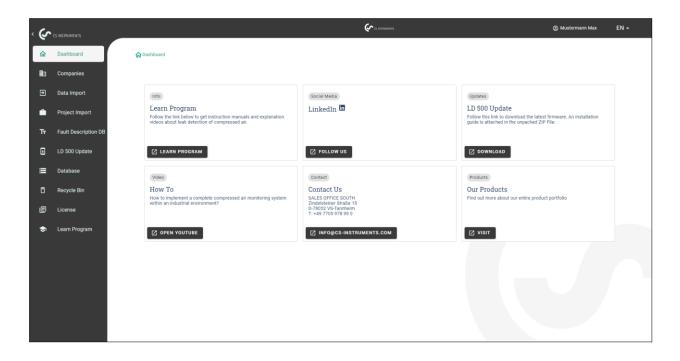


## **Operating instructions**

# CS Leak Reporter V2 for the leak detectors LD 500/LD 510







## 1 Content

1	Content2						
2		For	ewor	d	3		
3		Not	tes		4		
	3.2	1	About	t this document	4		
4		Ger	neral	functional description	4		
5		Sys	tem r	requirements	4		
6		Inst	tallati	ion/use of CS Leak Reporter V2	4		
7		Оре	eratio	on	5		
	7.:	1	Applic	cation start	5		
	7.2	2	Licens	sing	6		
	7.3	3	Impoi	rting the database	7		
	7.4	1		g the user profile			
	7.5	5	Leaka	ge data import	8		
8		Ma	•	ng companies			
	8.3	1	•	aying companies			
	8.2	2		any master data			
	8.3	3		ngs			
	8.4	1	Comp	panies – projects			
		8.4.1		Editing the project master data			
		8.4.2		Leak overview			
		8.4.3	3	Creating a report	20		
9		Pro	ject i	mport	. 22		
	9.3	1	Proje	ct export	22		
	9.2	2	Proje	ct import	22		
1(	C	Fau	lt de	scription DB	. 23		
1	1	Rec	cycle	Bin	.24		
12	2	Dat	abas	e	. 25		
13	3	Upo	date	overview	. 25		
14	4						



## 2 Foreword

Dear Customer,

If you have an LD 500/LD 510 leak detector (abbreviated as LD 5X0 in the text below), you can export the leaks from the LD 5X0 and import and evaluate them with the CS Leak Reporter V2 software.

Data transfer via USB stick makes it easy to generate reports. You can transfer the stored leaks into a report and easily manage and add data.

In addition, you can import your existing data from Leak Reporter V1 if you have already used this software. Otherwise, this point is irrelevant to you.

#### **Primary functions:**

- Managing companies/buildings/projects/measurements
- Adding company data
- Managing projects
- Managing measurements
- Documentation/report preparation
- Photo of the point of leakage
- Date/time
- Size of the leak in litres/min (units are adjustable)
- Costs of the leak per year in € (currency can be selected)
- Description of the position of the leak with indication of the company/department or hall/machine
- Information about leak repair (defective element, measure, spare part)
- Totals, priority, CO<sub>2</sub> emissions per year, etc.



## 3 Notes

#### 3.1 About this document

- Read this documentation carefully.
- Keep this document close at hand so you can refer to it if necessary.
- Share this document with future users of the product.

**CS INSTRUMENTS GmbH & Co. KG** provides no warranty regarding its suitability for any particular purpose and assumes liability neither for errors contained in these instructions for use nor for consequential damages in connection with delivery, performance or use of this software.

## 4 General functional description

The CS Leak Reporter V2 software is used to manage and evaluate leakage data recorded with an LD 5X0 leak detector.

You can import data using a USB stick, which automatically transfers the images of the leaks. You can also add your own images as required. The measurements can be described in more detail in the software and initially specified for the project.

In the report, the desired measurement place can be evaluated and transferred to a report. The total values, the leakage cost information and the imputed quantities for the CO<sub>2</sub> emissions/year are also output there.

## 5 System requirements

PC hardware	from Win 7 x64/Mac
Main memory requirement	min. 4 GB RAM
Hard disk space	min. 10 GB

## 6 Installation/use of CS Leak Reporter V2

Launch "Setup.exe" to install the software and follow the installation instructions. The software is installed automatically.

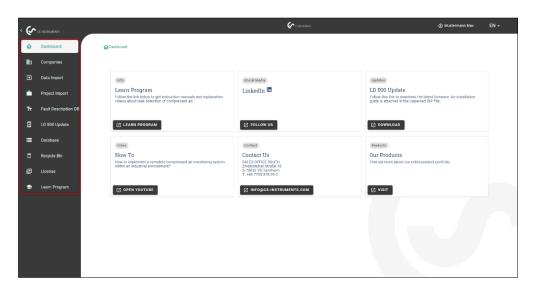


## 7 Operation

The operation is largely self-explanatory, and during the sequences, the software shows appropriate descriptions of how to operate the software.

