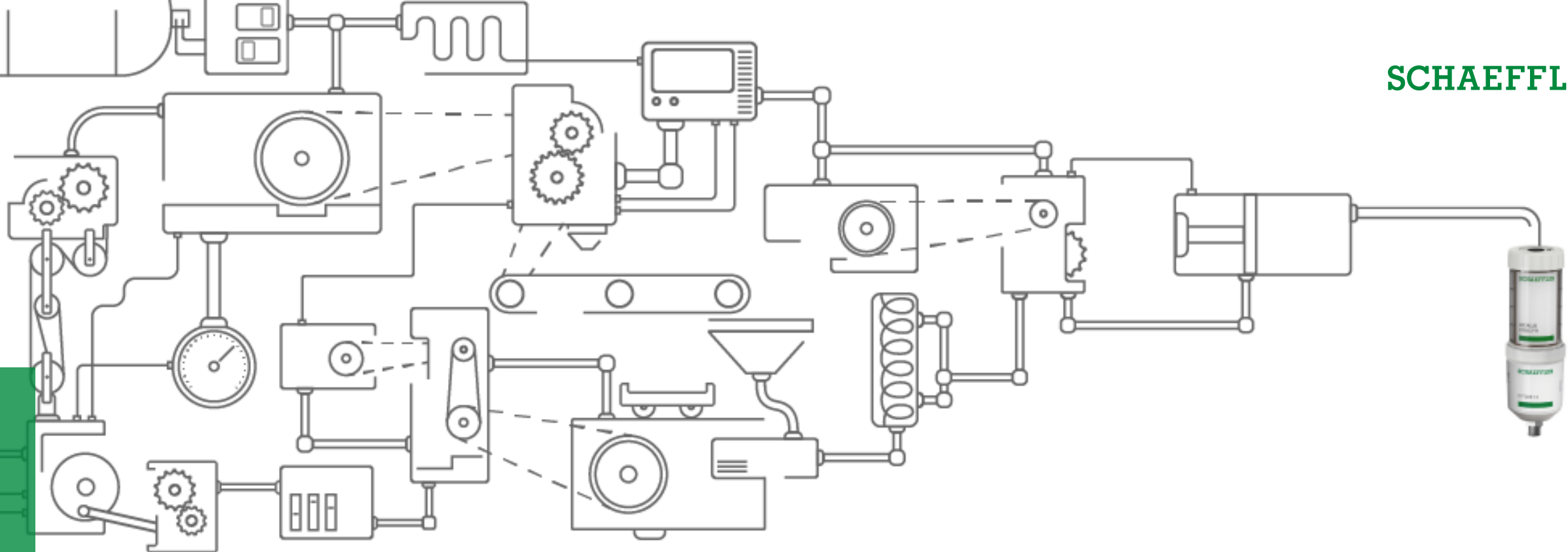


SCHAEFFLER



# OPTIME C1

The world's first smart lubricator

Schaeffler is

**your solution provider**

for smart maintenance

## A thoroughly positive user experience



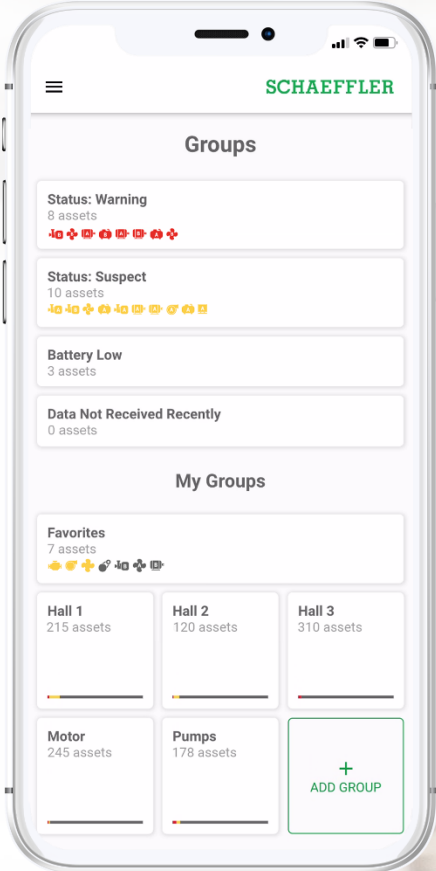
From installation to operation to maintenance.

One-stop shopping for all innovative and smart solutions for meeting long-term productivity needs.

**In short:**

**We make life as easy as possible for our customers**

The world's first smart lubricator built to simplify the task of lubricating your machines



## Complex challenges

### Maintenance tasks in your plant are complex

And part of that complexity comes from the tasks maintenance teams wish they could cut out of their daily maintenance routines – but can't.

Tasks such as:

- Lubricating by hand
- Manually checking many lubrication points
- Finding the right cartridge replacement for automatic lubricators

Which poses risks including:

- Over or under-lubrication
- Localized pollution
- Bearing and component failures



## Complex challenges

### But lubrication is crucial

Because insufficient/incorrect lubrication is the number one cause of machine bearing failure and downtime.

And there's been simply no better way of doing these tasks. Not until now at least.

#### Typical causes for bearing issues:



## Turn complexity into simplicity

# OPTIME C1: The world's first smart lubricator

Combines all the benefits of our Concept1 automatic lubricators with award-winning condition monitoring technology.



