

# **Operating Manual YarnMaster® PRISMA**

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## **1** About this document

## 1.1 Purpose of this document

This document guides you through the operation of the product using the software. Explanations of menus, buttons and displays can also be accessed via the help button on the user interface. If you have any uncertainties or questions, please contact the supplier.

## 1.2 Validity

This document applies to:

- YarnMaster® PRISMA DM
- YarnMaster® PRISMA DMF
- YarnMaster® PRISMA DMFP

## **1.3** Applicable documentation

An instruction manual is available in addition to this manual.

## 2 Safety

## 2.1 Qualified personnel

Unqualified personnel cannot recognize risks and therefore endanger themselves and others.

- Only use trained and qualified personnel for the activities specified in these instructions.
- Define and publicize the respective responsibilities for the activities and train the personnel regularly.

## 2.2 Electric shock

Failure to observe the 5 electrotechnical rules may result in serious injury and electric shock.

- Disconnect.
- Secure against restart.
- Secure absence of voltage.
- Ground and short-circuit.
- Cover or isolate adjacent live parts.

## 2.3 Electromagnetic compatibility

This equipment is intended for use in an industrial environment. Electromagnetic compatibility in other environments cannot be guaranteed due to conducted and radiated interference.

This equipment is not intended for use in residential areas and may not provide adequate protection for radio reception in such environments.

## 2.4 Unexpected start-up

If the machine starts up unexpectedly, people may be seriously injured or die.

- Before carrying out any maintenance work, secure the machine against restarting.
- Only switch the machine back on when all safety devices are working and nobody is in the danger zone.

## 2.5 Description of symbol

Warning symbols



General warning symbol



Electric voltage warning



Flammable substances warning



Hot surfaces warning

#### **Prohibition symbols**



Switched on mobile phones not permitted



Operation with long hair not permitted

## Instruction symbols



Disconnect power plug



Disconnect before maintenance or repair (disconnect power supply)



Ground before using

**ESD** symbol



Electrostatically sensitive components

## **3** General user interface information

### 3.1 LZE screen

The Loepfe Central Unit (LZE = Loepfe Zentral-Einheit) controls and monitors all sensors connected to it. With the LZE, the quality characteristics for yarn defect cleaning are defined and the data from yarn cleaning, production and quality control, are collected, evaluated and stored.

Depending on the access rights of the current user certain menus, screens and buttons may be hidden or only available for viewing.

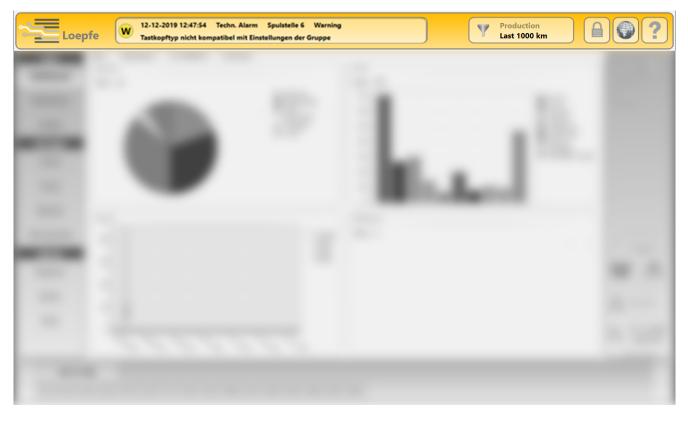


Location	Selection	Description
LZE Screen	TOP MENU	<ul><li>Displays messages, alarms and errors.</li><li>Contains buttons for settings.</li><li>Contains object for filtering.</li></ul>
	LEFT MENU	Contains submenus for data, settings and service.
	CENTRAL AREA	<ul> <li>Displays navigation path.</li> <li>Displays system and sensor information.</li> <li>Contains objects for monitoring and controlling the system.</li> </ul>
	RIGHT MENU	<ul> <li>Contains tool buttons.</li> <li>Displays connection, user status, system time and software version.</li> </ul>
	BOTTOM MENU	Contains buttons to select group, sensing head or article.

#### 3.1.1 **TOP MENU**

#### **TOP MENU overview**

The TOP MENU screen displays the last messages, user login, data selection filter, language and help button.



Location	lcon	Selection	Description
TOP MENU		Loepfe Logo	Switches between Loepfe and Savio GUI (only LZE-6 Faceless) to control Loepfe sensing heads or Savio winding machine.
		Last Message	<ul> <li>Displays an alarm level symbol.</li> </ul>
			<ul> <li>Displays last message warning.</li> </ul>
			Opens a window with the last 20 messages.
		Data Selec- tion Filter	Enables filter settings to display monitoring and classification data according to selected options.
		User Login	<ul> <li>Changes user to:</li> <li>Guest (low level for view only)</li> <li>Operator (mid-level to start or stop processes)</li> <li>Foreman (mid-level to apply major settings)</li> <li>Enables change of password.</li> <li>Enables user logout to guest level.</li> </ul>
		Languages	Changes menu language.

Location	lcon	Selection	Description
	2	Info	<ul> <li>Contains a calculator.</li> </ul>
	?		<ul> <li>Contains a textile unit calculator.</li> </ul>
			<ul> <li>Provides an online help.</li> </ul>

#### Alarm level symbol

The Alarm level symbols indicate the escalation level of the displayed messages.

Symbol	Alarm Level	Description
Warning		Warning without need for intervention.
0	Error	Error with need for intervention.
A	Alarm	Alarm with need for intervention.
6	Fatal	Fatal error prevents further use of software and cannot be confirmed by guest, operator or foreman.

#### Last 20 messages

This window displays a list of the last 20 messages and indicates the alarm level of each message.

Letzte 20 Meldungen					
22-08-2019 12	2:28:08	Techn. Alarm	Spulstelle 6	Warning	Tastkopftyp nicht kompatibel mit Einstellungen der Gruppe
22-08-2019 12	2:28:08	Techn. Alarm	Spulstelle 5	Warning	Tastkopftyp nicht kompatibel mit Einstellungen der Gruppe
0 22-08-2019 12	2:28:08	Techn. Alarm	Spulstelle 4	Warning	Tastkopftyp nicht kompatibel mit Einstellungen der Gruppe
0 22-08-2019 12	2:28:04	Techn. Alarm	Spulstelle 3	Warning	Tastkopftyp nicht kompatibel mit Einstellungen der Gruppe
A 22 00 2010 1	220.04	Taska Alassa	Cardenal a D	10 months and	Teather firm which have all all with Floated and a Conservation

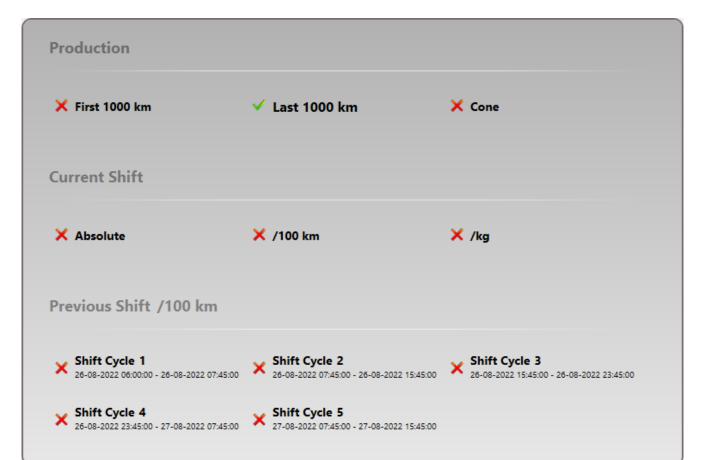
Location	Selection	Description
Last Message	Last 20 mes- sages	<ul> <li>Displays a list of the last 20 messages with the following topics:</li> <li>Date and time</li> <li>Type of event</li> <li>Spindle number</li> <li>Alarm level</li> <li>Reason for message.</li> </ul>

#### **Data selection filter**

With the data selection filter can be defined which yarn length (in km), which yarn quantity (in kg) or which time period (e.g. shift) is taken into account in the evaluation.

The default monitoring length is 100 km. This value can be changed here:

- SETTINGS > Group > Group No > Overview > Data Acquisition > Window Length
- SETTINGS > Machine > Default Data Acquisition > Window Length



Location	Selection	Description
Production	First 100 km (1000 km)	Displays data of the first 100 km (1000 km) wound yarn for a selected group or spindle.
	Last 100 km (1000 km)	Displays data of the last 100 km (1000 km) wound yarn for a selected group or spindle.
	Cone	Displays data of each individual cone.
Current Shift	Absolute	Displays data from the beginning of current shift.
	/ 100 km	Displays data per 100 km of current shift.
	/ kg	Displays data per kg of current shift.
Previous Shift	Shift Cycle 1-5	<ul> <li>Displays data per 100 km or per kg, depending on basic settings.</li> <li>On of the last five shifts can be taken into account.</li> </ul>

#### **User login**

Each user level has its own authorization to make settings on the system. This dialog can be used to create users and assign their authorizations.

Login			
User	Name	Password Level	
	Foreman	Foreman	
	Operator	Operator	
4			•
_			
		! 🗸 🔝	9

Location	lcon	Selection	Description
Login		List of users	<ul><li>Displays a list of users and their password level.</li><li>Indicates selected user with a yellow highlight.</li></ul>
		Input field	Enables input of password for selected user.
	$\checkmark$	Save or Con- firm	Confirms entry from input field.
		Change Pass- word	Opens a window to change password for selected user.
		Logout	User logout to guest level.

#### Language

The user interface of the LZE provides several languages. With this dialog the languages can be changed.

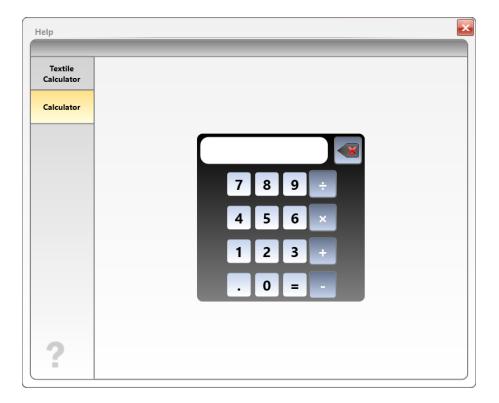
Language	×
English	<b> <b><b></b></b></b>
Deutsch	Português
Español	Русский
Français	Türkçe
Indonesia	Tiếng Việt
Italiano	日本語
বাংলা	

Location	Selection	Description
TOP MENU	Language	Sets system language.

#### Info

The Info button calls the online help and some useful calculation tools. The online help shows information about all input options and data visualizations for each screen of the user interface.

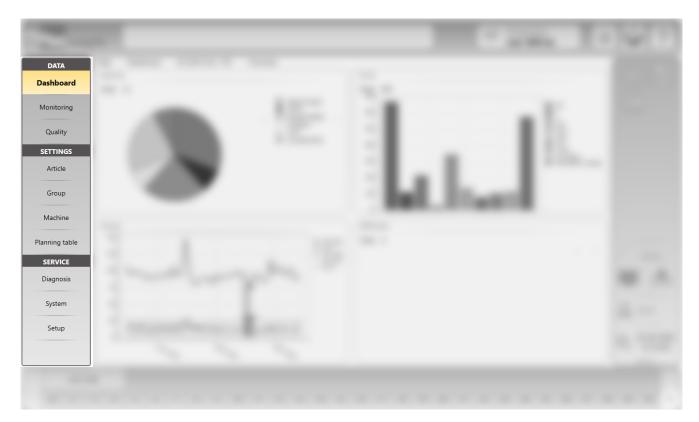
Help		×
Textile Calculator		
Calculator	<b>Tex</b> 100.0 g/km	
	Nm 10.0 km/kg	
	Ne <sub>Cotton</sub> 5.9 840 yd/lb	
	Ne <sub>Wool</sub> 19.4 256 yd/lb	
	Ne Worsted 8.9 560 yd/lb	
	Den <sub>Silk</sub> 900.0 g/9000 m	
?		



Selection	Description
Textile Calcu- lator	Converts yarn counts from one unit to another.
Calculator	Opens a calculator.
Help	Contains an online help.
	Textile Calcu- lator Calculator

#### 3.1.2 LEFT MENU

The LEFT MENU contains the article and group management with different display and setting options. In addition, system and machine settings can be made here.



Location	Selection	Description
DATA	Dashboard	<ul> <li>Displays a summary of alarms and events for a selected group or sensing head depending on the filters set in data selection filter.</li> </ul>
		<ul> <li>Displays a trend for up to 5 clearing parameters.</li> </ul>
	Monitoring	<ul> <li>Displays cutting data and alarms for a selected group or sensing head depending on the filter set in the data selection filter.</li> </ul>
	Quality	<ul> <li>Displays online IPI, Laboratory data, classification data for NSLT, splice, FF and PP for a selected group or sensing head depending on the filter set in the data selection filter.</li> </ul>
SETTINGS	Article	Enables setting of article properties.
		<ul> <li>Adds or removes articles.</li> </ul>
	Group	Enables group settings.
		<ul> <li>Adds or removes groups.</li> </ul>
	Machine	Contains objects to change machine settings.
SERVICE	Diagnosis	Contains objects for diagnosis: users, processes and sensing heads.
	System	<ul> <li>Contains objects for information, settings and back-up of system.</li> </ul>
		Enables maintenance access.

Location	Selection	Description	
	Setup	<ul> <li>Contains objects for basic network, software and system settings.</li> <li>Enables user management and system reset.</li> </ul>	

#### 3.1.3 CENTRAL AREA

All information is displayed in the CENTRAL AREA. This can be lists, diagrams or dialog windows. A navigation path is also displayed at the upper left edge of the screen.



Location	Selection	Description
CENTRAL AREA	Navigation Path	Displays menu path of current view or workspace.
		Area to display windows, charts, lists and other information from LZE.

#### 3.1.4 RIGHT MENU

The RIGHT MENU contains context-sensitive function keys. These are activated or deactivated depending on the situation and user level. Some function keys only appear when there is a use for them.

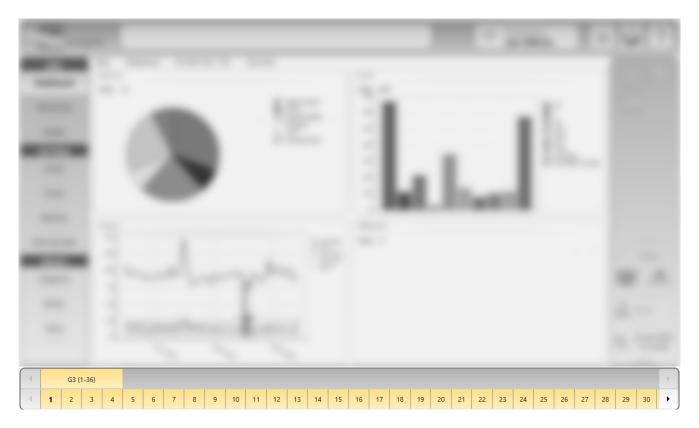


Location	lcon	Selection	Description
RIGHT MENU		Printscreen	Takes a screenshot and saves it as XPS-file on USB stick.
		Reports	<ul> <li>Generates a report and saves it as XPS-file on USB stick.</li> <li>Available in menu DATA: <ul> <li>Dashboard</li> <li>Monitoring</li> <li>Quality</li> <li>Current shift</li> <li>Previous shift</li> </ul> </li> <li>Available in menu SERVICE:</li> </ul>
			<ul><li>Diagnosis</li><li>System</li><li>Setup</li></ul>
		Import or Ex- port Data	<ul><li>Imports data from USB stick to LZE.</li><li>Exports data from LZE to USB stick.</li></ul>
		Connection	Indicates status of connection.

Location	lcon	Selection	Description
	<b>—</b>	Remote Ac- cess	Indicates if connection to MillMaster TOP is established or not.
		MillMaster Settings	Indicates if data from MillMaster is available or not.
	2	Current User	Displays current user level.
		Date / Time	Displays date and time.
		Software Ver- sion	Displays current version of LZE software.

#### 3.1.5 BOTTOM MENU

Depending on the current view or workspace groups, sensing heads and articles are listed in the BOTTOM MENU. Selected items are shown with a yellow highlight and a bold font.



Location	Selection	Description	
BOTTOM MENU	Group	<ul><li>Selects a group to be evaluated.</li><li>Indicates selected group with a yellow highlight.</li></ul>	
	ТК	<ul><li>Selects a sensing head to be evaluated.</li><li>Indicates selected sensing head with a yellow highlight.</li></ul>	
	Article	<ul><li>Selects an article to be evaluated.</li><li>Indicates selected article with a yellow highlight.</li></ul>	
	Scroll buttons	Scrolls through groups, sensing heads or articles.	

#### 3.1.6 Function Keys

This list gives an overview of all symbols and function keys that are used in the user interface of the LZE.

lcon	Description
	Data selection filter
?	Info
	Select language
$\checkmark$	Save or confirm
$\times$	Exit or discard
	Edit mode
$\langle$	Step backward
$\geq$	Step forward
-	Add (article or group)

lcon	Description
	Delete (article or group)
	Start group
	Stop group
	Copy (article or settings)
	Adjust (group or sensing head)
6	Print screen
	Configuration report
	Load or save data from or to USB stick
4	AutoCorrect
$\mathbf{Q}$	Enable autostart

# General user interface information

lcon	Description
۲	Disable autostart
	Coordinates table
+2	Add user
-2	Delete user
4	User logout
	Change password
	Download or import
	Network is online
	Network is offline
hht	Remote access online

lcon	Description
	Remote access offline
<b>.</b>	MillMaster data available
<b>.</b>	MillMaster data not available
2	Current user level
	Date and time
G	Restart
×	Delete (point setting)

#### 3.1.7 Abbreviations, terms and definitions

This list contains abbreviations and subject-specific terms.

Abbreviation	Term	Definition	
LZE	Loepfe Zen- tral-Einheit	Loepfe name for control unit	
NSLT	Neps, Short, Long, Thin	Fault type name	
F	Foreign Mat- ter	Fault type name	
Р	Polypropylene	Fault type name	
SFI/D	Surface In- dex / Diame- ter	Fault type name	
IPI	Imperfection Index	Fault type name	

## 3.2 Overview of DATA menu with submenus

Location	Selection	Description	
Dashboard	Alarms	<ul><li>Displays alarms of selected group or sensing head.</li><li>Navigates to monitoring overview.</li></ul>	
	Cuts	<ul><li>Displays cutting events of selected group or sensing head.</li><li>Navigates to monitoring overview.</li></ul>	
	Trend	<ul> <li>Displays a trend of defined group or sensing head.</li> <li>Navigates to Quality &gt; Trend.</li> </ul>	
	OffLimit	<ul><li>Displays OffLimit events of selected group or sensing head.</li><li>Navigates to monitoring overview.</li></ul>	

Location	Selection	Description	
Monitoring		Selects and displays events in a bar chart:	
	Cuts	Cuts	
	NSLT	Neps, Short, Long and Thin	
	OffCount	OffCount	
	SFI/D	SurFace Index / Diameter	
	Splice	Splice	
	Foreign Mat- ter	Foreign matter	
	Special	Special	
	OffStandard Alarms	OffStandard alarms	
	Bobbin Startup Alarms	Bobbin startup alarms	
	OffLimit Alarms	OffLimit alarms	
	Class Alarms	Class alarms	
	IPI Alarms	IPI (imperfection index) alarms	
	Length Limit Alarms	Length limit alarms	
	Length	Wound length	
	Last Cut	Last cut	
Location	Selection	Description	
Quality	NSLT	Opens DM-class window	
	Foreign Mat- ter	Opens F-class window	
	Splice	Opens splice-class window	
	Polypropylene	Opens P-class window	
	Trend	Opens trend settings and display window	
	LabPack IPI	Selects and displays events of LabPack IPI in a bar chart.	
	LabPack SFI	Selects and displays events of LabPack SFI in a bar chart.	

