

# **Quick Start Guide**

# **METPOINT<sup>®</sup> CID**



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# 1. Safety instructions

# 1.1 About this document

Carefully read this documentation and familiarize yourself with the product before using it. Observe all safety instructions and warnings in particular so as to prevent injury and damage to the product. Keep this documentation within reach so that you will be able to consult it if necessary. Pass on this documentation to later users of the product.

# 1.2 General safety instructions

<ul> <li>Use the product properly and exclusively as intended and within the parameters specified in the technical data. Do not use force.</li> <li>Do not, under any circumstance, use the device to measure on or close to live parts!</li> </ul>
<ul> <li>When detecting leaks on electrical systems, please make sure to maintain a safe distance so as to avoid dangerous electric shock!</li> <li>Avoid direct contact with hot or rotating parts.</li> <li>Always switch the device on <b>before</b> connecting the headphones! The volume can be high when the signal levels are high (headphone bars in red range).</li> </ul>

## 1.3 Using Class 2 lasers

<ul> <li>Do not, under any circumstance, point the integrated laser directly at your or someone else's eyes! Do not, under any circumstance, hit a person's or animal's eyes with the laser beam!</li> <li>Laser module: Conforms to DIN EN 60825-1: 2015-07 Class 2 (&lt; 1 mW)</li> </ul>
<ul> <li>Observe the specified storage and operating temperatures.</li> </ul>
• Using the device improperly or trying to use force on it will void the warranty.
<ul> <li>Tampering of any kind that is not in conformity with the intended and described processes will void the warranty and exclude all liability.</li> <li>The device is intended exclusively for the purpose described.</li> </ul>

## 1.4 Environmental protection

	<ul> <li>Dispose of faulty rechargeable batteries and dead batteries in compliance with all applicable regulations.</li> <li>After this product reaches the end of its service life, dispose of it as e-waste (in compliance with all local regulations) or return the product to BEKO TECHNOLOGIES for disposal.</li> </ul>
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# 2. Intended use

The **METPOINT**<sup>®</sup> **CID** is a leak detection device used to quickly and reliably detect leaks in compressed air systems.

The **METPOINT**<sup>®</sup> **CID** leak detection device analyses the ultrasonic waves produced by a leak as a function of distance and pressure.

It is designed exclusively for the intended purpose described here and may only be used accordingly. The operator must check whether the device is suitable for the use chosen.

The technical data listed on the data sheet are binding.

Inappropriate handling and operation outside the technical specifications is not permitted. Claims of any kind due to non-intended use are excluded.

Handheld housing dimensions	263 x 96 x 280 mm (11.55 x 3.78 x 11.02 in) with preamplifier and horn
Weight	0.55 kg (1.21 lb) with preamplifier and horn.
	Approx. 3.0 kg (6.61 lb) for the complete kit in its case
Operating frequency	40 kHz (+/-2 kHz)
Power supply, internal	7.2 V internal lithium-ion battery
Power supply, external	12 VDC 1 A external power supply unit (included)
Operating time	> 9 h (continuous operation)
Charging time	Max. 4 h
Laser	645 660 nm wavelength, output power < 1 mW (Class 2 laser)
Connections	3.5 mm headphone jack for headphones.
	Power supply connector for connecting an external charger.
	USB port
Colour display	Transmissive TFT 3.5" touch panel
Interface	USB for importing / exporting data, SW updates, etc.
Data logger	16 GB memory card (Class 4 microSD)
Intended area for use	Indoors
Operating temperature	-5 °C +50 °C (+23 +122 °F)
Storage temperature	-20 °C +60 °C (-4 +140 °F)
Altitude	Up to 4000 m (13,123 ft) above sea level
Max. air humidity	< 95% RH, non-condensing
Permissible pollution degree	2
Degree of protection	IP20

