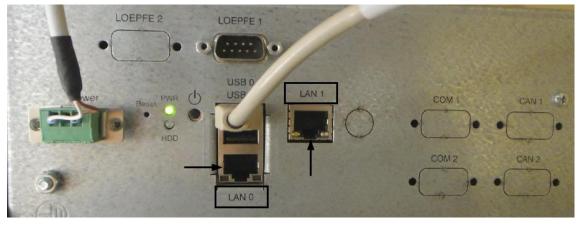
Connect the LZE-III to the client computer

- 1. Connect the client computer to the LAN 1 port with an RJ45 cable.
- 2. Select the «Dialog» tab.



- 3. Select the *Software > Options* menu.
 - ⇒ The «Reports» window opens.
- 4. Find the MAC address under «Reports».
- 5. Find the MAC address in the *Central unit* menu and compare with the MAC address from Reports.
 - ⇒ If MAC Address 1 matches, for example, then the LAN 1 port is activated.
- ⇒ The software is now connected to the LZE-III central unit.





LZE-III rear panel

Configure network settings

Prerequisites

- ✓ The LZE-III has been started up.
- 1. Select the «Dialog» tab.

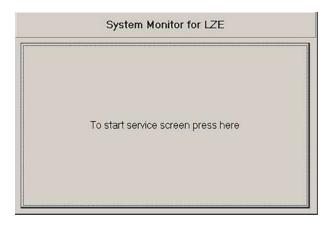


2. In the *Permissions* menu, select Foreman Password.

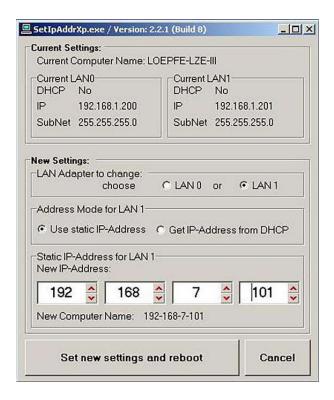
- ⇒ The Permissions window opens.
- 3. Enter the foreman password.
- 4. Press «OK».
 - ⇒ The user level / password level is set to Foreman and the menu changes.
- 5. Check the MAC address, and change the MAC address if needed. See the section on how to **Connect the LZE-III to the client computer**.
- 6. Select «Reboot system».

Reboot System

- ⇒ A "Reboot system?" pop-up window appears.
- 7. Press «Yes».
 - ⇒ The system restarts.
- ⇒ The **«System monitor for LZE»** window opens.



- 1. Press «To start service screen» to change the IP address.
 - \Rightarrow The «Loepfe YM Zenit monitor service screen» window opens.
- 2. Press «Change IP Address».
 - ⇒ A confirmation window appears.
- 3. Press **«Yes»** to reboot the system.
 - ⇒ The system restarts.
 - ⇒ The **«SetIpAddrXp»** window opens.
- 4. Under New Settings, go to the "LAN Adapter to change" field and select LAN 0 or LAN 1.
- 5. In the "Address Mode for LAN" field, select the radio button for "Use static IP address".
- 6. In the "Static IP Address for LAN" field, enter the machine's current IP address, e.g. from the IP addresses [▶ 18] table.
- 7. Press «Set new settings and reboot» to reboot the system.
 - \Rightarrow The settings are saved.
 - ⇒ The system restarts.
- ⇒ The network settings are configured.



SetlpAddrXp

4.3.4 LZE-II

Connect Ethernet cable

Prerequisites

- ✓ The LZE-II has been started up and the menu has been opened.
- 1. Connect an RJ45 cable to LAN 1 to use the software.
 - ⇒ The software is now connected to the LZE-II central unit.



LZE-II rear panel

Configure network settings (version ≥ 2.0)

1. Select the «Dialog» tab.

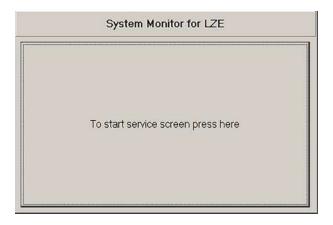


- 2. In the *Permissions* menu, select Foreman Password.
 - ⇒ The Permissions window opens.

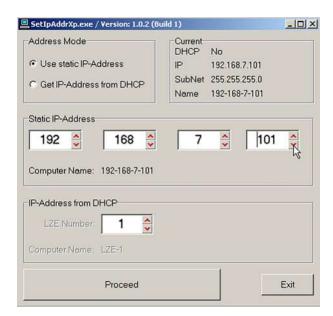
- 3. Enter the foreman password.
- 4. Press «OK».
 - ⇒ The user level / password level is set to Foreman and the menu changes.
- 5. Select Reboot System.

Reboot System

- ⇒ A "Reboot system?" pop-up window appears.
- 6. Press «Yes».
 - ⇒ The system restarts.
- \Rightarrow The **«System monitor for LZE»** window opens.



- 1. Press «To start service screen» to change the IP address.
 - ⇒ The «Loepfe YM Zenit monitor service screen» window opens.
- 2. Press «Change IP Address».
 - ⇒ A "Disable CF Protection" pop-up window appears.
- 3. Press «Yes» to reboot the system.
 - \Rightarrow The system restarts.
 - ⇒ The «SetIpAddrXp» window opens.
- 4. In the "Address Mode for LAN" field, select the radio button for "Use static IP address".
- 5. In the "Static IP Address for LAN" field, enter the machine's current IP address, e.g. from the IP addresses [▶ 18] table.
- 6. Press «Proceed» to reboot the system.
 - \Rightarrow The settings are saved.
 - ⇒ The system restarts.
- ⇒ The network settings are configured.



SetIpAddr2

4.3.5 Schlafhorst Informator AC5/ACX5/AC6

1. Connect an RJ45 cable to LAN 1 to use the software.



Informator AC rear panel

Informator control icons

Symbol	Name	Description
	Data Display	This section contains screens to monitor and operate the machine and its individual parts.
	Machine Configuration Machine configuration	
	Management	Software settingsAccess permissionsMachine status
100	Login/Logout	Enter username and passwordAssign password

Table 4: Meanings of Informator icons

Check battery

- \checkmark The battery level must not be too low to configure the settings.
- ✓ Do not switch off the machine while editing settings.
- 1. Stop the machine.
- 2. Activate the Informator's screen.
- 3. Press the Data Display/Machine/Electronics icon.
- 4. Check the battery level.
 - ⇒ The battery level should be > 3000 mV.

Connect network

Prerequisites

- ✓ A software version ≥ 1.30.00 is no longer necessary.
- 1. Activate the Informator's screen.
- 2. Press the Login/Logout icon.
- 3. Enter the password (service) and confirm with "Login".
- 4. Press the Management icon.
- 5. Press the Machine Configuration icon.
- 6. Press "Basic adjust", then "Network".
- 7. Change the Network setting to Network with.

Restart the Informator

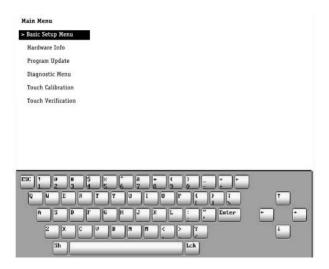
- 1. Switch to the Loepfe screen.
- 2. Press the «Maintenance > AWE 800 status» button.
- 3. Press
- 4. Enter the password (service) and confirm.
- 5. Press
- 6. Scroll to 255.
- 7. Press
- 8. Scroll 1 to 258.
- 9. Press for to reboot the system.
 - ⇒ The system restarts.
- 10. Press the «Setup» button once the Setup screen opens.

Enter the TCP/IP address, subnet mask and hostname.

Please note the following restrictions for the hostname:

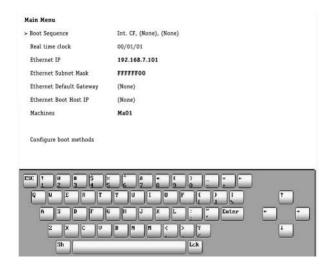


- use 8 characters max, no spaces
- Use the letters A-Z, a-z and digits 1-9
- The first character must be a letter
- Hostname and machine name can be identical
- 1. In the main menu, select Basic setup menu.
- 2. Enter the password (42) and confirm.
- 3. Enter the following information from the Informator:
 - Informator IP address,
 - Subnet mask in hex code (FF = 255),
 - Machine hostname, e.g. MA01.
- ⇒ The system restarts.



Basic Setup Menu

- 1. Press «ESC» to switch to the main menu.
- 2. Save changes.
- 3. Press «Y».
 - ⇒ The menu closes.
- 4. Press «ESC» to switch to the main menu.
- 5. Press **«ESC»** to reboot the system.
- ⇒ The system restarts.



Boot Sequence

4.3.6 Schlafhorst Informator AC338

1. Connect an RJ45 cable directly to the Mini surface box to use the software.



Informator AC338 rear panel

4.3.7 Schlafhorst Informator with series number < 7000



Informators delivered before the end of January 2004 also require a transceiver to connect to the machine.

Informator units delivered after February 2004 have a built-in transceiver.

1. Connect an RJ45 cable to the Informator interface to use the software. (See figure: Informator rear panel.)



Informator rear panel

Check battery

- ✓ The battery level must not be too low to configure the settings.
- ✓ Do not switch off the machine while editing settings.
- 1. Stop the machine.
- 2. Activate the Informator's screen.
- 3. Open the *Service > Maintenance* menu.
- 4. Check the battery level.
 - ⇒ The battery level should be > 3000 mV.

Connect network

- 1. Activate the Informator's screen.
- 2. Press "Machine parameters".
- 3. Press "Network".
- 4. Enter the password and confirm.
- 5. Change the Network setting to Network with.
- 6. Press the Enter icon.

Settings in the configuration

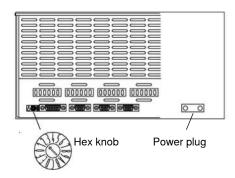
⚠ DANGER



Danger of electric shock

Touching live components and electrical connections can lead to severe injury or death.

- Unplug the device from mains power before performing any repair or maintenance work.
- Unplug the device from mains power before removing device enclosure or opening side panels.
- 1. Open the panel over the Informator.
- 2. Pull out the plug to turn off the Informator.
- 3. Turn the hex knob to position 1.
- 4. Insert the plug to turn on the Informator.
 - ⇒ The system restarts.



Reconfigure boot system

- ✓ The Boot menu is open.
- ✓ The TCP/IP address is available.
- 1. Select <rc> from the menu to Reconfigure the boot system.
- 2. Press Enter.

Enter IP address, subnet mask and hostname

Prerequisites

- ✓ The Boot menu is open.
- ✓ The IP address, subnet mask and hostname are available.
- 1. Select <in> from the menu to Set internet address.
- 2. Press Enter.
- 3. Enter the prepared TCP/IP address, e.g. 192.168.7.101 for Machine 01.

Enter subnet mask

- ✓ The Boot menu is open.
- 1. Select <im> from the menu to Set internet subnet mask.
- 2. Press Enter.
- 3. Enter subnet mask:
 - Hex code, e.g. FFFF00
 - Default, e.g. FFFFF00 = 255.255.255.0

Enter hostname

Please note the following restrictions for the hostname:



- use 8 characters max, no spaces
- Use the letters A-Z, a-z and digits 1-9
- The first character must be a letter
- Hostname and machine name can be identical

Prerequisites

- ✓ The Boot menu is open.
- 1. Select <ih>> from the menu to Set internet hostname.
- 2. Press Enter.
- 3. Enter the hostname, e.g. MA01.

Enter Internet broadcast mask

Prerequisites

- ✓ The Boot menu is open.
- 1. Select <ib> from the menu to Set internet broadcast mask.
- 2. Press Enter.
- 3. Type 1 to set the IP address.

Review settings

Prerequisites

- ✓ The Boot menu is open.
- 1. Select <dp> from the menu to Display all boot parameters and review them.
- 2. Press Enter.
- 3. Check the parameter values and make any necessary changes.

BOOT PARAMETERS: SCSI M14 module slot: 0 BOOTP filename: os9boot 192.168.7.101 Internet address Internet subnet mask : 0xfffffff00 Internet hostname : MA 10 Internet broadcast mask: 1 Boot order: ?Boot from onboard FLASH ROM ?Boot from raw PCMCIA card ?Transfer PCMCIA -> FLASH ?Boot from Ethernet - BOOTP ?Boot from SCSI (CCS) hard drive (M14) ?Boot from Teac SCSI floppy drive (M14)

Hit <CR> to continue...