## 3.3 Overview of SETTINGS menu with submenus

Location	Selection	Description	
Article	Article List	<ul> <li>Displays a list of articles.</li> </ul>	
		<ul> <li>Adds or deletes articles.</li> </ul>	
		<ul> <li>Sorts articles by column title.</li> </ul>	
		Indicates selected article with a yellow highlight.	
		Indicates whether article is applied to an active group with a green highlight.	
Group	Group List	Displays a list of groups.	
		<ul> <li>Enables fine adjustment.</li> </ul>	
		<ul> <li>Starts or stops a group.</li> </ul>	
		Adds or deletes groups.	
		<ul> <li>Sorts groups by column title.</li> </ul>	
		Indicates selected group with yellow highlight.	
		Indicates whether group is running with green highlight.	
Machine	Shift Calendar	Edits beginning and duration of each shift for each day of the week.	
	Base Settings	Edits basic settings of winding machine.	
	Default Group Settings	Edits default parameters of group.	
	Default Data Acquisition	Sets default window length (km) in which data is collected.	

## 3.4 Overview of SERVICE menu with submenus

Location	Selection	Description	
Diagnosis	TK Informa- tion	<ul><li>sensing head information</li><li>sensing head alarm</li></ul>	
	TK Parameter	General parameter	
Last CutList of last 20 cutsEvent (His- tory)List of last events		List of last 20 cuts	
		List of last events	
	Test Mode	Test mode settings	
	TK Com- mands	List of sensing head commands	
	User Activity	List of last changes applied by Foreman	

Location	Selection	Description
System	System Infor- mation	List of system information
	Log Profile	Log profile settings
	Firmware Up- date	<ul> <li>Information about firmware archive</li> <li>Update progress window</li> <li>Starts system backup wizard</li> <li>List of updates for each sensing head</li> </ul>
	LZE Software Update	Available for Loepfe Service only
	System Backup	Starts system backup wizard
	System Re- store	Available for Loepfe Service only
	Maintenance/ Service	Available for Loepfe Service only
Location	Selection	Description
Setup	Network	<ul> <li>Hostname setting</li> <li>I AN 1 (A/I AN) acttings</li> </ul>
		<ul><li>LAN 1 (WLAN) settings</li><li>LAN 2 settings</li></ul>
	Software Op- tions	
		LAN 2 settings
	tions Reports	LAN 2 settings Information about LZE and additional software packs
	tions Reports User Manage- ment	<ul> <li>LAN 2 settings</li> <li>Information about LZE and additional software packs</li> <li>Shift report settings</li> </ul>
	tions Reports User Manage- ment	LAN 2 settings Information about LZE and additional software packs Shift report settings Edit user level settings
	tions Reports User Manage- ment Factory Reset	<ul> <li>LAN 2 settings</li> <li>Information about LZE and additional software packs</li> <li>Shift report settings</li> <li>Edit user level settings</li> <li>Available for Loepfe Service only</li> </ul>

## 3.5 TK display

Codes appear on the display of the sensor heads that provide information on operation, errors and alarms.

**General TK (Sensing Head) States** 

	<ul> <li>Yarn runs between +/-5% difference</li> <li>If difference is over +/-5%, the line moves up [+] or down [-]</li> </ul>
<b>8.8</b> .	Startup after reset
• •	Zeroing (ECR)
PS	Wait for parameter from spindle
PE	Wait for parameter from Central Unit (LZE)
PR	Splindle locked, group not started
Rd	Adjust
do	Doffing
UF	UpdateTK firmware

#### **System Cuts**

٥0	Cut request from spindle
o l	Zeroing error
62	Cut by user (TK button)
٥Ч	F brightness regulator limit
٥5	Adjust cut
٥۵	Cut failed
٦٦	M range regulator limit
٥8	Adjust failed
٥9	Sensing head configuration changed by LZE
٥R	Spindle power fail
oF	Internal firmware error

#### **Textile Alarms**

- The display starts flashing and shows the reason for the cut.
- The respective spindle is stopped.
- The faulty yarn is automatically removed from the package, max. 80 m.
- The respective bobbin is ejected, depending on the machine setting and the machine type.

ЬЬ	Bobbin startup alarm cut
ER	Class alarm cut
0R	Offlimit alarm cut
I A	IPI alarm cut

#### **Technical Alarms**

Clean	Measuring	Slot
-		

AL	10	There is still yarn and/or yarn remains in the measurement channel.	<ul><li>Check measurement channel.</li><li>Check knife.</li></ul>
RL	20	Zeroing failed (D ECR)	5 failed zeroing cycles by 🖸 🕴 cut.
AL	21	Zeroing failed (M ECR)	<ul><li>Clean sensors.</li><li>Replace sensing head.</li></ul>
AL	22	Zeroing failed (F ECR)	_
AL	23	Yarn detected in D channel	Clean measurement channel.
AL	24	Yarn detected in M channel	_
AL	25	Yarn detected in F channel	_

#### **Repeat Adjustment**

ЯL	30	Adjustment failed Faulty bobbin or soiled measuring field	<ul> <li>Repeat with new bobbin.</li> <li>Clean D sensor.</li> <li>Repeat adjustment.</li> </ul>
			<ul> <li>Clean D sensor of all sensing heads in group.</li> <li>Repeat adjustment.</li> </ul>
AL	1 E	Adjustment outside the limit Threshold value exceeded	Repeat adjustment with new bobbin.

AL	40	F-sensor activated but not detected	<ul> <li>Change the settings of the sensing head type of the group.</li> </ul>
AL	41	P-sensor activated not detected	<ul> <li>Replace sensing head.</li> </ul>
81	42	Sensing head temperature above limit	<ul> <li>Reset alarm.</li> </ul>
		Sensing head I <sup>2</sup> C temperature over 85 °C	<ul><li>Press TK test button.</li><li>Replace sensing head.</li></ul>
RL	43	I <sup>2</sup> C blocked. Fatal error on internal	-
		I <sup>2</sup> C serial bus	-
RL	ЧЧ	DRV knife reel failed	-
		Input signal of knife reel is missing	-
RL	45	Sensing head incompatible	-
		At least one TK hardware component is not compatible with firmware	-
AL	46	Knife not available	-
· · <u> </u>		Knife not configured in Flash or CLPD	-
		Loose connector to knife	-

### Contact Loepfe Support

### Contact OEM or Loepfe Support

AL	50	DRV knife power supply failed. Thresh- old exceeded.	<ul><li>Reset alarm.</li><li>Press TK test button.</li></ul>
AL	57	DRV external voltage supply failed. % V power supply limit exceeded.	<ul> <li>Replace sensing head.</li> </ul>
AL	52	NTP (drum) signal check failed. 10 s NTP signal not detected during run- ning with yarn.	
AL	53	Spindle does not respond. After a cut, spindle does not respond for 15 s	

# **D/M Sensor Cuts**

NSL Cut	s in Display Mode: T	уре
п	Nep	0.1 cm – 0.5 cm 0 – 50 cm
5	Short	0.5 cm - 8 cm
L	Long	8 cm - 128 cm
E	Thin	1 cm - 128 cm
n -	Nep	unclassified
5 -	Short	unclassified
L -	Long	unclassified
£ -	Thin	unclassified

		y meder class		
n 0	۳4	N0-N4		Nep class
RD	ЯЧ	A0-A4	0.5cm - 1cm	Short class
60	64	B0-B4	1 cm - 2 cm	
٥٦	EЧ	C0-C4	2 cm - 4 cm	
۵۵	64	D0-D4	4 cm - 8 cm	
٥ ]	d. <sup>0</sup>	C00-D00		
Ε		E	8 cm - 128 cm	Long class
F	FD	F and F0	8 cm - 31 cm	
۲o	60	F00 and G00		
6	60	G and G0	32 cm - 128 cm	
Ы.	ЬΖ.	B1-B2	1 cm - 2 cm	Thin class
E 0.	E 2.	C0-C2	2 cm - 4 cm	
d 0.	d 2.	D0-D2	4 cm - 8 cm	
HD	НZ	H0-H2	12 cm - 32 cm	
10	12	10-12	32 cm - 128 cm	

### NSL Cuts in Display Mode: Class

### **Compactness Cuts**

 Compactness +

 CP.

 Compactness 

### Splice Cuts

-	
Jn	Slice cut nep
5 ل	Splice cut short
٦٢	Splice cut long
JЕ	Splice cut thin
58	Splice accumulation cut

# Cluster Cuts (Accumulation of Yarn Faults)

٦n	Nep cluster	1 m - 80 m
50	Short cluster	1 m - 80 m
LE	Long cluster	1 m - 80 m
ΕĽ	Thin cluster	1 m - 80 m

### **Special Cuts**

Ьυ	Bunch cut
UP	Upper arm cut
д[	Drum wrap cut
dE	Drum wrap event

## Yarn Count Cuts

Sc	Short count +	1 m - 10 m
5c.	Short count -	1 m - 10 m
Ûc	Off count +	1 m - 50 m
0c.	Off count -	1 m - 50 m

### Core Yarn Cuts

nc	Missing core	2 m - 50 m
СС	Offcentric core	0.2 m - 50 m

### Length Limit (Count, SFID, Offcolor)

L Length limit cut
--------------------

# Surface Index Cuts

SF	SFI/D + (Surface Index)	10 m - 80 m
5 <i>F</i> .	SFI/D - (Surface Index)	10 m - 80 m
C	Short SFI/D +	0 m - 10 m
С.	Short SFI/D -	0 m - 10 m

# General user interface information

# **F** Sensor Cuts

Display	Mode: Type	Display Mode: Class			
FF Dark forei	Dark foreign matter	57	54	D S1 - D S4	0.1 cm - 1 cm
		d	,4	D 10 - D 14	1 cm - 2 cm
		r 1	r 4	D R0 -D R4	2 cm - 4 cm
		01	04	D 00 - D 04	4 cm - 12.8 cm
F.F	Organic foreign matter	5. 1	5.4	O S.1 - O S.4	0.1 cm - 1 cm
		d	,4	O I.0 - O I.4	1 cm - 2 cm
		r. 1	r.4	O R.0 -O R.4	2 cm - 4 cm
		0.1	0.4	O 0.0 - O 0.4	4 cm - 12.8 cm
FF.	Bright foreign matter	5 t	54	B S1 - B S4	0.1 cm - 1 cm
		d	,4	B 10 - B 14	1 cm - 2 cm
		r l	гЧ	B R0 -B R4	2 cm - 4 cm
		01	04.	B 00 - B 04	4 cm - 12.8 cm

# F C F cluster dark Accumulated foreign matter or dirty and oiled 1 m - 80 m parts of yarn F C. F cluster bright D F F offcolor dark Shade variation of yarn color 1 m - 50 m D F. F offcolor brigt

# **P** Sensor Cuts

Display I	Display Mode: Type		Display Mode: Class			
PP	Synthetic foreign matter cut	P 1	PS	P1 - P5	0.1 cm - 1cm	
		0	٥٢	01 - 05	1 cm - 2 cm	
		LI	LS	L1 - L5	2 cm - 4 cm	
		91	95	Y1 - Y5	4 cm - 8 cm	

# 4 DATA menu

# 4.1 Dashboard overview

The dashboard overview screen displays a summary of alarms and events for a selected sensing head or group, depending on the filter set in the data selection filter. Each summary of alarms or events can be tapped to navigate to monitoring overview or trend setting.



Location	lcon	Selection	Description
TOP MENU	$\nabla$	Data selection filter	Selects filter settings to be applied to the evaluation.
Dashboard Overview		Alarms	For a selected group or sensing head and depending on the Data Selection Filter:
			<ul> <li>Displays total number of alarms.</li> </ul>
			<ul> <li>Displays the distribution of cutting alarms in a pie chart.</li> </ul>
			<ul> <li>Navigates to monitoring overview when tapped.</li> </ul>
		Cuts	For a selected group or sensing head and depending on the data selection filter:
			<ul> <li>Displays total number of cutting events.</li> </ul>
			Displays the distribution of cutting events in a bar chart.
			<ul> <li>Navigates to monitoring overview when tapped.</li> </ul>
		Trend	<ul> <li>Displays a trend graph for up to 5 clearing parameters.</li> <li>Navigates to Quality &gt; Trend when tapped.</li> </ul>

Location	lcon	Selection	Description
		OffLimit	<ul> <li>Displays total numbers of OffLimit events.</li> </ul>
			<ul> <li>Navigates to monitoring overview when tapped.</li> </ul>
BOTTOM MENU			Selects a group or a single sensing head to be evaluated.

# 4.2 Monitoring overview

The monitoring overview screen displays a summary of events and alarms for a selected sensing head or group, depending on the filter set in the data selection filter. Each clearing or alarm can be tapped to display the data in a bar chart.

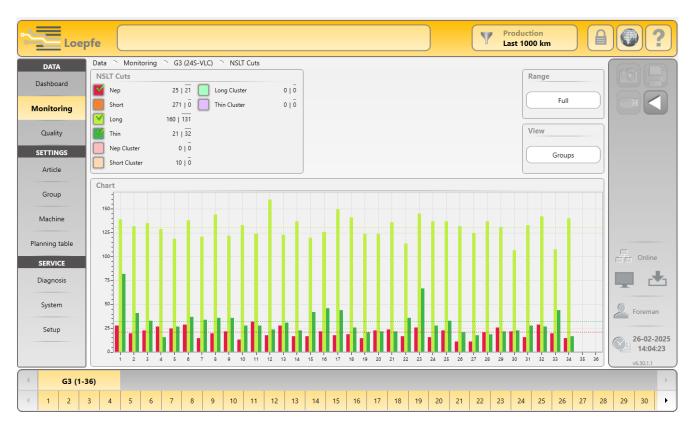
Loe	pfe			Production Last 1000 km	
DATA	Data 🛸 Monitoring 🛸 G3 (24S-VLC)	: TK1 > Overview			
Dashboard	Cuts Summary Total 997 DM 669	SFI/D Cuts           SFI/D +         23           SFI/D -         1	OffStandard Bobbin Alarms Max. NSLT Cuts 0 _Nep 0		
Monitoring	F 113 P 215	Short SFI/D + 0 Short SFI/D - 2	trep 0 Short 0 Long 0 Thin 3	Class Alarms	
Quality	NSLT Cuts	Compactness Cuts	Max. Surface Cuts 0 SFI/D 1		
SETTINGS	Nep         28           Short         345           Long         139	Compactness + 8 Compactness - 1	_Short SFI/D 0 _Compactness 1		
Article	Thin 82 Nep Cluster 0	Foreign Matter Cuts	_Nep Cluster 0 _Short Cluster 4 _Long Cluster 0	OffCount + 0	
Group	Short Cluster 18 Long Cluster 0 Thin Cluster 1	F Dark 105 F Bright -	_Thin Cluster 0 Foreign Matter 3 F Organic 1	SFI/D + 4	
Machine	OffCount Cuts	F Organic 8 F Cluster Dark - F Cluster Bright -	F Cluster - OffColor - P -	OffColor Bright	
Planning table	Missing Core - OffCenter Core - OffCount + 2	OffColor Dark - OffColor Bright -	Missing Core - OffCenter Core - Max. Cuts 0	Bobbin Startup Alarms OffCount + 0	Online
SERVICE Diagnosis	OffCount +         2           OffCount -         2           Short OffCount +         6           Short OffCount -         12	Special Bunch Cuts 6		OffCount -         8           OffColor Dark         -           OffColor Bright         -	<b>• •</b>
System	Splice	Upper Yarn Cuts 1 Yarn Breaks 118 Total Bobbin Changes 576		Length Wound Length 1000.0 km	Guest
Setup	Splices 1790 Splice Cuts 46	Knife Jams 0			
	Splice Repetitions 154 Splice Accumulation Cuts 1			Last Cut Runout/Yambreak	25-02-2025 15:17:58 v6.30.1.1
G3 (1-	-36)				
<b>1</b> 2	3 4 5 6 7 8 9	9 10 11 12 13 14 15	16 17 18 19 20 21	22 23 24 25 26 27 28	3 29 30

Location	lcon	Selection	Description
TOP MENU	$\nabla$	Data selection filter	Selects filter settings to be applied to the evaluation.
Monitoring Overview (left side)		Cuts Sum- mary	For a selected Group or sensing head and depending on the Data Selection Filter:
		NSLT	<ul> <li>Lists a summary of corresponding events.</li> </ul>
			<ul> <li>Opens a bar chart to display selected events when tapped.</li> </ul>
	OffCount SFI/D Splice Foreign Mat- ter	OffCount	
		SFI/D	_
		Splice	_
		-	
		Special	
Monitoring Overview (right side)		Alarms	For a selected group or sensing head and depending on the
	Sta	Bobbin	<ul> <li>Lists a summary of corresponding alarms.</li> </ul>
		Startup	<ul> <li>Opens a bar chart to display selected events when tapped.</li> </ul>
		Alarms	

Location	Icon	Selection	Description
		OffLimit Alarms	
		Class Alarms	_
		IPI Alarms	_
		Length Limit Alarms	
		Length	_
		Last Cut	Navigates to SERVICE > Diagnosis > TK > Last Cut when tapped.
			Displays a list of last cutting events.
BOTTOM MENU			Selects a group or a single sensing head to be evaluated.

# 4.3 Bar chart

The LZE software can display most of its data in bar charts. In all cases, the settings of the bar charts are very similar.



Location	lcon	Selection	Description
TOP MENU	$\nabla$	Data selection filter	Selects filter settings to be applied to the evaluation.
			Selects type of events to be displayed in the bar chart.
	V		For a selected group or sensing head and depending on the data selection filter:
			<ul> <li>Lists total number of events.</li> </ul>
			<ul> <li>Lists an average value for the events.</li> </ul>
		Chart	Displays selected events in the bar chart.
			X-axis: Sensing head number
			<ul> <li>Y-axis: Number of events or yarn quality data</li> </ul>
			<b>Dashed line</b> : Average value.
		Range	Scales the range of Y-axis:
			Full: from zero to highest value of displayed group.
			• <b>Optimized</b> : from lowest to highest value of displayed group.
			<ul> <li>Relative: negative and positive deviation of values of sensing head from mean value.</li> </ul>
			<ul> <li>Percentage: negative and positive deviation of values of sensing head from mean value. In percent.</li> </ul>

Location	lcon	Selection	Description
		View	<ul> <li>Groups: Displays all sensing heads of selected group.</li> <li>Machine: Displays all sensing heads of machine.</li> </ul>
RIGHT MENU	<	Step Back	Navigates to previous window.
BOTTOM MENU			Selects a group or a single sensing head to be evaluated.

# 4.4 Quality

# 4.4.1 Quality overview

The quality overview screen displays the most important clearings and events for a selected sensing head or group, depending on the filter set in the data selection filter. Each clearing or event can be tapped to show more details or to display the data in a bar chart.

