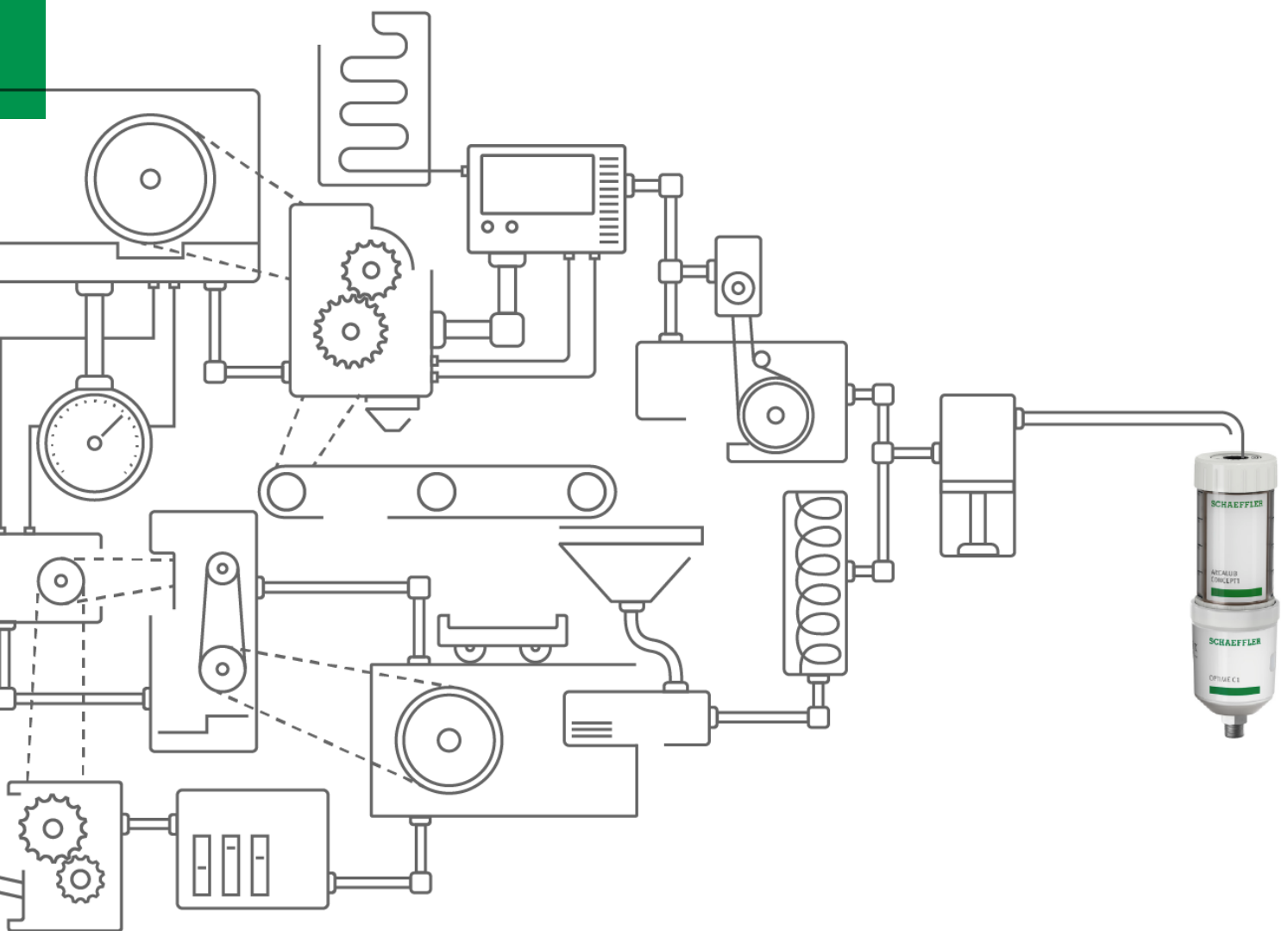


# OPTIME C1

The world's first smart lubricator



**LUBRICATION  
WORKLOAD:  
A COMMON  
PROBLEM,  
WITHOUT A  
SOLUTION...  
UNTIL NOW!**



#### OPTIME Digital Service

- Easy to use mobile app
- Powerful web-based dashboard for desktop PCs

#### Concept1 Cartridge

- OPTIME C1 is compatible with Concept1 cartridges
- Can be refilled with our ARCANOL high-performance lubricant, or your own alternative



#### OPTIME C1 – the smart lubricator

- NFC, giving you plug and play capability
- Mesh communication, allowing for a robust, easily manageable network
- Replaceable battery
- Increased pressure up to 10 bar via an electrical pump

#### Gateway

- Mobile communication via SIM or ethernet

Manually managing lubrication across a production line, factory hall or plant can involve extensive busywork and take employees away from other important tasks.