# 3. Technical data

# 4. Marking

# 4.1 Type plate



4.2 Laser warning label



4.3 Label locations

# 4.3.1 The METPOINT<sup>®</sup> CID (standard and laser distance module)





4.3.2 Parabolic mirror





# 5. Device components and controls



Position number	Description / Explanation	
[1]	Release button for preamplifier module	
[2]	3.5" TFT colour display with touch panel	
[3]	Membrane keypad (four keys)	
[4]	ON / OFF button	
[5]	Volume (+/-)	
[6]	"Save" key	
[7]	Connector for power supply unit (battery charging connector)	
[8]	USB port	
[9]	Preamplifier module	
[10]	Camera	
[11]	Horn	

# 6. Preparing the device

Before starting the leak detection process, you will need to configure the device. To access the navigation screens, tap the "Home" button.

# 6.1 Changing the language

Can you read this text?		
English	Deutsch	Spanish
Italian	Danish	Русский
Polski	French	Portuguese
Romanian	Czech	

Home -> Settings -> Device Settings -> Set Language -> English

# 6.2 Checking the current firmware and updating the firmware

Please visit the **BEKO** TECHNOLOGIES homepage on a regular basis to see if a new firmware version is available. We are continuously making enhancements and improvements to the product, and keeping the firmware up to date will ensure that you are using the latest software version and have access to all available functionalities.

1.	Check the firmware version on the homepage and download it from the following URL: https://www.beko-technologies.com
2.	Check the firmware on the <b>METPOINT</b> <sup>®</sup> CID
۷.	Path: <u>Home -&gt; Settings -&gt; About METPOINT®</u> <u>CID</u> -> Software Version
3.	If the firmware is outdated, download the new version from the <b>BEKO</b> TECHNOLOGIES homepage
4.	Unzip the ZIP file
5.	Copy the unzipped DEV0004 folder to a USB drive

6.

The folder structure must look as follows:

File Home	Share View Di	ive Tools			
Pin to Quick Copy access	Paste $\lambda$ Cut Copy path Paste Paste shortcut	Move to * Copy	New item ▼ ↑ New folder	Properties	Select all Select none
Cr	lipboard	Organise	New	Open	Select
← → · ↑	This PC > USB Driv	e (G:) >	Date modified	Туре	Size

- Plug the USB drive into the **METPOINT® CID** and connect the power supply unit
- 7. Run the system update in:

**Path:** Home -> Settings -> Device settings -> Update System

*** Update System ***		
Check USB Stic	k for new S	oftwate updates
act. SW = V99.88		Ch.Vers.
Software V99.88 Languages V0.83 ChSW Pwr. V0.22 ChSW Com. V0.23 Bluetooth V0.22		P1: V033 C1 I1
Bootloader V99.88		
Update selections	force all	Update Kanäle
Back		

- 8. Tap the <u>"Check USB Stick for new Software updates"</u> button
- 9. The available update will appear
- 10. Tap <u>"force all"</u> to run the update
- 11. <u>Restart the device and update the channels</u>

The device is now updated.

# 6.3 Configuration

National Standard	ISO US
Cost / 1000 m <sup>3</sup>	20.000 €
Operating hours/year	8760
Parameter	Ø Meas. Point

# Cost Standard Mode Expert Mode Electricity price / kWh 0.158 € Specific power 0.120 kWh/m³ Electricity cost [70%] 19.000 €/1000m³ Total Cost[100%] 27.143 €/1000m³

ок

#### Home -> Configuration

You can use the configuration settings to select the system of units you want and enter the parameters needed in order to calculate annual leakage costs.

- Select either the ISO or US system of units
- To define the costs, tap the "Cost / 1000 m<sup>3</sup>" text field
- Enter the operating hours per year (during which the compressed air system is operated actively)

There are two different mode options available for defining the costs:

• Standard Mode: Cost per 1000 units of volume. The cost and the currency will need to be entered directly. Default value:

19 € / 1,000 m³ (0.58 € / 1,000 cf)

• Expert Mode: Can be used to define the electricity cost / kWh and the system's specific power in detail.