### **MORE transparency:**

**Award-winning OPTIME technology** lets you monitor the condition of all your lubrication points – from wherever you are – via the mobile app or web-based dashboard



### **MORE simplicity:**

**Plug-and-play functionality** makes OPTIME Concept1 simple to install, use and refill



### **MORE uptime:**

**Improved lubrication** eliminates premature bearing failure, reducing unexpected and expensive machine downtime

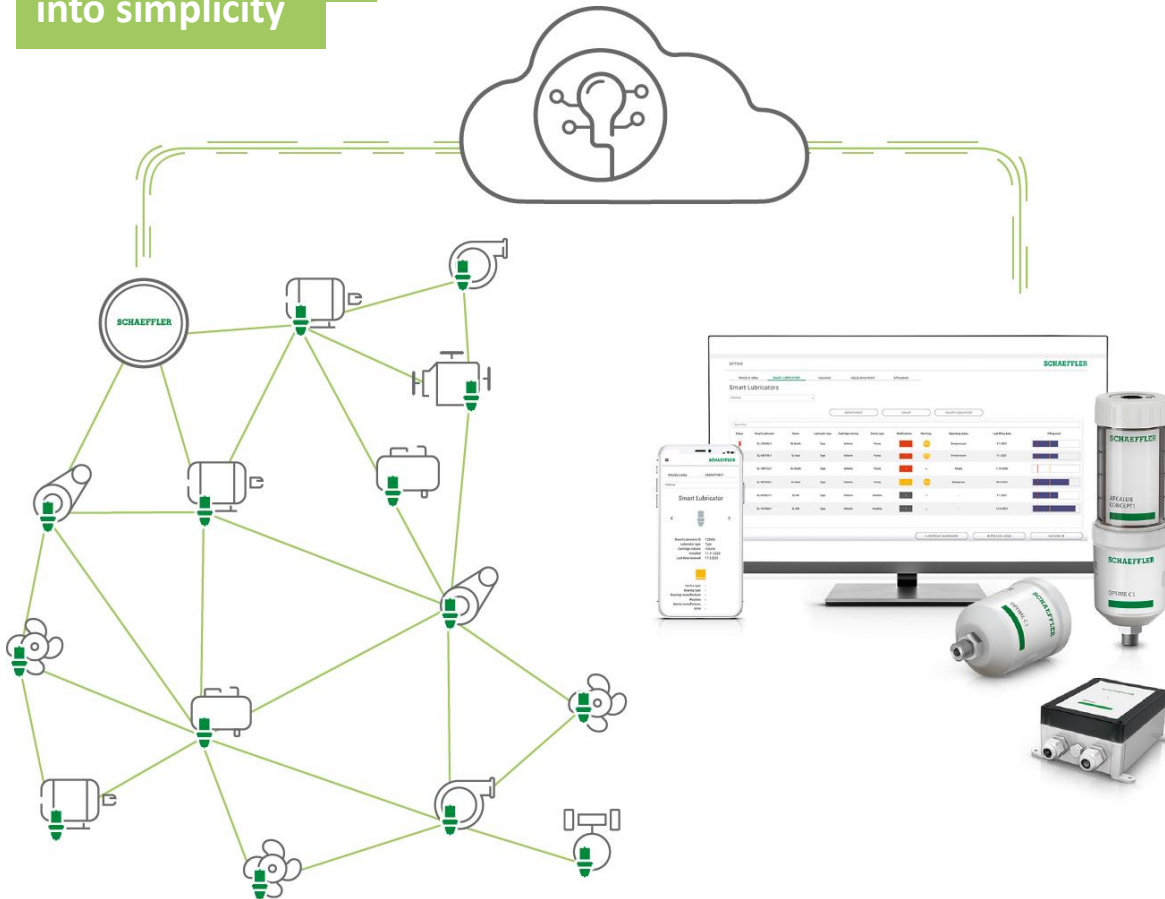




# How it works

## About OPTIME C1

Turns complexity into simplicity



**With the new OPTIME C1, you can simplify the complex job of lubricating your machines.**

- Easy to use and economical solution for automatic single point lubrication
- Designed with the user in mind: simple sub-2-minute commissioning process, smooth expandability and wide range of possible uses
- Secure communication network
- All machine/lubrication statuses available in one app
- Part of the award-winning OPTIME family
- Easy to understand alarms and alerts mean fewer empty cartridges or blocked pipes
- No manual, laborious checks to ensure adequate lubrication
- Part of the OPTIME condition monitoring solution from Schaeffler

## About OPTIME

Optime –  
Plug. Play. Predict.