But this work has been necessary, as downtime induced by a lack of machine lubrication is both common and expensive, putting valuable machines at risk of damage.

With so many components needing to be checked, and so many different cartridge replacements for automatic lubricators required, this job necessitated almost full-time monitoring – until now!



We are proud to present the world's first smart lubricator, that works to streamline lubrication management via alerts from a mobile app or web-based dashboard. Our OPTIME philosophy revolves around three key pillars:



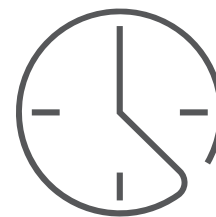
#### **Transparency**

Allowing your maintenance team to monitor the condition of all lubrication points, whether on-site, in the office, at home, or even on the other side of the world.



#### **Simplicity**

Plug-and-play functionality means that all the guesswork is taken out of installation and operation. You pick it up, you bolt it on, and when you get an alert, you replace the lubrication cartridge. Simple and scalable!



#### **Uptime**

Lubrication avoids dreaded production line downtime and helps you fulfil orders and keep things moving with as little manual work as possible. Work smart, not hard!



## Customer Success Story: Westerwälder Elektro Osmose

Founded in 1916, Westerwälder Elektro Osmose is a manufacturer of high-quality ceramic products for buildings as well as vitrified clay pipes for the water and wastewater industry.

Our work with this customer enabled them to avoid mill failures, which have a cost of 47,000 EUR, all in a factory environment where components operate up to 1,200°C.

The smart functionality in the device will simply warn you of any impending lubrication shortage, saving you time and money.

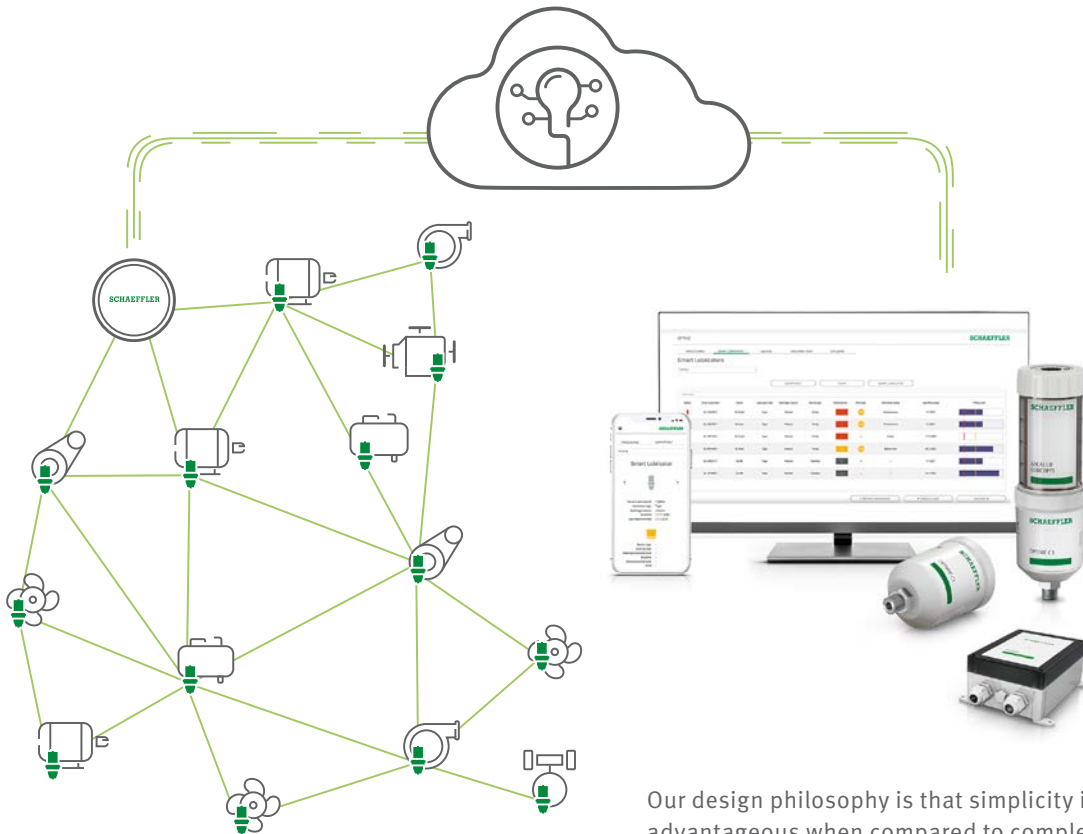
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*“When I open the app and see that everything is running smoothly, it gives me peace of mind.”*

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**Peter Hannappel**  
Maintenance Manager at  
Westerwälder Elektro Osmose

# So how does it work?



Our design philosophy is that simplicity is always advantageous when compared to complexity. The fewer components, the better the quality, the better the value proposition, and the better the final product.

