

UPDATE REGARDING LOGSTOR PRODUCT PROGRAM

It's once again time for new updates.

Below, please find our Product info No. 5 - 2023 with following updates:

- Introduction to LOGSTOR ShrinkMaster
- WeldMaster Portal renamed to LOGSTOR InstallationPortal

Should you have any questions, please contact your usual LOGSTOR contact person or the undersigned.

Best regards Kingspan LOGSTOR

Peter Jorsal Product & Academy Manager



LOGSTOR ShrinkMaster and LOGSTOR InstallationPortal

We are now ready to launch a new solution on the LOGSTOR Connect App:

LOGSTOR ShrinkMaster

ShrinkMaster is a tool for approval and documentation of shrinkable joint installations via your smartphone.

Because of this we will rename the LOGSTOR WeldMaster Portal to LOGSTOR InstallationPortal.

The **LOGSTOR InstallationPortal** will from now on include documentation of weld joints as well as documentation of shrinkable joints.

Very soon we will introduce more language layers (DK, DE, PL, NL & FR) to the LOGSTOR Connect (ShrinkMaster and WeldMaster).



Teaser video

On the following link you can see a short teaser video about ShrinkMaster: <u>https://youtu.be/henZQvTSoBM?si=Vw_bko1wZUYVOh-6</u>

Customer and contractor benefits

- Detailed documentation of joint installation
 - Date, time, installer credentials, contractor credentials, project information, GPS-location, joint type, joint dimension, isolation type, photo documentation, manual checks, resistance measurements, and comments are saved during installation
- Digitized documentation with easy access
 - No more written reports needed to be stored in a physical location, as they are now available in the InstallationPortal securely stored online
- More transparency
 - As a customer you will gain detailed information about the installation of the joints installed in your pipe network
- Easier workflow for supervision
 - By having all documentation available in one place, it will be easier to supervise your projects
- Clear overview of installations and locations
 - Through a map feature in the InstallationPortal you will have an easy map overview of your shrinkable joints' GPS-location
- Contractors can document their installations
 - As a contractor you can generate detailed reports of your work for your customers
- Removal of manual processes
 - All documentation is automatically available in the InstallationPortal after upload and can be generated as a report automatically

ShrinkMaster

LOGSTOR ShrinkMaster is a tool for utilities, contractors, installers, advisors, and supervisors, who want better documentation of shrinkable joint installations. The tool enables users to capture the installation process with photo documentation and resistance measurements for alarm wire and insulation.

After upload in the LOGSTOR ShrinkMaster tool via a smartphone, the documentation will be available in the InstallationPortal, where it can be extracted as reports. Unlike today's manual processes, our product provides comprehensive documentation for every single installation, eliminates written manual administrative processes, stores reports with easy user access, and makes it simple for our customers to supervise quality assurance.

Registration of project information

The first thing to do for the installer is to fill out project information: Customer ID and Project ID

Shrinkable joint parameters

All standard LOGSTOR shrinkable joints are available for installation in LOGSTOR ShrinkMaster.

We have started adding a label with a QR code on the packing foil of SX-WPJoint, SXB-WPJoint, SXT-WPJoint, BXJoint and BXSJoint. By scanning this QR code you can automatically register the correct information about the joint type and dimensions in the tool, but also the production order ID will be saved in our database, whereby we can track the joint to be installed on batch level if necessary.

You will start to see the label with the QR code when we have delivered our stock of joints without the label.

13.06	11.39 - 11.39 - 111 4G Clear
Scan QR code on project paper	Joint Parameters
	Type DIM /mm 2nd DIM /mm
LOGSTREE Type: 5031 Dimensiae: 125 Prod. Order: 101396479 ShrinkMaster	Insulation Foaming O Insulation shells
	Create shrink
	Tools Documents More

LOGSTOR ShrinkMaster can also be used if the QR code is damaged or unavailable. Information about the type of joint and dimensions is in this case inserted manually by clicking the input fields.

11.39 🕇 🗧	.11 4G 45	12.35 🕇	0	111 4G 40
ancel Type		Cancel	Dimension	
B2S		90		
B2S Reduction		110		
BS		125		
BX		140		
BXS		160		
C2F		180		
C2L		200		
End fitting		225		
FX		250		
SX-WP		280		
SX-WP Reduction		315		
SXB-WP		355		

Start the process

When all data has been entered, the installer will start the process and a 6-digit file number for the installation will be created for the installation and metadata will be saved for the file (i.e. date, time, gps location).