You can make entries or changes in all boxes with a white background.

You navigate with the main menu bar:



## 7.1 Application start

You use the installed shortcut (on the desktop) to start the application:



You can use the



button to select the language.



## 7.2 Licensing

You can activate the software twice with a licence key. Alternatively, a 30-day trial version is available.

board / License		
locard / License		
icense		
- · · · · · · · · · · · · · · · · · · ·		
fline activation Click on "GENERATE ID FILE"		
Transfer the ID FILE to a computer that is online Open the following link <u>https://license.aks.cs-instruments.com/#/activate-license</u>		
Login with your CS ID credentials (Register if you do not have a CS ID yet)		
Upload the ID FILE and enter the license key Download the "ACTIVATION ID File" and save it on the USB drive		
Click on "Upload ACTIVATION ID File" and select the file on the USB drive to unlock the software		
Generate id file		
	Vour test version expired. Plesse purchase a license and activate files software.	Vour test version egend. Please purchase a locase and activate this toffware.

Licensing: You use "ACTIVATE LICENCE" to activate the software.

You will need to create an account with CS ID and then enter the licence key provided to you. After you register, a verification email will be sent to you. If you do not receive this email, check your virus scanner/firewall and spam folder.

After you have successfully activated the software, you can use it indefinitely.

#### **Offline activation:**

If the computer is not connected to the Internet, follow the instructions shown.

#### Licence deactivation:

If you need to use the software on another PC, it may be necessary for you to carry out a data transfer beforehand by exporting the database. Then you need to take note of the licence key. You can deactivate the licence under this menu item.

😭 Sadowed / Lienne	
License	
🛞 Tour authors was constants if activities.	
Your license key:	Are you sure?
	Did you copy the license key to the aliphaend?
	CANCEL OK



Afterwards, you need to install the software with the installation media or by downloading it from our homepage and then license it again as described above.

Tip:

You can activate Leak Reporter V2 by following this link:

www.license.cloud.cs-instruments.com

#### 7.3 Importing the database

If you have already been using Leak Reporter V1, you can import the existing database into Leak Reporter V2.

- Make sure that you do **not** unzip the Leak Reporter V1 database you instead need to import the ZIP file directly.
- In addition, Leak Reporter V1 must be at release level 1.3.7 or higher.

#### (1) Export database in Leak Reporter V1

		www.cs-instru	uments.com	
DATABASE		Dashboard	// Database	EN 👻
Database				
Export database	Import database	clear database		

#### (2) Import database in Leak Reporter V2

، (پ	CS INSTRUMENTS			⊗ Mustermann Max EN +
ŵ	Dashboard	🟠 Dashboard / Database		
₽	Companies			
Ð	Data Import	Import	Export	Clear
Ĥ	Project Import	Click on "Select" to import or restore a saved	Click on "Generate File" to create a backup of the	Click *Clear Data* to delete all data within the Leak
Tr	Fault Description DB	database (Leak Reporter V1 or V2). The existing database will be extended with the data from the	database. This generated file can be used in import to restore the current data.	Reporter. Warning: this action cannot be undone!
₿	LD 500 Update	selected database.		
≡	Database			🖒 CLEAR DATA
۵	Recycle Bin			
₽	License			
٢	Learn Program			



## 7.4 Editing the user profile

Concrements	🕛 🛞 Mustermann Max 🛛 EN 🗸
	(3)
	🚯 📄 🖬 SAVE

Your company's master data is to be stored in the profile.

- (1) You can get to this interface by clicking the contact
- (2) You can customise the company master data
- (3) You can save a company logo
- (4) The **Save button** saves the data.

The company name and logo are then output on the reports.

#### 7.5 Leakage data import

The data import takes place as a sequence:

- (1) Selection of a folder
- (2) Selection of an XML file
- (3) Selection of the leaks to be imported
- (4) Destination of the imported leaks

ڰ		<b>(*</b> 1000000	Mustermann Max	EN -
	Dashboard	🚱 Dashboard / Deta Import		
₽	Companies	FOLDER XML LEAKAGES TARGET		
•	Data Import	•		
۵	Project Import			
	Fault Description DB	Folder		
	LD 500 Update	Select the folder that contains the XML journals and		
	Database	the image folder (for example		
	Recycle Bin	DEV0004/4018/266/Journal). You can choose the leakages to be imported in the following steps.		
e	License			
۲	Learn Program	<b>▲</b> SELECT		

The LD 5X0 exports the leaks on the USB stick. You use then the data import menu item to transfer the exported data from the LD 5X0 of the USB stick into the leak reporter software.