## Challenge? Accepted.

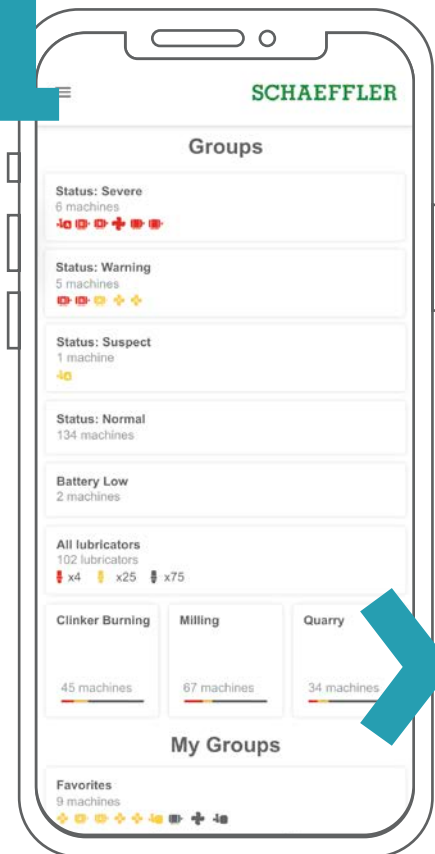
It can sometimes be hard to imagine how a product like OPTIME C1 could fit into your workflow, so we've put together three common challenges that our award-winning solution can help with:



# You have hundreds of lubrication points that need constant monitoring

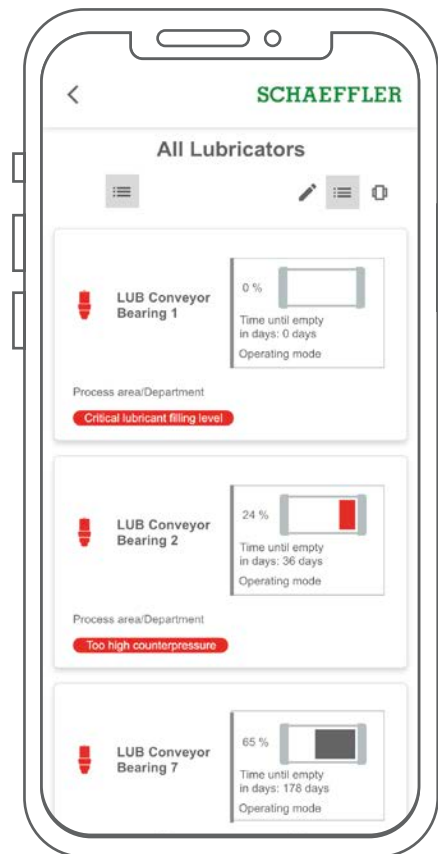
Instead of directing your maintenance team to conduct daily or weekly checks on lubrication status, you can connect OPTIME to the IIoT and get component status and fill level information, automatic alarms in the event of malfunction, and more, all at the touch of a button.

# 01



## Group View

Clear groups for all your machines and lubrication points. So you can make sure that you keep an eye on all your lubrication points.



## List view of group “All lubricators”

Within the groups, all lubrication points are sorted by urgency. This ensures that you always know which lubricator needs your attention next. Easy to understand information such as critical lubricant filling level and high temperature or pressure. In this way, you immediately know what the problem is so you can take the right measures straight away.

# Your maintenance team are unsure of which lubricant cartridge to use

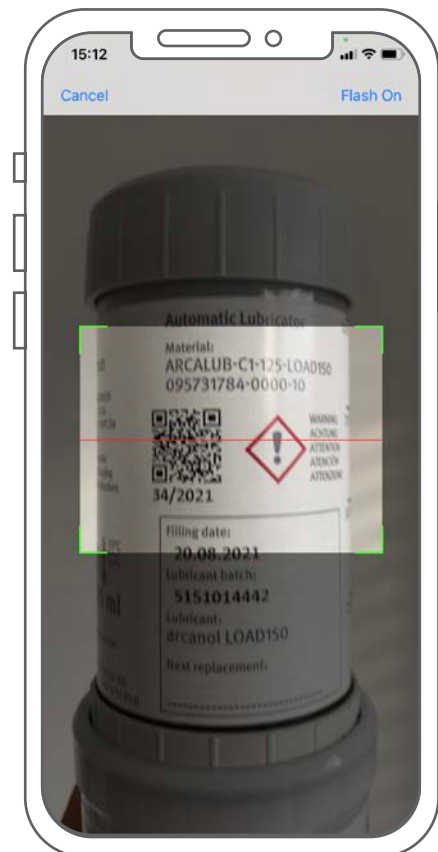
Take manual errors out of your lubrication workflow. OPTIME C1, with its intuitive screw-on functionality, goes above and beyond, with its design preventing incorrect cartridges from both being installed and dispensing lubricant – stopping expensive damage.