Good	20.000 kW/100cfn
Medium	30.000 kW/100 cfm
Bad	40.000 kW/100 cfm
User defined	0.000 kW/100 cfm

The specific power describes the efficiency of the compressor system, i.e., how much electric power (kWh) is required in order to produce one cubic meter of compressed air (m<sup>3</sup>). There are three predefined system values for it, as well as a custom input field that you can use to enter a different value.

In addition, the type of cost can be set in Expert mode. "Electricity cost (70%)" is caused by the "electric power consumed by" the compressed air system, which typically corresponds to 70% of the total costs. Meanwhile, "Total Cost (100%)" includes the investment and maintenance costs incurred in addition to the electricity costs over the compressor's entire service life.

# 6.3.1 Configuring parameters

Select Se	nsor type
Acoustic Trumpet	Focus tube
Gooseneck	Parabolic mirror
<u>0</u> •	к і

The parameters need to be entered in order to be able to calculate the leakage volumetric flow rate. The following settings must be configured.

#### -> Sensor type

Select the sensor type based on the application and ambient conditions in question; see section 9.4.

ensor type	e:	Acoustic Tr	umpet
	Pres	sure	
6.0 bar	7.0 bar	8.0 bar	9.0 bar
	Dist	ance	
1.00 m	3.00 m	5.00 m	6.00 m

#### Home -> Configuration -> Parameter -> Pressure and Distance

You can enter any value you want for the pressure and distance into the two white fields, provided that the values fall within the valid range.

You can set the **pressure** to any value between 1 and 10 bar.

For the various **sensor types**, there are various defined **distances** between the **METPOINT**<sup>®</sup> **CID** and the leak that must be maintained in order to be able to calculate valid values for the leakage loss volumetric flow rate and the costs per year. These distances must be maintained as exactly as possible without fail; see section 9.4 for more information.

## 6.3.2 Configuring the measuring point

Meas. Point		
Company	BEKO TECHNOLOGIES	
Building	Halle 5	
Place	Maschine 1	
LeakTag	1	
	ок	

Home -> Configuration -> Meas. Point

The measuring point is stored for each leak in the corresponding leakage data (XML file). This information can be viewed later on in the software's leak report.

You can enter the company and building information when entering the building. Meanwhile, the place refers to the exact location of the leak and is intended to make it easy to find again for repairs.

-> LeakTag: Automatically incremented by 1 after every stored measurement.

# 7. Commissioning / use



## 7.1 Switching on the device

Press the ON / OFF button and hold it down for about 1 second. The device will switch on and a startup sequence will be shown on the display. Pressing the button again will switch off the device. See section "Device components and controls" for the ON / OFF button.

## 7.2 Headphone volume up / down

You can raise and lower the headphone volume in 16 steps with the volume up / down buttons. Holding the button down will automatically raise / lower the value.

See section "Device components and controls" for volume up / down buttons.



Please make sure that the headphone volume is lower than 50% before putting the headphones on.

## 7.3 Laser ON / OFF

The laser pointer can only be switched on and off with the laser ON / OFF button on the display (not with the membrane keypad). When switched on, the display will show a laser warning symbol.



Laser "ON" icon



Please observe all warnings regarding laser operation! Do not, under any circumstance, hit a person's or animal's eyes directly or indirectly (reflection) with the laser beam!

# 8. Automatic distance measurement

The new intelligent horn features an integrated distance measuring module.

#### Prerequisites for firmware and hardware:

In order to be able to use this functionality, the following prerequisites must first be met:

- The main board must be "intelligent" so that the main body of the **METPOINT**<sup>®</sup> **CID** and the tool will be able to communicate with each other.
- The firmware version on the **METPOINT**<sup>®</sup> **CID** must be V3.02 or higher. The latest firmware can be downloaded from the "Downloads" section of the corresponding homepage.