You use the

↔ SELECT

button to select the journal file.

- (1) Open the "Journal" folder according to the path shown on the USB stick
- (2) Select the folder

Ordner auswählen					×
← → ∽ ↑ 🚺 → USB-Laufwerk (D:)	> DEV0004 > 20217641 > Journal 1		ې 🏹 🗸		
Organisieren 🔻 Neuer Ordner					?
	Name	Änderungsdatum	Тур	Größe	
	BM21CW33 BM21CW34	01.09.2021 15:17 01.09.2021 15:17	Dateiordner Dateiordner		
Ordner: Journal					
			2 Ordner aus	wählen Abbrecher	<u> </u>

(3) Select the desired XML file that was exported by the leak detector

☆ Dashboard / Data Import								
		FOLDER	XML	LEAKAGES	TARGET			
	XML							
	Select the folder that contains the XML	journals and						
	the image folder (for example							
	DEV0004/40187266/Journal). You can	choose the						
	leakages to be imported in the following	g steps.						
3	D:\DEV0004\10217487\Journal\Jnl_2	10415093539_210428105	839.xml					



After selecting the XML file, you can filter the leaks according to their "company" and "building" or a freely selectable time period:

- (1) Selecting individual leaks
- (2) Filtering by one or more companies
- (3) Filtering by one or more buildings
- (4) Defining the start period (first leak)
- (5) Defining the end period (last leak)

	3 Buildir	ng	• 30.0	7.2021 11:04:26	5	Until 30.07.2021 11:10:32	-
npany Buildin	ng Dal	te T	ïme				
MER WKA HALLE	123 30.	.07.2021 1	1:04:26				
MER WKA HALLE	123 30.	.07.2021 1	1:06:32				
MER WKA HALLE	123 30.	.07.2021 1	1:07:16				
IMER WKA HALLE	123 30.	.07.2021 1	1:08:04				
MER WKA HALLE	123 30.	.07.2021 1	1:08:38				
MER WKA HALLE	123 30.	.07.2021 1	1:09:30				
MER WKA HALLE	123 30.	.07.2021 1	1:10:32				
	MER WKA HALLE MER WKA HALLE MER WKA HALLE MER WKA HALLE MER WKA HALLE	MER WKA HALLE 123 30. MER WKA HALLE 123 30.	pary         Building         Date         T           MER WKA         HALLE 123         30.07.2021         1           MER WKA         HALLE 123         30.07.2021         1	Building         Date         Time           MER WKA         HALLE 123         30.07.2021         11.04.26           MER WKA         HALLE 123         30.07.2021         11.06.32           MER WKA         HALLE 123         30.07.2021         11.06.32           MER WKA         HALLE 123         30.07.2021         11.08.38           MER WKA         HALLE 123         30.07.2021         11.08.38           MER WKA         HALLE 123         30.07.2021         11.09.30	Building         Date         Time           MER WKA         HALLE 123         30.07.2021         11.04.26           MER WKA         HALLE 123         30.07.2021         11.06.32           MER WKA         HALLE 123         30.07.2021         11.06.32           MER WKA         HALLE 123         30.07.2021         11.06.32           MER WKA         HALLE 123         30.07.2021         11.08.04           MER WKA         HALLE 123         30.07.2021         11.08.04           MER WKA         HALLE 123         30.07.2021         11.08.38           MER WKA         HALLE 123         30.07.2021         11.09.30	Building         Date         Time           MER WKA         HALLE 123         30.07.2021         11.04.26           MER WKA         HALLE 123         30.07.2021         11.06.32           MER WKA         HALLE 123         30.07.2021         11.06.32           MER WKA         HALLE 123         30.07.2021         11.06.32           MER WKA         HALLE 123         30.07.2021         11.08.32           MER WKA         HALLE 123         30.07.2021         11.08.04           MER WKA         HALLE 123         30.07.2021         11.08.38           MER WKA         HALLE 123         30.07.2021         11.09.30	Building         Date         Time           WER WKA         HALLE 123         30.07.2021         11.04.26           WER WKA         HALLE 123         30.07.2021         11.06.32           WER WKA         HALLE 123         30.07.2021         11.06.32           WER WKA         HALLE 123         30.07.2021         11.06.32           WER WKA         HALLE 123         30.07.2021         11.08.38           WER WKA         HALLE 123         30.07.2021         11.08.38           WER WKA         HALLE 123         30.07.2021         11.09.30

#### Options

- (1) For the leaks of each company (Kromer WKA) to be imported, an existing company and/or project can be selected as the destination. At the same time, the buildings of the leaks are created in the selected company.
- (2) If the company already exists, a new project is appended to it or an existing project can be selected. At the same time, the buildings of the leaks are created in the selected company.
- (3) If the company of the data import does not exist yet, a new company with the corresponding name is created along with an initial project. At the same time, the buildings of the leaks are created in the selected company (as shown in the screenshot).