# 02



## Replace lubricant cartridge

Assisted input of lubrication parameters, lubricant quantity and time period. So you make sure that you set up all your lubricators correctly.



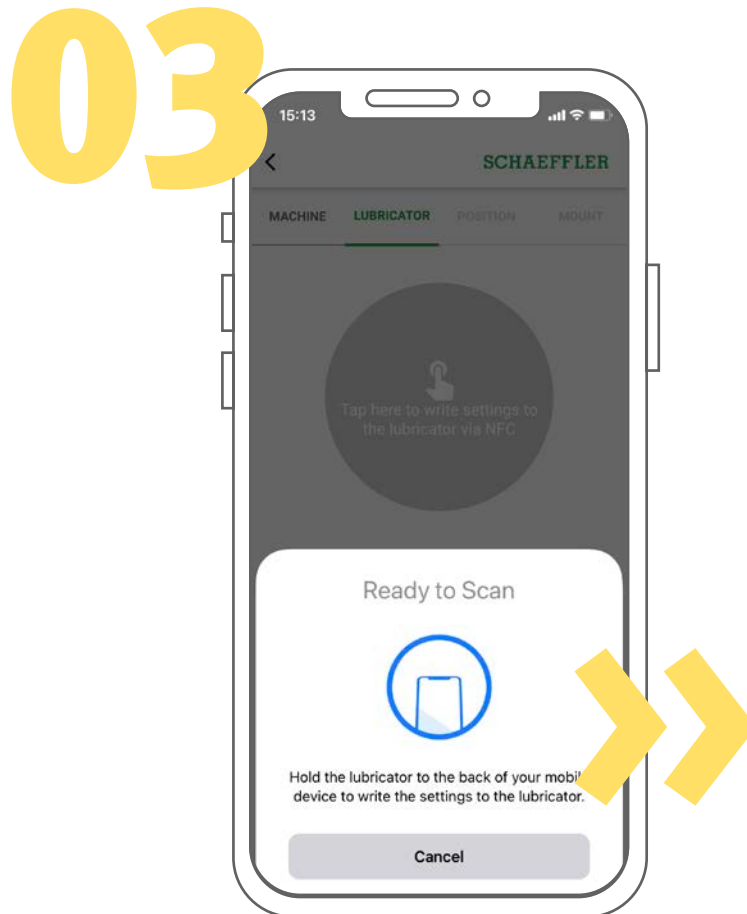
## Scan QR code

Scan the QR code on the cartridge, ensuring that you use the right lubricant at the right lubrication point.



# You want to get started, but don't know how

We have designed OPTIME C1 to be as easy to install as possible, with plug-and-play functionality that allows for seamless scalability and doesn't require excessive worker training. And remember, all this lubrication management saves on the need for excessive expenditure on expensive new bearings, helping your profit margins.



### Provisioning lubricator

A simple NFC scan of the OPTIME C1 activates and configures it. This ensures that you can save your resources for more important tasks.

# Feature rich, cost efficient

## Product specifications

Description	Value	Unit
<b>Function OPTIME C1</b>		
Drive system	Electro-mechanical	–
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 CONCEPT1</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
<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

**Here is a summary of our key features at a glance:**

- Status and fill level information available via the OPTIME app or desktop dashboard
- Automatic alarm notification in the case of an adverse event
- Simple installation and maintenance
- Ability to adjust each lubricator individually
- Optimized maintenance and routing
- Pressure allowance of up to 10 bar
- Rapid and easy screw-on cartridge replacement
- User guidance available in several languages

Description		Value	Unit
<b>Other characteristics</b>			
Mounting position		As required	–
Threaded connector		G $\frac{1}{4}$	–
Housing material		PET	–
Mass		= 0.25	kg
Warranty and operating life	Duration	2	years
	Number of emptying operations	10	–
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 $\pm$ 5	°C
	Humidity	< 65	%
<b>Certificates</b>			
CE		–	–
Radio Equipment Directive 2014/53/EU		–	–

# Technical data 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
<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	–	–



## A proud member of the OPTIME family

OPTIME C1 is a proud member of the wider award-winning OPTIME product range, which offers a variety of cost-effective condition monitoring solutions.

[www.schaeffler.com/optime](http://www.schaeffler.com/optime)

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