If these prerequisites are met, the **METPOINT**<sup>®</sup> **CID** will automatically detect that an intelligent tool with automatic distance measuring is connected.

#### Description of functionality:

1.

The laser must be started in order to activate the distance measurement, just like with all other tools. The **METPOINT**<sup>®</sup> **CID** will then show the measured distance on

2.

the display. In this case, the distance is 3.49 meters o 137 inches depending on the selected unit system.



In order to automatically use the measured distance to calculate costs, you will need to enable the "Distance by Laser" option under "Parameter."

3.

**Important:** The laser must be switched on before you enable "Distance by Laser." Otherwise, the icon will flash yellow and red and say "Laser?".

ensortype	r:   @	Acoustic T	rumpet
	Pres	sure	
6.0 bar	7.0 bar	8.0 bar	9.0 bar
	Dist	ance	
1.00 m	3.00 m	5.00 m	6.00 m

Note: For the horn, the valid distance range is 1 ... 6 meters (40 ... 236 inches).

4.

The **METPOINT® CID** will now update the distance automatically. The currently measured distance will be shown in the grey "Dist:" bar. Meanwhile, the distance used for cost calculations will be shown in the small bar at the bottom left next to the pressure.

State	Current distance measurement	Distance parameter used internally	Likelihood that the distance is being measured correctly
Best case	white	Green	High
Assess how plausible the measurement is	yellow	yellow	Medium
Move to the valid distance range	white	yellow	High, but distance outside of valid range
Move to a different surface close to the leak until the "best case" occurs and the measurement is robust	red	Empty	Low

**Important:** The distance measurement can be challenging on black surfaces or in very bright environments, which is why distances can still be entered manually. To be able to enter manual distances, disable the "Distance by Laser" option.

#### States:

#### Best case:



"Dist:" is green, the distance module measurement is robust and the distance used falls within the valid range



Outside of range: Distance measurement = robust, but out of range! Move to the valid distance range

# 9. Pinpointing leaks

This section goes over how to optimally use the device in real-life scenarios.

## 9.1 Leak pinpointing process

The following process should be carried out cyclically at the company in order to keep leakage rates as low as possible. The goal should be to have a continuous leakage rate of 5 ... 10%, as searching for leaks and fixing them one time only will not reduce the leakage rate permanently and new leaks will occur later on.

Real-life tip:

To identify the ideal time, it is recommended to use a volumetric flow sensor in the main line behind the tank. At least one week (Monday to Sunday) is recommended as the period for the measurement. When production is stopped, the volumetric flow profile will show the leakage rate. This means that if the limit is exceeded, a leak search can be ordered.

In addition, the volumetric flow measurement can be used to validate the result from the leak search and fix, as the latter should reduce the volumetric flow rate when production is stopped.



Position number	Description / Explanation
[1]	Pinpointing leaks
[2]	Quantifying leaks
[3]	Documenting leaks
[4]	Reporting leaks
[5]	Fixing leaks

# 9.2 Possible causes of leaks

When dealing with compressed air systems, leaks can be usually found at connecting elements.

- Leaky couplings and hose clamps
- Leaky gaskets
- Porous / faulty hoses
- Porous / faulty seals on tools and machines
- Faulty condensate drains
- Leaky or incorrectly installed dryers, filters, service units

# 9.3 Superficial leak detection

After the device starts, it will be in the leak detection view. The following figure describes the various corresponding functions and indicators.



Position number	Description / Explanation
[1]	Signal level in dB
[2]	Leakage rate
[3]	Leakage costs per year
[4]	LeakTag number
[5]	Camera image
[6]	Home screen
[7]	High sensitivity
[8]	Saves the measurement
[9]	Settings
[10]	Laser ON / OFF button
[11]	Date / time and battery charge (alternating display)
[12]	Laser "ON" icon
[13]	Signal level bars
[14]	Sensitivity adjustment button

## 9.4 Choosing accessories

In order to make it easier for the user to pinpoint leaks, various attachments were developed for different measuring conditions.