	FOLDER	XML	LEAKAGES	TARGET
	•	•	•	•
KROMER WKA				
Choose an existing company and/or projec	t into			
which to import the selected leakage data.	Select			
[Create new] in the company selection to cr	eate a			
new company with the shown name (in gre	en color).			
Select [Create new] in the project selection	to create			
a new project with the name "Data Import				
<timestamp>" where <timestamp> is repla</timestamp></timestamp>	ced by the			
current date and time.				
Company				
[Create new]				
Project				
[Create new]				

Once you have imported all leaks, you will have the following options:

- (1) Carry out a new data import in the same way
- (2) View the project within the most recently imported data

	FOL	DER	XML	LEAKAGES	TARGET
			•		-
			•	•	•
	Data was a successfully				
	Data was successfully				
	Annual and a second s				
	imported.				
	Would you like to view the imported data or to import				
	additional data?				
		-			
1	ADDITIONAL IMPORT				
_					
2	SHOW DATA				
		-			

If the firmware used on the LD 5X0 is out of date at the time of export, this is indicated as follows:

			FOLDER	XML	LEAKAGES	TARGET		
▲ `	The software of your L	D 500 is outdated. Please update it.						
Comp	any	Building	]		From 17.12.2020 10:05:43	÷	Until 17.12.2020 10:06:12	Ē
	Company	Building	Date	Time				
	CS Instruments	Conference Room 2 Level	17.12.2020	10:05:43				

The current firmware can be downloaded from the following link: <u>https://www.cs-instruments.com/downloads/software/firmware-leak-detectors</u>



## 8 Managing companies

You can find the data of the imported companies in the main menu under the "Companies" item.

#### 8.1 Displaying companies

- (1) Select "Companies" in the main menu bar
- (2) Search for a specific company
- (3) Edit the master data of the selected company
- (4) View the projects of the selected company
- (5) Create a new company
- (6) Delete the selected companies

، (پ	CS INSTRUMENTS				Mustermann Max	EN +
	Dashboard	🟠 Dashboard / Companies				
	Companies 1	Search				
	Data Import					
۵	Project Import	Companies	Buildings	Projects	3	0
	Fault Description DB	KROMER WKA	1	1	1	0
۵	LD 500 Update					
=	Database					
	Recycle Bin					
₽	License					
\$	Learn Program					
				6	6	
				DELETE	+ NEW	

#### 8.2 Company master data

You can store contact information and a company logo under the company master data. The information stored here is printed on the cover sheet of the report.

م	CS INSTRUMENTS			٥	Mustermann Max	EN -
ଜ	Dashboard	😭 Dashboard / Companies / KROMER WKA / Master Data				
	Companies	BACK TO COMPANIES				
Ð	Data Import	MASTER DATA BUILDINGS PROJECTS				
۵	Project Import					
Tr	Fault Description DB	KROMER WKA				
₽	LD 500 Update	Edit Company				
≡	Database	Company KROMER WKA				
٥	Recycle Bin					
e	License	Last Name				
۲	Learn Program	First Name				
		Phone				
		Email				
		Street				
			DELETE	CANCEL	SAVE	



#### 8.3 Buildings

You can add or delete buildings on the "Buildings" tab.

- (1) To delete a building, click the corresponding Recycle Bin.
- (2) To edit a building, click the corresponding pencil
- (3) To create a new building, enter the corresponding name
- (4) To add the building, click the plus sign

م	CS INSTRUMENTS	Çe în maxem	Mustermann Max	EN +
ŵ	Dashboard	Distributed / Companies / KROMEN WKA / Buildings		
	Companies	BACK TO COMPANIES		
€	Data Import	MASTER DATA BUILDINGS PROJECTS		
۵	Project Import			
Tr	Fault Description DB	Building 123     O		
	LD 500 Update			
≡	Database			
ō	Recycle Bin			
Ð	License			
٢	Learn Program			

#### 8.4 Companies – projects

The data already created/imported is displayed on the Projects tab. Each data import creates a new project here, unless an existing project was selected as the destination during a data import.

- (1) You call up the project's leaks by pressing the "eye" button. The measurements and project master data stored there are then displayed.
- (2) You can create a new project manually by pressing the "NEW" button.