### The award-winning condition monitoring solution.

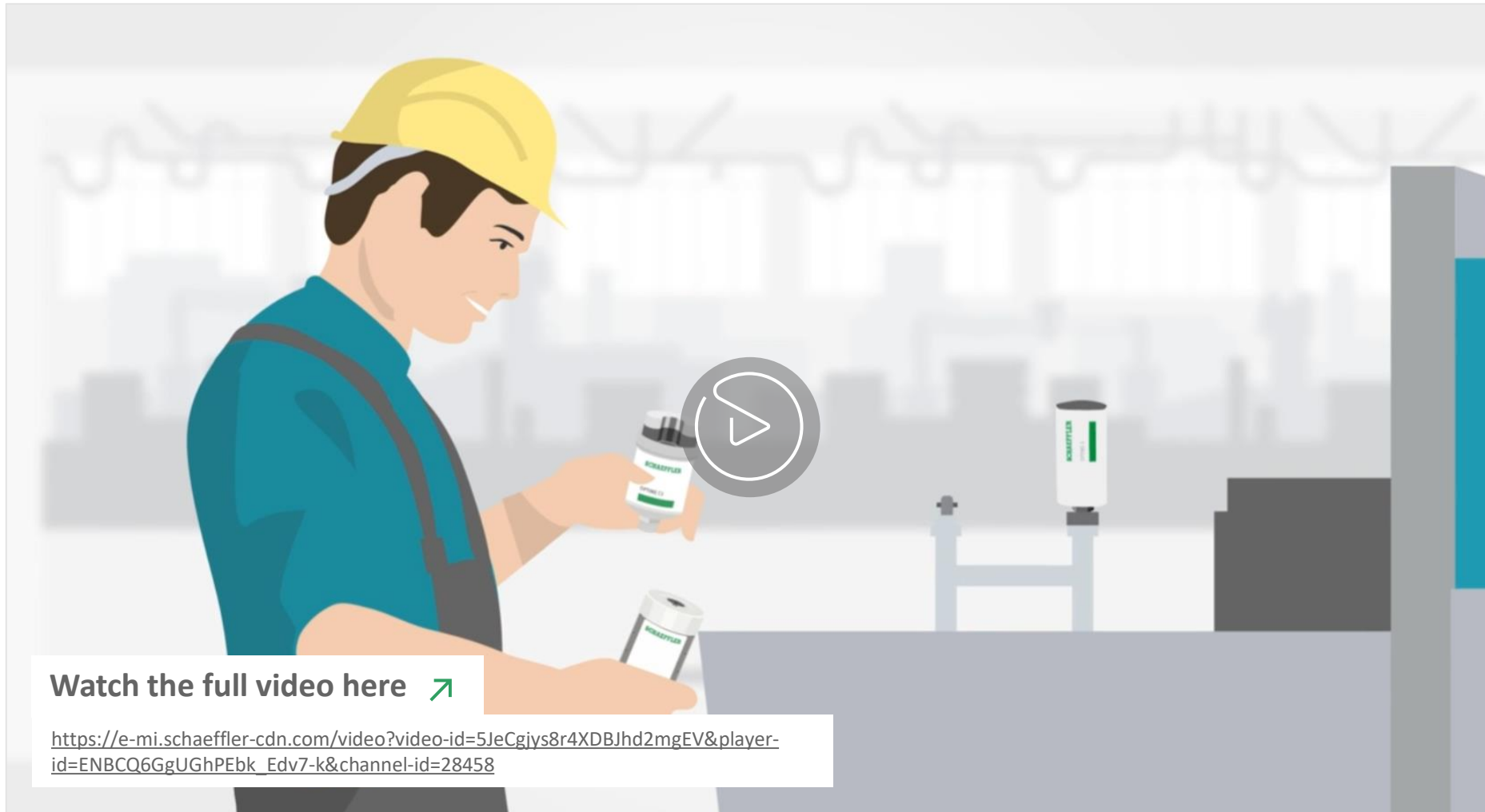
- OPTIME C1 is the latest addition to the award-winning Schaeffler OPTIME family
- The system was developed for the condition monitoring of rolling bearings
- Allows lubrication status to be checked on-site and remotely, not just within Bluetooth range, but anywhere with internet connectivity
- Can detect potential damage, imbalances or misalignments – even weeks in advance
- Makes predictive maintenance of machines both affordable and easy



reddot winner 2021

**Best-in-class:** the Schaeffler OPTIME solution received the “Red Dot Award” in 2021 – a product design award that honors products for their outstanding design quality. The innovative solution received the prize in two categories: “Smart Product” and “Industrial Equipment”.

## Watch the how-to video



Watch the full video here [↗](#)

[https://e-mi.schaeffler-cdn.com/video?video-id=5JeCgiys8r4XDBJhd2mgEV&player-id=ENBCQ6GgUGhPEbk\\_Edv7-k&channel-id=28458](https://e-mi.schaeffler-cdn.com/video?video-id=5JeCgiys8r4XDBJhd2mgEV&player-id=ENBCQ6GgUGhPEbk_Edv7-k&channel-id=28458)

A man with a grey beard and short hair, wearing a dark grey t-shirt, is looking directly at the camera. He is in a workshop or factory setting, with various mechanical parts and tools visible in the background. The lighting is warm and focused on the man.