#### Note on distance for the quantification function:

The distances that must be maintained for quantifying the leak are always measured from the front end of the corresponding attachment to the leak.

## 9.4.1 Horn (standard attachment)



The horn bundles incident ultrasonic waves together, increasing the device's range this way. This makes it ideal for medium distances.

Leaks can be heard across long distances, but the user needs to get closer to the leak and always follow the "loudest" point to pinpoint it accurately. The user must then scan the individual compressed air components to pinpoint exact locations.

**Quantification function** (distance) -> 1 ... 6 m (3 ... 20 ft)

#### When to use the horn:

- Medium distance from line / component of 0.2 ... 6 mm (0.66 ... 20 ft)
- Low noise
- Freely accessible leak
- Use at distances of up to six meters if there is no parabolic mirror

## 9.4.2 Focus tube



The tip of the focus tube only lets very few ultrasonic waves through in the direction of the ultrasonic transducer, making it possible to pinpoint leaks very exactly.

Accordingly, it is recommended to use the focus tube at short distances in order to accurately pinpoint the corresponding leak.

**Quantification distance:** (Distance) -> 0 ... 0.2 m (0 ... 0.66 ft)

#### When to use the focus tube:

- Short distance from line / component of 0.05 m (0.16 ft)
- Freely accessible line / component
- The lines and components being inspected are physically very close to each other
- Medium to high noise
- Use if there is no gooseneck available

## 9.4.3 Gooseneck



If you ordered the gooseneck separately, you will first need to import the corresponding data (which is found on the included USB drive) into the **METPOINT® CID** in order to be able to use the gooseneck.

#### Import:

Home -> Export / Import -> Import -> New Sensor -> Gooseneck xxxxxxx

The gooseneck should be used when the lines and components being inspected are physically very close to each other. In addition, the gooseneck's shape can be adjusted as necessary in order to make it possible to comfortably inspect lines and components that are difficult to access.

The gooseneck's sensitivity has been reduced in order to attenuate noise. Accordingly, it is exceptionally well-suited to inspecting compressed air components in a targeted and local manner when there is high noise, such as is the case inside compressed air distributor cabinets and with systems that use pneumatic cylinders.

#### Quantification function (distance) -> 0.05 m (0.16 ft)

#### When to use the gooseneck:

- Short distance from line / component of 0.05 m (0.16 ft)
- Leak not freely accessible
- Medium to high ultrasonic noise
- The lines and components being inspected are very close to each other

## 9.4.4 Parabolic mirror



If you ordered the parabolic mirror separately, you will first need to import the corresponding data (which is found on the included USB drive) into the **METPOINT**<sup>®</sup> **CID** in order to be able to use the parabolic mirror.

Import: Export / Import -> New Sensor -> Parabolic xxxxxxx

The parabolic mirror bundles horizontally incident ultrasonic waves together at its focal point, where the ultrasonic transducer is located. This results in the measured ultrasound being significantly amplified (long range), as well as in very precise directional characteristics, as any ultrasound that is not horizontally incident is simply reflected by the reflector.

**Quantification function** (distance) -> 3 ... 12 m (9.84 ... 39.38 ft)

#### When to use the parabolic mirror:

- Long distance from line / component of 3 ... 15 m (9.84 ... 39.38 ft)
- Noise
- Leak not freely accessible (behind a fence)
- Leaks physically close to each other (overlapping)

# 9.5 Selecting sensitivity levels

Ultrasonic levels can be viewed as a kind of leak "volume."

You can use the "sensitivity adjustment button" to adjust the sensitivity of the **METPOINT**<sup>®</sup> **CID** to the corresponding surroundings. This will heavily affect the device's acoustic behaviour and increase or reduce the valid value range. Reducing the sensitivity level will reduce the range of the leak measurement. However, the "relevant area" illustrated with a circle on the display will also be smaller, making exact pinpointing much easier.