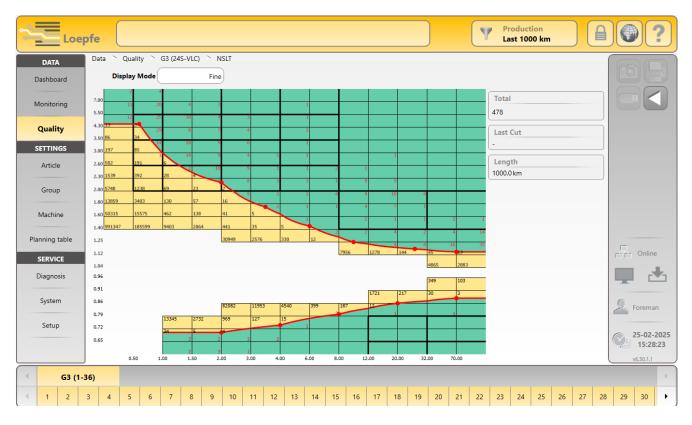


Location	lcon	Selection	Description
TOP MENU		Data selection filter	Selects filter settings to be applied to the evaluation.
		NSLT	For a selected group or sensing head and depending on the data selection filter:
			<ul> <li>Lists total number of NSLT events.</li> </ul>
			<ul> <li>Displays clearing curve with number of events caused by NSLT.</li> </ul>
			<ul> <li>Navigates to clearing curve for detailed information when tapped.</li> </ul>
	·	Foreign Mat- ter	For a selected group or sensing head and depending on the data selection filter:
			<ul> <li>Lists total number of foreign matter events.</li> </ul>
			<ul> <li>Displays clearing curve with number of events caused by foreign matter and organic matter.</li> </ul>
			<ul> <li>Navigates clearing curve for detailed information when tapped.</li> </ul>
		Splice	For a selected group or sensing head and depending on the data selection filter:

Location	lcon	Selection	Description
			<ul> <li>Lists total number of splice events.</li> </ul>
			<ul> <li>Displays clearing curve with number of events caused by splices.</li> </ul>
			<ul> <li>Navigates to clearing curve for detailed information when tapped.</li> </ul>
		Polypropylene	For a selected group or sensing head and depending on th data selection filter:
			<ul> <li>Lists total number of polypropylene events.</li> </ul>
			<ul> <li>Displays clearing curve with number of events caused by polypropylene.</li> </ul>
			<ul> <li>Navigates to clearing curve for detailed information when tapped.</li> </ul>
		Trend	Navigates to trend settings screen to select events or alarms to be displayed in a trend diagram.
		LabPack IPI	For a selected group or sensing head and depending on th data selection filter:
			<ul> <li>Lists a summary of IPI events.</li> </ul>
			<ul> <li>Navigates to LabPack IPI screen to select events to be displayed in a bar chart.</li> </ul>
		LabPack SFI	For a selected group or sensing head and depending on th data selection filter:
			<ul> <li>Lists a summary of SFI/D and SFI values.</li> </ul>
			<ul> <li>Navigates to LabPack SFI screen to select values to be displayed in a bar chart.</li> </ul>
		Length	For a selected group or sensing head and depending on th data selection filter:
			<ul> <li>Lists wound length.</li> </ul>
			<ul> <li>Navigates to length screen to select events to be displayed in a bar chart.</li> </ul>
BOTTOM MENU			Selects a group or a single sensing to be evaluated.

# 4.4.2 NSLT

The NSLT screen displays in a matrix the neps, short, long and thin events for a selected sensing head or group, depending on the filter set in the data selection filter. The clearing curve defines the boundary between events that have been cut (red numbers) and events that remain in the yarn (black numbers).

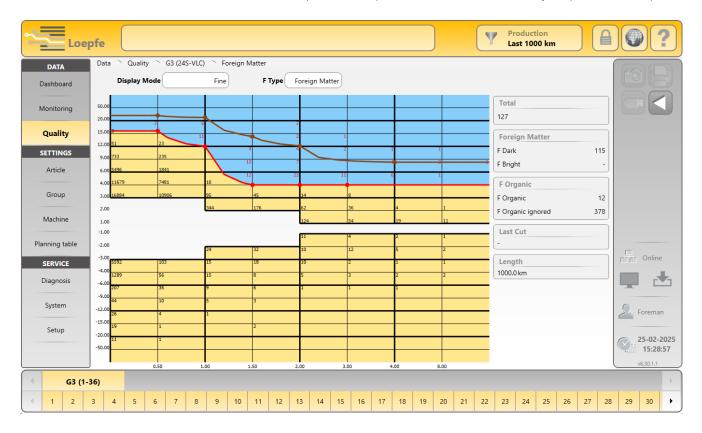


Location	lcon	Selection	Description
TOP MENU	$\nabla$	Data selection filter	Selects filter settings to be applied to the evaluation.
NSLT		Display Mode	<ul> <li>Changes representation of measurements in the matrix.</li> <li>Fine: Displays classification data in fine classes.</li> <li>Coarse: Displays classification data in coarse classes.</li> <li>Scatter Plot: Graphic representation of fault clusters in a heat map (for groups only).</li> </ul>
		Classification Data in matrix	<ul> <li>Displays number of events (cuts and/or faults) in corresponding classes for set length.</li> <li>Red: Number of faults that have been cut.</li> <li>Black: Number of faults that remain in the yarn.</li> </ul>
		Total	Displays total number of cutting events in all classes for the set length.
		Last Cut	<ul> <li>Displays the last cutting event for a selected sensing head according to cutting type and fault classification.</li> <li>Navigates to Diagnosis &gt; TK &gt; Last Cut and displays a list of all cuts with their specific data.</li> </ul>
		Length	Displays wound length according to data selection filter.

Location	lcon	Selection	Description
RIGHT MENU	<	Step Back	Navigates to previous window.
BOTTOM MENU			Selects group or a single sensing head to be evaluated.

# 4.4.3 Foreign matter

The foreign matter screen displays in a matrix the foreign matter events for a selected sensing head or group, depending on the filter set in the data selection filter. The clearing curve defines the boundary between events that have been cut (red numbers) and events that remain in the yarn (black numbers).

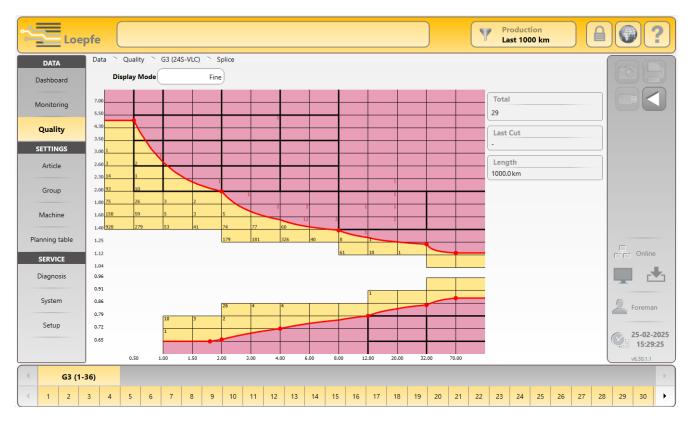


Location	lcon	Selection	Description
TOP MENU		Data selection filter	Selects filter settings to be applied to the evaluation.
Foreign Mat-		Display Mode	Changes representation of measurements in the matrix.
ter			<ul> <li>Fine: Displays classification data in fine classes.</li> </ul>
			<ul> <li>Coarse: Displays classification data in coarse classes.</li> </ul>
			<ul> <li>Scatter Plot: Graphic representation of fault clusters in a heat map (for groups only).</li> </ul>
			<ul> <li>Color Distribution: Displays colors of cuts as a bar chart.</li> </ul>
		F Туре	Changes F type and enables respective curve settings.
			<ul> <li>Foreign matter</li> </ul>
			Forganic
		Classification Data in matrix	Displays number of events (cuts and/or faults) in corresponding classes for set length.
			Red: Number of events that have been cut.
			<ul> <li>Black: Number of events that remain in yarn.</li> </ul>
		Total	Displays total number of cutting events in all classes for set length.

Location	lcon	Selection	Description
		Foreign Mat- ter	<ul> <li>Displays number of foreign matter cuts.</li> <li>F Dark: in raw-white yarn.</li> <li>F Bright: in dyed or dark yarn.</li> </ul>
		F Organic	<ul> <li>Displays number of events for the following:</li> <li>F Organic: F organic cuts.</li> <li>F Organic ignored: intentionally ignored and saved F cuts.</li> </ul>
		Last Cut	<ul> <li>Displays the last cutting event for a selected sensing head according to cutting type and fault classification.</li> <li>Navigates to Diagnosis &gt; TK &gt; Last Cut and displays a list of all cuts with their specific data.</li> </ul>
		Length	Displays wound length according to data selection filter.
RIGHT MENU	<	Step Back	Navigates to previous window.
BOTTOM MENU			Selects a group or a single sensing head to be evaluated.

# 4.4.4 Splice

The splice screen displays in a matrix the splice events for a selected sensing head or group, depending on the filter set in the data selection filter. The clearing curve defines the boundary between events that have been cut (red numbers) and events that remain in the yarn (black numbers).

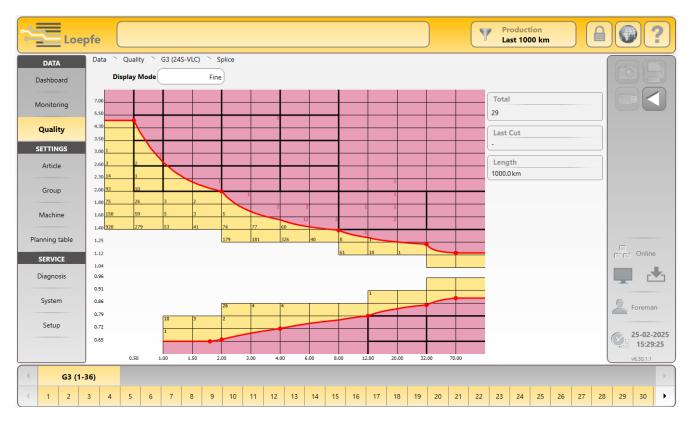


Location	lcon	Selection	Description
TOP MENU	$\nabla$	Data selection filter	Selects filter settings to be applied to the evaluation.
Splice		Display Mode	Changes representation of measurements in the matrix:
			Fine: Displays classification data in fine classes.
			<ul> <li>Coarse: Displays classification data in coarse classes.</li> </ul>
			<ul> <li>Scatter Plot: Graphic representation of fault clusters in a heat map (For Groups only).</li> </ul>
		Classification Data in matrix	Displays number of events in corresponding classes for set length:
			Red: number of faults that have been cut.
			<ul><li>Black: number of faults that remain in the yarn.</li></ul>
		Total	Displays total number of cutting events in all classes for the set length.
		Last cut	<ul> <li>Displays last cutting event for a selected sensing head according to cutting type and fault classification.</li> </ul>
			<ul> <li>Navigates to Diagnosis &gt; TK &gt; Last Cut and displays a list of all cuts with their specific data.</li> </ul>
		Length	Displays wound length according to data selection filter.

Location	lcon	Selection	Description
RIGHT MENU	<	Step Back	Navigates to previous window.
BOTTOM MENU			Selects group or a single sensing head to be evaluated.

# 4.4.5 Polypropylene

The polypropylene screen displays the polypropylene events for a selected sensing head or group, depending on the filter set in the data selection filter. The clearing curve defines the boundary between events that have been cut (red numbers) and events that remain in the yarn (black numbers).



The X-axis (horizontal) represents the reference length of the signal, the accuracy of which decreases with the length of the physical defect, as the triboelectric charge decreases with a high frequency of occurrence. The Y-axis (vertical) represents the difference in triboelectric charge intensity between the materials.

Location	lcon	Selection	Description
TOP MENU	$\overline{\mathbf{v}}$	Data selection filter	Selects filter settings to be applied to the evaluation.
Polypropylene		Display Mode	Changes representation of measurements in the matrix:
			Fine: Displays classification data in fine classes.
			<ul> <li>Coarse: Displays classification data in coarse classes.</li> </ul>
			<ul> <li>Scatter Plot: Graphic representation of fault clusters in a Heat Map (for groups only).</li> </ul>
		Classification Data in matrix	Displays number of events in corresponding classes for set length:
			Red: number of faults that have been cut.
			<ul><li>Black: number of faults that remain in the yarn.</li></ul>
		Total	Displays total number of cuts in all classes for the set length.

Location	lcon	Selection	Description
		Last cut	<ul> <li>Displays last cutting event for a selected sensing head according to cutting type and fault classification.</li> </ul>
			<ul> <li>Navigates to Diagnosis &gt; TK &gt; Last Cut and displays a list of all cuts with their specific data.</li> </ul>
		Length	Displays wound length according to data selection filter.
RIGHT MENU	<	Step Back	Navigates to previous window.
BOTTOM MENU			Selects Group or a single sensing head to be evaluated.

# 4.4.6 Trend

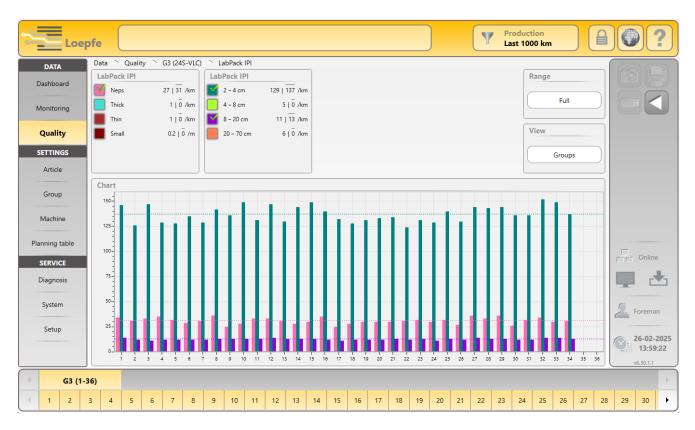
The Trend screen displays the trend graph for up to five events or alarms for a selected sensing head or group, depending on the filter set in the data selection filter. The events or alarms to be displayed as a trend graph can be selected separately.



Location	lcon	Selection	Description
Trend		Trend Set- tings	<ul> <li>Selects up to 5 events or alarms to be displayed as a trend graph.</li> </ul>
			<ul> <li>Selects a group or a sensing head to be displayed as a trend graph.</li> </ul>
			<ul> <li>Selects color to be assigned to trend graph.</li> </ul>
		Trend	Displays trend graph.
RIGHT MENU	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.
	$\times$	Exit or Dis- card	Exits Edit Mode and discards last changes.

# 4.4.7 LabPack IPI

The LabPack IPI screen displays events associated with the imperfection index for a group or the complete machine, depending on the filter set in the data selection filter. The events to be shown in the bar chart can be selected separately.

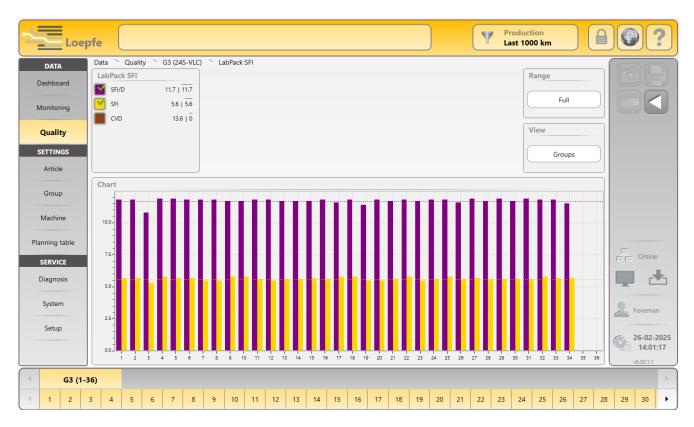


Location	lcon	Selection	Description
TOP MENU		Data selection filter	Selects filter settings to be applied to the evaluation.
LabPack IPI		LabPack IPI	Selects parameter to be shown in bar chart.
		Chart	Displays selected parameters:
			X-axis: Sensing head number
			Y-axis: Number of events
		Range	Scales the range of Y-axis to:
			<ul> <li>Full: From zero to highest value of displayed group.</li> </ul>
			<ul> <li>Optimized: From lowest to highest value of displayed group.</li> </ul>
			<ul> <li>Relative: Negative and positive deviation of values of sensing head from mean value.</li> </ul>
			<ul> <li>Percentage: Negative and positive deviation of values of sensing head from mean value. In percent.</li> </ul>
		View	Groups: Displays all sensing heads of selected group.
			Machine: Displays all sensing heads of machine.

Location	lcon	Selection	Description
RIGHT MENU	<	Step Back	Navigates to previous window.
BOTTOM MENU			Selects a group or a single sensing head to be evaluated.

# 4.4.8 LabPack SFI

The LabPack SFI screen displays events associated with the surface index for a group or the complete machine, depending on the filter set in the data selection filter. The events to be shown in the bar chart can be selected separately.

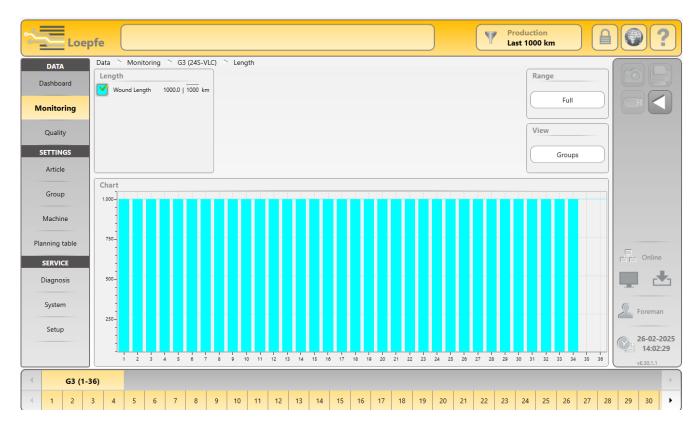


Location	lcon	Selection	Description
TOP MENU		Data selection filter	Selects filter settings to be applied to the evaluation.
LabPack SFI		LabPack SFI	Selects parameter to be shown in bar chart.
		Chart	Displays selected parameters:
			X-axis: Sensing head number
			Y-axis: Yarn values
		Range	Scales the range of Y-axis to:
			<ul> <li>Full: From zero to highest value of displayed group.</li> </ul>
			<ul> <li>Optimized: From lowest to highest value of displayed group.</li> </ul>
			<ul> <li>Relative: Negative and positive deviation of values of sensing head from mean value.</li> </ul>
			<ul> <li>Percentage: Negative and positive deviation of values of sensing head from mean value. In percent.</li> </ul>
		View	<ul> <li>Groups: Displays all sensing heads of selected group.</li> </ul>
			Machine: Displays all sensing heads of machine.

Location	lcon	Selection	Description
RIGHT MENU	<	Step Back	Navigates to previous window.
BOTTOM MENU			Selects a group or a single sensing head to be evaluated.

# 4.4.9 Length

The length screen displays the wound length for a group or the complete machine in a bar chart, depending on the filter set in the data selection filter.



Location	lcon	Selection	Description
TOP MENU	$\nabla$	Data selection filter	Selects filter settings to be applied to the evaluation.
Length		Length	Selects parameter to be shown in bar chart.
		Chart	Displays selected parameters:
			X-axis: Sensing head number
			Y-axis: Wound length in km
		Range	Scales the range of Y-axis:
			<ul> <li>Full: From zero to highest value of displayed group.</li> </ul>
			<ul> <li>Optimized: From lowest to highest value of displayed group.</li> </ul>
			<ul> <li>Relative: Negative and positive deviation of values of sensing head from mean value.</li> </ul>
			<ul> <li>Percentage: Negative and positive deviation of values of sensing head from mean value. In percent.</li> </ul>
		View	<ul> <li>Groups: Displays all sensing heads of selected group.</li> </ul>
			Machine: Displays all sensing heads of machine.
RIGHT MENU	<	Step Back	Navigates to previous window.

Location	lcon	Selection	Description
BOTTOM MENU			Selects a group or a single sensing head to be evaluated.