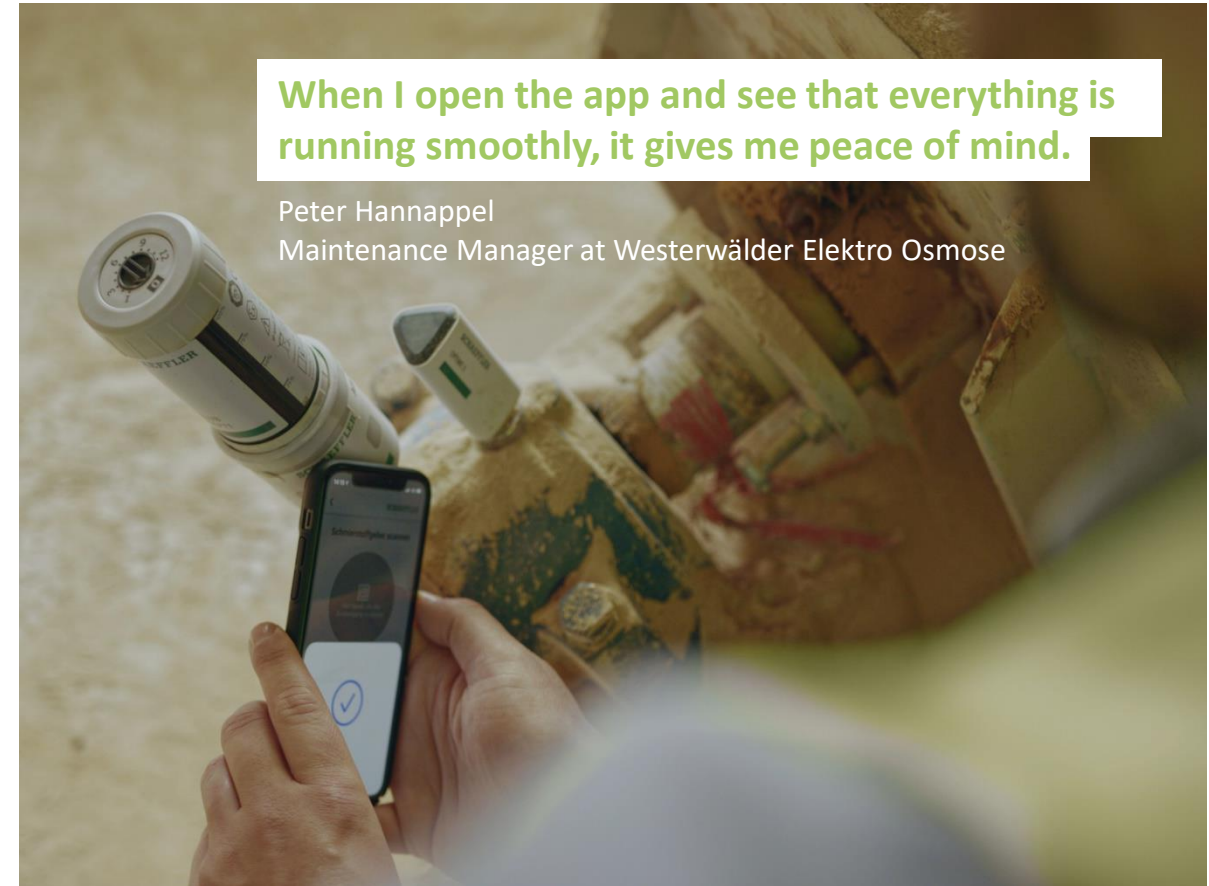
**Customer  
success story**

## Westerwälder Elektro Osmose

Less complexity,  
less downtime

**When a machine breaks down, the entire production process can come to a standstill. Here is how the OPTIME C1 solved this challenge for Westerwälder Elektro Osmose and ensured greater uptime.**

- Every lubrication point can be outfitted with the OPTIME C1
- The small size of OPTIME C1 lets it be installed anywhere, even in tight spaces
- Lubrication points can then be “forgotten” about – the app alerts workers when action needs to be taken (for example: if the lubricator cartridge needs to be replaced)
- This frees up resources while enabling quick action to avoid downtime