Sensitivity levels	
0 60 dB	The device's maximum sensitivity level (intended for when there are small leaks and no noise); can be selected with the "HiSn button" or "sensitivity adjustment button"
10 70 dB	Leaks and noise will become "quieter" and the range will decrease.
20 80 dB	Leaks and noise will become "quieter" and the range will decrease.
30 90 dB	Leaks and noise will become "quieter" and the range will decrease.
40 100 dB	Least sensitive level (large leaks, a lot of noise -> for a heavy-duty application)

The **METPOINT**<sup>®</sup> **CID** will have its auto function enabled by default and will switch between levels (10 ... 70 dB to 40 ... 100 dB) by itself.

You can set the device's highest sensitivity level (0 ... 60 dB) with the **"HiSn"** button or manually select the sensitivity level with the "sensitivity adjustment button." Use this mode if you want to find small leaks in quiet environments.

## 9.5.1 Sensitivity adjustment button



You can either use the "Sensitivity" adjustment button to switch between individual sensitivity levels manually or select the auto function for adjusting the level. The sequence is shown in the figure to the left.

# 9.5.2 Auto function (standard)

The auto function (automatic sensitivity level selection) is activated by default. In other words, the measured ultrasound level is used to automatically set the optimal measuring range. Example: Level = 71 dB -> stage: 20 ... 80 dB

# 9.5.3 Manually adjusting the sensitivity

You can also switch between individual sensitivity levels manually. To do this, use the "sensitivity adjustment button."

Users can use this option to reduce noise and find leaks as quickly and easily as possible.

To do so, they must keep increasing or reducing the sensitivity and using the adjusted sensitivity to scan the target area for leaks. When the sensitivity level is reduced, the device will focus on a smaller area, but will also lose range.

# 9.5.4 Pinpointing leaks

The specific approach recommended for pinpointing leaks depends on the specific ambient conditions in question.

**Option 1** ... from which direction can you hear a leak?

When using this method, you should point in all directions until you find the loudest point. After this, you should move in the direction of the loudest point in order to be able to accurately pinpoint the leak.

This option works well when there is little noise.



**Option 2** ... Walking along the compressed air system.

Alternatively, if there is more noise, you can make it easier to pinpoint the leak by "moving along and listening to the compressed air system bit by bit." That is, from the compressor room all the way to the end points. If there is noise, it is recommended to manually reduce the device's sensitivity and use either the gooseneck for short distances or the parabolic mirror for long distances.

In addition, the following generally applies when using this method: The shorter the distance from the line, the easier it will be to pinpoint the leak.



**Option 3** ... Searching for leaks while production is stopped

Production processes can result in ultrasonic noise in certain cases. If, for example, a pneumatic system blows off air on a regular basis, the **METPOINT**<sup>®</sup> **CID** will detect the corresponding noise.

If noise makes pinpointing leaks significantly harder, it is recommended to use option 1 or option 2 if the lines are pressurized but the corresponding production processes are stopped. This is the easiest and fastest way to find leaks.

## 9.6 Other problems that can make the measurement more difficult



When pinpointing leaks, there can be additional problems, which are described in the following subsection. In order to reduce these problems, the most important things to do are to use the correct attachment as instructed in section 9.4 ("Choosing accessories") and to reduce the sensitivity level.

**Reflections:** If you can hear leaks on walls but there are no lines running along them, the sound is coming from reflected ultrasound from a leak. In this case, it is recommended to reduce the sensitivity (manually switch to a higher range until you cannot hear the reflected sound anymore). In addition, keep scanning parallel to the reflection area, as that is where the leak is coming from (the leak will be louder than the reflected ultrasound).



**Overlapping leaks:** If leaks are physically close to each other, the ultrasound they emit will overlap. In this case, it is recommended to "seal off" the leaks with a piece of cloth. This will increase the accuracy of the measurement enormously, especially when quantifying the leak. At the same time, you should be measuring physically very closely to the components.