ج	CS INSTRUMENTS					
	Dashboard	Dashboard / Companies / KROMER WKA	/ Projects			
b	Companies	BACK TO COMPANIES				
	Data Import	MASTER DATA BUILDINGS	PROJECTS			
۵	Project Import					
Tr	Fault Description DB	Project Name	Date	No. of Leakages	Total Leakage Rate	
Ð	LD 500 Update	Data Import 26.11.2021, 13:35	30.7.2021, 11:04 - 30.7.2021, 11:10	7	273.11 €	e e o
≡	Database					0
	Recycle Bin					
e	License					
\$	Learn Program					
					2	• NEW



#### 8.4.1 Editing the project master data

The parameters set in the LD 5X0 are initially used for each project. If it is necessary to change them, you can do this globally for the entire project in project master data. The project data is defined as follows:

- Name project name (also printed on the report)
- Description project description

-	1				
Currency	Local currency				
Unit	Volume unit (m <sup>3</sup> or cf)				
Operating hours	Operating hours of the system per year (e.g. 8760 for 24/7 operation)				
Costs	Costs for 1000 Nm <sup>3</sup> or CF air in the currency to the right (automatically calculated if the "Electricity price" and the "Specific output" have been entered in the Expert menu).				
CO <sub>2</sub> emissions	The default value of 0.527 kg/kWh is used here				
Electricity price	Unit: Currency/kWh				
Specific output	Output of compressor efficiency variable in kWh/m <sup>3</sup> or kWh/CF				
Cost basis	A distinction can be made here between pure energy costs [70%] and complete costs [100%]				

#### **Cost calculation basis:**

If the Electricity price and Specific output boxes have been populated in the Expert menu, the software automatically calculates the energy costs of the compressed air system.

These costs typically correspond to 70% of the total costs, which consist of energy [70%], investment [21%] and maintenance costs [9%].

The user has the option to choose between either of these cost types. The selected cost type is then adopted globally for the entire project.

، «	CS INSTRUMENTS	Edit Project
ŵ	Dashboard	Name Data Import 26.11.2021, 13:35
•	Companies Data Import	Description Data Import 26.11.2021, 13:35
•	Project Import	Compressed air cost Currency Unit 14,400000 € ✓ /1000 m <sup>3</sup> ✓
Tr	Fault Description DB	Annual Operating Hours per year 8760
	LD 500 Update	Expert Settings
=	Database	coz Emission Unit
ō	Recycle Bin	0,527 kg / kWh +
e	License	Specific Power 0,12 KWb / m <sup>3</sup>
۲	Learn Program	Electrochy Rate 0,12 € / kWh
		- ENERGY COST [79N]: 14.400 C / 1000 M*
		▲ TOTAL COST [1094]: 20.571 € / 1000 M*
		Energy cost (ros)  Investment Cost (21%) Maintenance Cost (9%)
		D DELETE C EXPORT



#### 8.4.2 Leak overview

The Measurements tab shows the leaks for the selected project, including the project master data, shown in the red box.

Functions of the interface:

- (1) Filter for buildings
- (2) Filter for the location of the leak
- (3) Filter for the status of the leak (remedied/open)
- (4) Leak tag search
- (5) Generate PDF report
- (6) Generate Excel report
- (7) Status of the leak (remedied/open)
- (8) View details of the leak

60	CS INSTRUMENTS	Dashboard / Companies	/ KROMER WKA / Projects ,	/ Data Import 26.11.2021 / Leakages				
	Dashboard	BACK TO PROJECTS						
		MASTER DATA	LEAKAGES					
	Companies							
ŧ	Data Import	0 Leaks selected 25.981 ltr/min total leakag	e rate	Master Data Annual Operating Hours of	er vear: 8.760 h	PDF	@ XLS	\$
Ê	Project Import	196.64 Eper year		Annual Operating Hours p Compressed Air Cost: 14.4	10 € / 1,000 m°	6	В	
Tr	Fault Description DB	Search LeakTag						
Ð	LD 500 Update				Olatura			
ļļļ	Database	Building	۲ ب	ace 2	Status	-		
	Recycle Bin	Building	Place	LeskTeg	Leakage Rate	Cost per Year	Status ၇	0
e	License	Building 123	1. 00	1	3.425 ltr/min	25.92 €	¢	٢
\$	Learn Program	Building 123	1. OG	2	4.425 ltr/min	33.49 €	φ	٢
		Building 123	1. OG	3	1.185 ltr/min	8.96 €	¢	۵
		Building 123	1. OG	4	7.080 ltr/min	53.58 €	φ	٢
		Building 123	1.06	5	3.489 ltr/min	26.40 €	¢	٢
		Building 123	1. OG	6	2.216 ltr/min	16.77 €	¢	0
					→ MOVE	COPY	T DELETE	