# 5 Article settings

# 5.1 Article list

An article is a set of parameters to which the yarn is cleared. An article can be assigned to a group with a single sensing head or a number of sensing heads.

The article list screen displays the articles that are available in the LZE. Articles can be added or deleted here.

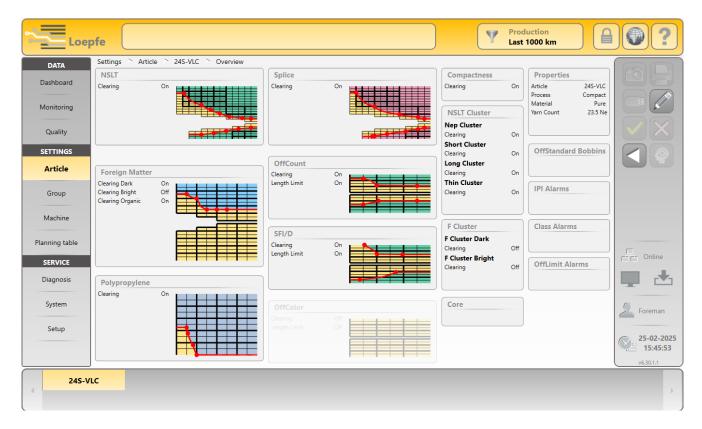
Loep	ofe				Production Last 1000 km	
<b>DATA</b> Dashboard	Settings > Article > Article	24S-VLC > List Process Autostart	Count M	Naterial Last Change	Active in group	
Monitoring	24S-VLC	Compact	23.5 Ne P	Pure 28-12-2024 16:02:	37 3	
Quality						
Group						
Machine						
Planning table SERVICE						C Online
Diagnosis						🛄 📥
System						E Foreman
Setup						25-02-2025 15:45:04
			<b>~</b>			v6.30.1.1
245-V	ıc					×

Location	lcon	Selection	Description
Article List			Displays a list of articles with information about:
			<ul> <li>Article name</li> </ul>
			– Process
			– Yarn parameters
			<ul> <li>Cleaning mode auto or else</li> </ul>
			<ul> <li>Count material</li> </ul>
			<ul> <li>Last change</li> </ul>
			<ul> <li>Being active in a specific group</li> </ul>
			The selected article is highlighted in yellow.
			<ul> <li>A green highlight indicates that the article is applied to an active group.</li> </ul>
		Article buttons	Navigates to article overview.
		Column Titles	Sorts article list according to column title.

Location	lcon	Selection	Description				
RIGHT MENU	GHT MENU Add Article		Starts a wizard to add a new article.				
		Delete Article	Deletes an article.				
BOTTOM MENU			<ul><li>Displays all articles.</li><li>Selects an article.</li><li>The selected article is highlighted in yellow.</li></ul>				
		Scroll buttons	Scrolls through list of articles.				

# 5.2 Article overview

The article overview screen displays a summary of clearing limits and alarm settings for a selected article. Each summary of clearing limits can be tapped to see more details and to apply changes.



Location	Icon Selection	Description
Overview	NSLT Foreign Marter Polypropyle Splice OffCount SFI/D OffColor Compactne NSLT Clust F Cluster OffLimit Alarms Class Alarm IPI Alarms OffStandard Bobbins Core Properties	<ul> <li>Displays clearing curves and parameters for a selected article.</li> <li>Navigates to corresponding clearing curve to change article settings. If required with the help of the edit option.</li> <li>Clearing curves or alarms that have changed are highlighter in yellow.</li> </ul>

Location	lcon	Selection	Description				
RIGHT MENU	-	Edit	Enables Edit Mode for selected clearing.				
	$\checkmark$	Save or Con- firm	<ul> <li>Saves current settings.</li> <li>Applies all changes to highlighted clearing curves and parameters.</li> </ul>				
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.				
	<	Step Back	Navigates to article list				
	<b>(2)</b>	Enable Au- tostart Disable Au- tostart	<ul> <li>Enables autostart mode.</li> <li>Selects clearing curve(s) to run in autostart mode.</li> <li>Indicates clearing curves that have autostart assigned with blue highlight. Clearing curve assigned with autostart is highlighted in blue.</li> <li>Disables autostart mode for all clearing curves.</li> </ul>				
BOTTOM MENU			<ul> <li>Displays a list of all articles</li> <li>The selected article is highlighted in yellow.</li> </ul>				
		Scroll buttons	Scrolls through list of articles.				

# 5.3 Add article

# 5.3.1 Add article scenarios

An article can be added in three ways:

- 1. Start article setting from scratch with optional autostart function
- 2. Start article setting with a copy of an existing article
- 3. Start article setting with an import of an article from a USB stick.

Loe	pfe						Production Last 1000 km	
<b>DATA</b> Dashboard	Settings > Article > 24	S-VLC Dist	Autostart	Count	Material	Last Change	Active in group	
Monitoring	24S-VLC	Compact		23.5 Ne	Pure	28-12-2024 16:02	2:37 3	
Quality						_		
SETTINGS				Add article	×	3		
Article				New Article				
Group				Copy Setting	gs from an Articl	e		
Machine				Import Setti	ings from USB			
Planning table								Online
Diagnosis						9		<b>•</b>
System								
								E Foreman
Setup								25-02-2025 15:47:15
				~				v6.30.1.1
24S-V								Þ

Location	lcon	Selection	Description
Add Article	Article New Article		Starts article settings with basic parameters and optional au- tostart function.
			Provides a copy of an article and navigates to article overview where clearing parameters can be edited.
		Import Set- tings from a USB stick	Imports article settings from a USB stick.
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.

# 5.3.2 New article

#### New article with autostart

An new article can be created from scratch by editing a list of basic yarn parameters and adjusting the clearing curves manually or with the help of the autostart function. If autostart is selected the parameters will be adjusted automatically during the first 100 km. If autostart is deselected default clearing curves are given. In this case the clearing curves can be adjusted by editing the parameters.

Loe	pfe					Production Last 1000 km	
DATA	Settings 📄 Article 🛸 🕯						
Dashboard	Article	Process Autostart	Count	Material	Last Change	Active in group	
		Create Article with Yarn Parameter	ers			×	
Monitoring	24S-VLC	Properties		Clearing			
Quality		Article	DEFAULT	NSLT	Autosta	art	
SETTINGS		Process	Carded	Splice	Autosta	art	
Article		Material	Pure	OffCount	Autosta	art	
		Fiber 1	CO - Cotton	SFI/D	Autosta	art	
Group		Fiber 2	None	Foreign Matter	Autosta	art	
Machine		Blend Ratio	100.0	OffColor	Off		
		Fancy Yarn	Off	Polypropylene	Autosta	art	
Planning table		Conductive Material	Off	Folypropylerie			
SERVICE		Yarn Count	17.7 Ne				Online
Diagnosis		Count Range 16.7	Ne) - 18.7 Ne)				
System		Core Yarn	Off				6
System		Color	Natural			Image: A start of the start	Foreman
Setup							25-02-2025
							15:48:43
			▼				v6.30.1.1
24S-V	LC						

Location	lcon	Selection	Description
Create Article with Yarn Pa rameters		Properties	Sets article properties such as name and basic yarn parameters.
		Clearing	Sets parameter for the listed clearing types with of the following methods:
			<ul> <li>Autostart: clearing parameters will be adjusted automatically within the first 100 km.</li> </ul>
			Normal: clearing parameters can be set manually.
			<ul> <li>Off: clearing will not be applied.</li> </ul>
			Top 9: NSLT curve to clear top 9 classes.
			Top 12: NSLT curve to clear top 12 classes.
			Top 16: NSLT curve to clear top 16 classes.
			<ul> <li>Convert Zenit+: converts Zenit+ NSLT setting to Prisma NSLT</li> <li>Due to the different resolution of YarnMaster® PRISMA compared to previous generations of YarnMaster® clearers, the number of events in each classification and the clearing curve is not comparable. Always check that the yarn quality</li> </ul>

Location	lcon	Selection	Description
			complies with the quality requirements if the settings have been adopted from previous generations of YarnMaster® clearers.
			Open
			Sensitive
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.

# Wizard core yarn

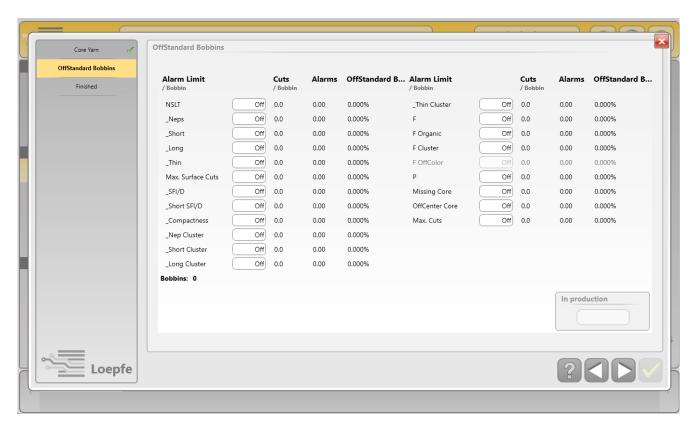
The core yarn screen is a part of the article creation wizard and enables missing core clearing and OffCenter clearing. In both menus basic yarn and clearing parameters can be set.

Nominal Yarn Count     -     Limit     25.0%       Cover Material     -     Limit Suggestion	-					
Finished     Missing Core     OffCenter Core       Finished     Clearing     Off     Clearing     Off       Nominal Yarn Count     -     Limit     25.0%       Cover Material     -     Limit Suggestion       Core Count     5.0     Obs. Length     1.5m       Core Material     1.00     Core Material     0bs. Length       Core Material     EA - Ela     Sensitivity     10		Core Yarn	Core Yarn			
Nominal Yarn Count     -       Cover Material     -       Core Count Unit     Den       Core Count     5.0       Core Draft     1.00       Core Material     EA - Ela       Sensitivity     10		OffStandard Bobbins	Missing Core		OffCenter Core	
Cover Material Core Count Unit Den Core Count 5.0 Core Draft 1.00 Core Material EA - Ela Sensitivity 10		Finished	Clearing	Off	Clearing	Off
Core Count Unit     Den       Core Count     5.0       Core Draft     1.00       Core Material     EA - Ela       Sensitivity     10			Nominal Yarn Count	-	Limit	25.0%
Core Count 5.0 Core Draft 1.00 Core Material EA - Ela Sensitivity 10			Cover Material	-	Limit Suggestion	-
Core Draft 1.00 Core Material EA - Ela Sensitivity 10			Core Count Unit	Den	Obs. Length	1.5m
Core Material EA - Ela Sensitivity 10	ļ		Core Count	5.0		
Sensitivity 10			Core Draft	1.00		
Sensitivity 10			Core Material	EA - Ela		
Obs. Length 15m			Sensitivity	10		
			Obs. Length	()		
		Loepre				
Loepfe	2					

Location	lcon	Selection	Description
Core Yarn		Missing Core	<ul><li>Toggles missing core clearing on or off.</li><li>Sets parameters for missing core clearing.</li></ul>
		OffCenter Core	<ul><li>Toggles OffCenter core clearing on or off.</li><li>Sets OffCenter core limit.</li><li>Sets observation length.</li></ul>
	$\succ$	Navigation ar- rows	Navigates to next window.

#### Wizard OffStandard bobbins

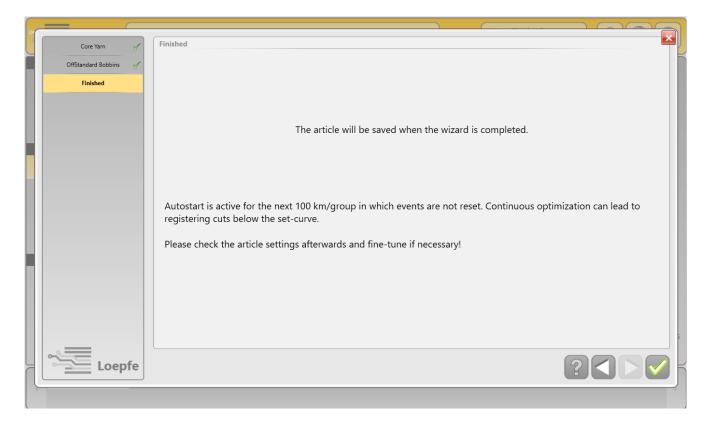
The OffStandard bobbin screen is a part of the article creation wizard and enables the setting of alarm limits for bobbins. It provides a menu where a maximum allowed number of repetitions for each cut type can be defined.



Location	lcon	Selection	Description
OffStandard Bobbins			Sets alarm limit for maximum allowed number of repetitions for each individual cut type per bobbin.
		Bobbins	Displays total number of bobbin changes per selected filter and group.
		In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>
			Displays group to which article is assigned.
	<	Navigation ar- rows	Navigates to previous or next window.
	$\geq$		

### **Wizard Finished**

The Finished screen is the end of the article creation wizard and saves all settings as a new article.



Location	lcon	Selection	Description
Finished	<	Navigation ar- row	Navigates to previous or next window.
	$\checkmark$	Save or con- firm	Ends wizard, saves article and displays article overview.

# 5.3.3 Copy settings from article

This screen provides a list of all articles that are available in the LZE. An article can be selected and its basic yarn parameters can be edited if required before it is saved as a new article.

Loe	pfe				Production Last 100 km	
DATA	Settings 📄 Articl	e 👌 24S-VLC 🛸 List				
Dashboard	Article	Create a copy of an e	xisting article			
Monitoring	24S-VL	Source Article:		Properties		
		Article	Last Change	Article	24S-VLC (1)	
Quality	DEFAUL		▲	Yarn Count	23.5Ne	
SETTINGS		DEFAULT	2/25/2025 3:48:26 PM	Fancy Yarn	Off	
Article		24S-VLC	12/28/2024 4:02:37 PM	Process	Compact	
				Material	Pure	
Group				Fiber 1	CO - Cotton	
Machine				Fiber 2	None	
				Blend Ratio	100.0	
Planning table				Conductive Material	Off	
SERVICE				Conductive Material		Online
Diagnosis						
System			~			E Foreman
Setup						
						25-02-2025
						v6.30.1.1
24S-V	LC					
DEFAU	LT					

Location	lcon	Selection	Description
Create a copy of an existing		Source Article	Displays a list of articles that can be copied.
Article		Properties	Enables setting of article properties such as name and basic yarn parameters.
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.

# 5.3.4 Import settings from USB

The import settings from USB screen provides a list of all articles that are available on the USB Stick. An article can be selected and its basic yarn parameters can be edited if required before it is saved as a new article to the LZE.

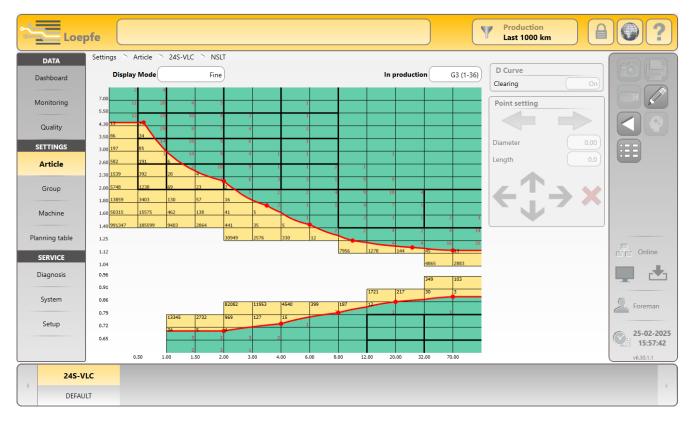
Location	lcon	Selection	Description
Import Article Settings		Article Set- tings	<ul> <li>Displays a list of articles that can be imported from a USB stick.</li> </ul>
			<ul> <li>Selects an article to be imported.</li> </ul>
			Indicates selected article with a yellow highlight.
		Properties	Enables setting of article properties such as name and basic yarn parameters.
		Download or import	Imports settings of article.

# 5.4 Edit article

# 5.4.1 Basic settings / tools

### **Clearing curves matrix**

The clearing curve defines the boundary between events that remain in the yarn and those that are to be removed. The LZE software displays clearing curves in a matrix that is divided in fine and coarse classes:

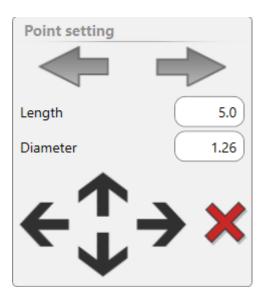


Location	lcon	Selection	Description
TOP MENU	$\nabla$	Data selection filter	Selects filter settings to be applied to the evaluation.
Central area	Matrix		Area within clearing curve:
			Events in this area will remain in yarn.
			Number of events are listed in black color.
			Area outside clearing curve:
			<ul> <li>Events in this area will be cleared.</li> </ul>
			Number of events are listed in red color.
			Points in curve:
			<ul> <li>Setting points in clearing curve.</li> </ul>
			Light-framed boxes:
			Fine classes (207).

Location	lcon	Selection	Description
			Bold-framed boxes:
			Coarse classes (23).
			X-axis [cm]:
			Length of yarn fault.
			Y-axis [multiple of diameter]:
			<ul> <li>Yarn thickness.</li> </ul>
	Point setting	I	Adds, deletes and moves setting points in clearing curve.
BOTTOM MENU			Selects group to be evaluated.

### **Point settings**

Clearing curves can be adjusted by moving, adding or deleting setting points. A setting point can be selected by tapping, a new setting point can be added by tapping the curve between two existing setting points. Each clearing curve has a specific number of setting points.



Location	lcon	Selection	Description
Point setting		Grey left and right arrows	Jumps from one setting point to previous or next.
		Length	Sets length (X-axis value).
		Diameter	Sets diameter (Y-axis value).
		Black direc- tional arrows	Moves setting point in corresponding direction.
	×	Cross	Deletes setting point.

# 5.4.2 Autostart

#### New autostart list

With the autostart function, the system supports the user in creating an article. During the first 100 km, the yarn is analyzed and the system adjusts the parameters every 5 km. At the end of this auto configuration, the clearing curve is available to the user for manual fine adjustments, if required.

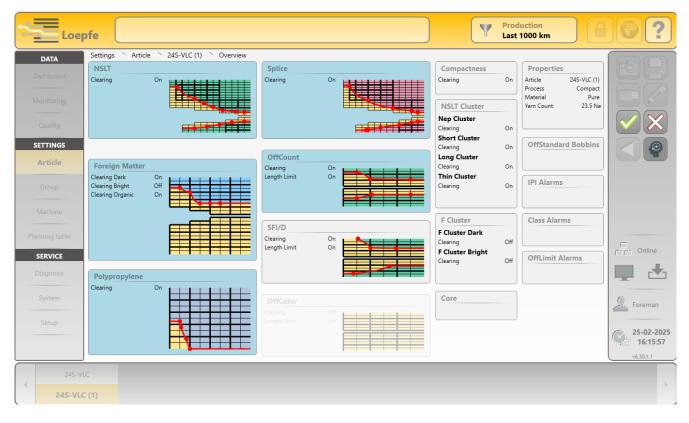
Loe	pfe				roduction ast 1000 km	
DATA Dashboard Monitoring	Settings Articl	e 24S-VLC (1) Overview	Splice Clearing On	Compactness Clearing C NSLT Cluster	In Article 24S-VLC (1) Process Compact Material Pure Yarn Count 23.5 Ne	
Quality SETTINGS Article Group	Foreign Matter Clearing Dark Clearing Bright Clearing Organic	On Of Of On Off	Autostart  Autostart  On  Splice On  OffCount Foreign Matter On  OffColor OffColor Off	Nep Cluster Clearing O Short Cluster Clearing O Long Cluster Clearing O Thin Cluster Clearing O	OffStandard Bobbins	
Machine Planning table SERVICE Diagnosis System	Polypropylene Clearing		Ci Le Contra Con	F Cluster F Cluster Dark Clearing O F Cluster Bright Clearing O Core		Online
Setup 245-VL0			Clearing Off Length Limit Off			Eoreman 25-02-2025 16:14:40 v630.1.1

Location	lcon	Selection	Description
Autostart		NSLT	Toggle autostart on or off for selected clearing.
		Splice	
		OffCount	
		SFI/D	
		Foreign Mat- ter	
		OffColor	
		Polypropylene	
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.