Save settings in the configuration

Prerequisites

- ✓ The panel over the Informator is open.
- 1. Turn the hex knob to position 2.
- 2. Select <q> from the menu to open Save changes and restart system.
- 3. Press Enter (2x).
- ⇒ The settings in the configuration are saved.

4.3.8 Schlafhorst Informator with series number > 7000

Check battery

Prerequisites

- ✓ The battery level must not be too low to configure the settings.
- ✓ Do not switch off the machine while editing settings.
- 1. Stop the machine.
- 2. Activate the Informator's screen.
- 3. Open the **Service > Maintenance** menu.
- 4. Check the battery level.
 - ⇒ The battery level should be > 3000 mV.

Connect network

Prerequisites

- ✓ A software version ≥ 1.30.00 is no longer necessary.
- 1. Activate the Informator's screen.
- 2. Press "Machine parameters".
- 3. Press "Network".
- 4. Enter the password and confirm.
- 5. Change the Network setting to Network with.
- 6. Press .

Restart the Informator

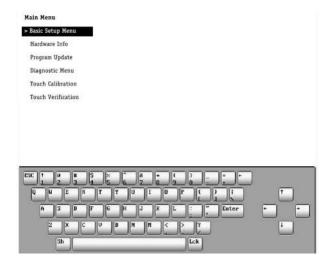
- 1. Switch to the Loepfe screen.
- 2. Press the «Maintenance > AWE 800 status» button.
- 3. Press 🛅 .
- 4. Enter the password (service) and confirm.
- 5. Press
- 6. Scroll to 255.
- 7. Press [1].
- 8. Scroll **(to 258.**
- 9. Press to reboot the system.
- 10. Press the «Setup» button once the Setup screen opens.

Enter IP address, subnet mask and hostname

Please note the following restrictions for the hostname:

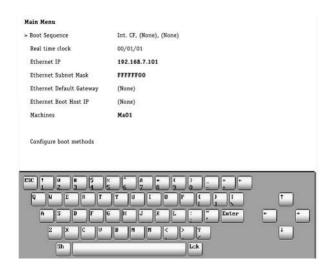


- use 8 characters max, no spaces
- Use the letters A-Z, a-z and digits 1-9
- The first character must be a letter
- Hostname and machine name can be identical
- 1. In the main menu, select Basic Setup Menu.
- 2. Enter the password (42) and confirm.
- 3. Enter the following information from the Informator:
 - Informator IP address,
 - Subnet mask in hex code (FF = 255),
 - Machine hostname, e.g. MA01.
 - \Rightarrow The system restarts.



Basic Setup Menu

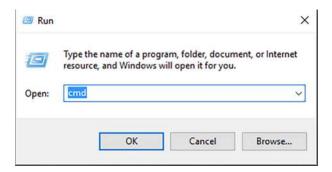
- 1. Press «ESC» to switch to the main menu.
- 2. Save changes.
- 3. Press «Y».
 - ⇒ The menu closes.
- 4. Press «ESC» to switch to the main menu.
- 5. Press **«ESC»** to reboot the system.
- \Rightarrow The system restarts.



Boot sequence

4.4 Connect local network and test connection

- 1. Connect a computer to the local network.
- 2. Move the mouse to the Windows Start symbol and right-click.
 - ⇒ The Windows menu opens.
- 3. Select "Run".
 - ⇒ The Run window opens.
- 4. Enter "cmd" in the text box.
- 5. Press «OK».



- ⇒ A command-line interface window opens.
- 6. At the cursor, type "ping" followed by the IP address, e.g. 192.168.7.101.
- 7. Press Enter to confirm.
 - ⇒ The ping utility runs.

```
C:\>ping 192.168.7.101

Pinging 150.158.148.15 with 32 bytes of data:

Reply from 192.168.7.101: bytes=32 time=10ms TTL=255

Reply from 192.168.7.101: bytes=32 time(10ms TTL=255

H:\>
```

⇒ The result is shown directly in the command-line interface window.

Check connection:

- \checkmark The command-line interface window is open.
- 1. At the cursor, type "ping" and the IP address followed by the -t flag, e.g. 192.168.7.101 -t.
- 2. Press Enter to confirm.
 - ⇒ The ping utility runs.

⇒ The result is shown directly in the command-line interface window.

4.5 Configure server

Administrator privileges for the server are needed for the following settings.

4.5.1 Change BIOS settings

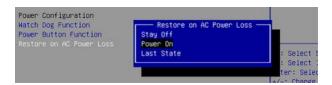
The settings shown in this chapter are only an example from one operating system.

In order for the server to restart automatically after a power failure, the BIOS settings need to be modified. Prerequisites

- ✓ The Windows operating system is installed.
- 1. Restart the server to open the BIOS.
 - ⇒ A message appears at the bottom of the screen: «Please press DEL or F2 to Enter UEFI BIOS settings».
- 2. Press the «DEL» or «F2» key during the reboot process.
 - ⇒ The «UEFI BIOS» menu opens.
- 3. Select the Language symbol to open language settings. ("Select your preferred language.")
- 4. Select «Restore after AC Power Loss > On».



5. Select «Power On».

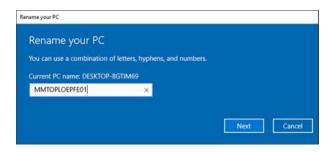


- 6. Select «Save and Exit» to save your settings.
- ⇒ The server restarts.

4.5.2 Change server name

To make it easier to find the server on the network, we recommend that you change its name.

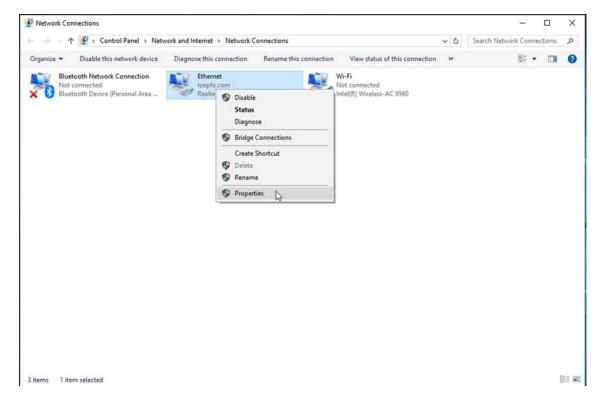
- 1. Open Windows > Settings > System > About.
- 2. Under "Device specifications", press «Rename this PC».
 - ⇒ The «Rename your PC» window opens.
- 3. Enter the new server name in the text box, e.g. MMTOPLOEPFE01.



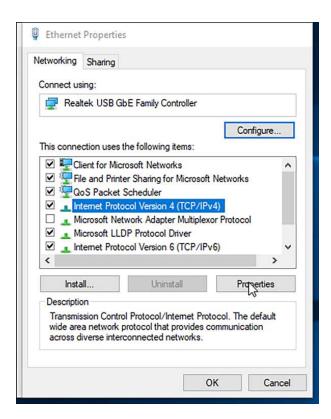
- 4. Press «Next», then confirm with «OK».
 - ⇒ The new server name is saved.
- ⇒ The server name has been changed.

4.5.3 Change network connection properties

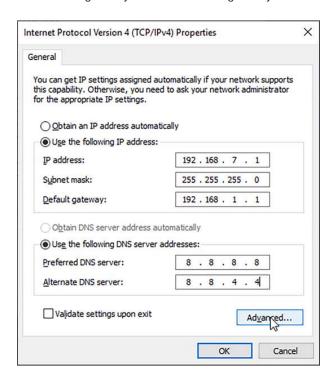
- ✓ See System Requirements [12].
- 1. Open Windows > Settings > Network & Internet > Network connections (Ethernet).
- 2. Open «Change adapter options».
 - ⇒ The «Control Panel > All Control Panel Items > Network Connections» window opens.



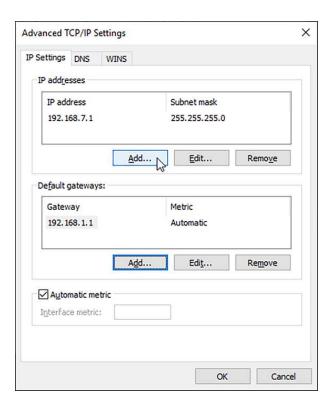
- 3. Open Ethernet > Properties.
 - \Rightarrow The **«Ethernet Properties»** window opens.



- 4. Select «Internet Protocol Version 4» and press the "Properties" button.
- 5. Select the radio button for «General Use the following IP addresses».
- 6. IP Address: Enter the IP address.
- 7. Subnet mask: Enter the subnet mask.
- 8. Default gateway: Enter the default gateway.



If both a machine network and a local network are present, press «Advanced...» to enter additional IP addresses for these networks.



- 10. Press «OK».
 - \Rightarrow The properties are saved.
- ⇒ The changes to the network connection properties are complete.



The server can be added to an existing domain.

4.6 Install MillMaster TOP software

4.6.1 Installation requirements



The MillMaster TOP and LZE-V software versions must be compatible.

The name of the installation file contains the corresponding LZE-V version: Loepfe MillMaster TOP/4.x.xxx.xxx/LZEVxxx.exe.

Mil	lMaster	LZE-V	LZE-III and LZE-II	INF AC338	INF AC5 and X5 and AC6
Version	Compatible		V	ersion	
4.0.10.467	≥ 4.0.10.467	5.7.16200.2	— 2.2.4.1	6.29	7.18
4.1.126.493	≥ 4.1.126.493	5.7.16228.4	2.5.0.11 2.5.0.14	6.30 6.31	7.40 7.55
4.3.508.528	≥ 4.3.508.528	5.8.xxxxx.x	2.3.0.14	0.31	7.55
4.4.xxx.xxx	≥ 4.4.xxx.xxx	5.8.xxxxxxx			

Table 5: MillMaster und LZE versions

4.6.2 Installation

- ✓ The computer is connected to the Internet.
- ✓ Anti-virus software is turned off during installation.
- ✓ The following Microsoft software should be installed, or is installed during the installation:
 - NET Framework 4.X.X
 - PostgreSQL
 - Internet Explorer 11
 - GoToAssist
- 1. Copy the Loepfe MillMaster Server Setup.exe file to the server.
- 2. Double-click on the Setup.exe file to open it.
 - ⇒ The «Loepfe MillMaster TOP Setup» window opens with the list of prerequisites.
- 3. Press «Next».
 - ⇒ Any missing software is installed.
- 4. Follow the remaining instructions.
 - \Rightarrow The «Welcome to the Loepfe MillMaster TOP Setup» wizard opens.
- 5. Follow the remaining instructions.
 - ⇒ The Loepfe MillMaster TOP Service opens.
- 6. Select the radio button for «Standard Loepfe MillMaster TOP Service User».



- 7. Press «Accept».
- 8. Follow the remaining instructions from the wizard.
 - ⇒ When the message **«Loepfe MillMaster TOP installed successfully»** appears, the installation is complete.
- 9. Close the wizard.
- ⇒ The Loepfe MillMaster TOP software is now installed.

4.6.3 Install additional client computers

The software can be installed on 3 additional client computers. Their IP addresses and computer names must be entered in the host file on the client computers and on the server.

Situation	Action	
Network with DNS server	The IP address and hostname are added automatically.	
Network without DNS server	Add the IP address and hostname to the server's host file.	
2 network cards with fixed IP addresses	Add both IP addresses and both hostnames to the server's host file.	

Table 6: Install client

1. In Windows Explorer, go to Windows\System32\drivers\etc to locate the host file.



- 2. Copy the file.
- 3. Open the copied file.
 - ⇒ The IP address 127.0.0.1 and the hostname "localhost" are already present.
- 4. Enter IP address and computer name.
- 5. Save file. «File > Save.»
- 6. Save the file in the etc folder.
- 7. Open a command prompt.
- 8. At the cursor, type "ping" and the client IP address.



- 9. Press Enter to confirm.
 - ⇒ The ping utility runs.
- ⇒ The result appears directly in the window.