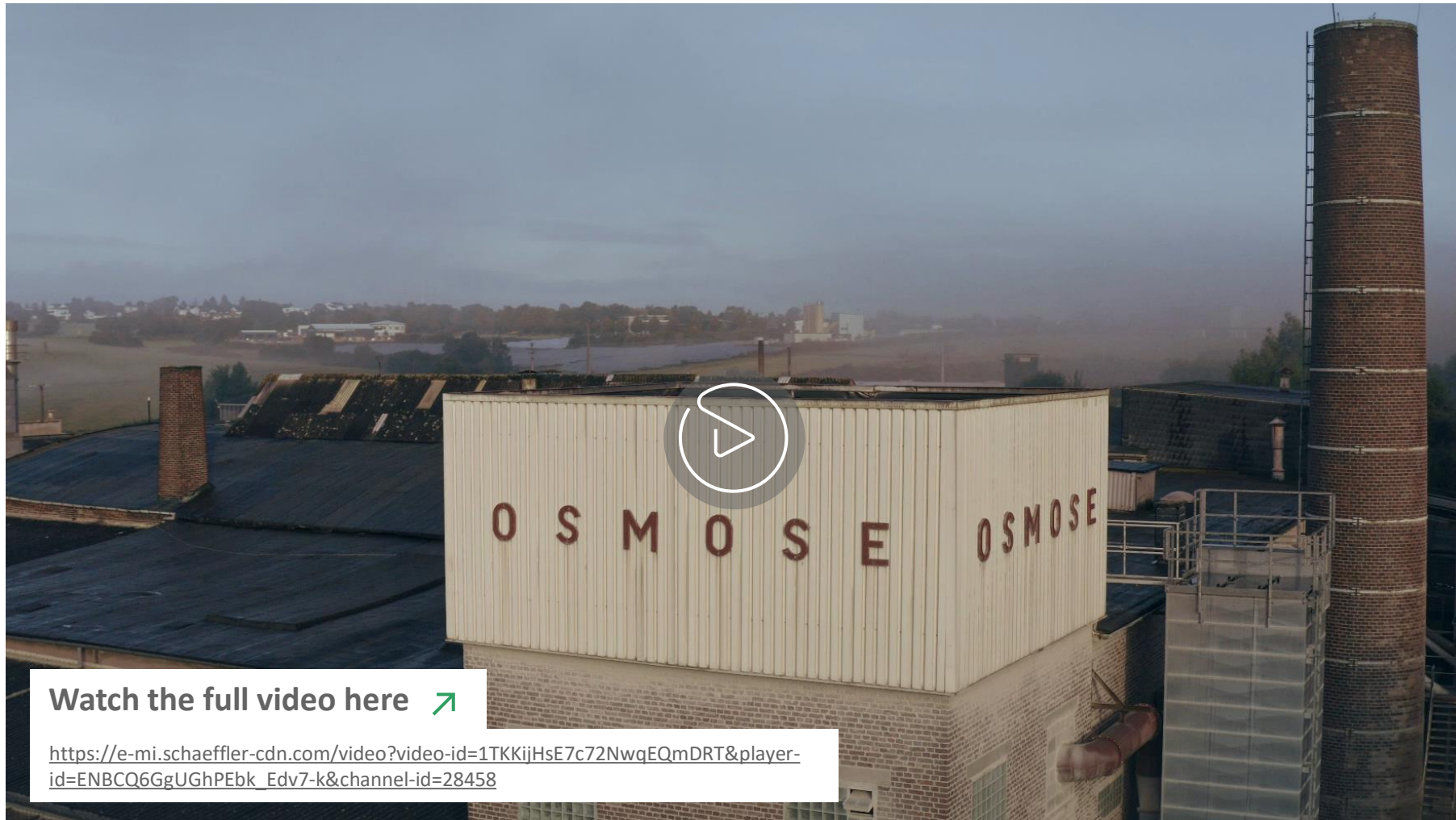


**When I open the app and see that everything is running smoothly, it gives me peace of mind.**

Peter Hannappel

Maintenance Manager at Westerwälder Elektro Osmose

## Westerwälder Elektro Osmose



# Use cases

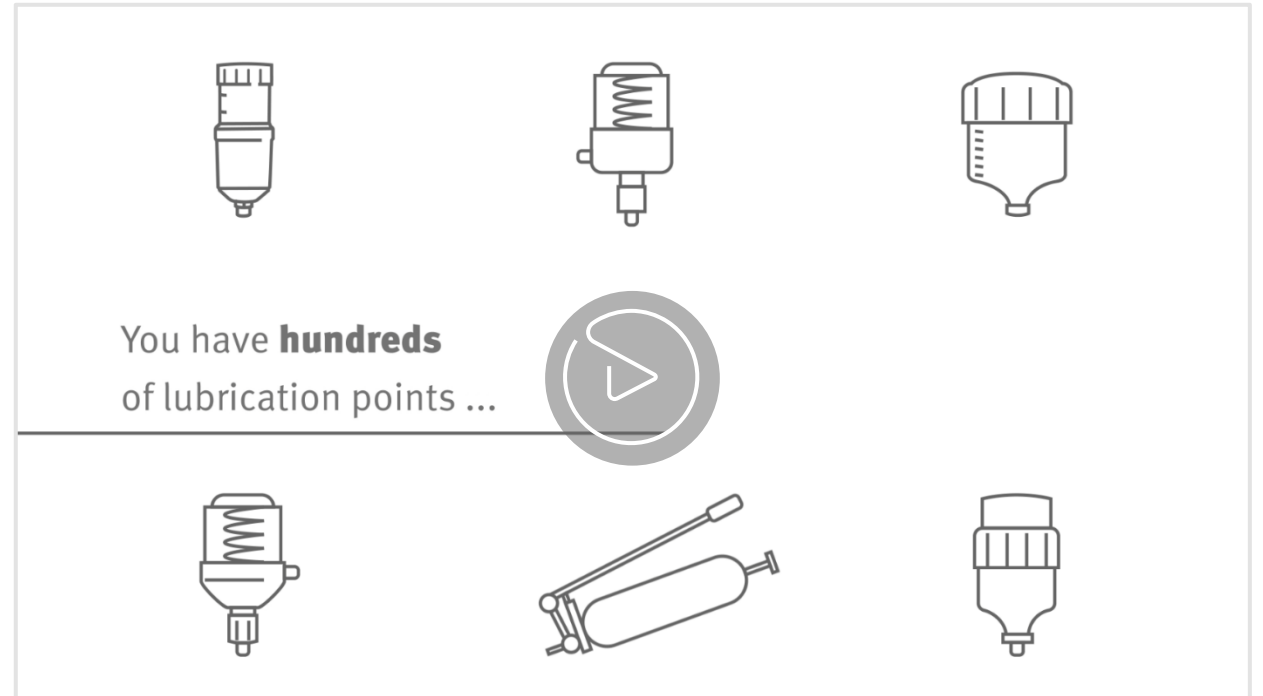


## Turn stress into serenity

**Challenge 1: You have hundreds of lubrication points to manage. But how?**

**Keep an overview of all your lubrication points and any potential lubrication problems – no matter where you are – by connecting them to the IIoT with OPTIME.**

- Current status and fill level information available at a glance
- Avoid lubrication shortages, which are involved in 80% of bearing defects
- Automatic alarm in event of unusual operating conditions
- No need for time-consuming manual checks