#### **Toggle Autostart on/off**

If the autostart function is activated, the curve adjusts continuously. The autostart is completed after the first 100 km wound yarn per group.

The autostart function can be used both when creating a new article and during operation. If autostart is switched on during operation, the user will be asked if the clearing parameters of the current article should be overwritten.



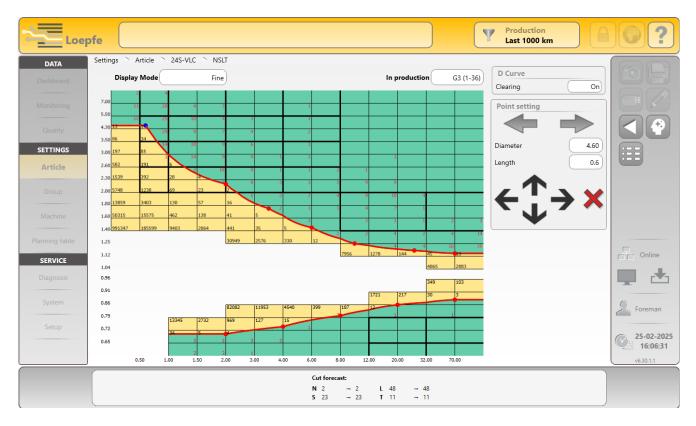
Location	lcon	Selection	Description
Autostart		NSLT	Toggle autostart on or off for selected clearing.
		Foreign Mat- ter	<ul> <li>Clearing curves highlighted in blue are ready for autostart.</li> </ul>
		Polypropylene	
		Splice	
		OffCount	
		SFI/D	
		OffColor	
		NSLT Cluster	
		F Cluster	
		OffLimit Alarms	
		Class Alarms	
		IPI Alarms	
		OffStandard Bobbins	
		Core	
		Properties	

Location	lcon	Selection	Selection Description	
RIGHT MENU	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.	
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.	
	0	Disable Au- tostart	<ul><li>Indicates enabled autostart.</li><li>Autostart can be disabled.</li></ul>	
		Enable Au- tostart	<ul><li>Indicates disabled autostart.</li><li>Autostart can be enabled.</li></ul>	

# 5.4.3 Edit article scenarios

#### Adjust clearing curve in the matrix

The clearing curve defines the boundary between events that remain in the yarn and those that are removed. The LZE software displays clearing curves in a matrix that is divided in fine and coarse classes. In all cases, adjusting the curves is very similar. In this case the NSLT curve is used as an example to describe the tools used to adjust the clearing curve:



Location	lcon	Selection	Description		
Central area		Display Mode	Changes representation of measurements in the matrix.		
		In Production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>		
			<ul> <li>Displays Group to which article is assigned.</li> </ul>		
		Matrix	<ul> <li>Displays current clearing curve (green).</li> </ul>		
			<ul> <li>Displays new clearing curve (red).</li> </ul>		
		Point setting	Adjusts setting points in clearing curve.		
RIGHT MENU	A CONTRACTOR	Edit	Enables edit mode.		
	<	Step back	Navigates to previous window.		
	•	AutoCorrect	Enables AutoCorrect mode to adjust clearing curve with a sensi- tivity slider.		

Location	lcon	Selection	Description
		Coordinates table	Sets numerical values for setting points.
BOTTOM MENU		Cut forecast	Shows the actual cuts of NSLT. If the setting of the calculation curve is changed, the cut forecast shows the calculated (theoret- ical) increase (red) or decrease (green) of the cuts to be ex- pected after changing the settings.

#### Set numerical values in the coordinate table

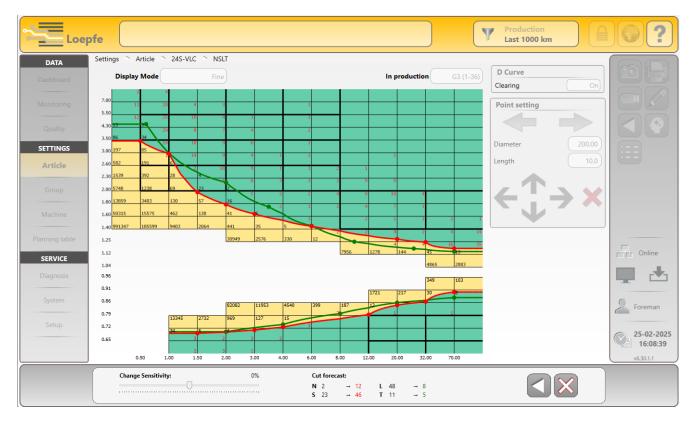
Clearing curves are defined by setting points. These setting points can be set with numerical values in the coordinates table. As an example, the NSLT coordinates table is shown:

Loe	pfe						Production Last 1000 km	
DATA	Settings 📄 Article	> 24S-VLC > 1	VSLT (Point list)					F
Dashboard		Diameter	Length		Diameter	Length		
	Thick ID 0	4.60	0.6	Thin ID 0	0.70	2.0		
Monitoring	Thick ID 1	2.20	2.0	Thin ID 1	0.74	4.0		
	Thick ID 2	1.75	3.5	Thin ID 2	0.80	8.0		
Quality	Thick ID 3	1.45	6.0	Thin ID 3	0.86	20.0		
SETTINGS	Thick ID 4	1.25	10.0	Thin ID 4	0.88	70.0		
Article	Thick ID 5	1.18	27.0	Thin ID 5	Off	Off		
	Thick ID 6	1.15	70.0	Thin ID 6	Off	Off		
Group	Thick ID 7	Off	Off	Thin ID 7	Off	Off		
Machine	Thick ID 8	Off	Off					
Wachine	Thick ID 9	Off	Off					
Planning table	Thick ID 10	Off	Off					
SERVICE	Thick ID 11	Off	Off					Online
	Thick ID 12	Off	Off					<b>– –</b>
Diagnosis	Thick ID 13	Off	Off					
System	Thick ID 14	Off	Off					6
	Thick ID 15	Off	Off					Foreman
Setup								25 02 2025
								25-02-2025
	]							v6.30.1.1
24S-V	LC							•

Location	lcon	Selection	Selection Description		
NSLT (Point list)		Thick ID 0 - 15	<ul><li>Sets numerical values for diameter and length.</li><li>Adds and deletes setting points.</li></ul>		
		Thin ID 0 - 7	<ul><li>Sets numerical values for diameter and length.</li><li>Adds and deletes setting points.</li></ul>		
RIGHT MENU	<	Step Back	Navigates to previous window.		

#### Autocorrect

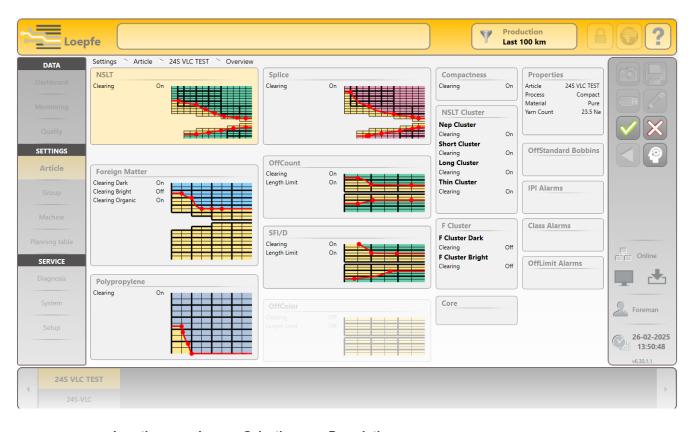
The autocorrect mode allows fine adjustment of the clearing curve after the first 100 km wound yarn per group. The clearing curve can be adjusted by using the sensitivity slider in the BOTTOM MENU or using the point setting tool. As an example, the NSLT autocorrect mode is shown:



Location	lcon	Selection	Description
BOTTOM MENU		Change Sen- sitivity	Adjusts complete NSLT clearing curve with a slider in a range between -30% and +30%.
		Cut forecast	Displays NSLT cut forecasts depending on the set sensitivity.
	<	Step back	Confirms adjustments and returns to previous screen.
	$\times$	Exit or Dis- card	Exits autocorrect mode and discards last changes.

#### **Confirm and save changes**

All changed parameters of the article are highlighted in yellow. They are only accepted after confirmation with "Save/Confirm".



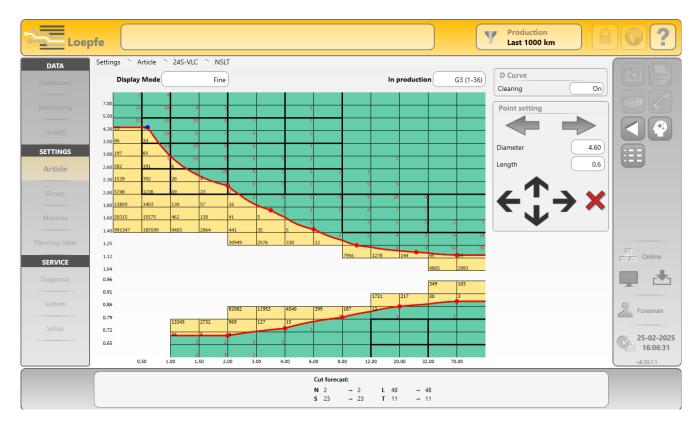
lcon	Selection	Description
	NSLT	Indicates edited yarn settings with a yellow highlight.
	Foreign Mat- ter	
	Polypropylene	
	Splice	
	OffCount	
	SFI/D	
	OffColor	
	NSLT Cluster	
	F Cluster	
	OffLimit Alarms	
	Class Alarms	
	IPI Alarms	
	OffStandard Bobbins	
	Core	
	Properties	
$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.
	Icon	NSLT Foreign Mat- ter Polypropylene Splice OffCount SFI/D OffColor NSLT Cluster F Cluster OffLimit Alarms Class Alarms IPI Alarms OffStandard Bobbins Core Properties

Location	lcon	Selection	Description
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.

# 5.4.4 Clearing curves and alarms

#### **NSLT**

The NSLT screen enables nep, short, long and thin clearing for a selected article. The clearing curve can be adjusted as described in point setting. In the BOTTOM MENU the expected numbers of cuts after the adjustment of the clearing curve is shown.

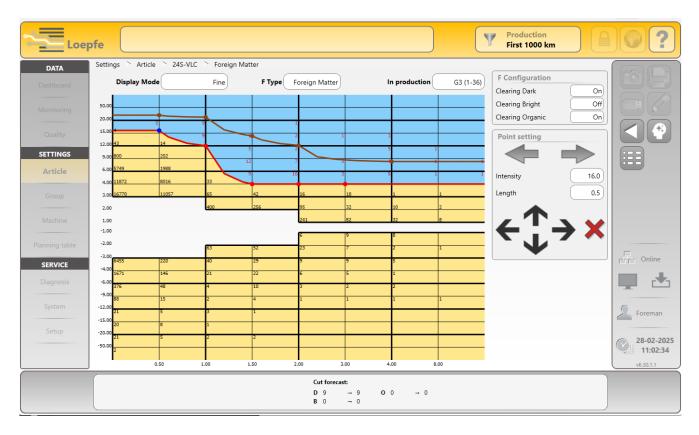


Location	lcon	Selection	Description
NSLT		Display Mode	Changes representation of events in the matrix.
		In production	Indicates whether article is currently being used in production.
			Displays group to which article is assigned.
		NSLT Curve	Toggles NSLT curve clearing on or off.
		Point Setting	Sets, edits and deletes setting points in clearing curve.
RIGHT MENU	A CONTRACTOR	Edit	Enables edit mode.
	<	Step back	Adapts changes and navigates to article overview window.
	¢	Autocorrect	Enables autocorrect mode for current clearing curve.

Location	lcon	Selection	Description
		Coordinates Table	Sets numerical values for setting points.
BOTTOM MENU		Cut forecast	Calculates number of events that are likely to occur after adjust- ing clearing curve.

#### **Foreign matter**

The foreign matter screen enables dark, bright and organic clearing for a selected article. The clearing curve can be adjusted as described in point setting. In the BOTTOM MENU the expected number of cuts after the adjustment of the clearing curve is shown.

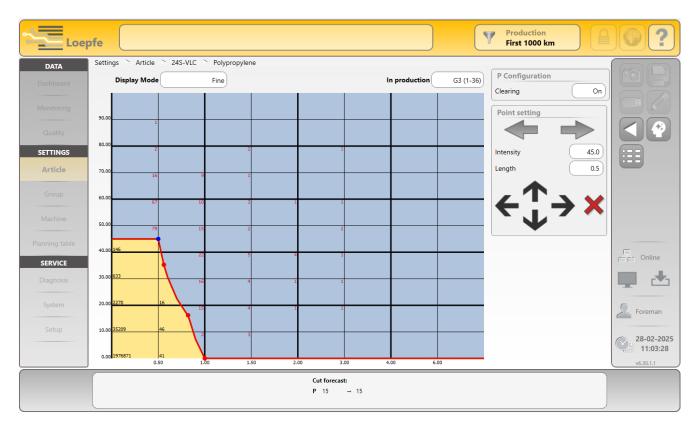


lcon	Selection	Description
	Display Mode	Changes representation of events in the matrix.
	F Туре	Changes F type when clearing dark and clearing organic is en- abled.
	In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>
		<ul> <li>Displays group to which article is assigned.</li> </ul>
	F Configura-	Toggles on or off:
	tion	Clearing dark
		<ul> <li>Clearing bright</li> </ul>
		<ul> <li>Clearing organic</li> </ul>
	Point Setting	Sets, edits and deletes setting points in clearing curve.
-	Edit	Enables edit mode.
<	Step back	Adapts changes and navigates to article overview window.
		Display Mode F Type In production F Configura- tion Point Setting Edit

Location	lcon	Selection	Description
		Autocorrect	Enables autocorrect mode for current clearing curve.
		Coordinates Table	Sets numerical values for setting points.
BOTTOM MENU		Cut forecast	Calculates number of events that are likely to occur after adjust- ing of the clearing curve.

#### Polypropylene

The polypropylene screen enables P configuration clearing for a selected article. The clearing curve can be adjusted as described in point setting. In the BOTTOM MENU the expected number of cuts after the adjustment of the clearing curve is shown.



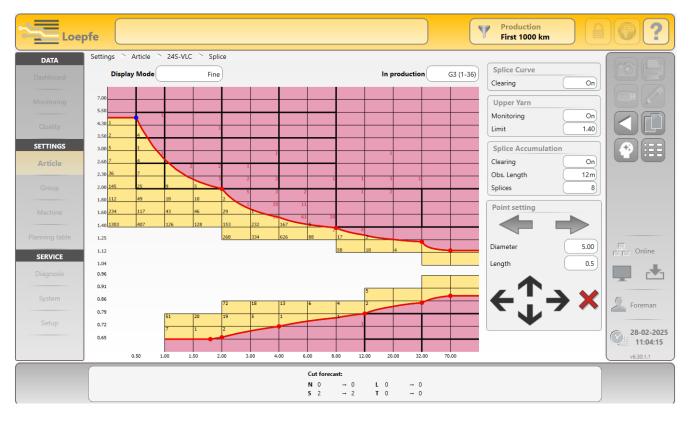
The X-axis (horizontal) represents the reference length of the signal, the accuracy of which decreases with the length of the physical defect, as the triboelectric charge decreases with a high frequency of occurrence. The Y-axis (vertical) represents the difference in triboelectric charge intensity between the materials.

lcon	Selection	Description
	Display Mode	Changes representation of measurements in the matrix.
	In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>
		Displays group to which article is assigned.
	P Configura- tion	Toggles P curve clearing on or off.
	Point Setting	Sets, edits and deletes setting points in clearing curve.
A.	Edit	Enables edit mode.
<	Step back	Adapts changes and navigates to article overview window.
•	Autocorrect	Enables autocorrect mode for current clearing curve.
		Display Mode In production P Configura- tion Point Setting Edit Edit Step back Autocorrect

Location	lcon	Selection	Description
		Coordinates Table	Sets numerical values for setting points.
BOTTOM MENU		Cut forecast	Calculates number of events that are likely to occur after adjust- ing clearing curve.

#### Splice

The splice screen enables splice curve clearing, Upper yarn monitoring and splice accumulation clearing for a selected article. The clearing curve can be adjusted as described in point setting. In the BOTTOM MENU the expected number of cuts after the adjustment of the clearing curve is shown.

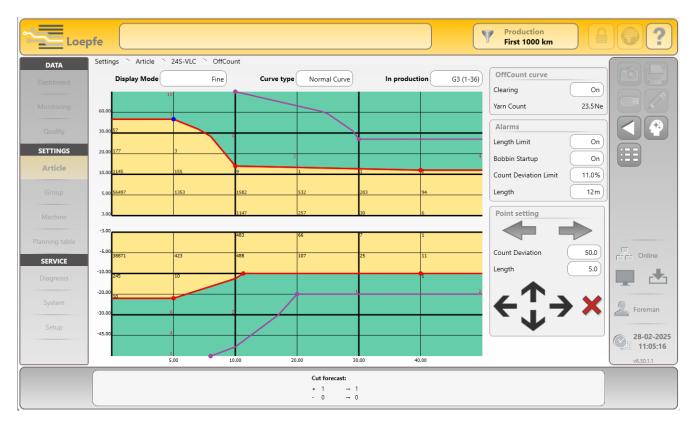


Location	lcon	Selection	Description
Splice		Display Mode	Changes representation of measurements in the matrix.
		In production	Indicates whether article is currently being used in production.
			<ul> <li>Displays group to which article is assigned.</li> </ul>
		Splice Curve	Enables/disables splice curve clearing.
		Upper Yarn	<ul> <li>Toggles monitoring on or off.</li> </ul>
			Sets limit.
		Splice Accu-	<ul> <li>Toggles splice accumulation clearing on or off.</li> </ul>
		mulation	Sets observation length.
			Sets number of splices.
		Point Setting	Sets, edits and deletes setting points in clearing curve.
RIGHT MENU	2	Edit	Enables edit mode.
	<	Step back	Adapts changes and navigates to article overview window.

Location	lcon	Selection	Description
		Autocorrect	Enables autocorrect mode for current clearing curve.
		Сору	Copies NSLT channel settings to splice channel.
		Coordinates Table	Sets numerical values for setting points.
BOTTOM MENU		Cut forecast	Calculates number of events that are likely to occur after adjust- ing of the clearing curve.

#### OffCount

The OffCount screen enables OffCount Curve clearing for a selected article. The clearing curve can be adjusted as described in point setting. In the BOTTOM MENU the expected number of cuts after the adjusting the clearing curve is shown.