4.6.4 Install MillMaster TOP Client

- ✓ The client computer is connected to the Internet.
- 1. Open a web browser, e.g. Internet Explorer.
- Enter http://ComputerName/mminstall/ in the address bar, e.g. with MMTOPLOEPFE01 for ComputerName.
- 3. Press Enter to confirm.
 - ⇒ The Loepfe MillMaster TOP Client Installation window opens.
- 4. Press «Download» to start the download.



- ⇒ If necessary, the .NET Framework 4.X.X software will be installed or updated.
- \Rightarrow The Loepfe MillMaster TOP FullClient icon is displayed on the screen.
- ⇒ The MillMaster TOP Client (Loepfe BDE Client) is installed.

5 Operation

5.1 Operational design

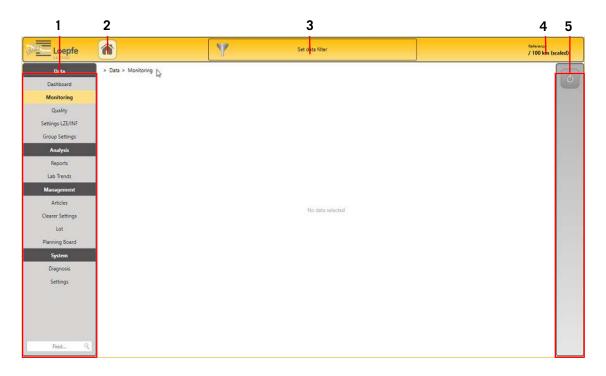
5.1.1 User interfaces

The software consists of two user interfaces, the Room view and the Main view. In the Room view, production data is displayed directly from the LZE central units, providing a quick overview of ongoing production. The Main view displays production data with detailed views, information and analyses; this is also where data administration and system settings are managed.

Description		
The software can be controlled with a mouse and keyboard. The keyboard commands are the standard Windows keyboard commands. There are no restrictions on the use of the mouse.		
Users can use the mouse and keyboard to interact with the main menu, as well as the title bar, main menu bar, function bar and data display area.		
Tooltips (mouseover text) show a description of a user-interface element. They appear when the user lets the mouse pointer hover briefly over the element without moving it.		
Scrolling by swiping with one finger is only available on mobile devices.		
The combo box allows users to choose from multiple options, or to enter the own data.		
The context menu contains context-specific functions that are important for current content. Right-click to open.		
The function button area contains context-specific buttons which are hidden marked as inactive (grayed out) if they are not needed for the current conter		
The Room view, with title bar, register and the connected machines, can be operated with the mouse.		
A checkbox is used to enter and display yes/no decisions. They can be combined into checklists with multiple options.		
A selection menu is a dropdown list in which one or more values/options can be selected.		
Radio buttons are used to enter and display a single selection from among several options.		
Certain menus have an accompanying video that provides UI help for a par ular topic.		

Table 7: User interface control elements

Main view and Room view



Main view

- 1 Main menu
- 2 Switch to Room view
- 3 Data filter

- 4 Reference display, for 100 or 1000 km
- 5 Function buttons

Main menu	
Data	
Dashboard	Quick overview of the most important data in graphic and numeric form
Monitoring	Overview of all events in numeric form
Quality	Overview of classification and yarn quality in graphic form
Settings LZE	Overview of settings for LZE central units and clearers, and synchronization of settings
Group settings	Overview of settings for the group

Analysis	
Reports	Configure and generate report
Trend	Production data for a given time period presented as a line chart
Lab Trends (optional feature)	Compare production units (machines) over a period of time
Management	
Articles	Add and edit articles
Clearer settings	Add and edit clearers
Lot	Add and edit lots
Planning board	Manage current production
System	
Diagnosis	Overview of the (active) system
Settings	Local system settings

Table 8: Explanation of the Main view



The software always opens with the overview of the Room view.



Room view

- 1 Switch to Main view
- 2 Room view tabs
- 3 Filter for rooms
- 4 Edit Room view
- 5 Online help

- 6 Select language
- 7 Login/Logout
- 8 Other rooms
- 9 Switch to other rooms

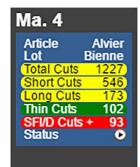
Room view	
Machines	Overview of connected machines (production units)
Groups	Overview of groups
Lot	Overview of assignments
Forecast	Overview of current production runs
Status	Overview of spindle status (diagram)
Rooms	Production units (machines) in other rooms



Non-link machine, consists of one or more groups



Link machine, consists of only one group



Information from a machine

Display and presentation are set in Settings > Machines, e.g.

- Machine number
- Background color, e.g. gray
- Symbols indicate the machine's state:



Group settings changed



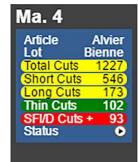
Clearer settings changed



Note



No connection to machine



Information for a group

The basic data and presentation are set in the Lot menu, e.g.

- Article name
- Lot name
- Background color, e.g. blue
- Monitoring of data points
- The "Status" field shows the production status:



Production is ongoing



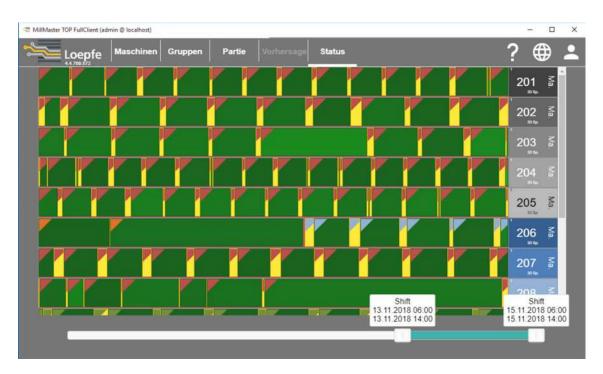
Production is paused



Production is stopped

Table 9: Explanation of Room view

Room view > Status



Example of Room view > Status

The *Status* tab in the Room view shows all spindles for all machines. All shifts for the current day are shown. The slider at the bottom of the screen can be used to change the time period being viewed. Up to 7 days back, or 42 shifts. The production area of each spindle/machine is represented by a colored bar that indicates different production statuses. See Table 10. For the **Production** status, more winding in production is represented by increasingly darker shades of green. For the **Production not planned** status, a color gradient is used. Spindles that belong to the same group are shown together in a block. Current production data can be displayed in the tooltip.

Color	Production status	Meaning
	Production	Machine is running
	Production not planned	Lot not planned
	Pause	Machine temporarily stopped
	Stop	Not in production.
	Unknown	Data not available for spindle range

Table 10: Status in Room view

Function buttons



Online help



Search



Save / Confirm



Cancel / Discard



Edit settings



Add setting



Delete setting



Update data



Zoom in (month/week/day/shift)



Zoom out



Show scan result



Duplicate settings



Open Clearer Setting Assistant



Complete lot



Cancel alarm



Send settings to machine



Restore lot



Synchronize lot data



Export status report



Generate lab report



Automatic repair



Add pause



Synchronize time



Add user



Delete user



Change password



Remote connection



Print report



Export report to Excel



Start video

5.1.2 Data filters and edit window

Create data filters

There are two ways to create a data filter:

- using data and analysis in the main menu, or
- directly with the «Set data filter» button.

Create data filters, report filters and trend filters in Main menu > Data

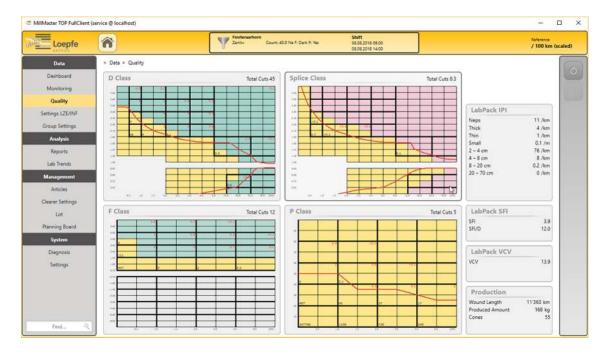
- ✓ The software has been started up and connected with the machine's LZE.
- ✓ The Main view is open.
- 1. In the main menu, open Data > Dashboard, Monitoring or Quality.
 - ⇒ The «Production data filter» window opens.



- 2. Search for a machine, in the list or using the search field.
- 3. Select time period (month, week).
- 4. Press to open selection for the week.
- 5. Select time period (week, day).
- 6. Press to open shift selection.
- 7. Select time period (day, time).
- 8. Press your selection to open the shift.



- ⇒ The desired shift is displayed, e.g. with quality data.
- 9. Select a data window, e.g. D-Class, to open more detailed views.
 - ⇒ The data window is shown in graphic form and with values.



- 10. In the main menu, open Data > Settings LZE to switch to a different menu.
- ⇒ The data filter is created.

Create data filters, report filters and trend filters with "Set data filter"

Prerequisites

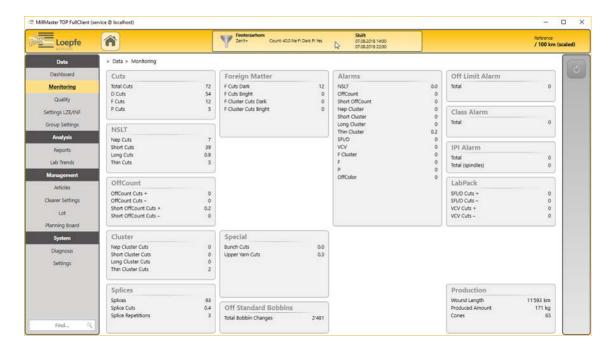
- ✓ The software has been started up and connected with the machine's LZE.
- ✓ The Main view is open.
- 1. Press «Set data filter».



⇒ The «Production data filter» window opens.



- 2. Search for a machine, in the list or using the search field.
- 3. Select time period (month, week).
- 4. Press to open selection for the week.
- 5. Select time period (week, day).
- 6. Press to open shift selection.
- 7. Select time period (day, time).
- 8. Press your selection to open the shift.
 - ⇒ The desired shift is shown, e.g. with monitoring data.



- 9. Select a data window to open more detailed views.
 - ⇒ The data window is shown in graphic form and with values.
- 10. In the main menu, open Data > Quality to switch to a different menu.
- ⇒ The data filter is created.

Edit window in the Main view

Various windows have a fixed editing time of 10 minutes in edit mode, to prevent multiple people from making changes to the same menu at the same time. The editing time starts when the window is opened, and continues for 9 minutes until the user is asked whether they want to continue working.

Symbol	Description	
Lot marked in green	Current production runs with all production data	
Lot marked in gray	Completed production runs	
O	Select year, month, week, day and shift (time of day) to restrict the time period for production data.	
✓	Shift selected	
	Clearer settings have changed	
e	The production data could not be precisely assigned to this shift. The data will be shown in the next shift.	
	The Room view, with title bar, register and the connected machines, can be operated with the mouse.	

5.2 System startup

5.2.1 Start and configure software

This menu is used to log in, register, set the user interface language, and start the software.

- 1. Start the software.
 - ⇒ The Room view opens.
 - ⇒ The login window opens.

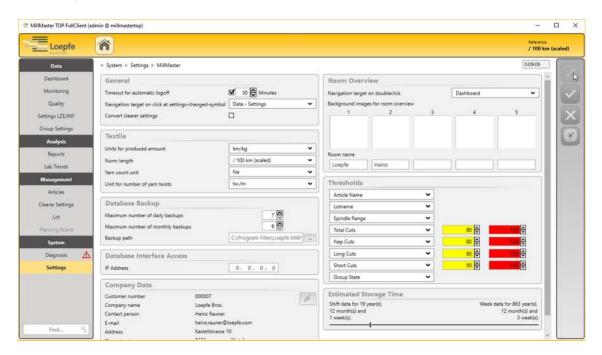


- 2. Enter the username (admin) and password (Admin1).
 - ⇒ The «Registration» window (for support services) opens.
- 3. Enter the requested information in the text boxes, using the (six-digit) Customer Number given in the delivery documents.
- 4. Press 🌐
 - ⇒ The «Language» window opens.
- 5. Select your language.
- 6. Confirm with «OK».
 - ⇒ The language changes.
- ⇒ The Loepfe MillMaster TOP software is started.

5.2.2 Configure MillMaster (TOP server)

This menu is used to modify the settings for the system and the server.