**Watch the full video here** [↗](#)

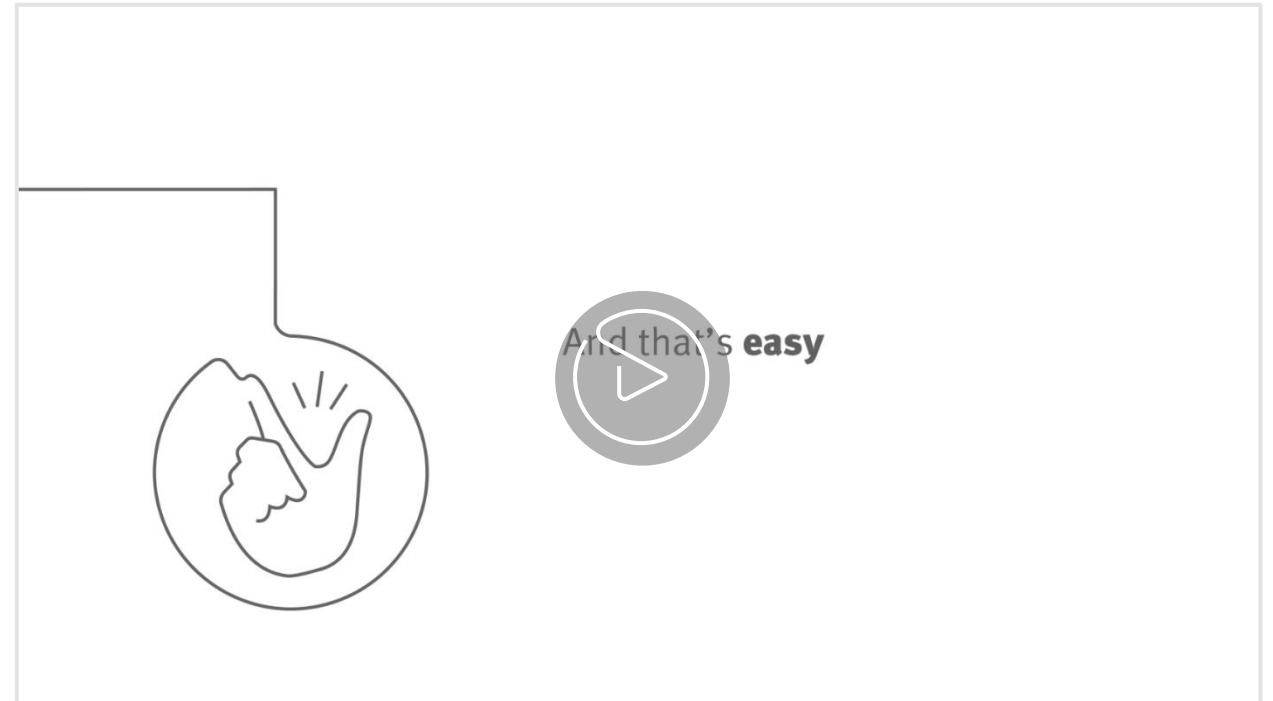
[https://e-mi.schaeffler-cdn.com/video?video-id=CdNq2B4HWAFwDxrQt3djAd&player-id=ENBCQ6GgUGhPEbk\\_Edv7-k&channel-id=28458](https://e-mi.schaeffler-cdn.com/video?video-id=CdNq2B4HWAFwDxrQt3djAd&player-id=ENBCQ6GgUGhPEbk_Edv7-k&channel-id=28458)

## Turn chaos into calm

### Challenge 2: You need to change the lubricator cartridge. But how?

**Reduce costly manual mistakes when changing your lubricator cartridge with the OPTIME app, which will tell you the correct grease and the correct settings for that specific lubricator.**

- Changing cartridges is quick and easy: replacement just needs to be screwed on
- User guidance available via the app in several languages
- Reduction in downtime due to reliable, correct lubrication



**Watch the full video here** [↗](#)

[https://e-mi.schaeffler-cdn.com/video?video-id=7vbPv7JTWoYWD9xPTSybPi&player-id=ENBCQ6GgUGhPEbk\\_Edv7-k&channel-id=28458](https://e-mi.schaeffler-cdn.com/video?video-id=7vbPv7JTWoYWD9xPTSybPi&player-id=ENBCQ6GgUGhPEbk_Edv7-k&channel-id=28458)

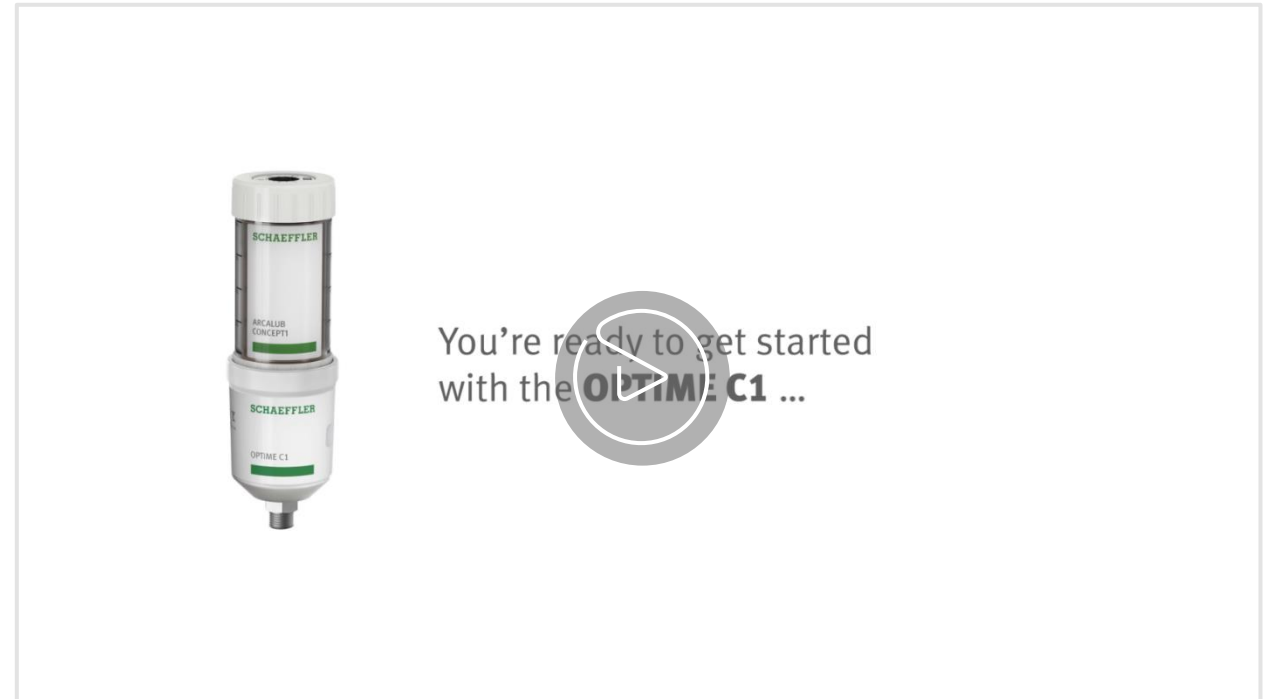
## Turn effort into ease

### Challenge 3: You want to get started. But how?

**Connect your OPTIME C1 lubricators quickly and simply thanks to the plug-and-play functionality as well as the extremely user-friendly OPTIME app.**