From left to right, the columns contain information about each leak:

- Buildings
- Location
- Leak tag
- Flow leakage rate
- Leak costs per year
- Status of the measurement (open, remedied)

The formula for the leak costs is as follows:

Leak costs per year = loss in l/min \* 60min/1000l \* operating hours of the system \* cost of compressed air generation for 1000m<sup>3</sup> in euros

```
= 5.95 l/min * 60min * (1m³ /1000l) * 8760 (h/year) * €25/1000 m³
= €78.18 leak costs per year.
```

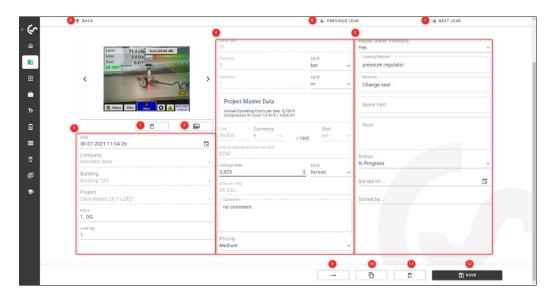




Using the button next to the respective measurement, you can display the measurement detail data for editing.

You can change the measurements on this screen. Measures as well as comments, priority, status and who eliminated the leak at what time can be stored.

- (1) Delete the image
- (2) Add a saved image
- (3) Information on the location of the leakage point
- (4) Information on the cost of leakage data
- (5) Information on leak repair
- (6) View previous leak
- (7) View next leak
- (8) Back to the leak overview
- (9) Move this leak to another company, building or project
- (10) Copy this leak to another company, building or project
- (11) Delete this leak
- (12) Save changes





#### Project master data filled in:

This figure shows the parameters that the system uses to calculate.

When you set the project master data, this data is used to calculate the costs for each leak within the project.

The box highlighted in red shows the parameters used by the leak detector. If the project master data is set, these boxes have a grey background and are locked for editing.

If the unit of measurement is changed from [ltr/min] to [cfm], an automatic conversion takes place and vice versa.

Annual Ope	Master Da erating Hours p ed Air Cost: 14.	er year: 8,76			
Cost 20,000	Curren €		/ 1000	Unit m³	Ţ
Annual Operat 8760	ing Hours per y	/ear			
Leakage Rate 3,425				nit <b>/min</b>	*
Cost per Year 25.922					



#### Project master data is blank:

<sup>Cost</sup> 20,000	Currency €	~	/ 1000	Unit m³	Ŧ
Annual Operat <b>31</b>	ing Hours per year			<b>*</b>	
Leakage Rate 3,425	-			nit <b>r/min</b>	•
Cost per Year 25.922					

If no project data is recorded, the data in the leaks can be changed. You do the calculation in the formula above using the data from the measurement.

The boxes will then be white and thus available for input.



The buttons can be used to move, copy, delete or save a measurement.

#### The following dialogue is displayed when copying leaks:

Copy to	
Company KROMER WKA	Ŧ
Building [Keep current building]	<b>.</b>
Project [Keep current project]	Ŧ
Do you want to switch to this project?	
CANCEL	



- (1) The company into which the leak(s) are to be copied
- (2) [Keep current building] →Building with the name is created if it does not already exist
- (3) [Keep current project] → New project is created in the company with the same name if it does not already exist
- (4) Target project is displayed after the copying process

#### The following dialogue is displayed when moving leaks:

As with moving, you can fill in the boxes with the same steps. After being copied, the leaks selected in this manner are in both projects.

Company KROMER WK	A	-
Building [Keep current	: building]	Ŧ
Project [Keep current	project]	-
Do you w	ant to switch to this project?	



Before final deletion of a measurement, this message is displayed:



#### Note:

If a leak has been accidentally deleted, it can be restored from the Recycle Bin.

#### 8.4.3 Creating a report

- (1) A report can then be created in the leak overview for the project.
- (2) The marked or filtered leaks or even all leaks are then transferred to the report.
- (3) Sorting of the leaks is taken into account in the report.