- 1. In the main menu, open System > Settings > MillMaster.
 - ⇒ The menu opens.
- 2. Press
 - ⇒ The menu is activated and can be edited.
- 3. Change data if necessary.



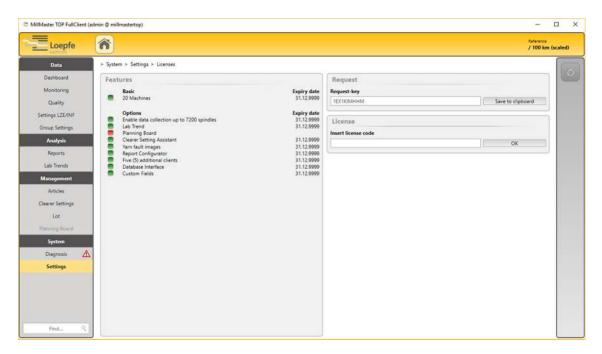
- 4. Press 🗸
 - ⇒ The data is saved.
- ⇒ The changes are activated and recorded.

5.2.3 Activate licenses and options

This menu can be used to enhance the software with options.

Prerequisites

- ✓ The Loepfe.BDE.LicenseGenerator program has been installed.
- ✓ The request key is available.
- 1. In the main menu, open System > Settings > Licenses.
 - ⇒ All active and inactive options are listed under Functions.



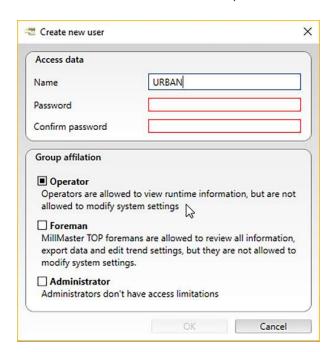
- 2. Copy the request key shown under "Request" to the clipboard.
- 3. Open the Loepfe.BDE.LicenseGenerator program.
- 4. Paste in the request key.
- 5. Select the desired option(s).
 - ⇒ The license key is created.
- 6. Enter the license key in the text box and confirm with «OK».
- ⇒ The desired option is activated.

5.2.4 Add user

Depending on their responsibilities, users can be assigned to one of three specified user levels. The following table lists these user levels, which are active with the associated usernames after initial startup.

User level Group affiliation Group/Role	Username	Password	Permissions
Operator	operator	Operator1	View data Create reports View Trends View Management View System > Diagnosis View System > Settings
Foreman	foreman	Foreman1	View all data and information. Export data Create reports Edit Trends Edit and add to Management Edit System > Settings > Machines Edit System > Settings > MillMaster Edit System > Settings > Shift calendar View System > Diagnosis View System > Settings
Administrator	admin	Admin1	No restrictions

- 1. In the main menu, press System > Settings > User management.
 - ⇒ The User Management menu opens.
- 2. Press 🔁 .
 - ⇒ The «Create new user» window opens.



- 3. Enter login credentials in the text boxes.
- 4. Set the group affiliation/user level.
- 5. Confirm with «OK».
 - ⇒ The data is saved.
- \Rightarrow The user is added.

5.2.5 Configure basic group settings

The group settings are divided into different yarn clearer types.

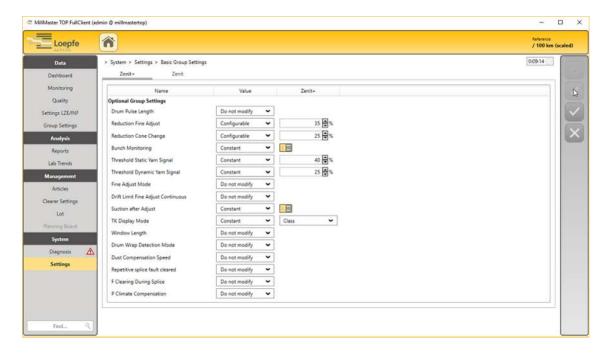
- Zenit⁺
- Zenit
- Spectra



The group settings that are changed at the central unit are displayed in the software. However, these values are not automatically imported by the software.

Values	Properties	
Unchangeable	 Settings from the central unit are automatically imported by the software Not displayed when creating a new lot Central unit settings are not displayed when downloading 	
Constant	 Settings can be entered under group settings, but are not displayed when creating a new lot Central unit settings are copied over when downloading a lot 	
Configurable	 Settings can be entered under group settings They are displayed when creating a new lot and can be modified/changed for this lot Central unit settings are copied over when downloading a lot 	

- 1. In the main menu, press System > Settings > Basic settings.
 - ⇒ The menu opens.



- 2. Select the tab for the desired «yarn clearer type»
- 3. Press .

- ⇒ The menu is activated and can be edited.
- 4. If necessary, enter values in the "Value" column.
- 5. If necessary, modify or remove settings under the yarn clearer type.
- 6. Press
 - ⇒ The data is saved.
 - ⇒ The menu closes.
- ⇒ The changes are recorded.

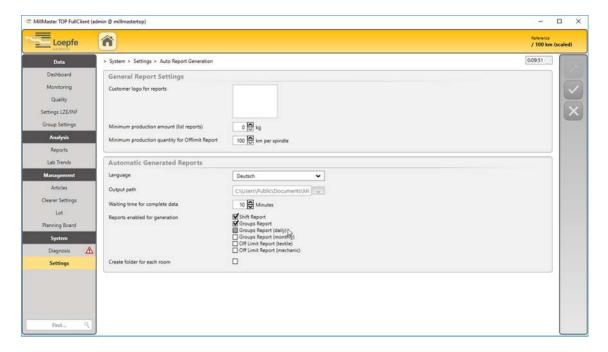
5.2.6 Custom reports

There are two ways to prepare reports: automatically-generated reports by default, or configuring custom reports (optional feature).

Automatic generated reports

The automatic generated reports are a selection of pre-defined reports. The individual customer's logo can be entered in the settings for each report, as well as the minimum production volumes for list reports and OffLimit reports. The user also selects the report language, the directory path, the wait time and the desired reports. Rooms can also be separated into various folders and saved. The reports can then be generated from the main menu under Analysis > Reports and printed out.

- 1. In the main menu, open System > Settings > Generated reports.
 - ⇒ The menu opens.

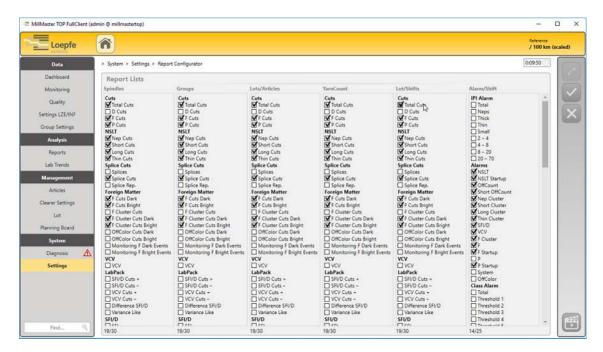


- 2. Press
 - ⇒ The menus are activated and can be edited.
- 3. Under "General report settings", enter the customer logo and production volumes, for example.
- 4. Under "Automatically generated reports", select the language, directory path, wait time and desired reports, for example.
- 5. Press 🗸
 - ⇒ The data is saved.
- ⇒ The changes are recorded.

Custom reports (optional feature)

The report configuration tool is used to create user-defined reports, with the report properties (list reports) set individually in the report settings. The reports can then be generated from the main menu under Analysis > Reports and printed out.

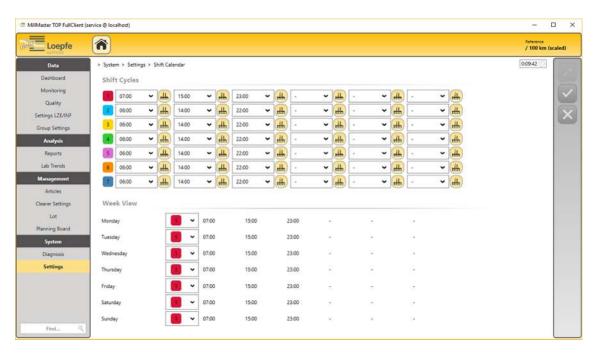
- 1. In the main menu, open System > Settings > Custom reports.
 - ⇒ The menu opens.



- 2. Press .
 - ⇒ The menu is activated and can be edited.
- 3. Under "List reports", modify selections e.g. under Spindles, Groups, Article/Lot, etc.
- 4. Press
 - ⇒ The data is saved.
- ⇒ The changes are recorded.

5.2.7 Add and edit shift calendar

- 1. In the main menu, press System > Settings > Shift calendar.
 - ⇒ The Shift calendar overview opens.



- 2. Press
 - ⇒ The menu is activated and can be edited for the specified editing time.

Shift calendar	Properties	
Shift cycles	 set a maximum of 7 different shift cycles set a maximum of 3 user-defined shifts per day a shift may last up to 12 hours max time can be set in 15-minute increments 	
Week view	Choose the desired distribution: distribute shift cycles over an entire week or one shift cycle can be assigned multiple times	

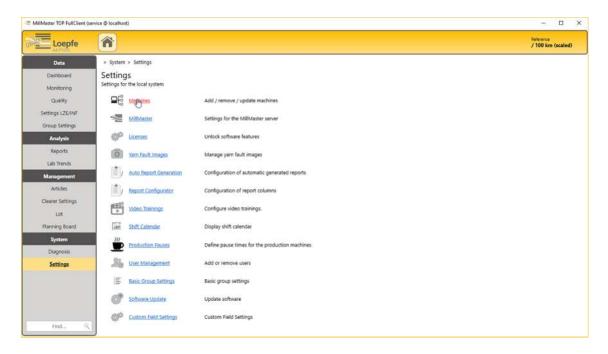
5.2.8 Connect and add machines

This menu is used to connect machines to the software and add them.

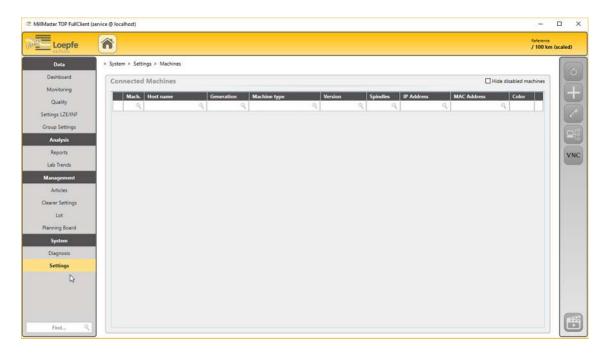
1. Press the Loepfe company logo.



- \Rightarrow The Main view opens.
- ⇒ No data are displayed because no data have been added yet.
- 2. In the main menu, open System > Settings > Machines.



- ⇒ The *Settings > Connected machines* menu opens.
- ⇒ No data are displayed because no data have been added yet.



- 3. Press □€ .
 - \Rightarrow The **«Found machines»** window opens.



- ⇒ All winding machines with LZE-V and Informators and that are connected to the data system are displayed.
- ⇒ Note: Use the **«Search for LZE-III»** button to search for winding machines with LZE-III units.
- \Rightarrow If no machines are shown, add them manually or check the connection data.
- 4. Select the desired machine and press «Connect».
 - ⇒ The **«Connect to new machine»** window opens.



- 5. Enter values in the input fields, making sure to fill in the machine parameters and sections.
- 6. Press «Add section».
 - ⇒ The machine is connected to the software.
- 7. Check that the desired machine is listed in the menu.
- ⇒ The desired machine has been added.

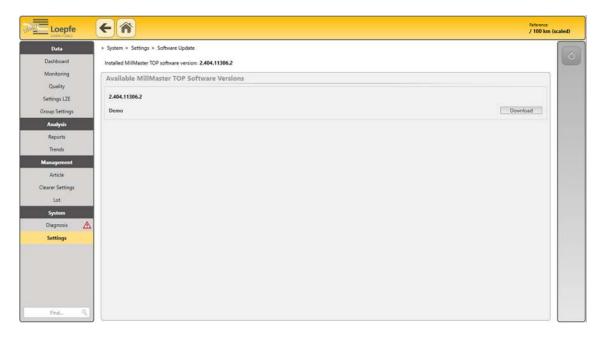
Symbol	Machine statuses	Meaning
	Reachable	Unrestricted communication with the data system
	Reachable	Cannot communicate with machine because data transfer has not yet occurred or because multiple different configurations are present.
	Not reachable	Communication with data system interrupted

Table 11: Machine statuses

5.2.9 Update software

Prerequisites

- ✓ The update service is reachable.
- 1. In the main menu, press System > Settings > Software update.
 - ⇒ The menu opens.