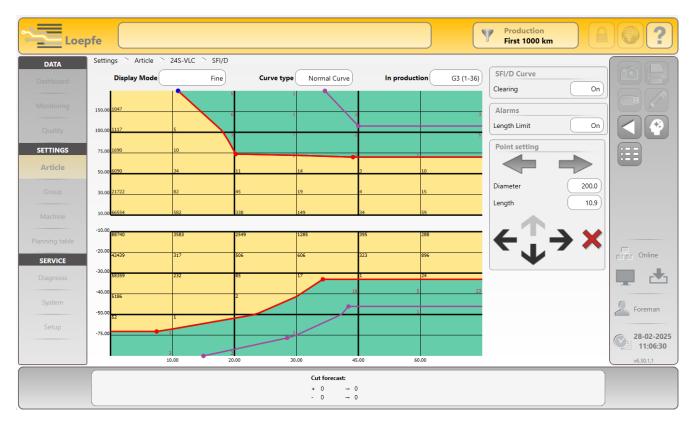


Location	lcon	Selection	Description
OffCount		Display Mode	Changes representation of measurements in the matrix.
		Curve Type	Selects curve type when length limit alarm is enabled.
		In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>
			<ul> <li>Displays group to which article is assigned.</li> </ul>
		OffCount Curve	Toggles OffCount curve clearing on or off.
		Alarms	Toggles length limit alarm on or off.
			The length limit alarm is an additional curve that can be placed above the clearing curves in the matrix. If the intensity of the OffCount fault and the length reach the limit of the curve, the length limit alarm is triggered and the bobbin is rejected.
			<ul> <li>Toggles bobbin startup alarm on or off.</li> </ul>
			If the yarn count deviation within the first <set length=""> of the bobbin exceeds the set limit, the bobbin startup alarm is triggered and the bobbin is rejected.</set>
			<ul> <li>Sets count deviation limit of bobbin startup.</li> </ul>
			<ul> <li>Displays length of bobbin startup.</li> </ul>

Location	lcon	Selection	Description
		Point Setting	Sets, edits and deletes setting points in clearing curve.
RIGHT MENU	2	Edit	Enables edit mode.
	<	Step Back	Adapts changes and navigates to article overview window.
	4	Autocorrect	Enables autocorrect mode for current clearing curve.
		Coordinates Table	Sets numerical values for setting points.
BOTTOM MENU		Cut forecast	Calculates number of events that are likely to occur after adjust- ing the clearing curve.

#### SFI/D

The surface index / diameter curve clearing is an optional feature for the LZE software. It enables SFI/D clearing for a selected article. The clearing curve can be adjusted as described in Point setting. In the BOTTOM MENU the expected number of cuts after the adjusting of the clearing curve is shown.



Location	lcon	Selection	Description
SFI/D		Display Mode	Changes representation of events in the matrix.
		Curve Type	Selects curve type when length limit alarm is enabled.
		In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>
			<ul> <li>Displays group to which article is assigned.</li> </ul>
		SFI/D Curve	Toggles SFI/D curve clearing on or off.
		Alarms	Toggles length limit alarm on or off.
		Point Setting	Sets, edits and deletes setting points in clearing curve.
RIGHT MENU	2	Edit	Enables edit mode.
	<	Step back	Adapts changes and navigates to article overview window.
		Autocorrect	Enables autocorrect mode for current clearing curve.

Location	lcon	Selection	Description
	••••	Coordinates Table	Sets numerical values for setting points.
BOTTOM MENU		Cut forecast	Calculates number of events that are likely to occur after adjust- ing clearing curve.

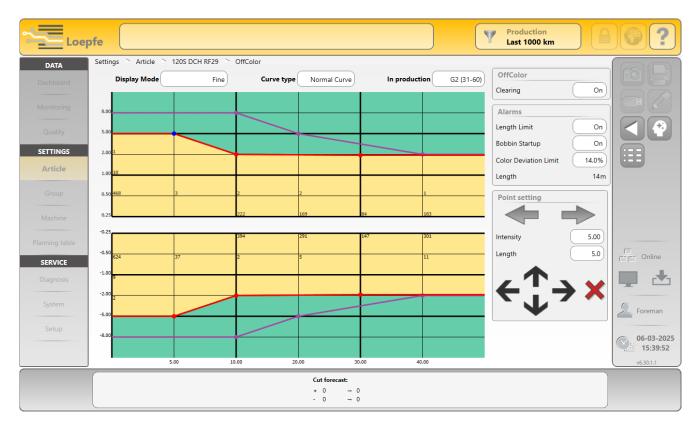
# Compactness

The Compactness screen enables compactness clearing for a selected article.

Location	lcon	Selection	Description			
		In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>			
			<ul> <li>Displays group to which article is assigned.</li> </ul>			
		Compactness	Toggles compactness clearing on or off.			
			Measurement sets the used signal.			
			<ul> <li>Observation length.</li> </ul>			
			<ul> <li>Limit positive: To detect faults with diameter increase.</li> </ul>			
			Limit negative: To detect faults with diameter decrease.			
RIGHT MENU	A.	Edit	Enables edit mode.			
	<	Step back	Adapts changes and navigates to article overview window.			

#### OffColor

The OffColor screen enables OffColor clearing for a selected article. The clearing curve can be adjusted as described in point setting. In the BOTTOM MENU the expected number of cuts after the adjustment of the clearing curve is shown.



Location	lcon	Selection	Description				
OffColor		Display Mode	Changes representation of measurements in the matrix.				
		Curve Type	Selects curve type when length limit alarm is enabled.				
		In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>				
			<ul> <li>Displays group to which article is assigned.</li> </ul>				
		OffColor Curve	Toggles OffColor curve on or off.				
		Alarms	<ul> <li>Toggles length limit alarm on or off.</li> </ul>				
			The length limit alarm is an additional curve that can be placed above the clearing curves in the matrix. If the intensity of the OffColor fault and the length reach the limit of the curve, the length limit alarm is triggered and the bobbin is rejected.				
			<ul> <li>Toggles bobbin startup alarm on or off.</li> </ul>				
			If the yarn color deviation within the first <set length=""> of the bobbin exceeds the set limit, the bobbin startup alarm is triggered and the bobbin is rejected.</set>				
			<ul> <li>Sets color deviation limit of bobbin startup.</li> </ul>				
			<ul> <li>Displays length of bobbin startup.</li> </ul>				

Location Icon		Selection	Description				
		Point Setting	Sets, edits and deletes setting points in clearing curve.				
RIGHT MENU	-	Edit	Enables Edit Mode.				
	<	Step back	Adapts changes and navigates to article overview window.				
	4	Autocorrect	Enables Autocorrect Mode for current clearing curve.				
		Coordinates Table	Sets numerical values for Setting Points.				
BOTTOM MENU		Cut forecast	Calculates number of events that are likely to occur after adjust- ing clearing curve.				

#### **NSLT cluster**

The NSLT cluster screen enables nep cluster, short cluster, long cluster or thin cluster clearing for a selected article. For each clearing the observation length and the maximum numbers of faults can be set.

Loe	pfe								
DATA	Settings > Article > 24	4S-VLC 🚬 NSLT	Cluster						600
Dashboard	Nep Cluster	Sh	nort Cluster		Long Cluster		Thin Cluster		
Dashboard	Clearing	On Cle	earing	On	Clearing	On	Clearing	On	
Monitoring	Obs. Length	12m Ob	os. Length	12m	Obs. Length	12m	Obs. Length	12m	
Quality	Faults	6 Fau	ults	6	Faults	6	Faults	4	
	Events	0 Eve	ents	0.1	Events	0	Events	0	
SETTINGS	Cluster settings								
Article	2 4								
Group	11 20 4 12 25 10	4 3	1						
	86 34 <sup>29</sup> 8 197 85 <sup>44</sup> <sup>18</sup>	7 4 9 6	2						
Machine	582 191 6 14	9 4 1	1 2 1	1					
Planning table	1539 392 28 5748 1238 69 23	8 3	3 1 9	9					
	13859 3403 130 57 50315 15575 462 138	16 5 2 41 5 2	2 4 9 1 1 4	18 4 7 1					Online
SERVICE	991347 185599 9403 2 <b>064</b>	441 35 5		1 1	2 1				
Diagnosis		30949 2576 3		278 144 4 45	16 35				
System				_	65 2883				6
System			I	721 217 30					Foreman
Setup	13345 2732	82082 11953 4 969 127 1	540 399 187 4	2	1		ſ	In production	26-02-2025
	<del>343</del> 5	2 3 2	1					G3 (1-36)	10:34:20
	2	3 1						G3 (1-30)	v6.30.1.1
	24S VLC TEST 24S-VLC						+		

Location	lcon	Selection	Description				
NSLT Cluster		Nep Cluster	For each N, S, L or T cluster:				
		Short Cluster	<ul> <li>Toggles cluster clearing on or off.</li> </ul>				
		Long Cluster	Sets observation length.				
		Thin Cluster	Sets permissible number of faults for set observation length.				
			Displays number of events.				
		Cluster set-	Matrix with clearing curve.				
		tings	<ul> <li>Navigates to Cluster settings.</li> </ul>				
			Purple = Nep Cluster field.				
			Red = Short Cluster field.				
			Green = Log Cluster field.				
			Yellow = Thin Cluster field.				
		In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>				
			<ul> <li>Displays group to which article is assigned.</li> </ul>				
RIGHT MENU		Edit	Enables edit mode.				
	<	Step Back	Adapts changes and navigates to article overview window.				

#### **Cluster settings**

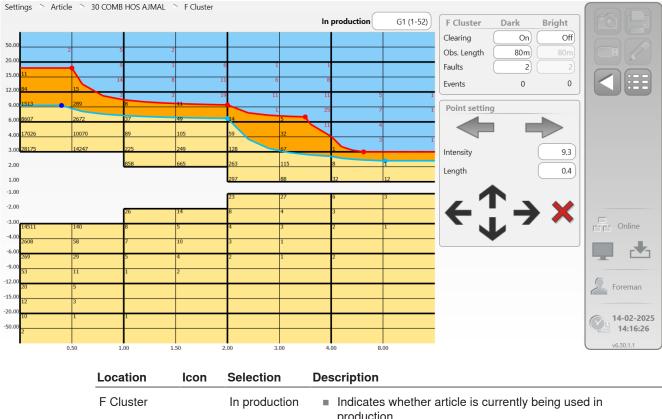
The cluster settings screen enables adjustment of the NSLT clearing curve for a selected article. The clearing curve can be adjusted as described in point setting.



Location	lcon	Selection	Description
Cluster set- tings		In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>
			<ul> <li>Displays group to which article is assigned.</li> </ul>
		Point Setting	Sets, edits and deletes setting points in clearing curve.
RIGHT MENU	2	Edit	Enables edit mode.
	<	Step Back	Adapts changes and navigates to article overview window.
		Coordinates Table	Sets numerical values for setting points.

#### **F** cluster

The F cluster screen enables F cluster dark clearing and F cluster bright clearing for a selected article. For each clearing the observation length and the maximum number of faults can be set. In the BOTTOM MENU the expected number of cuts after the adjustment of the clearing curve is shown.



F Cluster		In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>						
			Displays group to which article is assigned.						
		F Cluster Dark	<ul> <li>Toggles (corresponding) clearing on or off.</li> </ul>						
		F Cluster	<ul> <li>Sets observation length.</li> </ul>						
		Bright	Sets number of allowed faults.						
			Displays (number of) events.						
		Point Setting	Sets, edits and deletes setting points in clearing curve.						
RIGHT MENU	RIGHT MENU Edit		Enables Edit Mode.						
	<	Step Back	Adapts changes and navigates to article overview window.						
		Coordinates Table	Sets numerical values for setting points.						

#### **OffLimit alarms**

The OffLimit alarms screen offers up to 5 sets of specific OffLimit alarms for a selected article. For each alarm set, the cut type and its upper and lower limits can be defined. It can also be defined how the LZE should react if a limit is reached in one of the sets.

Loe	pfe					Production Last 1000 km	
Control Contro	pfe Settings > Article Action Pop-up Set 1 Active Monitoring Lower Limit Upper Limit Set 4 Active Monitoring Lower Limit Upper Limit	<ul> <li>245-VLC &gt; OffLimit A</li> <li>Total</li> <li>0 /100 km</li> <li>112 /100 km</li> <li>DM</li> <li>0 /100 km</li> <li>10 /100 km</li> </ul>	larms Current shi Set 2 Active Monitoring Lower Limit Upper Limit Set 5 Active Monitoring Lower Limit Upper Limit	ift /100km per spindle  Splice Cuts 0 /100 km 4 /100 km DM 0 /100 km 10 /100 km	Set 3 Active Monitoring Lower Limit Upper Limit		
System							Foreman 26-02-2025 10:39:59 v6:30.1.1
245 VLC							

Location	lcon	Selection	Description
OffLimit Alarms		Action	Selects how LZE should react to this alarm.
Alamo		Set 1 - 5	<ul> <li>Toggles up to 5 sets of OffLimit alarms on or off.</li> <li>Selects type of monitoring for each set.</li> <li>Sets lower and upper limit for each set.</li> </ul>
RIGHT MENU	RIGHT MENU		Enables edit mode.
	<	Step back	Adapts changes and navigates to article overview window.

#### **Class alarms**

The Class alarms screen enables the setting of the class alarm limits for a selected article. Up to 23 classes can be selected to be observed. For each selected class, an upper limit of events can be set. It can also be defined how the LZE should react if a class alarm limit is reached. Remark: the Class alarm limit is based on 100 km.

Loepfe Production Last 1000 km ? 7 i limit based on 100 km Class Alarms Class ala Settings Article 24S-VLC DATA In production 7.00 10 10 10 10 G3 (1-36) 5.50 Action 3 0 4.30 10 10 10 10 10 Pop-up 3.50 3.00 10 10 10 10 2.60 SETTINGS 4 2.30 10 10 10 10 Article 2.00 2 1 1.80 10 10 1.60 1.40 1.25 1.12 1.04 0.96 0.91 0.86 0.79 Online SERVICE 10 10 0.65 0 0 10 10 32.0 R 0.5 1.5 2.0 3.0 4.0 6.0 8.0 20.0 70.0 1.0 26-02-2025 10:41:18 /6.30.1.1 24S-VLC

Location	lcon	Selection	Description
Class Alarms		Matrix	<ul><li>Toggles class alarms on or off.</li><li>Sets class alarm limits.</li></ul>
		In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>
			<ul> <li>Displays group to which article is assigned.</li> </ul>
		Action	Selects how LZE should react to this alarm.
RIGHT MENU	A.	Edit	Enables edit mode.
_	<	Step Back	Adapts changes and navigates to article overview window.

#### **IPI alarms**

The IPI alarms screen enables IPI group alarms or IPI spindle alarms for a selected article. For each alarm can be defined how the LZE should respond when an event occurs (message, pop-up or block). The length limits for IPI events can also be edited here.

Loep	ofe								
DATA	Settings 🚿 Article	> 24S-VLC > IPI A	Alarms	Current shift data					
Dashboard	IPI Group Alarm			IPI Spindle Alarm				In production	
	Action	Message		Action	No	Action		G3 (1-36)	
Monitoring	Length 2 – 4 cm	Off	3	Length 2 – 4 cm	+	Off -	Off		
Quality	Length 4 – 8 cm	Off	0	Length 4 – 8 cm	+	Off -	Off		
SETTINGS	Length 8 – 20 cm	Off	0	Length 8 – 20 cm	+	Off -	Off		
Group	Length 20 – 70 cm	Off	0	Length 20 – 70 cm	+	Off -	Off		
Machine	Neps	Off	28	Neps	+	Off -	Off		
Planning table	Thick	Off	1	Thick	+	Off -	Off		_
SERVICE	Thin	Off	1	Thin	+	Off -	Off		Online
Diagnosis	Small	Off	0	Small	+	Off -	Off		
System								IPI Reference Values	E Foreman
Setup								, de	26-02-2025 10:42:07
									v6.30.1.1
	24S VLC TEST								

Location	lcon	Selection	Description
IPI Alarms		IPI Group Alarms	Sets limits for up to 8 NSLT yarn parameter.
		IPI Spindle Alarms	Sets difference (+) and difference (-) for up to 8 NSLT yarn parameter.
		In production	Indicates whether article is currently being used in production.
			<ul> <li>Displays group to which article is assigned.</li> </ul>
		IPI Reference	Sets IPI reference values for:
		Values	Neps +200%
			Thick Places +50%
			Thin Places -50%
RIGHT MENU	Edit Enables edit mode.		Enables edit mode.
	<	Step Back	Adapts changes and navigates to article overview window.

#### **OffStandard bobbins**

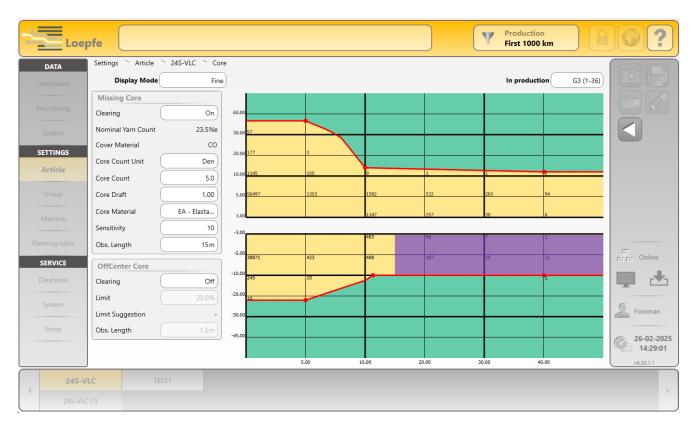
The OffStandard bobbins screen enables the setting of alarm limits for bobbins. It provides a menu where a maximum allowed number of repetitions for each cut type can be defined.

		24S-VLC	> OffStan	dard Bobbins	5						
shboard	Alarm Limit / Bobbin		Cuts / Bobbin	Alarms	OffStandard B	Alarm Limit / Bobbin		Cuts / Bobbin	Alarms	OffStandard B	
	NSLT	30	0.8	0.00	0.000%	_Thin Cluster	3	0.0	0.00	0.000%	
	_Neps	5	0.0	0.00	0.000%	F	3	0.2	3.00	0.534%	
	_Short	20	0.5	0.00	0.000%	F Organic	3	0.0	0.00	0.000%	
TINGS	_Long	15	0.3	0.00	0.000%	F Cluster	Off	0.0	0.00	0.000%	
rticle	_Thin	10	0.0	1.00	0.178%	F OffColor	Off	0.0	0.00	0.000%	
	Max. Surface Cuts	15	0.1	0.00	0.000%	Р	Off	0.4	0.00	0.000%	
	_SFI/D	3	0.0	1.00	0.178%	Missing Core	Off	0.0	0.00	0.000%	
	_Short SFI/D	3	0.0	0.00	0.000%	OffCenter Core	Off	0.0	0.00	0.000%	
	_Compactness	3	0.0	5.00	0.890%	Max. Cuts	25	1.4	0.00	0.000%	
	_Nep Cluster	3	0.0	0.00	0.000%						
-	_Short Cluster	3	0.0	0.00	0.000%						Conlin
RVICE	_Long Cluster	3	0.0	0.00	0.000%						
	Bobbins: 562										
									In p	G3 (1-36)	Forem
											26-02 10:4

Location	lcon	Selection	Description
OffStandard Bobbins			Sets alarm limit for maximum allowed number of repetitions for each individual cut type per bobbin.
		Bobbins	Displays total number of bobbin changes per selected filter and group.
		In production	<ul> <li>Indicates whether article is currently being used in production.</li> </ul>
			<ul> <li>Displays Group to which article is assigned.</li> </ul>
RIGHT MENU		Edit	Enables edit Mode.
	<	Step Back	Adapts changes and navigates to article overview window.

#### Core

The core screen enables missing core clearing or OffCenter core clearing for a selected article. For both clearings basic parameters can be set in corresponding menus.