					<b>(</b> ) = 1000000		Musterm	ann Max EN
	n Dashboard	d / Companies / KRD	MER WKA / Projects / Data	Import 26.11.2021 / Leakages				
	BACK TO P	PROJECTS						
	MASTER	DATA LEAK	AGES					
		s selected r/min total leakage rate per year		Master Data Annual Operating Hours per yea Compressed Air Cost: 14.40 € /	sr: 8,760 h 1,000 m <sup>3</sup>	PDF	۵×۱	s
	Bearch Leaking							
0	٩	iTag	Pla	ice	Status		_	
0	٩		Pla Place	LeaKTag	Status ~	- Cost per Year	Status	
0	Building Build		•		*		Status	۹
0	Building Building Building Building	ding	Place	LeakTag	Leakage Rate	Cost per Year		0
0	Building Building Building Building Building Building Building	ding ding 123	• Place 1.05	LeekTag	Leakage Rate 3.425 ltr/min	Cost per Year 25.92 €	¢	
0	Building Building Building Building Building Building Building Building	ding 123 ding 123	Place 1. 05 1. 03	LeakTag 1 2	Leakage Rate 3.425 lit/min 4.425 lit/min	Cost per Vear 25.92 ¢ 30.49 ¢	¢ ¢	۵

#### Structure of the report:

1. Cover sheet (page 1):

The PDF report consists of a cover sheet with information about

- The customer, auditor
- Project master data
- Results of the measurement



## 2. Leak overview (following pages)

The following is displayed for each leak:

- Location
- Potential savings
- Fault description
- Status and priority

#### Overview page (final page):

• Results of the measurement

#### Excel report:

This report shows essentially the same information as the PDF report.



## 9 Project import

In order to save or exchange data, CS Leak Reporter V2 has a "project import" function, which can be accessed from the home menu.

This function imports a project, including all the buildings and leaks stored in it. If there is already a company with the same name, an additional project is added to it.

If a company with the same name does not already exist, the corresponding company is created with the project.

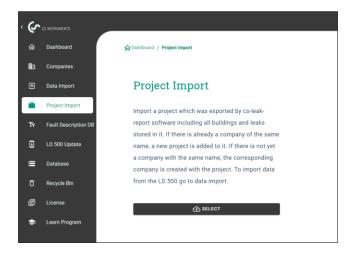
#### 9.1 Project export

م	<b>€</b> C nontreen	Mustermann Max EN +
ŵ	Dashboard / Companies / KROMER WAA / Projects / Data Import 26.11.2021 / Master Data	
	BACK TO PROJECTS	
Ð	MASTER DATA LEAKAGES	
۵		
Tr	Edit Project	
۵	Name Data Import 26.11.2021, 13:35	
=	Description Data Import 26.11.2021, 13:35	
Ē	Compressed in cost Currency. Unit	
\$	Annual Operating Hours per year	
	Expert Settings	
	CO2 Emission kg / kWh -	
	6 Joedie Power 0,12 kWh / m <sup>2</sup>	
		SAVE

The project is saved using the "Export project" button. This allows data to be conveniently copied back and forth between different users

#### 9.2 Project import

Use the following menu to import the project.





## **10** Fault description DB

You can generate the fault description database for the LD 5X0 with Leak Reporter V2.

With each import, Leak Reporter V2 expands the database with entries in the XML file of the leak. You can also add entries manually.

گ	CS INSTRUMENTS		(C to reprint the	NG	Mustermann Max EN
	Dashboard	Dashboard / Fault Description DB / Me	asure		
	Companies	EXPORT DATA TO LD 500			
	Data Import	MEASURE LEAKING ELEME	NT REPLACEMENT		
۵	Project Import	Add			+
Ŧ	Fault Description DE				
₿	LD 500 Update	The set of characters is limited on Leak Reporter View	the LD 500. Text that is displayed in the Leak Reporter soft LD 500 View (limited character set)	ware (left column) may be displayed differently on the	e LD 500 (right column).
III	Database	Change seal	Change seal		/ 8
	Recycle Bin	Unange sear	Unange sea		
₽	License				
\$	Learn Program				

#### Caution:

The LD 5X0 can only display strings of a certain length and a limited character set. If the input is too long, Leak Reporter V2 cuts it off so that it can be imported into the LD 5X0.

In the export process, you can select which data the XML file to be exported should contain:

م	CS INSTRUMENTS		<b>€</b> r <sub>alinness</sub>	Mustermann Max EN +
ŵ	Dashboard	G Dashboard / Data Export		
	Companies	< BACK TO FAULT DESCRIPTION		
Ð	Data Import		MEASURE LEAKING REPLACEMENT COMPANIES COMPLETE	
۵	Project Import			
Tr	Fault Description DE			
	LD 500 Update	Leak Reporter View	LD 500 View (limited character set)	
=	Database	Change seal	Change seal	
Ō	Recycle Bin			
e	License			
\$	Learn Program			
			< BACK	> CONTINUE
			, proc	



The exported database has a maximum length of 1000 elements. If this size is exceeded, there is a maximum of 1000 elements in the XML file.