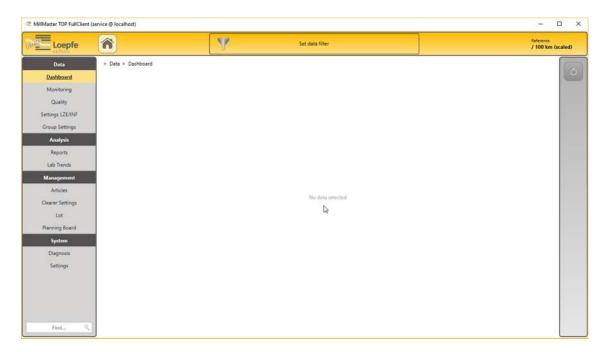
- 2. Select the software version.
- 3. Download the desired version.
- 4. Double-click on the Setup.exe file to open it.
 - ⇒ The «Loepfe MillMaster TOP Setup» window opens with the list of prerequisites.
- 5. Press «Next» to start the download.
- 6. Follow the remaining instructions.
 - ⇒ The "Welcome to the Loepfe MillMaster TOP Setup" wizard opens.
- 7. Follow the instructions in the wizard.
- 8. Close the wizard.
- ⇒ The software or an update is now installed.

5.3 Operate the software

Open the Main view

- ✓ The software has been connected with the machine's LZE.
- 1. Start the software.
 - ⇒ The login window opens.
- 2. Enter username and password in the text boxes.
- 3. Press «OK».
 - ⇒ The Room view opens.

- 4. Change the language if necessary.
- 5. Press 🜐 .
 - ⇒ The «Language» window opens.
- 6. Select your language.
- 7. Press «OK».
 - ⇒ The language changes.
- 8. Press the Loepfe company logo.
 - \Rightarrow No data are displayed because no data have been selected yet.
- ⇒ The Main view is open.

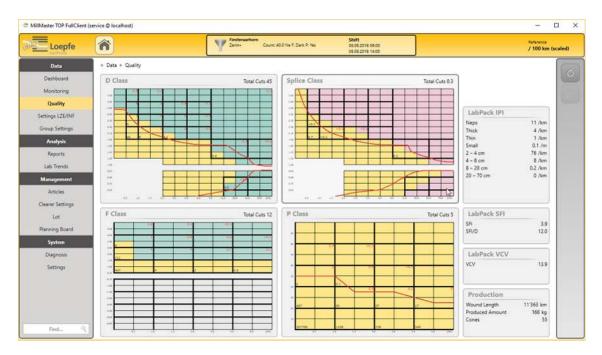


5.3.1 Data

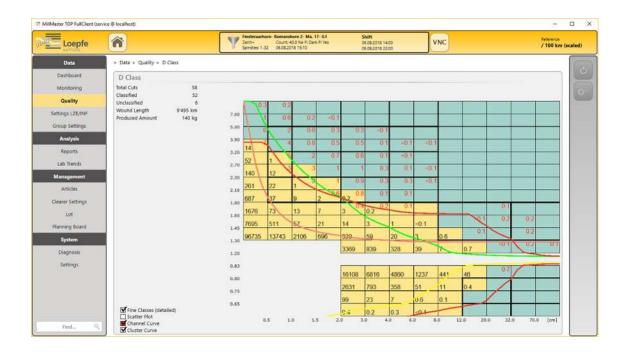
This menu displays the machines' production data in various different overviews, including the Dashboard, Monitoring, and Quality, as well as the settings for the LZE central units and the group settings.

Display overview in Dashboard, Monitoring or Quality

- ✓ The Main view is open.
- √ No data are displayed because no data have been selected yet.
- 1. In the main menu, open Data > Dashboard, Monitoring or Quality.
 - ⇒ The «Production data filter» window opens.
- 2. Search for a machine, in the list or using the search field.
- 3. Select a time period to open the data for a particular shift.
 - ⇒ The desired overview is displayed, e.g. Quality.



- 4. Select a data window to open more detailed views.
- ⇒ The data window is shown in graphic form and with values.

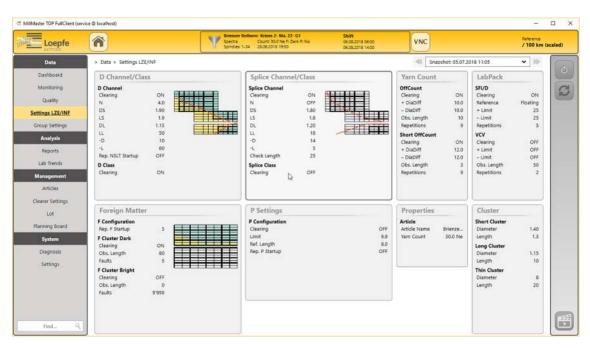


Display LZE settings overview

- ✓ The Main view is open.
- ✓ No data are displayed because no data have been selected yet.
- 1. Press «Set data filter» or open Data > Settings LZE in the main menu.
 - ⇒ The «Production data filter» window opens.



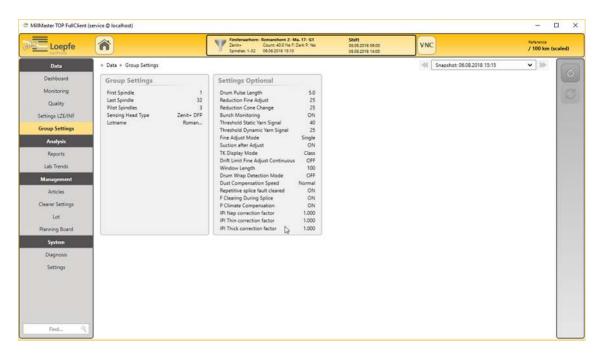
- 2. Search for a machine, in the list or using the search field.
- 3. Select a time period to open the data for a particular shift.
 - $\, \Rightarrow \,$ The LZE settings overview is displayed.



- 4. Select a data window to open more detailed views.
- ⇒ The data window is shown in graphic form and with values.

Display group settings overview

- ✓ The Main view is open.
- ✓ No data are displayed because no data have been selected yet.
- 1. In the main menu, open System > Settings > Group.
 - ⇒ The «Production data filter» window opens.
- 2. Search for a machine, in the list or using the search field.
- 3. Select a time period to open the data for a particular shift.
- ⇒ The group settings overview is displayed.



5.3.2 Analysis

In this menu, production data and clearer settings can be displayed in various pre-defined reports. These reports can be exported or saved as PDF or Excel files, and also printed out. Report features can only be changed with the "Custom reports" option.

Overview of pre-defined reports

Reports	Description
Shift report	At the end of a shift, a shift report is automatically saved for each winding machine.
Lot report	This report shows the production data for the selected lots.
Spindle report	This report shows the production data for each individual spindle for the selected shift.
Group report	This report shows the production data for the groups.
Lot/Article report	This report shows the production data for the selected lots or articles.
Yarn count report	This report shows the production and quality data sorted by article yarn count over the selected time period (max. 30 days).
Shift book report	This report shows the shifts with the production data for the last 4 days.
OffLimit report	This report displays spindles that have exceeded the specified threshold values.
Lot/Shift report	This report shows the production and quality data per shift for the selected lot.
Alarms/Shift report	This report shows all alarm messages for each shift.

Table 12: Pre-defined reports

Open reports with report filter

The Data filters and edit window [▶ 52] section of the Operational Design chapter describes how to open reports with the report filter.

Shift report

- ✓ The report filter window is open.
- 1. At the left, select "Shift report".
- 2. At the right, select the desired report options (display options).
- 3. In the middle, search for an object in the list or using the search field.
- 4. Select a time period to open the data for a particular shift.
 - ⇒ The report is generated and opens.

Lot report

- ✓ The report filter window is open.
- 1. At the left, select "Lot report".
- 2. At the right, select the required pre-defined filters.
- 3. In the middle, search for an object in the list or using the search field.
- 4. Press «OK».
 - ⇒ The report is generated and opens.

Spindle report

- ✓ The report filter window is open.
- 1. At the left, select "Spindle report".
- 2. In the middle, search for an object in the list or using the search field.
- 3. Select a time period to open the data for a particular shift.
 - ⇒ The report is generated and opens.

Group report

- ✓ The report filter window is open.
- 1. At the left, select "Group report".
- 2. At the right, select the required pre-defined filters.
 - Shift filter: select from the last four shifts.
 - Period filter: Set shift period start date and end date.
 - Yesterday filter: All shifts from the previous day.
- 3. Press «OK».
 - ⇒ The report is generated and opens.

Lot/Article report

- ✓ The report filter window is open.
- 1. At the left, select "Lot/Article report".
- 2. Select Articles or Lots filter.
- 3. Search for an object in the list or using the search field.
- 4. Press «OK».
 - ⇒ The report is generated and opens.

Yarn count report

- ✓ The report filter window is open.
- 1. At the left, select "Yarn count report".
- 2. Set shift period start date and end date.
- 3. Select the desired yarn count.
- 4. Press «OK».
 - ⇒ The report is generated and opens.

Shift book

The shift book shows changes that have been made at the LZE central unit.

- ✓ The report filter window is open.
- 1. At the left, select "Shift book".
- 2. At the right, select the required pre-defined filters.
- 3. In the middle, search for a machine (object).
 - ⇒ The report is generated and opens.

The following pre-defined filters are available:

- Changes to clearer settings of the active group
- Changes to group settings of the active group
- Information about the group (Group information), e.g.
 - Lot name,
 - Article name,
 - Material,
 - Group,
 - Spindle range,
 - Starts and stops,
 - Planned spindle range,
 - Download time and target

OffLimit report

The OffLimit report shows spindles with faults in production.

- ✓ The report filter window is open.
- 1. At the left, select "OffLimit report".
 - ⇒ The «OffLimit Configurations and Machines» window opens.
- 2. Press to open existing configurations or
- 3. press to add a new configuration.
- 4. At the right, change the name.
- 5. Enter settings for "Worst", "Percent deviation" and "Standard deviation".
- 6. Select machine and time period.
- 7. Press «OK».
 - ⇒ The report is generated and opens.

Lot/Shift report

- ✓ The report filter window is open.
- 1. At the left, select "Lot/Shift report".
- 2. Search for an object in the list or using the search field.
- 3. Press «OK».
 - ⇒ The report is generated and opens.

Alarms/Shift report

- ✓ The report filter window is open.
- 1. At the left, select "Alarm/Shift report".
- 2. Select date or press «Last shifts».
 - ⇒ The existing shifts are displayed.
- 3. Select the desired shift.
- 4. Press «OK».
 - ⇒ The report is generated and opens.

5.3.3 Trends

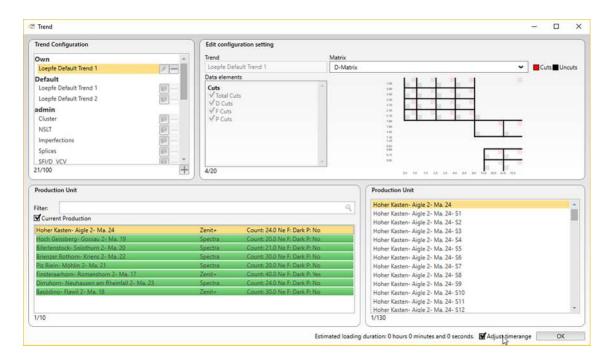
This menu shows production and quality data for the selected period. These data and values are displayed as a trend. Trend reports are compiled and displayed from existing data elements from the Monitoring and Quality menu. The data elements are shown in three different styles, as a line and bar chart and in a table.

Generate trend data filter (Trend configuration filter)

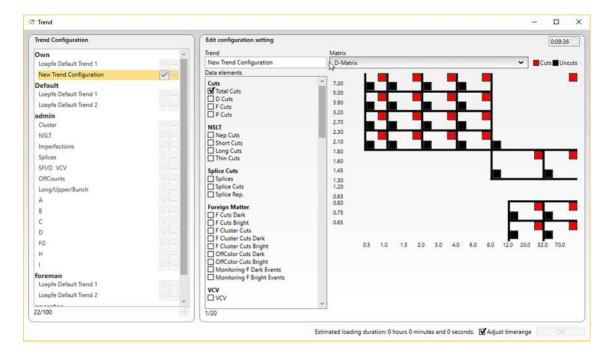


A new or existing trend configuration is always created and edited in the user level currently in use. The data then become visible in any other user level and can be used there.