- Designed with the user in mind
- Guided and simple installation, commissioning and maintenance
- Extended bearing life as result of optimized and controlled lubrication
- Saves an average of 44% (€62) per year, per lubrication point vs manual lubrication\*

\* based on a sample calculation with 5 years usage, 125ccm grease per year/lubrication point, 100 devices



**Watch the full video here** [↗](#)

[https://e-mi.schaeffler-cdn.com/video?video-id=58rk\\_j1tfYBSRPRxiC3veL&player-id=ENBCQ6GgUGhPEbk\\_Edv7-k&channel-id=28458](https://e-mi.schaeffler-cdn.com/video?video-id=58rk_j1tfYBSRPRxiC3veL&player-id=ENBCQ6GgUGhPEbk_Edv7-k&channel-id=28458)

# Technical details

**OPTIME C1**

Description	Value	Unit
<b>Function OPTIME C1</b>		
Drivesystem	Electromechanical	-
Operating pressure	≤ 10	bar
Metering volume per lubrication interval	0.5	cm <sup>3</sup>
Metering volume per day (dependent on size and setting of CONCEPT1)	0.17 up to 8.3	cm <sup>3</sup>
Commissioning	NFC	-
<b>Lubricator OPTIME C1</b>		
Dispensing time (steplessly adjustable)	1 up to 12	months
Lubricant volume	60 or 125	cm <sup>3</sup>
Lubricant	- Grease	< NLGI 2
	- Oil	> 68
		cSt
<b>Communication</b>		
Wirepas Mesh (ISM band)	2.4	Ghz
Range with line of sight	100	m
<b>Electrical characteristics</b>		
Power supply (battery pack)	6	V
	2.3	Ah

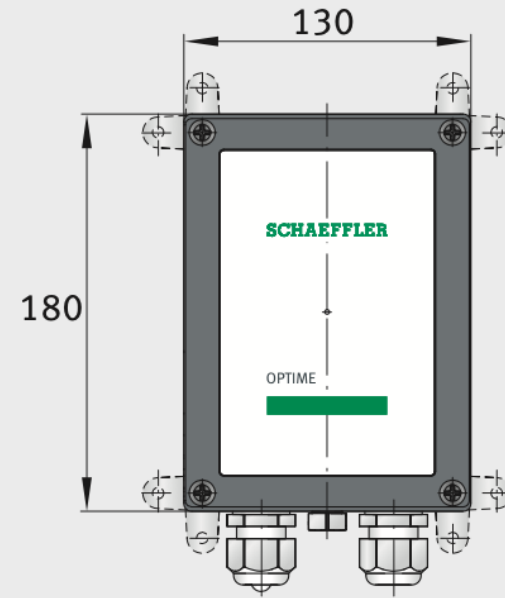
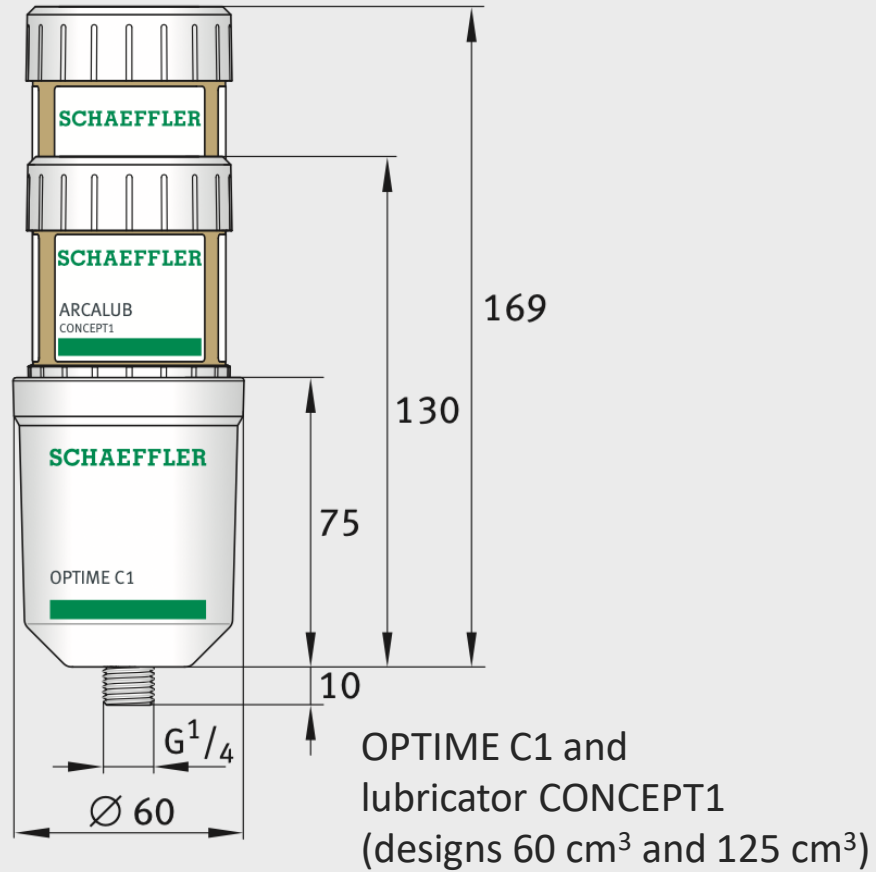
Description	Value	Unit
<b>Other characteristics</b>		
Mounting position	As required	-
Threaded connector	G 1/4	-
Housing material	PET	-
Mass	= 0.25	kg
Warranty and operating life	Duration	2
	Number of emptying operations	10
		years
		-
Packing unit	10	pieces
<b>Ambient conditions</b>		
Protection class	IP68	-
Operating temperature	-10 up to +55	°C
Storage (protect from direct sunlight, store in a dry place )	Temperature (recommended)	+20 ±5
	Humidity	≤ 65
		°C
		%
<b>Certificates</b>		
CE	-	-
Radio Equipment Directive 2014/53/EU	-	-