To import the data into the LD 5X0, save the ZIP file to the supplied USB stick and unzip it there.

Once you have inserted the USB stick into the LD 5X0, you can update the LD 5X0 database at:

- (1) LD 5X0 Export/Import→
- (2) Import: Database
- (3) Select the XML file in the Customer folder
- (4) Define ranges

## 11 Recycle Bin

Deleted items are temporarily placed in the Recycle Bin. This applies to:

- Companies
- Buildings
- Projects
- Leaks

If an item has been deleted by mistake, you can restore it by clicking the "Move" button. A random number combination is appended to the original file name in the Recycle Bin so that there can be no interference with existing data during the restore operation. You can customize this name afterwards.

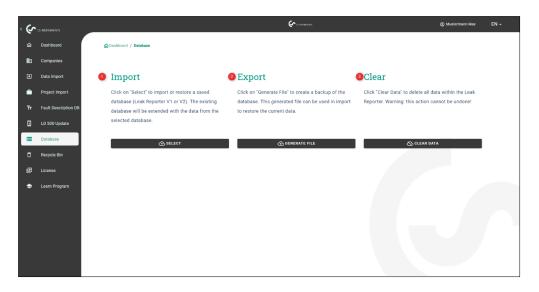
. و <b>د</b>					
\$	Dashboard	🞧 Dashboard / Recycle Bin			
₽	Companies				
Ð	Data Import	Recycle Bin	Companies (0)		
۵	Project Import	Companies	Name	Date	
Tr	Fault Description DB	Leakages			
۵	LD 500 Update				
=	Database				
٥	Recycle Bin				
e	License				
٢	Learn Program				
					_
				📅 ЕМРТҮ	

If you click "Empty Recycle Bin", the entire Recycle Bin is deleted, but it is also possible to delete individual items in the categories (companies, buildings, projects and leaks).



## 12 Database

We recommended performing regular backups and saving them to different storage media.



- (1) You can restore the previously exported data status of CS Leak Reporter V1 and V2 with "Import database". To do this, import the database (ZIP file), which has **not yet been unzipped**.
- (2) Using "**Export** database", you can create a backup file that saves the current information status of CS Leak Reporter V2.
- (3) Using "Clear database", you can delete all data from CS Leak Reporter V2.

#### Caution:

Please make sure that you do **not** unzip the Leak Reporter V1 database; instead, import the ZIP file directly into Leak Reporter V2. In addition, Leak Reporter V1 must be release level 1.3.7 or higher.

#### 13 Update overview

CS INSTRUMENTS is continuously working on the leak detector firmware, and new firmware versions are published regularly.

To keep the LD 5X0 current, we strongly recommend that you update it. During data import, the XML journal is checked, and the firmware in use for the corresponding unit is saved on this basis.

If the firmware in use is out of date at the time of export, this is indicated as follows:



			FOLDER	XML	LEAKAGES	TARGET		
			•	•	•	•		
Δ	The software of your L	.D 500 is outdated. Please update it.						
Comp	any	Buildin •	g		From • 17.12.2020 10:05:43	ť	Until 17.12.2020 10:06:12	
	Company	Building	Date	Time				
	CS Instruments	Conference Room 2 Level	17.12.2020	10:05:43				
	CS Instruments	Conference Room 2 Level	17.12.2020	10:05:53				
	CS Instruments	Conference Room 2 Level	17.12.2020	10:06:05				
_	CS Instruments	Conference Room 2 Level	17.12.2020	10:06:12				

The following overview shows the current firmware version (4.04) and the versions used for the corresponding serial numbers.

م		Cr. : universit	Mustermann Max	EN 🕶
	Dashboard	☆Dashboard / Updates		
	Companies			
	Data Import	LD 500 Update		
Ê	Project Import	Latest LD 500 firmware version: 3.0. Follow this link to download the latest firmware. An installation guide is attached in the unpacked ZIP File: <u>https://www.cs-instruments.com/downloads/software/firmware</u>	-leak-detectors	
Tr	Fault Description DB	LD 500 Serial Number Version		
Ð	LD 500 Update	40187256 3.3		
=	Database			
	Recycle Bin			
e	License			
٢	Learn Program			

The current firmware can be downloaded from the following link:

https://www.cs-instruments.com/downloads/software/firmware-leak-detectors

## 14 Learning programme

This tile in the dashboard takes you to the homepage of CS INSTRUMENTS. There you will find all relevant information about the LD 5X0 and CS Leak Reporter V2 at a glance.

The following link is called up:

https://www.cs-instruments.com/downloads/tutorials/professional-compressed-air-leakdetection