- ✓ The main menu is open.
- ✓ No data are displayed because no data have been selected yet.
- 1. In the main menu, open Analysis > Trends.
 - \Rightarrow The «Trends» window opens.



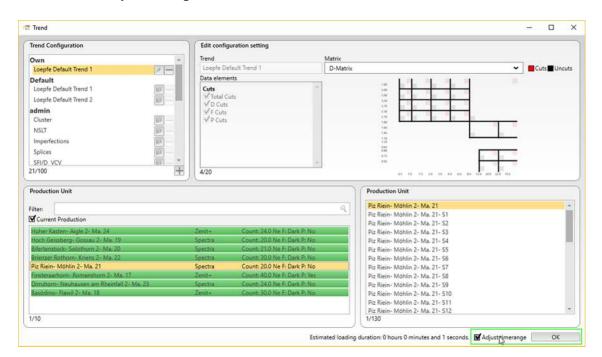
- 2. In **«Trend configuration»**, press to open edit mode.
- 3. Add a «New trend configuration» (max 100/user).
- 4. In **«Edit trend configuration»**, enter the trend name and mark the necessary trend data points (max. 20).



- 5. Confirm with in «Trend configuration».
- ⇒ The trend configuration and the trend data points are saved.

Set trend configuration and production unit

- ✓ The main menu is open.
- ✓ No data are displayed because no data have been selected yet.
- 1. In the main menu, open *Analysis > Trends*.
 - ⇒ The «Trends» window opens.
- 2. Select the desired configuration in «Trend configuration».
- 3. Press volume to modify the configuration if needed.
- 4. Select the desired object/machine under «Production unit».
 - ⇒ If multiple objects/machines are selected, no spindles can be displayed.
 - ⇒ If only one object/machine is selected, all spindles for the selected production unit are displayed.
- 5. Select one or more spindles.
- 6. Check the «Adjust time range» checkbox if desired.



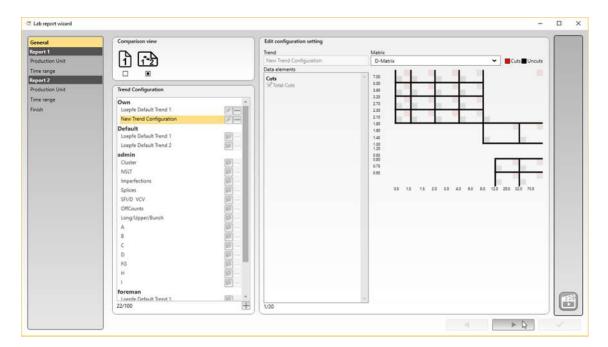
- 7. Press «OK».
 - ⇒ The «Line chart» tab opens.
 - \Rightarrow Additional tabs can be opened with other representations.

Lab trends (optional feature)

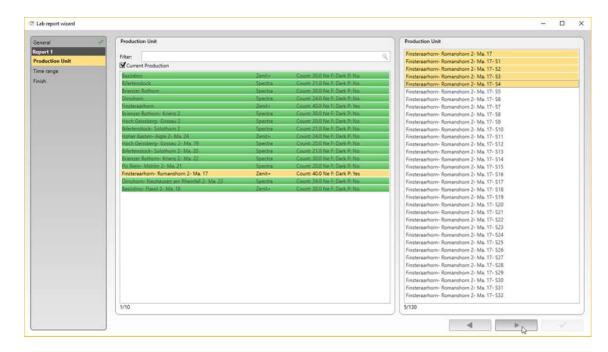
With the "Lab trends" option, reports on individual production units or comparisons of production units can be individually generated and displayed and printed in a combined trend report.

As in the Trends menu, production and quality data for a current time period are also displayed here. Trend reports are compiled and displayed from existing data elements from the Monitoring and Quality menu.

- ✓ The main menu is open.
- ✓ No data are displayed because no data have been selected yet.
- 1. In the main menu, open *Analysis > Lab trends*.
 - \Rightarrow The «Trend» window opens with the «Lab trends» tab.
- 2. Press to create a trend report.
 - ⇒ The wizard opens.
- 3. Select the Comparison view, 1 or 1 <--> 2.
 - ⇒ If you select the 1 <--> 2 Comparison view, a second report appears in the menu at the left.
- 4. Select the desired configuration in «Trend configuration».

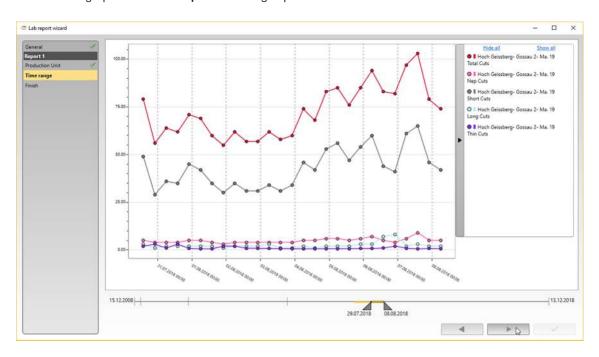


- 5. Press the «arrow».
 - ⇒ The "Production unit" tab opens.
- 6. Select the desired object/machine under $\mbox{\ensuremath{\mbox{\bf `ensuremath{\mbox{\bf desired}}}}$

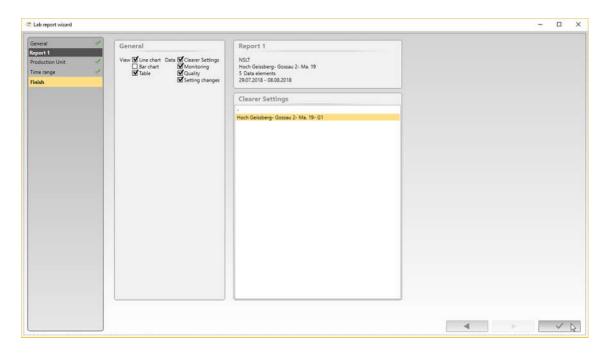


7. Press the «arrow».

⇒ The graph for the **«Time period»** settings opens.



- 8. Select the desired time period on the timeline.
- 9. Press the «arrow».
 - ⇒ The overview of the selected trend reports opens.
- 10. Make changes to the trend reports.



- 11. Press the «checkmark» button.
 - ⇒ The trend report is created and can be printed out.

5.3.4 Management

This menu is used to manage the settings for articles, yarn clearers, and lots, and to transfer them to the machine. Synchronization between the software and the machine also takes place here.

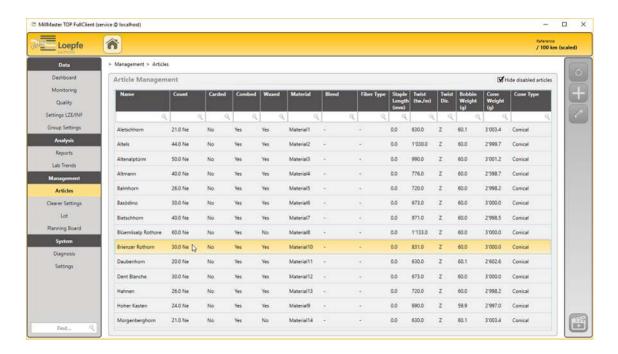
Articles

Prerequisites

- ✓ The Main view is open.
- ✓ No data are displayed because no data have been selected yet.
- 1. Proceed to "Add article" or "Edit article" below.

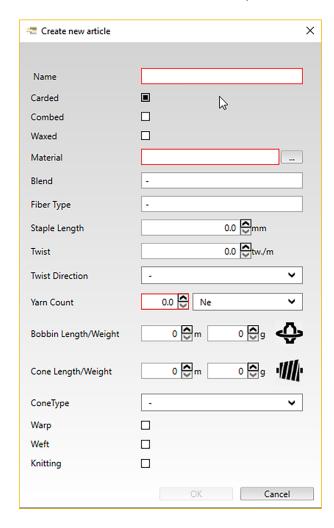
Add article

- 1. In the main menu, open *Management > Articles*.
 - ⇒ The "Article management" menu opens.



2. Press + .

 \Rightarrow The **«Create new article»** window opens.



3. Enter settings in the input fields and selection menus, and edit values.

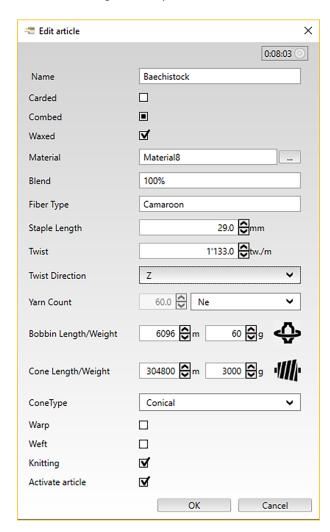
- 4. Press «OK».
 - ⇒ The new article is saved.
- ⇒ The article has been added.

Edit article



The article name can be changed in the Clearer settings [▶ 82] menu.

- 1. In the main menu, open *Management > Articles*.
 - ⇒ The "Article management" menu opens.
- 2. Search for a machine, in the list or using search fields.
- 3. Press .
 - ⇒ The «Edit article» window opens.
- 4. Enter settings in the input fields and selection menus, and edit values.



- 5. Press «OK».
 - ⇒ The data is saved.
- ⇒ Article editing is complete.

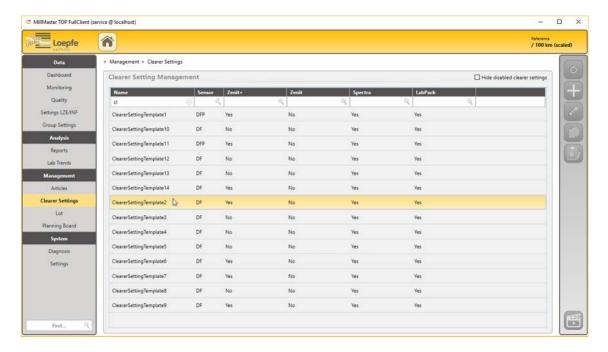
Clearer settings

Prerequisites

- ✓ The Main view is open.
- √ No data are displayed because no data have been selected yet.
- 1. Proceed to "Add clearer settings" or "Edit clearer settings" below.

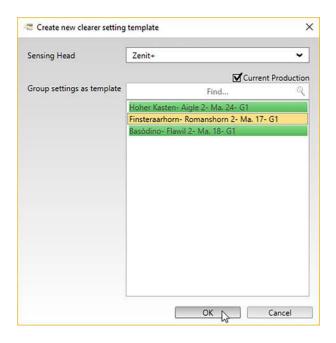
Add clearer settings

- 1. In the main menu, open *Management > Clearer settings*.
 - ⇒ The "Clearer setting management" menu opens.



- 2. Press .
 - ⇒ The «Add new clearer setting to template» window opens.
- 3. Select the sensing head and group settings.

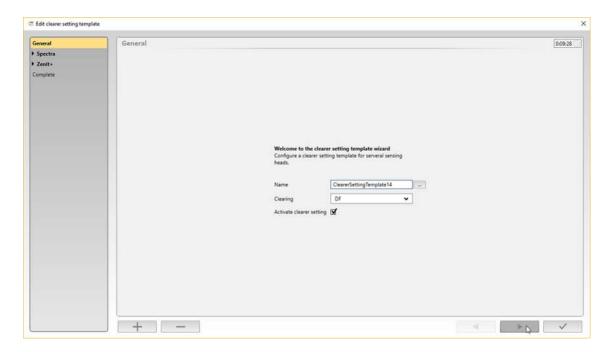
83



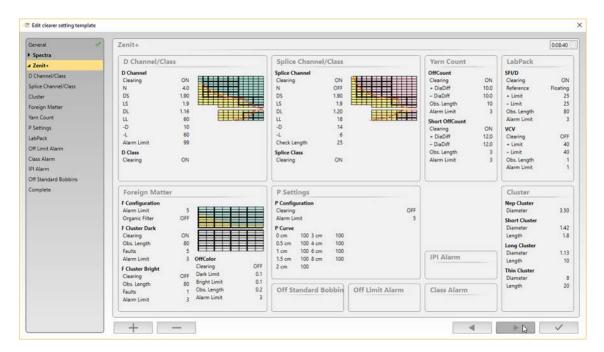
- 4. Press «OK».
 - ⇒ The wizard opens.
- 5. Enter a name for the clearer and select the desired clearing type.
- 6. Press the «arrow» to move on to the next setting.
 - ⇒ Continue to follow the wizard's instructions.
- 7. Confirm with the «checkmark» button.
 - \Rightarrow The changes are saved.
 - ⇒ The Synchronization menu opens.
- 8. Perform synchronization or close the menu.
- ⇒ The clearer has been added.