The file number shall be written on the casing of the pre-insulated pipe and fittings as this is the traceability of the joint installation.

Manual checks and measurements

Before the file can be uploaded to the InstallationPortal, the installer must carry out four manual checks and two measurements:

Manual Checks:

- Alarm test
- Leakage test
- Foam inspection
- Visual inspection

Measurements:

- Alarm wire resistance
- Insulation resistance

The measured alarm wire resistance and insulation resistance shall be entered. If the measurement is approved, the input field will display a green outline and the text: "Approved according to LOGSTOR accept criteria".

If the measurement is not approved, the input field will display a red outline and the text: "Not approved according to LOGSTOR accept criteria".

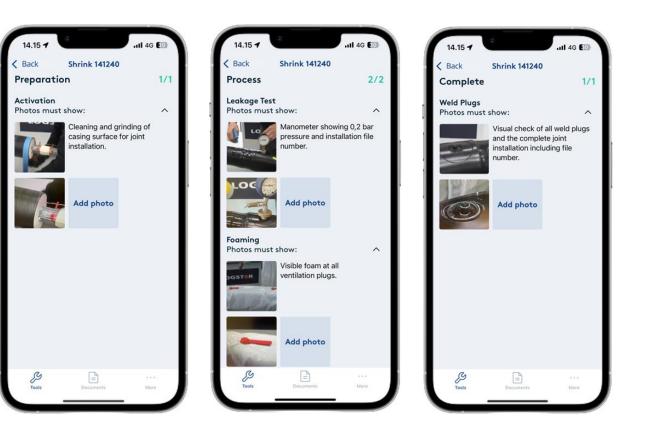
Alarm test and leakage test can be set to "not done" if not required for the specific joint.

Installation phases

When installing a shrink joint, the installation process must be documented with photos of three phases. The photos shall document that installation instructions are followed:

- Preparation
- Process
- Complete

Below, see examples of photo documentation of these phases (the photo documentation requirements will be different for different type of joints):



Upload to the installation portal

When all manual checks have been done and mandatory photos have been added for the installation phases, the file for the joint is ready to be uploaded to the InstallationPortal.

14.15 7	111 4G 🗊	14.15 -	.ııl 4G 🕅
Back Shrink 141240	Delete	K Back Shrink	141240
Preparation	1/1	Manual checks	6.
reputation		 Alarm test 	O Not do
Process	2/2	Leakage test	O Not do
Complete	1/1	Foam inspection	O Not do
Manual checks	6/6	 Visual inspection 	O Not do
		Alarm wire resistance	Insulation resistance
Comments		12 Ω	10
Add comment		Correspond to m, wire	Approved according to LOGSTOR accept criter
		1000 m	
Joint Parameters	^		
Main pina Ma	in nine		
Upload			
<i>چ</i>		ß)
Tools Documents	More	Tools Docu	ments More

LOGSTOR InstallationPortal

The **LOGSTOR InstallationPortal** will from now on include documentation on weld joints as well as documentation on shrinkable joints.

The InstallationPortal gives you the possibility of seeing the documentation for all casing joints installed with the PDA or LOGSTOR Connect app via a smartphone.

The process documentation for shrinkable and welded casing joints differs and therefore information in the InstallationPortal also differs in some instances.

It is possible to search for projects, towns/utilities, installer, contractor, file number of specific joints, joint type, approved/not approved joints, polygon/map etc.

Based on a chosen search a report can be generated.