Pinpointing leaks can be made much easier by reducing the sensitivity and especially by using the parabolic mirror (for long distances) and the gooseneck (for short distances).

**Very large leaks:** Very large leaks will produce a strong ultrasonic field that can generate ultrasound throughout the entire room under certain circumstances. In this case, it is also recommended to reduce the sensitivity and closely scan the individual components. Within this context, leaks should be pinpointed based on the volume level of the loudest point.

If the leak is not accessible, it is recommended to use the parabolic mirror, as it has excellent directivity.

#### Lamps and motors:

Noise: Electrical buzzing -> Do not confuse for leaks!

Some systems and machines can also produce ultrasound that falls within a similar frequency range, e.g., neon tubes and motors. However, these usually sound different from the typical "hissing" of leaks and should not be confused with them.

If you can hear ultrasound that is clearly not coming from the compressed air system, then reduce the device's sensitivity in order to "suppress" it. If this is not enough, then you will have to ignore the noise.

# 9.7 Documenting leaks

Once you find the leak and have set the corresponding pressure and distance and described the leak, you can save a *picture* of the latter by tapping the "store" button.

store Data/Image on SdCard (0/1000)					
BEKO TECHNOLOGIES					
Halle 5					
	Maschine 1				
Distance 1.00 m Pressure 6.0 bar					
Fault Description					
	Fault De	scription			
<b>¢</b>	Fault De Parameter	scription Meas. Point			

After this, you can check the parameters (distance and pressure) and define the exact measuring location with the corresponding company, building and place. In addition, you can also enter a brief description (maximum of 32 characters).

Leak.Element		
Measures		
Replacement		
		1 .
Repair	Status	under pressure
Repair Comment	Status	under pressure

The following error descriptions are available, and are intended to make it significantly easier to fix the leak later on.

- Leak.Element
- Measure
- Replacement
- Repair under pressure possible?

	1-5 (14)				
	Nr.	Leak.Element			
	001	Air tool			
	002	Ball valve			
	003	Filter unit			
	004	Fitting			
¥	005	Flange connection			
	new delete Cancel OK				
-					

By default, the system has a few available suggestions that are meant to make input easier for users.

In addition, any custom entries you make will additionally be stored in an internal database so that they can be reused at any time.

44.4 dB Amon CS Instruments
< 1.1 l/m Halle 4
Maschine 1
// L#: 001
Loss: < 1.1 l/m
Cost < 11 E/Y
Distance: 1.00 m
AL Pressure: 6.0 ba
Loss: < 1.1 l/m Cost: < 11 €/Y Distance: 1.00 r

The screen shown will list all relevant leak data so that it can be checked one final time before saving it. All leaks, including all entries made, will be stored in the leakage data file.

## 9.8 Exporting leakage data

Once all leaks have been documented, the corresponding data can be exported to a USB drive. When doing this, users can choose the start and end times for the leakage data export. **Important:** The "ERASE Leakage data" option will delete <u>ALL</u> stored leak information irretrievably.

Home -> Export / Import -> Export -> Leakage data -> Select start time and end time -> export

*** Ехро	rt Leakage data	***
Company		Change
Date start	Time	Change
end		Change
Files to export:	no Data	export
Back	ERASE Le	eakage data

To generate comprehensive leak documentation, import the leakage data into the BEKO Leak Management software program and process it there.

# 10. Using the BEKO Leak Management software

Main functions:

- Managing companies / buildings / projects / measurements
- Documentation and reporting

To install the software, run the "Setup.exe" file. The file will be found on the included USB drive and can also be downloaded from the **BEKO** TECHNOLOGIES homepage.

# 11. Operation manual

Additional information, as well as a detailed product description, can be found in the **METPOINT**<sup>®</sup> **CID** installation and operation manual.

The installation and operation manual can be found on the included USB drive or downloaded at the following URL.

www.beko-technologies.com

# 12. Notes

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