Edit clearer settings

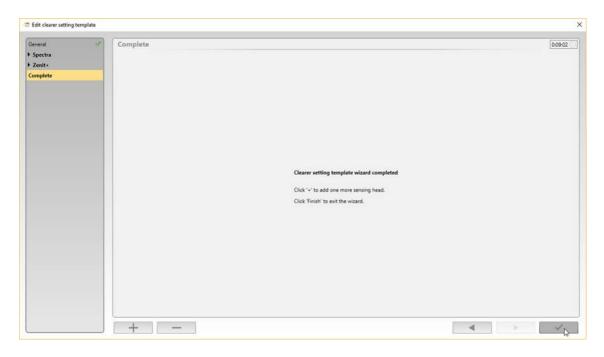
- 1. In the main menu, open Management > Clearer settings.
 - ⇒ The "Clearer setting management" menu opens.
- 2. Search for a clearer, in the list or using search fields.
- 3. Press of to edit a clearer.
 - ⇒ The "Edit clearer setting template" window opens.



- 4. If necessary, make changes to the name of the clearer and the desired clearing type.
- 5. If necessary, tick the "Clearer setting" checkbox.
- 6. Choose the clearer type in the menu at the left.
 - ⇒ The clearer settings overview opens.
- 7. Open and edit the desired settings.



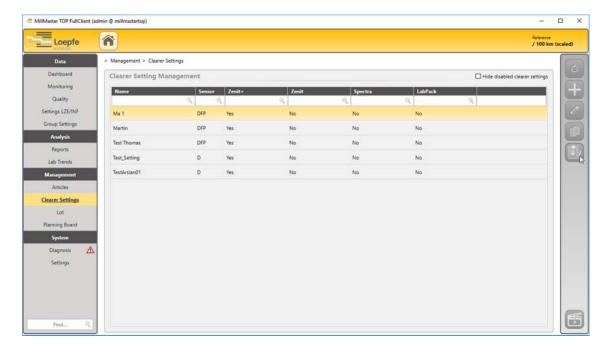
- 8. Press the «arrow» to move on to the next setting.
- 9. Confirm with the «checkmark» button.

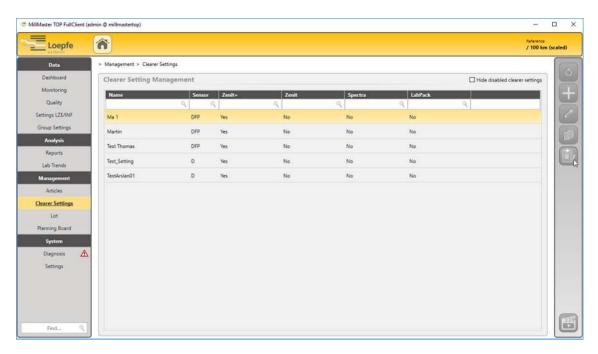


- ⇒ The data is saved.
- ⇒ The Synchronization menu opens.
- 10. Perform synchronization or close the menu.
- ⇒ The clearer settings are recorded.

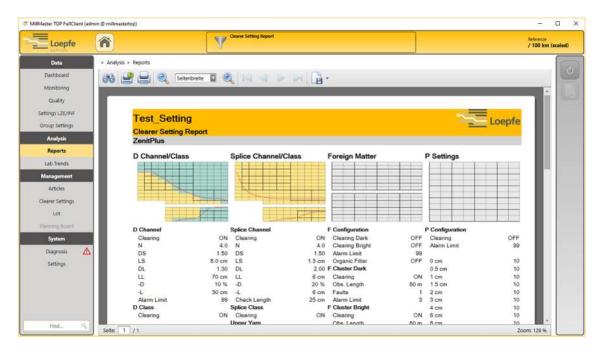
Print clearer settings report

- 1. In the main menu, open Management > Clearer settings.
 - \Rightarrow The "Clearer setting management" menu opens.
- 2. Search for a clearer, in the list or using search fields.



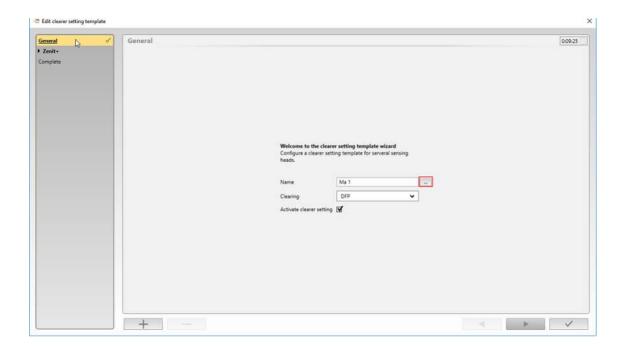


- 3. Press
 - ⇒ The report is generated and opens.
- 4. Press to print the report.
- \Rightarrow The report is printed.

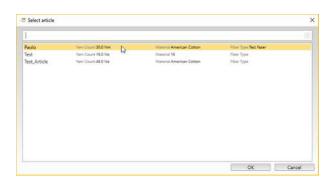


Change article name

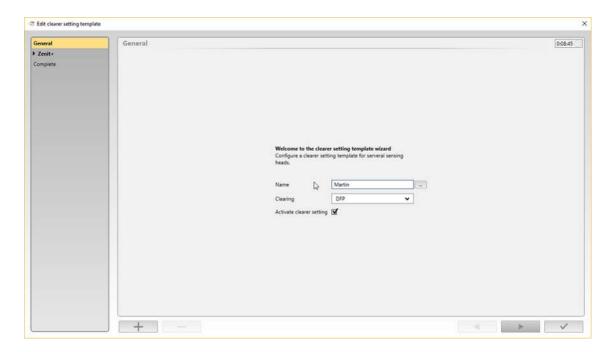
- 1. In the main menu, open Management > Clearer settings.
 - ⇒ The "Clearer setting management" menu opens.
- 2. Search for a clearer, in the list or using search fields.
- 3. Press to edit a clearer.
 - ⇒ The "Edit clearer setting template" window opens.
- 4. Press the button next to the name of the clearer.



- \Rightarrow The "Select article" window opens.
- 5. Select an article.



- ⇒ The window closes.
- ⇒ The article name is shown in the Name field.
- 6. Change the name.



- 7. Confirm with the «checkmark» button.
- \Rightarrow The article name has been changed.

Lot

Prerequisites

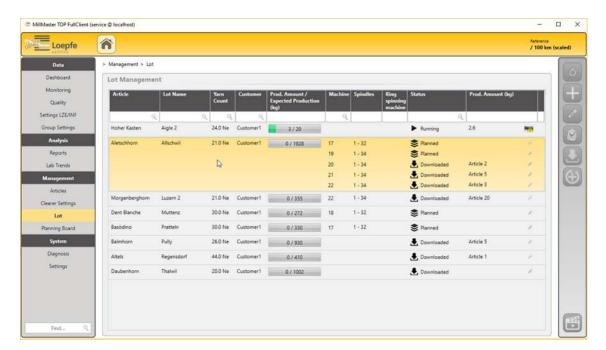
- ✓ The Main view is open.
- ✓ No data are displayed because no data have been selected yet.
- 1. Proceed to "Add lot" or "Edit lot" below.



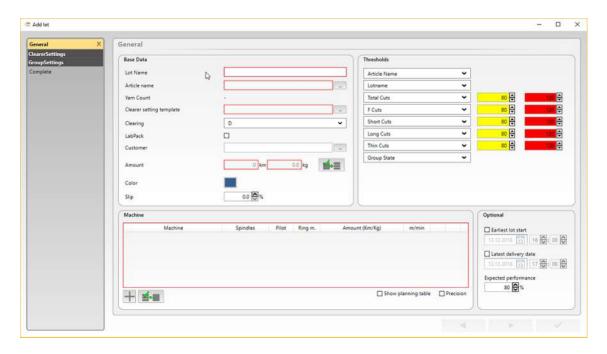
Double-click on the lot to show details. Double-clicking on another lot will hide these details again.

Add lot

- 1. In the main menu, open *Management > Lot*.
 - ⇒ The "Lot management" menu opens.



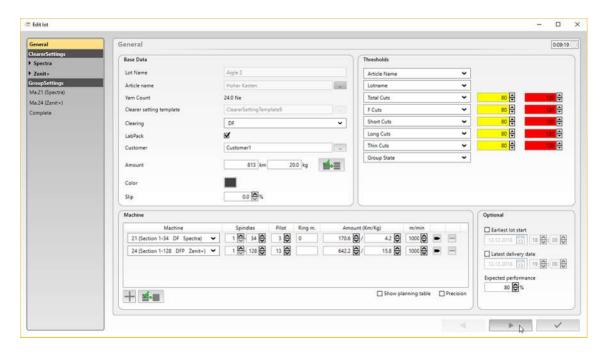
- 2. Press + .
 - ⇒ The «Add Lot» window opens, with the General menu.



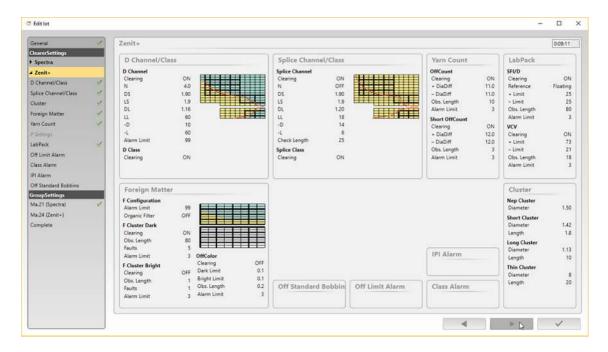
- 3. Edit the fields marked in red under "Basic data".
- 4. You may also enter other information, e.g. the color of the cops bobbin or cone bobbin.
- 5. Under «Machines», press to add a clearer.
- 6. Choose "Machine with clearer".
- 7. Enter other information, e.g. the numbers of one or more ring spinning machines 1, 3-5.
 - ⇒ A clearer, e.g. Zenit, is added in "Clearer settings" in the menu at the left.
- 8. In «Group settings», add the machine's basic settings.
- 9. In «Thresholds and data points», enter and select the necessary values.
- 10. If necessary, enter values under Optional.
- 11. Confirm with the «checkmark» button.
 - ⇒ The data is saved.
- ⇒ The clearer/lot has been added.

Edit lot

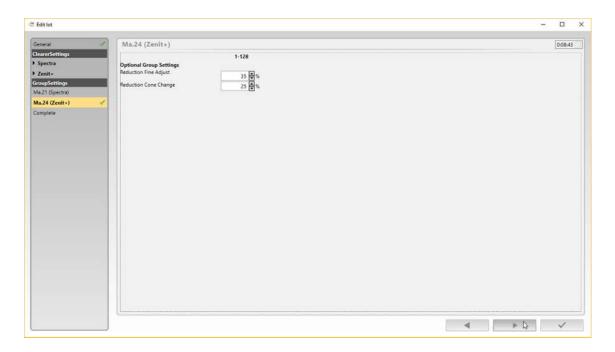
- 1. In the main menu, open Management > Lot.
 - ⇒ The "Lot management" menu opens.
- 2. Search for an article/lot, in the list or using search fields.
- 3. Press
 - ⇒ The «Edit lot» window opens, with the General menu.