		۹.						•			
							- 1977 C				
Adjust search 5 filters selected		Expand all	InputDateTime 👻	Edit selecter	6 rows				B. Report	🛃 Sha	re I≣ List ♀ Ma
Joints found	85 ~	FILE	WELDING INSULATION PROCESS RESISTANCE	••••	UTILITY	CONTRACTOR	PROJECT	INSTALLER	DATE	DIM.	TYPE COMMEN
Utility	~	114703	0	0000	Tjæreborg Industri A/S	Logstor service West	nordborgve; guderup	DMN	28. mar. 2023	710	BJ-P630
Contractor •	~										
nstaller •	~	KW	Bar - Press	sure (Bar) -O- EH	ect (KW) -O- Temp (°C)	*C	Checks		Machine Ch.	78	Comment
Project	~	5 KW 8 Bar	1			100 °C	V 🖨 Alarm Test		005005 #1		
Dimension •	~	4 KW 6 Bar 3 KW	·			200 °C	🗸 🙆 Leakage Test				
Joint Type 🔹	~	2 KW 4 Bar				100 °C	 Foam Inspection Signal Inspection 				
Date •	~	1 KW 2 Bar 0 KW 0 Bar	-			0 *C		_		-	
Machine Number	~	0 KW ¹ 0 Bar	1 29 57 85 113 141 16		11 109 337 365 293 421 449 477		E Photo Document	tation	Corrective actio	ns	Map
File	~	105513	0	0000	Tiæreborg Industri A/S	Logstor service West	and the set of the set	DMN	28. mar. 2023	710	83-9630
Air Tool	~	105513	•	0000	nareourg industri A/S	Logstor service west	nordborgvej guderup	UmN	20. mář. 2023	120	877630
Acceptance	~	101726	0	0000	Tjæreborg Industri A/S	Logstor service West	nordborgvej guderup	DMN	17. mar. 2023	710	BJ-P630
Comment	~										
Polygon	~	092419	0	0000	Tjæreborg Industri A/S	Logstor service West	nordborgvej guderup	DMN	17. mar. 2023	710	BJ-P630
Photo Documentation	~										

Example of a search on weld joints

Green marking on Welding Process means welding process performed according to LOGSTOR Accept criteria. Red marking and welding process is not performed according to LOGSTOR accept criteria.

If all manual checks are done all markings will be green. If manual checks are not done the Alarm Test and Leakage Test will be blank and Foam Inspection and Visual Inspection will be red.

			Search								•			
Adjust search		4	Expand all Sorting	~	A Editad	lected rows						B- Report	🛃 Share	i≣ List ♀ Ma
oints found	58 ~		FILE	WELDING PROCESS	INSULATION RESISTANCE		UTILITY		PROJECT	INSTALLER	DATE	DIM.	TYPE	COMMENT
latforms	~	R	095518		0	0000	Demo/test/Training		Test	testmasim	Aug 28, 2023	125-125	SX-WP	
Hility	~	102				0000	. Second contracting		10000				200700	
nstaller	~									Checks		Alarm wire resistance	Comme	ent
roject	~	Preparation phase			Process phase	Complete phase			✓ ● Alarm Test		12 Ω			
Vimension	~									🗸 🙆 Leakage T	est	Insulation resistance 88 MΩ		
oint Type	~		1	1		2		1		 Foam Insp Ø Visual Insp 		00 1452		
Date	~												_	
Aachine Number	~									Photo Docu	mentation	Corrective actions		Map
ile	~	F	123208		0	0000	Demo/test/Training		Test	testmasim	Jul 19, 2023	125-125	SX-WP	Test SX-WP_
ilr Tool	×	TO	110100			0000	Denvi test, Haring		1949	Charter and the				nation ma
cceptance •	*	Ar	150250		0	0000	Demo / test / Training		Test	testmasim	Jul 18, 2023	125 - 125	SX-WP	
Comment	~	×.												
olygon	*	Pr	084311		0	0000	Demo / test / Training		DE	akademia pl	Jul 16, 2023	140 - 140	85	
hoto Documentation	~													

Example of a search on a shrink joint

Green marking on Insulation Resistance means Insulation Resistance performed according to LOGSTOR Accept criterias. Red marking and Insulation Resistance is not performed according to LOGSTOR accept criterias.

Login

Login is via www.installation.logstor.com.

A username and password are needed.

All data is protected, and any kind of access requires username and password.

Price

App License, yearly fee included 1 user:

- WeldMaster, Euro 885
- ShrinkMaster, Euro 430
- Combined, Euro 1099

Extra users, Euro 40 per user per year

Documentation on our homepage

The following will be available on our home page in Danish, English and German language.

- User Manual for ShrinkMaster tool in LOGSTOR Connect
- User Manual for LOGSTOR Installation Portal