Location	lcon	Selection	Description
Core		Display Mode	Changes representation of measurements in the matrix.
		In production	Indicates whether article is currently being used in production.
			<ul> <li>Displays group to which article is assigned.</li> </ul>
		Missing Core	<ul> <li>Toggles missing core clearing on or off.</li> </ul>
			<ul> <li>Displays yarn parameters.</li> </ul>
			Sets yarn parameters.
		OffCenter	Toggles OffCenter core clearing on or off.
		Core	<ul> <li>Sets OffCenter core limit.</li> </ul>
			Sets observation length.
RIGHT MENU	GHT MENU Edit Enables edit mode.		Enables edit mode.
	<	Step Back	Adapts changes and navigates to article overview window.

#### **Properties**

The properties screen provides a menu to edit the name of the article and to set basic parameters of the yarn for a selected article.

_ Q_	Loep	ofe				Production Last 1000 km		
	DATA	Contraction of the second seco	> 24S-VLC > Pro	opperties			(	AD
		Properties						
		Article	24S-VLC					
1	Monitoring	Process	Compact					
	Quality	Material	Pure					
		Fiber 1	CO - Cotton					
	SETTINGS	Fiber 2	None					
	Article	Blend Ratio	100.0					
	Group	Yarn Count	23.5Ne					
		Fancy Yarn	Off					
	Machine	Conductive Material	Off					
Pla	anning table			-				
	SERVICE							Online
	Diagnosis							📮 🛃
	System							E Foreman
	Setup							
								26-02-2025 10:45:19
							l	v6.30.1.1
	24S VLC 1							
4	24S-V	LC						•

Location	lcon	Selection	Description
Properties		Properties	Sets basic yarn parameters.
RIGHT MENU	RIGHT MENU		Enables edit mode.
	<	Step Back	Adapts changes and navigates to article overview window.

# 6 Group settings

# 6.1 Group overview and edit

The group overview screen displays information about the selected group such as spindle range, type of sensing head or widow length for data acquisition. All settings can also be edited here.

Loep	ofe		Production Last 1000 km	
DATA	Settings 🗅 Group 🗅 G3 🖒 Overview			
Dashboard	Settings Group	Settings Optional	Reset Data	
Dashboard	First Spindle 1	Bunch Monitoring On		
Monitoring	Last Spindle 36	TK Display Mode Class		
Quality	Sensing Head Type DMFP	Climate Compensation 30%		$\checkmark$
Quality	Lot Name 201-11		Resets the production data of	
SETTINGS	Article 24S-VLC		Resets the production data of this group!	
Article				
Group				
Machine	Data Acquisition		Splice Settings	
Planning table	Window Length 1000 km		Splice Check Length 25 cm	
Planning table				Online
SERVICE			F clearing during Splice Off	
Diagnosis			Wet Splicer Off	
System				6
				E Foreman
Setup				26-02-2025
				10:47:22
				v6.30.1.1
G3 (1-:	36)			Þ

lcon	Selection	Description
Settings Group		Edits basic group settings.
	Settings Op- tional	Edits optional settings.
	Reset Data	Resets production data of this group.
	Data Acquisi- tion	Sets windows length for data acquisition.
	Splice Set- tings	Edits settings for splice.
$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.
$\times$	Exit or Dis- card	Exits edit mode and discards last changes.
	Icon	Settings GroupSettings Op- tionalReset DataData Acquisi- tionSplice Set- tingsSave or Con- firmExit or Dis-

# 6.2 **Group list**

The group list screen provides an overview of all groups that are defined in the LZE. It shows which article is assigned to a specific group. Groups can be added or removed here.

Loe		> Group		> List					Production Last 1000 km	
DATA Dashboard	Settings No.	First	Last	TK	Status	Lot Name	Article	Dia Diff	Last Change	
Monitoring	G3	) 1	36	DMFP	Production	201-11	24S-VLC	0%	28-12-2024 16:02:38	
Quality										
Article										
Group										
Machine										
nning table										C Online
Diagnosis										<b>1</b>
System										S Foreman
Setup										26-02-2 10:48:
							The second secon			v6.30.1.1

Location	lcon	Selection	Description
Group List			Displays a list of groups with information about:
			– group No.
			<ul> <li>First sensing head in listed group.</li> </ul>
			<ul> <li>Last sensing head in listed group.</li> </ul>
			<ul> <li>Type of sensing head (TK) used in group.</li> </ul>
			<ul> <li>Status if group is in production or defined.</li> </ul>
			<ul> <li>Lot Name = name of the group.</li> </ul>
			<ul> <li>Assigned article for this group.</li> </ul>
			<ul> <li>Dia Diff. = diameter deviation from group average in %</li> </ul>
			<ul> <li>Last Change.</li> </ul>
			Indicates selected group with yellow highlight.
			Indicates whether group is running with green highlight.
		Group button	Navigates to group overview and enables group settings.
		Article button	Navigates to article overview.
		Column title	Sorts group list according to column title.
RIGTH MENU		Adjust Group	Adjusts group. A new reference value is formed for the currently wound yarn (zeroing).

Location	lcon	Selection	Description
		Start Group	Start a selected group.
		Stop Group	Stops a selected group.
	-	Add Group	Adds a new group.
	_	Delete Group	Deletes a group.
BOTTOM			Displays all groups.
MENU			<ul> <li>Selects an article.</li> </ul>
			Indicates selected article with a yellow highlight.
		Scroll buttons	Scrolls through list of articles.

# 6.3 Add group

A group can be added in two ways:

- 1. Start group setting by editing parameters that are predefined in the default group settings.
- 2. Start group setting with a copy of an existing group.

Loep	pfe								Production Last 1000 km	
DATA	Settings	Group	📄 G3	👌 List						
Dashboard	No.	First	Last	тк	Status	Lot Name	Article	Dia Diff	Last Change	
Monitoring	G3	) 1	36	DMFP	Production	201-11	24S-VLC	0%	28-12-2024 16:02:38	
Quality										
SETTINGS					_					
Article					1	Add group				
Group						Create new group				
Machine						Copy from group:	3	$\supset$		
Planning table							•			Conline
SERVICE					<u> </u>					
Diagnosis										
System										Foreman
Setup										
										26-02-2025 10:49:14
							•			v6.30.1.1
G3 (1-3	36)									Þ

Location	lcon	Selection	Description
Add Group		Create new Group	Navigates to the group overview and enables settings for a new group.
		Copy from Group	Selects a group to copy parameters from and navigates to the group overview to adjust parameters.
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.

# 7 Machine settings

# 7.1 Machine overview

The machine overview screen contains modules to edit basic settings of the machine. In addition the shift calendar, default group settings and the window length for the default data acquisition can be set here.