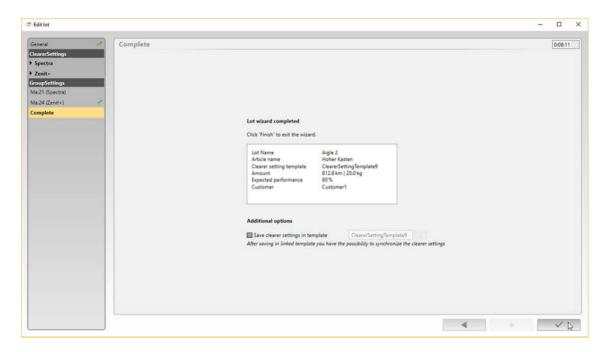
- 4. If necessary, enter values under General.
- 5. Choose the clearer type under «Clearer settings» at the left.
 - ⇒ The clearer settings overview opens.



- 6. Press the «arrow» to open the necessary settings.
- 7. Edit the settings.
- 8. Press the «arrow» to move on to the next setting.
- 9. If necessary, edit the machine's basic settings under «Group settings».



- 10. Press the «arrow» to move on to the next basic setting.
- 11. Confirm with the «checkmark» button.
 - \Rightarrow The «Finish» window opens.



- 12. Review the settings.
- 13. Tick the «Additional options» checkbox to save the clearer settings as a template.
- 14. Confirm with the «checkmark» button.
 - ⇒ The data is saved.
 - ⇒ The menu closes.
- ⇒ The Lot settings are recorded.

Planning board (optional feature)

This menu provides an overview of the production status of all machines and their lots that were previously created in the Lot menu. Current production data can be displayed in tooltips, and productions can be stopped, changed and moved, and pauses can be added.

Add and edit planning board

Prerequisites

- ✓ The Main view is open.
- ✓ Data have already been entered in the Lot menu.
- 1. In the main menu, open Management > Planning board.
 - ⇒ The "Planning board" menu opens.
- 2. Press
- 3. Press +
 - ⇒ The «Add lot» window opens, with the General menu.
- Follow the additional instructions as described in the Lot [▶ 89] management chapter under «Add lot» and «Edit lot».
- 5. Confirm with the «checkmark» button.
 - ⇒ The data is saved.

Add pause

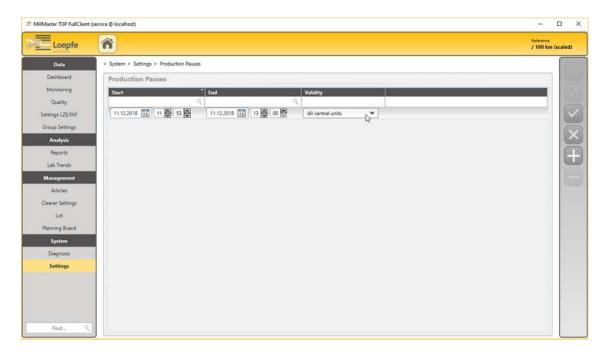
Prerequisites

- ✓ The Main view is open.
- ✓ Data have already been entered in the Lot menu.
- 1. In the main menu, open *Management > Planning board*.
 - ⇒ The "Planning board" menu opens.
- 2. Press
- - ⇒ The «Add pause» window opens.
- 4. Machine: Select a machine.
- 5. Duration: Select the length of the pause.
- 6. Press «OK».
 - ⇒ The pause is shown on the planning board.
- 7. Confirm with the «checkmark» button.
 - ⇒ The data is saved.

Add production pauses

- 1. In the main menu, open System > Settings > Production Pauses.
 - ⇒ The menu opens.
- 2. Click .
 - ⇒ The menu is activated and can be edited.
- 3. Click
 - ⇒ The Start, Until, and Valid For fields open.
- 4. In the Start column, open the calendar.

- 5. Select a date and time.
- 6. In the **Until** column, open the calendar.
- 7. Select a date and time.
- 8. In the Valid For column, select Machine from the selection menu.



- 9. Confirm with .
 - ⇒ The data is saved.
- ⇒ The changes are activated and recorded.

5.3.5 System

In this menu, users can review the status of the system and configure the system settings. Licenses and options are also managed in this menu.

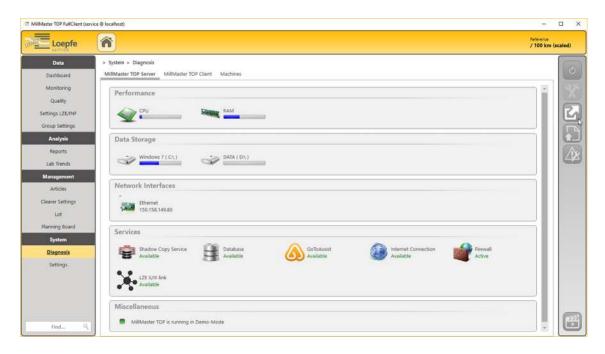
The following system settings were described earlier in the "System Startup" chapter.

- Configure MillMaster (TOP server) [> 56]
- Activate licenses and options [57]
- Custom reports [> 60]
- Add and edit shift calendar [> 62]
- Configure basic group settings [▶ 59]
- Update software [▶ 65]

Diagnosis

In the Diagnosis section, a current overview is displayed as a diagnostic report and as a logfile dump, both of which can be exported.

- 1. In the main menu, press *System > Diagnosis*.
 - ⇒ The Diagnosis menu opens.

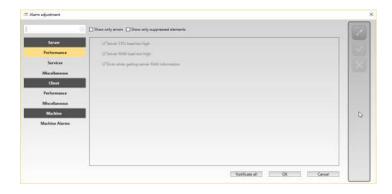


- 2. Select the desired tab: «Server, Client or Machine».
- 3. Press (Diagnostic report).
 - ⇒ A «Windows File Explorer» window opens.
- 4. Locate the directory in which you want to save the diagnostic report file.
- 5. Press «Save».
 - ⇒ The file is saved.
- ⇒ The file is saved and can then be emailed to the Loepfe Customer Support and Services team at service@loepfe.com.

Alarm settings

This menu can be used to change the alarm settings.

- 1. In the main menu, press *System > Diagnosis*.
 - ⇒ The Diagnosis menu opens.
- 2. Select the desired tab: «Server, Client or Machine».
- 3. Press 🛝 .
 - ⇒ The «Alarm settings» window opens.



- 4. Press
- 5. Configure alarm settings for the server, client and machines.

- 6. Press 🗸
 - ⇒ The data is saved.
- ⇒ The changes are activated and recorded.

Settings

red

Edit machines

Machine is unreachable. The connection between MillMaster TOP and the machine is broken.

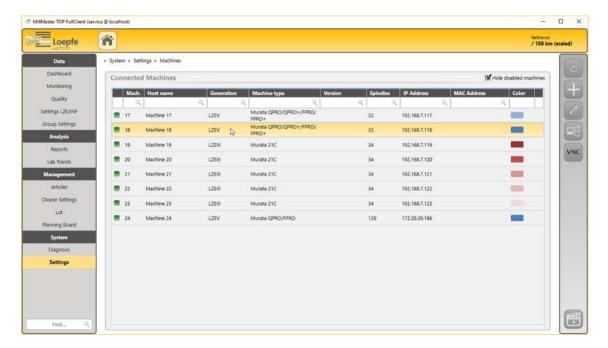
However, the software cannot communicate with the machine be-

yellow Machine is reachable. cause data transfer has not yet occurred or because multiple differ-

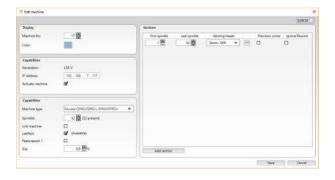
ent configurations are present.

green Machine is reachable. The connection between MillMaster TOP and the machine is OK.

- 1. In the main menu, open *System > Settings > Machines*.
 - ⇒ The Settings > Connected machines menu opens.



- 2. Search for a machine, in the list or using search fields.
 - ⇒ If no machines are shown, add them manually or check the connection data.
- 3. Press
 - ⇒ The **«Edit machine»** window appears.



- 4. Edit values in the input fields under «Connection», «Machine Parameters», and «Sections».
- 5. If spindles have been added, press «Add section» to add spindles.
- 6. Press «Save».
 - ⇒ The data is saved.
- ⇒ The changes to the machine are complete.

Fault images

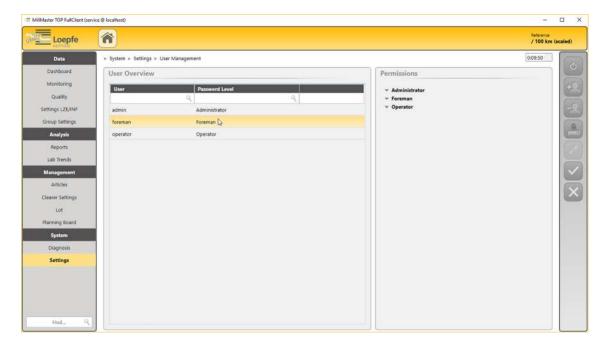
- ✓ New material is being produced.
- ✓ The images for new material are available.
- 1. Open Windows Explorer.
- 2. Select and copy the directory at C:\Program Files\Loepfe MillMaster TOP\4.x.xxx.xxx\Loepfe.BDE.Client \0.0.0.0\YarnFaultDefaultImages.
- 3. Paste the «YarnFaultDefaultImages» folder into another folder.
- 4. Rename the «YarnFaultDefaultImages» folder, e.g. with the name of the new material.
- 5. In the new folder, overwrite the existing images individually, but do not change the filename or format.
- 6. Switch to the «MillMaster TOP» software.
- 7. In the main menu, open System > Settings > Yarn fault images.
 - ⇒ The *Settings* > *Yarn fault images* menu opens.
- 8. Press .
 - ⇒ The menu is activated and can be edited.
- 9. Press in the **«footer»**.
 - ⇒ The «Add Yarn Fault Set» window opens.
- 10. In the "Material selection" menu: Select a material.
- 11. In the "Yarn count" text box: Enter the yarn count.
- 12. In the "Path selection" menu: Find the directory path of the new folder.
- 13. Press «OK».
 - ⇒ The new material is added and the images are imported from the folder.
- 14. Under "Yarn faults", left-click on the image names to check images.

Edit production pauses (optional)

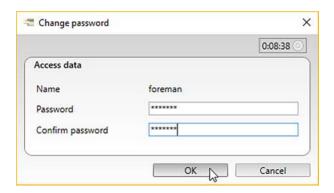
- 1. In the main menu, open *System > Settings > Production pauses*.
 - ⇒ The «Production pauses» menu opens.
- 2. Press
 - ⇒ The menu is activated and can be edited.
- 3. Press
- 4. Search for a machine, in the list or using search fields.
 - ⇒ The Start, Until, and Valid for fields open.
- 5. Edit the values if necessary.
- 6. Press
 - \Rightarrow The data is saved.
- ⇒ The changes are activated and recorded.

Change user password

- 1. In the main menu, press System > Settings > User management.
 - ⇒ The **«User management»** menu opens.



- 2. Search for a user in the list or using the search field.
- 3. Press
- 4. Double click on a user to edit their profile.
 - ⇒ The «Change password» window opens.



- 5. Enter the new password.
- 6. Press «OK».
 - ⇒ The data is saved.
- ⇒ The password has been changed.

6 Service

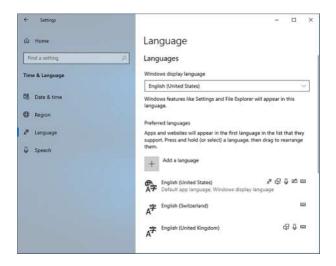
6.1 Support

In order for the support team to be able to use the Windows operating system's user interface in English when support is needed, the operating system should be installed in English, or the English language package should be installed.

- ✓ The Windows 10 operating system is installed.
- 1. Restart the computer to open the BIOS.
 - A message appears at the bottom of the screen: «Please press DEL or F2 to Enter UEFI BIOS settings».
- 2. Press the «DEL» or «F2» key during the reboot process.
 - ⇒ The «UEFI BIOS» menu opens.
- 3. Select the Language symbol to open language settings. ("Select your preferred language.")

Or?

1. Open Settings > Time & Language > Region & Language.



- 2. Press «Add a language» and select English.
 - ⇒ The English language package becomes available and is shown.
- 3. Press «English language package available».
- 4. Press «Options».
 - ⇒ The language options window opens.
- 5. Press «Download» to download the language package.
 - ⇒ The language package is downloaded.