## Gateway

Description	Value	Unit
<b>Communication</b>		
Wirepas Mesh (ISM band)	2.4	GHz
2G, LTE CAT M1 (additional options with installed local LTE stick)	-	-
WLAN	2.4	GHz
Ethernet RJ45	-	-
SIM card format	Micro SIM (3FF)	-
<b>Electrical characteristics</b>		
Power consumption	30	VA
Power supply AC	85 up to 264	V
Frequency	47 up to 440	Hz
<b>Ambient conditions</b>		
Protection class	IP66	-
Operating temperature	-20 up to +50	°C
Storage	Temperature	-40 up to +85
	Humidity	20 up to 90

Description	Value	Unit
<b>Dimensions, mass</b>		
Length	180	mm
Width	130	mm
Height	81	mm
Mass	= 1.2	kg
<b>Certificates</b>		
CE	-	-
Radio Equipment Directive 2014/53/EU	-	-

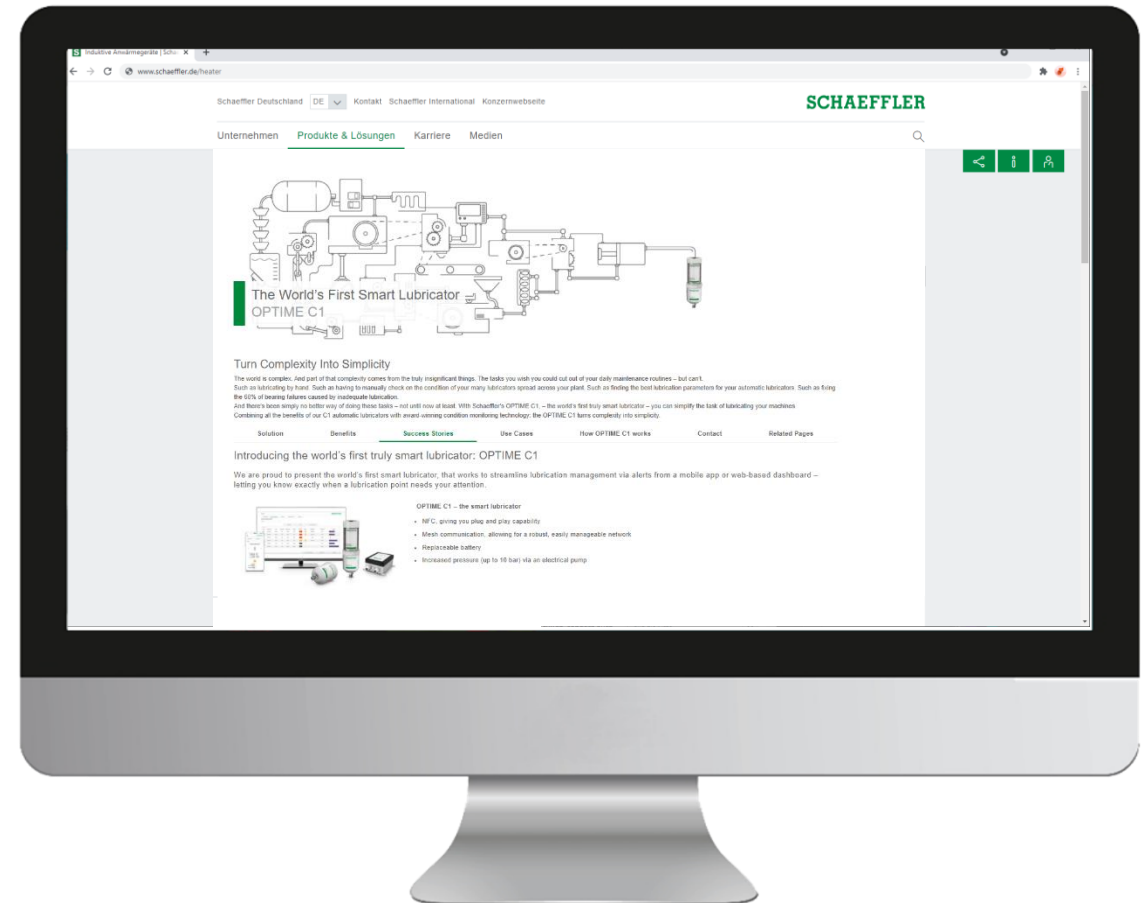
## Dimensions



Gateway

Want to turn complexity into simplicity?

Visit: [www.schaeffler.de/en/optime-c1](http://www.schaeffler.de/en/optime-c1)



## Related products



### OPTIME – Plug. Play. Predict.

<https://medias.schaeffler.de/en/condition-monitoring/optime>



### Schaeffler lubricators

<https://medias.schaeffler.de/en/lubrication/lubricators>



### Schaeffler lubricants

<https://medias.schaeffler.de/en/lubrication/lubricants>