DATA	Settings 🚿 Machine 🛸 Overview	w		_	
Dashboard	Shift Calendar	Base Settings	Default Data Acquisition		
		~~~~			
Monitoring					
Quality					
SETTINGS					
Article					
Group					
oroup					
Machine					
lanning table					
SERVICE					Online
Diagnosis					
<u> </u>					-
System					E Foremar
Setup					26-02-2
					26-02-2 10:50:
	J				v6.30.1.1

Location	Selection	Description				
Machine Overview	Shift Calendar	Edits beginning and duration of each shift for each day of the week.				
Overview	Base Settings	Edits basic settings of winding machine.				
	Default Data Acquisition	Sets default window length in which data is collected. 100 km or 1000 km can be set. 100 km is the default setting.				

# 7.2 Shift calendar

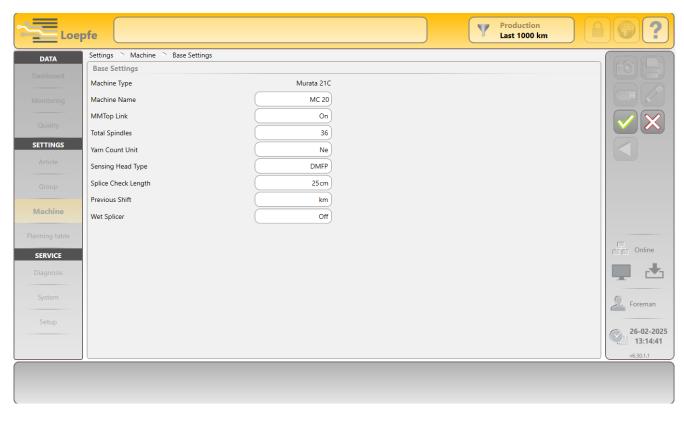
DATA	Settings 下 N	lachine 📄 S	Shift Calendar											
Dashboard	Shift Cycles						Week View							
Dashboard	08:00	16:00	23:45	-	-	-	Monday	07:45	15:45	23:45	-	-	-	
Monitoring	07:45	15:45	23:45	-	-	-	Tuesday	07:45	15:45	23:45	-	-	-	
Quality	08:00	16:00	23:45	-		-	Wednesday	07:45	15:45	23:45	-	-	-	
SETTINGS	08:00	16:00	23:45	-	-	-	Thursday	07:45	15:45	23:45	-	-	-	
Article	08:00	16:00	23:45	-		-	Friday	07:45	15:45	23:45	-	-	-	
Group	08:00	16:00	23:45	-	-	-	Saturday	07:45	15:45	23:45	-	-	-	
Mashina	08:00	16:00	23:30	-	-	-	Sunday	07:45	15:45	23:45		-	-	
Machine														
anning table														
SERVICE														Online
Diagnosis														
System														Guest
Setup	Manual Shift Cha													
	(Testing)	inge i												26-02-2 13:12:
														v6.30.1.1

The shift calendar screen contains modules to edit basic settings of the machine.

Location	lcon	Selection	Description
Shift Calendar		Shift Cycles	Edits beginning and duration of each shift for each day of the week.
		Week View	Assigns a shift to a day of the week by selecting the correspond- ing color.
		Manual Shift Change	Testing
RIGHT MENU	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.

# 7.3 Base settings

The base settings screen provides a menu to edit basic settings like machine name, total number of spindles or if wet splicers are used.



Location	lcon	Selection	Description
Base Settings		Base Settings	Edits basic settings for winding machine.
RIGHT MENU	NU Save or Con- firm		Saves or confirms current settings or selections.
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.

# 7.4 Default data acquisition

The default data acquisition screen allows to choose the default window length between 100 km and 1000 km.

Loe	pfe		uction 1000 km
DATA	Settings 🚿 Machine 🚿 Default Dat	a Acquisition	
Dashboard	Default Data Acquisition		
Dasinooard	Window Length	1000 km	
Monitoring			
Quality			
SETTINGS			
Article			
Article			
Group			
Machine			
Planning table SERVICE			Conline
Diagnosis			💻 📥
System			-
System			Foreman
Setup			
			26-02-2025 13:15:30
			 v6.30.1.1

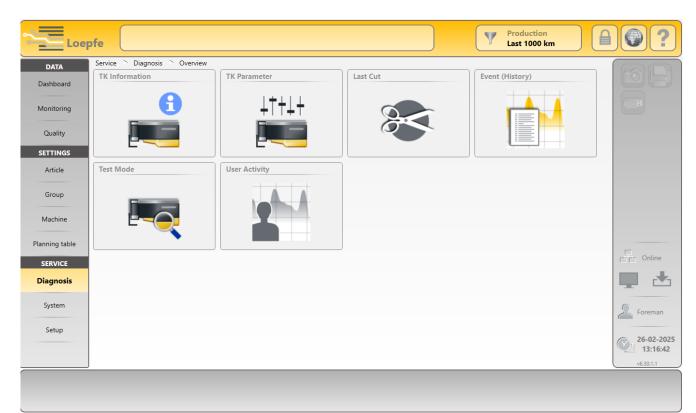
Location	lcon	Selection	Description
Default Data Acquisition		Default Data Acquisition	Sets default window length (km) in which data is collected.
RIGHT MENU	Save or Con- firm		Saves or confirms current settings or selections.
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.

# 8 SERVICE menu

# 8.1 Diagnosis

#### 8.1.1 Diagnosis overview

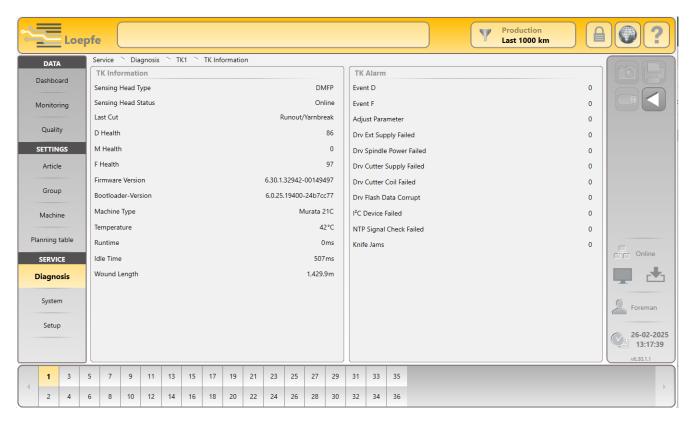
The diagnosis overview screen contains information about the sensing heads, last events or user activity. The test mode can also be activated here.



Location	Selection	Description
Diagnosis Overview	Sensing head Information	Displays information about sensing head.
	Sensing head Parameter	Displays sensing head parameters.
	Last Cut	Displays a list of last cutting events.
	Event (His- tory)	Displays a list of last events.
	Test Mode	Contains objects to perform a test mode.
	User Activity	Displays a list of last user activities.

### 8.1.2 TK information

The TK information screen provides information about each selected sensing head and shows a list of alarms that have occurred in the sensing head.



Location	lcon	Selection	Description
TK Informa- tion		TK Informa- tion	Displays a list of information about selected sensing head.
		TK Alarm	Displays a list of alarms coming directly from the sensing head.
RIGHT MENU	<	Step Back	Navigates to previous window.
BOTTOM MENU			<ul><li>Selects an sensing head to be displayed.</li><li>Indicates selected sensing head with a yellow highlight.</li></ul>
		Scroll Buttons	Scrolls through list of sensing heads.

### 8.1.3 TK parameter

The TK parameter screen provides information about each selected sensing head and shows a list of alarms that have occurred in the sensing head.

Loe	pfe													V	Produc Last 10		
DATA	Service 🔌 Dia	ignosis	≥ TK	(1 <u>&gt;</u> TK	Paramet	er				_							
Dashboard	General Para	meter															
	Settings ID			24	Setting	gs Block	Setting	s ID	24	1							
Monitoring	Last Cut	Run	out/Yan	nbreak	Wound	d Length			1430								
	Fine adjust p	arame	ter														
Quality	Diameter Base			0	Adjust			A	djusting								
SETTINGS	Fine Adjust Diff	erence		0	Fine A	djust Dri	ft Limit		Of	f							
Article	Dia Diff			-	Wound	d Length		1	12.2kn	n							
Group																	
Machine																	
Planning table																	_
SERVICE																	Online
Diagnosis																	- III - I
j																	
System																	S Foreman
																	- Toreman
Setup																	26-02-2
																	13:19:3
						_			1		1		1				v6.30.1.1
1 3	5 7 9	11	13	15	17 19	21	23	25	27	29	31	33	35				
						22	24	26	28	30	32	34	36				

Location	lcon	Selection	Description
TK Parameter		General Pa- rameter	Displays general parameters of selected sensing head.
RIGHT MENU	<	Step Back	Navigates to previous window.
BOTTOM MENU			<ul><li>Selects an sensing head to be displayed.</li><li>Indicates selected sensing head with a yellow highlight.</li></ul>
		Scroll Buttons	Scrolls through list of sensing heads.

### 8.1.4 Last cut

The last cut screen provides a list of the last cutting events for each selected sensing head.

<u>ک</u>	oep	fe																Productio			) 🕘 ?
DATA		Service	> Di	agnosis	≥ T	K1 📄	Last C	ut												(	
		Last Cu	ıt																		
Dashboard		Time			Cut					Clas	s				ength		Intensity				
Monitoring														<u> </u>	-						
wonitoning		09:58:1	18		Ru	nout/Ya	rnbrea	k							0		0				
Quality		09:57:0	02		FD	ark				D-	R2.2				2.40cm		11.70				
Quality		09:56:4	40		Р					P3	.1				0.20cm		49				
SETTINGS		09:56:1	19		Ru	nout/Ya	rnbrea	k							0		0				
Article		09:55:3	36		Р					P2	.3				0.90cm		25				
		09:54:4	46		FD	ark				D-	11.2				1.40cm		5.60				
Group		09:54:	14		FD	ark				D-	13.3				1.60cm		13.00				
		09:53:	55		Ru	nout/Ya	rnbrea	k							0		0				
Machine		09:52:2	24		S C	Cut				A2	.2				0.80cm		3.48				
		09:52:0	09		Ru	nout/Ya	rnbrea	k							0		0				
Planning tabl	e	09:50:3	35		Ru	nout/Ya	rnbrea	k							0		0				
-		09:50:0	09		S C	Cut				B1	.4				1.80cm		2.31				Online
SERVICE		09:48:	53		S C	Cut				B2	.3				1.60cm		2.72				
Diagnosis		09:48:3	33		Ru	nout/Ya	rnbrea	k							0		0				
-		09:46:	51		Ru	nout/Ya	rnbrea	k							0		0				
System		09:45:1	17		Ru	nout/Ya	rnbrea	k							0		0				0
		09:45:0	03		Ru	nout/Ya	rnbrea	k							0		0				Foreman
Setup		09:43:4	46		S C	Cut				B2	.1				1.40cm		2.90				
		09:43:2	29		S C	Cut				B2	.1				1.40cm		2.78				26-02-202
														•							13:20:37
																		 	 		v6.30.1.1
1 3	5	5 7	9	11	13	15	17	19	21	23	25	27	29	31	33	35					
							_														
2 4	6	5 8	10	12	14	16	18	20	22	24	26	28	30	32	34	36					

Location	lcon	Selection	Description
Last Cut		Last Cut	Displays a list of last 20 cuts for selected sensing head.
RIGHT MENU	<	Step Back	Navigates to previous window.
BOTTOM MENU			<ul><li>Selects a sensing head to be displayed.</li><li>Indicates selected sensing head with a yellow highlight.</li></ul>
		Scroll Buttons	Scrolls through list of sensing heads.

# 8.1.5 Event (history)

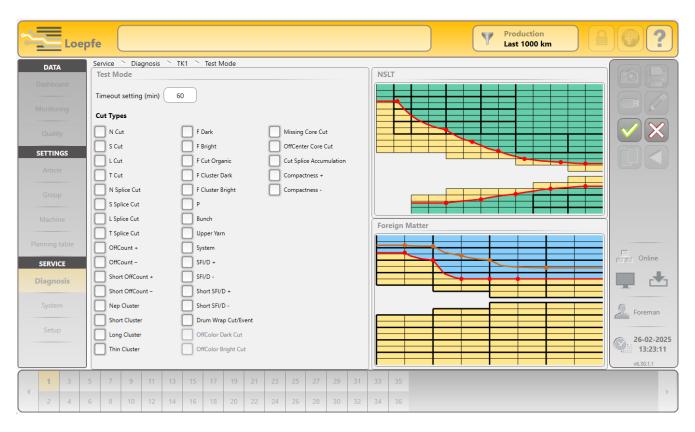
The event (history) screen provides a list of the last alarms and notes. The events can be filtered and sorted for a better overview.

DATA Dashboard	Service > Diagnos	is 📄 Event (Hi All Sou		Level	All Message				
ashboard	Event (History)								
onitoring	Appeared	Cleared	Confirmed	by	Туре	Source	Level	Message	
Quality					<b>A</b>				2
	08-01-2025 20:04:18	-	-	none	Text. Alarm	Spindle 21	Warning	F Alarm TK21	
TTINGS	08-01-2025 20:04:22	-	-	none	Text. Alarm	Spindle 23	Warning	NSLT Alarm TK23	
Article	08-01-2025 20:04:37		-	none	Text. Alarm	Spindle 30	Warning	Bad Bobbin Alarm TK30	
Group	08-01-2025 20:04:59	-		none	Text. Alarm	Spindle 30	Warning	Bad Bobbin Alarm TK30	
stoup	08-01-2025 20:05:22	-		none	Text. Alarm	Spindle 30	Warning	Bad Bobbin Alarm TK30	
lachine	08-01-2025 20:06:02	-	-	none	Text. Alarm	Spindle 30	Warning	Bad Bobbin Alarm TK30	
	08-01-2025 20:09:15	-	-	none	Text. Alarm	Spindle 33	Warning	F Alarm TK33	
ning table	08-01-2025 20:10:38	-	-	none	Text. Alarm	Spindle 1	Warning	Bad Bobbin Alarm TK1	
RVICE	08-01-2025 20:11:26		-	none	Text. Alarm	Spindle 1	Warning	Bad Bobbin Alarm TK1	Online
agnosis	08-01-2025 20:12:05			none	Text. Alarm	Spindle 23	Warning	Short Cluster AlarmTK23	
-	08-01-2025 20:12:19		-	none	Text. Alarm	Spindle 1	Warning	Bad Bobbin Alarm TK1	
ystem	08-01-2025 20:13:09	-	-	none	Text. Alarm	Spindle 1	Warning	Bad Bobbin Alarm TK1	S. Foreman
	08-01-2025 20:13:54	-	-	none	Text. Alarm	Spindle 1	Warning	Bad Bobbin Alarm TK1	
Setup	08-01-2025 20:14:40	-	-	none	Text. Alarm	Spindle 1	Warning	Bad Bobbin Alarm TK1	26-02-2
					•				13:22:

Location	lcon	Selection	Description					
Event (His- tory)		Туре	Filters types of alarms or notes.					
tory)		Source	Filters sources of LZE or sensing head.					
		Level	Filters levels of information, warnings, Alarms etc.					
		Message	Filters the messages in the list according to the typed character string.					
		Column Title	Sorts list according to column title.					
RIGHT MENU	<	Step Back	Navigates to previous window.					

#### 8.1.6 Test mode

The test mode screen provides a list of cutting types to be checked. One or more cutting types, NSLT classes or foreign matter classes can be selected for the evaluation.



Location	lcon	Selection	Description
Test Mode		Timeout (min)	Opens a list to select timeout for test mode.
		Cut Types	Selects cut types to be checked in test mode.
		NSLT	Opens an input window to select yarn fault classes to be evalu- ated in test mode.
		Foreign Mat- ter	Opens an input window to select yarn fault classes to be evalu- ated in test mode.
RIGHT MENU		Сору	Contains a button to copy test mode settings.
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.
BOTTOM			<ul> <li>Selects an sensing head to be displayed.</li> </ul>
MENU			Indicates selected sensing head with a yellow highlight.
		Scroll Buttons	Scrolls through the list of sensing heads.

# 8.1.7 User activity

The user activity screen provides a list of the last user activities. The list can be filtered by date/time, operator or text string so that the desired information can be found more quickly.

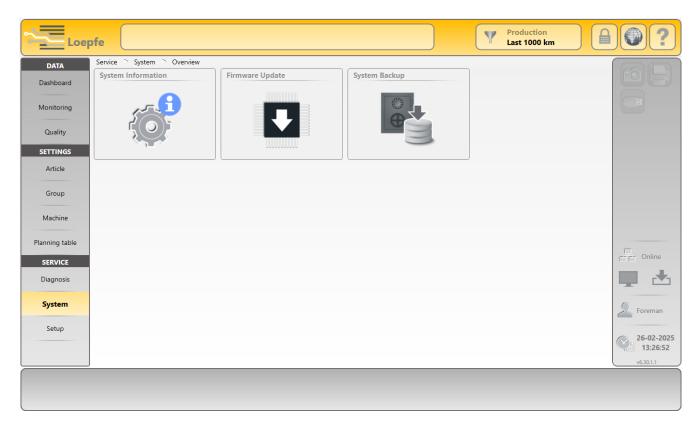
Loe	pfe			Production .ast 1000 km	
DATA	Service Diagnosis D	User Activity			AR
Dashboard	Date/Time Last 1	2 Months Operator	All Filter		
Monitoring	User Activity				
Quality	Activities: 4 Zipped data load Date/Time	Operator	Activity		?
			A.		
SETTINGS	26-02-2025 12:25:30	Foreman	The User loaded old (zipped) UserActivity files.		
Article			Article was changed. Group: D Curve		
Group	26-02-2025 09:26:04	Foreman	SettingValue: thick00 Original: 4.6 New: 2.24		
			Group: D Curve Set		
Machine			Article was changed. Group: D Curve		
Planning table	25-02-2025 15:38:14	Foreman	SettingValue: thick00 Original: 4.6		
SERVICE			New: 1.87 Group: D Curve		Online
Diagnosis			Set Article was changed.		<b>•</b>
<b>_</b>	25-02-2025 15:33:07	Foreman	Group: D Curve - SettingValue: thick00 Original: 4.6		
System	25-02-2025 15:53:07	Foreman	Originai: 4.0 New: 4.6 Group: D Curve		S. Foreman
Setup			Sett		
					26-02-2025
			V		v6.30.1.1

Location	lcon	Selection	Description
		Date and Time	Filters user activity list to selected time period.
		Operator	Filters user activity list to selected operator.
		Filter	Filters user activity list to typed character string.
		Column Title	Sorts user activity list according to column title.
RIGHT MENU	<	Step Back	Navigates to previous window.
	?	Info	Displays the full text of user activity in a pop-up window.

# 8.2 System

#### 8.2.1 System overview

The system overview screen provides access to system information, maintenance and service. Updates and backups can be created and the system can be restored.



Location Selection		Description		
System Over- view	System Infor- mation	Displays system information.		
date		Enables a firmware update.		
		Starts a wizard to create a backup of system configuration.		

# 8.2.2 System information

The system information screen provides system information and shows whether optional software extensions are enabled.

DATA	Service 📄 System 🚿	System Information				
Dashboard	System Information					
Dashboard	Hostname	MADONNENLILIE	Board Name	-	Installed Bootstrapper Version -	
Monitoring	Machine Type	Murata 21C	Mainboard Temperature	0°C	Logger Api Key 7f044bda7d6a576615a54d8	
	Machine Name	MC 20	Master Module Version	2.0.12.0	b3c81d517c45596e6	
Quality	LZE Software Version	6.30.1.1	Master Module ZE-Link Version	2.0.1.0		
SETTINGS	DLL ZE-Link Version	-	MSPS Version	2.0.0.0		
Article	MAC Address 0	00:50:08:0F:E0:10	Firmware Version 6.30.1.32	942-00149497		
	MAC Address 1	00:50:08:0F:E0:11	Bootloader Version 6.0.25.19	400-24b7cc77		
Group	Free space on Compact	Flash 62031MB	Telegram Receive Queue	0		
Machine	Free space on Ramdrive	62031MB	Telegram Processing Queue	0		
	Default Report Language	e en-US	Database revision	5		
lanning table	Option Code	1YE4PALOQW9KW	Clearer Data Types Version	6.30.1.2		
SERVICE	LabPack Enabled		Image Version	-		Online
Diagnosis			Factory Bootstrapper version	1.4.0.30528		
	Featurepack 1 Enabled		Factory PRISMA Version	-		
System	Valid Until	31-12-9999 23:59:59	Factory ZENIT+ Version	-		S. Foreman
Setup	Bios Version	-				
						26-02-2
						13:30:
						v6.30.1.1

Location	lcon	Selection	Description
System Infor- mation		System Infor- mation	Displays an overview of system information about hardware and software.
RIGHT MENU	$\langle$	Step Back	Navigates to previous window.

### 8.2.3 Firmware update

The firmware update screen provides menus to perform a firmware update of the master module or the sensing heads.

Loe	pfe				Production Last 1000 km		
DATA	Service 🛸 System 🛸 Firmware Update						
Dashboard	Firmware Archive		Master Mod	lule			
Dashboard	Master Module	2.0.12.0	Version				
Monitoring	Bootloader	6.0.25.19400-24b7cc77	Update State			Application	
Monitoring	Firmware	6.30.1.32942-00149497					
Quality							
	Update Progress		Spindles				
SETTINGS	Master Module	0 %	Spindle	Firmware	Bootloader		
Article				4			
Carrie	TK (bootloader/firmware)	0 %	1	6.30.1.32942-00149497	6.0.25.19400-24b7cc77		
Group			2	6.30.1.32942-00149497	6.0.25.19400-24b7cc77		
Machine			3	6.30.1.32942-00149497	6.0.25.19400-24b7cc77		
			4	6.30.1.32942-00149497	6.0.25.19400-24b7cc77		
Planning table			5	6.30.1.32942-00149497	6.0.25.19400-24b7cc77		
SERVICE			6	6.30.1.32942-00149497	6.0.25.19400-24b7cc77		Online
Diagnosis			7	6.30.1.32942-00149497	6.0.25.19400-24b7cc77		<b>1</b>
			8	6.30.1.32942-00149497	6.0.25.19400-24b7cc77		
System			9	6.30.1.32942-00149497	6.0.25.19400-24b7cc77		S. Foreman
Setup			10	6.30.1.32942-00149497	6.0.25.19400-24b7cc77		
Setup			11	6.30.1.32942-00149497	6.0.25.19400-24b7cc77		26-02-2025 13:31:59
				•			v6.30.1.1

Location	lcon	Selection	Description
Firmware Up- date		Firmware Ar- chive	Displays serial number of: ■ Master module
			Bootloader
			Firmware
		Master Mod- ule	Displays master module online state.
		Update Progress	Displays Update progress for:
			Master module
			TK (bootloader/firmware)
		Firmware-Up- date	Starts Update for:
			Master module
			TK (bootloader/firmware)
		Spindles	Displays version of firmware and bootloader for each spindle.
RIGHT MENU	ß	Edit	Enables edit mode to start update for:
	5		Master module
			TK (bootloader/firmware)

Location	lcon	Selection	Description
	$\times$	Exit or Dis- card	Exits edit mode and discards latest changes.
	<	Step Back	Navigates to previous window.

# 8.2.4 System backup

The system backup screen provides a wizard to perform a system backup.

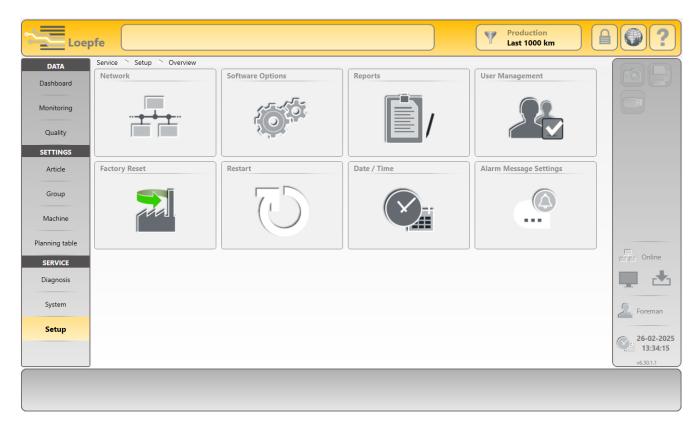
Loe	pfe		Production Last 1000 km	
DATA Dashboard Monitoring Quality SETTINGS Article Group Machine Planning table SERVICE Diagnosis	Service System System Backup	This wizard creates a backup of the current system configuration.		
System Setup				Foreman 26-02-2025 13:33:06 v630.1.1

Location	lcon	Selection	Description
System Backup			Starts a wizard to create a backup of system configuration.
	$\geq$	Step Forward	Starts backup and saves it in internal memory.
RIGHT MENU	<	Step Back	Navigates to previous window.

#### 8.3 Setup

#### 8.3.1 **Setup overview**

This screen provides access to setup information, user management, reports and alarm settings. A factory reset or software restart can be initiated. Furthermore, date and time can be set.



Location	Selection	Description			
Setup Over- view	Network	<ul><li>Displays network settings.</li><li>Edits network settings.</li></ul>			
	Software Op- tions	<ul> <li>Displays information about LZE software and additional software packages.</li> <li>Edite aption code</li> </ul>			
		Edits option code.			
	Reports	Sets values for complete shift report.			
		Sets values for Intermediate shift report.			
	User Manage- ment	Adds or deletes users.			
		Sets or changes passwords.			
	Factory Reset	Requires password level service.			
	Restart	Restarts LZE software.			
	Date and Time	Sets date and time.			
	Alarm Mes- sage Settings	Toggles several alarms on or off.			
	sage Settings	sage Settings			

#### 8.3.2 Network

The network screen contains menus to apply LAN or WLAN connections or to edit the settings of the network. For some features password level service is required.

Location	lcon	Selection	Description
Network		Network	Displays hostname.
		LAN 1	Requires password level service.
		LAN 2	Displays network settings for LAN 2 (MillMaster Top).
RIGHT MENU	2	Edit	Enables edit mode.
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.
	<	Step Back	Navigates to previous window.

# 8.3.3 Software options

The software options screen enables the integration of optional software features.

Loepfe				Production Last 1000 km	
DATA Servi Dashboard Monitoring Quality SETTINGS Article Group Machine Planning table SERVICE Diagnosis System Setup	ice `Setup `Software Options tware Options	Request Key Option Code LabPack Enabled Featurepack 1 Enabled Valid Until	MMKF7EAA 1YE4PALOQW9KW 31-12-9999 23:59:59		Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Contine Con

Location	lcon	Selection	Description
Software Op- tions		Request Key	Request key to request option code.
lions		Option Code	Unlocks the options LabPack or featurepack 1.
		LabPack En- abled	Indicates whether LabPack option is available. <ul> <li>SFI/D clearing and classification</li> </ul>
			– SFI/D short
			– SFI/D long
			SFI surface index
			Imperfections
			<ul> <li>IPI and IPI alarm</li> </ul>
		Featurepack 1	Indicates whether featurepack 1 option is available.
		Enabled	<ul> <li>OffColor</li> </ul>
			– Dark
			– Bright
		Valid Until	Displays until when LZE software is valid.
RIGHT MENU		Edit	Enables edit mode.
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.

Location	lcon	Selection	Description
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.
	<	Step Back	Navigates to previous window.

#### 8.3.4 Reports

The reports screen generates a complete shift report or an intermediate shift report. It enables the option to include information about settings, monitoring or quality data.

Loep	ofe		Production Last 1000 km	
DATA	Service Setup Reports			
Dashboard	Shirt Report Setup			
Monitoring		Completed Shift Report	Intermediate Shift Report	
Quality	Settings			
SETTINGS	Monitoring			
Article	Quality			
Group	Spindle Parameter 1			
Machine	Spindle Parameter 2			
Planning table SERVICE	Spindle Parameter 3			Online
Diagnosis	Spindle Parameter 4			💻 📥
System	Spindle Parameter 5			Foreman
Setup	Report Language	Eng	lish	26-02-2025
				13:39:44
				v6.30.1.1

Location	lcon	Selection	Description
Shift Report Setup		Settings	Includes or excludes information about settings in shift report.
Octup		Monitoring	Includes or excludes monitoring information in shift report.
		Quality	Includes or excludes quality information in shift report.
		Spindle Pa- rameter 1-5	Opens a list of yarn cut or alarm types to be included in shift report.
		Auto Gener- ate Intermedi- ate Report	Toggles automatic generation of an intermediate report on or off.
		Report Lan- guage	Opens a list of languages for report.
RIGHT MENU	6	Edit	Enables edit mode.
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.

Location	lcon	Selection	Description
	<	Step Back	Navigates to previous window.

### 8.3.5 User management

The user management screen enables the option to add or remove users, change passwords and distribute access rights.

Dark   Dashboard   Dashboard   Dashboard   Montoing   Operator     Foreman     Foreman     Setup     <	Loe	pfe	Production Last 1000 km	
13:41:09 v630.1.1	Dashboard Monitoring Quality SETTINGS Article Group Machine Planning table SERVICE Diagnosis System	Password Level Operator	Foreman	Conline Conlin

Location	lcon	Selection	Description
User Manage- ment		Password Level Opera- tor	Displays a list of users with operator level.
		Password Level Fore- man	Displays a list of users with foreman level.
RIGHT MENU	2	Edit	Enables edit mode.
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.
	+2	Add User	Selects password level.
	-2	Delete User	Deletes selected user.

Location	lcon	Selection	Description
		Change Pass- word	Changes password of selected user.
	<	Step Back	Navigates to previous window.

#### 8.3.6 Restart

The restart screen enables the restart of the LZE.

	ofe	Production Last 1000 km	
DATA	Service 🚿 Setup 🚿 Restart		
Dashboard	Restart		
Dashboard			
Monitoring			
Quality			
SETTINGS			
Article			
Group			
Machine	Restart now		
Planning table			
SERVICE			Online
Diagnosis			💻 🛃
System			Foreman
Setup			
Setup			26-02-2025 13:43:56
			v6.30.1.1

Location	lcon	Selection	Description
Restart	U	Restart	Restarts LZE software.
RIGHT MENU	<	Step Back	Navigates to previous window.

### 8.3.7 Date/Time

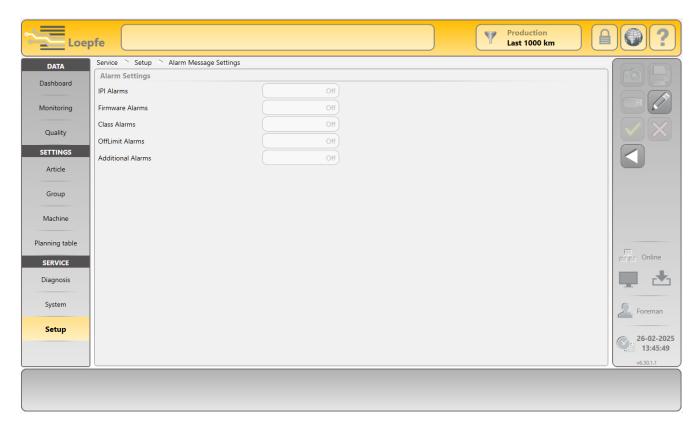
The date and time screen offers the option to set date and time of the LZE.

<b>DATA</b> ashboard	Service > Se Date	tup 🖒 Da						Time Hour	13	Minut	te (44	Sec	ond 48	
onitoring Quality														
Article	Su	Мо	Tu	We	Th	Fr	Sa			<u> </u>		$\overline{}$		
Group										6		)		
Machine														
nning table										[		_/		
SERVICE										1		J		Onli
Diagnosis														
System														S. Forem
Setup														
														26-02 13:4

Location	lcon	Selection	Description
Date/Time		Date	Displays current date.
_		Time	Displays current time.
RIGHT MENU	2	Edit	Enables edit mode.
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.
	<	Step Back	Navigates to previous window.

### 8.3.8 Alarm message settings

The alarm message settings screen contains a menu to change general settings for system-wide alarms.



Location	lcon	Selection	Description
Alarm Mes- sage Settings		Alarm Set- tings	Toggles on or off: IPI alarms Firmware alarms Class alarms OffLimit alarms Additional alarms
RIGHT MENU	-	Edit	Enables edit mode.
	$\checkmark$	Save or Con- firm	Saves or confirms current settings or selections.
	$\times$	Exit or Dis- card	Exits edit mode and discards last changes.
	<	Step Back	Navigates to previous window.

# Notes



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