

**GEMÜ**



**CONEXO<sup>®</sup>**

**Electronic identification and paperless maintenance**

# CONEXO<sup>®</sup>

## Processing industry 4.0

### RFID chip

- Clear, traceable identification
- Attachment options for a wide variety of requirements
- Passive transponder

### App

- Identification of components
- Maintenance documentation
- Easy access to documentation and certificates

### Pen

- RFID reading device
- Wireless
- Compact design







## Advantages

- **Captive electronic identification** of components
- **Simplified identification and inventory** of devices in the plant
- **Increased process reliability** thanks to electronic traceability
- **Electronic documentation** by providing job-specific documents (e.g. certificates)
- **Optimized maintenance processes** thanks to maintenance documentation
- **Paperless maintenance**
- **Improved IQ** (installation qualification)

## Portal

- Central management unit
- Electronic inventory of the locations and the components assigned to them
- Group-based rights management

# Optimal interaction

## System description

The interaction between valve components equipped with an RFID chip and the corresponding IT infrastructure actively increases process reliability.



Thanks to serialization every valve and every relevant valve component, such as the body, actuator, diaphragm and even automation components, can be clearly traced and read at any time using the RFID reader – the CONEXO pen. The CONEXO app, which can be installed on mobile devices, not only facilitates and improves the "installation qualification" process, but also makes the maintenance

process much more transparent and easier to document. The app actively guides the maintenance technician through the maintenance schedule and directly provides him with all the information assigned to the valve, such as test reports, testing documentation and maintenance histories. The CONEXO portal acts as a central element, helping to collect, manage and process data.



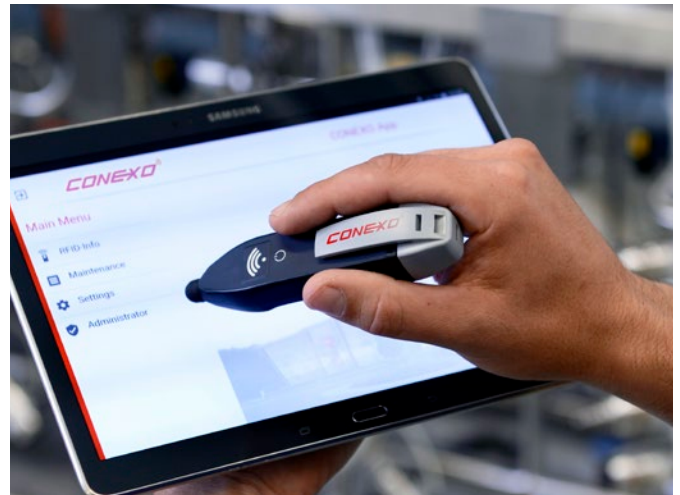
Clear, traceable identification by means of an RFID chip

# Relevant system components

## Features and descriptions

### CONEXO pen features

- Mobile RFID reading device in the form of a pen
- Coupling to mobile end devices possible
- Styluses for touchscreens (smartphone and tablet)
- UHF signal processing



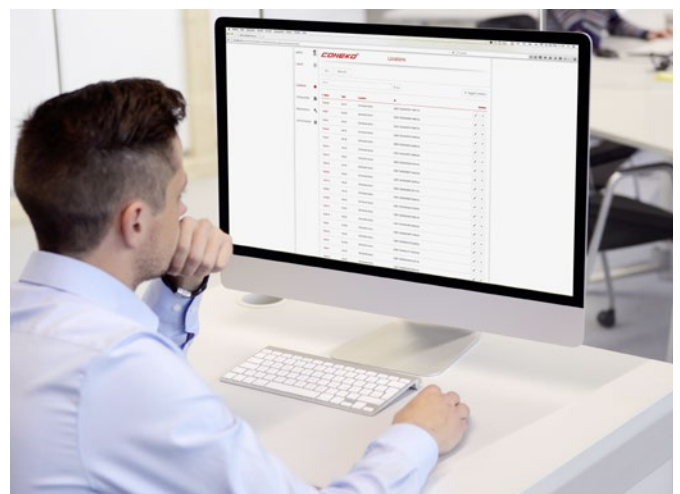
### CONEXO app features

- Application for identification of components
- Simple, paperless, guided maintenance documentation
- Clear allocation of certificates to the respective components and provision of important documentation that can be called up in the plant itself
- Multilingual (German, English, French, Japanese)
- Compatible with Android and iOS mobile devices



### CONEXO portal features

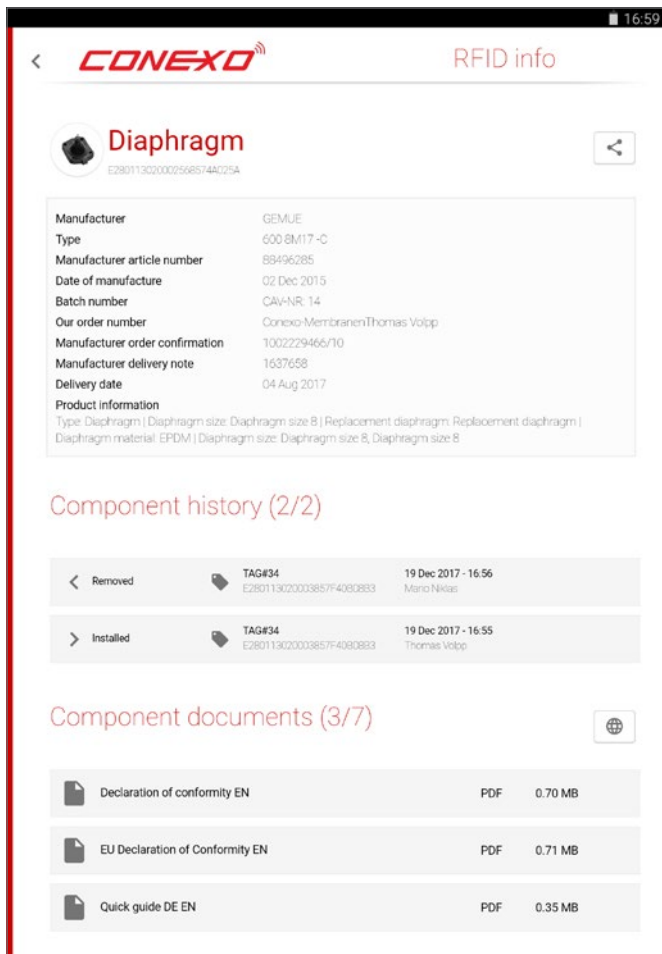
- Central management unit
- Quick and easy access to components and location documents
- Electronic inventory of the locations and the components assigned to them
- Provision of and access to important documentation and certificates
- Creation of maintenance tasks
- Developed in accordance with GAMP 5 regulations
- Multilingual (German, English, French, Japanese)
- Cloud hosting available upon request





# CONEXO app

## Application examples



Important information such as the type designation or the item number as well as each component's complete maintenance history can be displayed.

All assigned documents (instructions, certificates) can be accessed offline in the field.

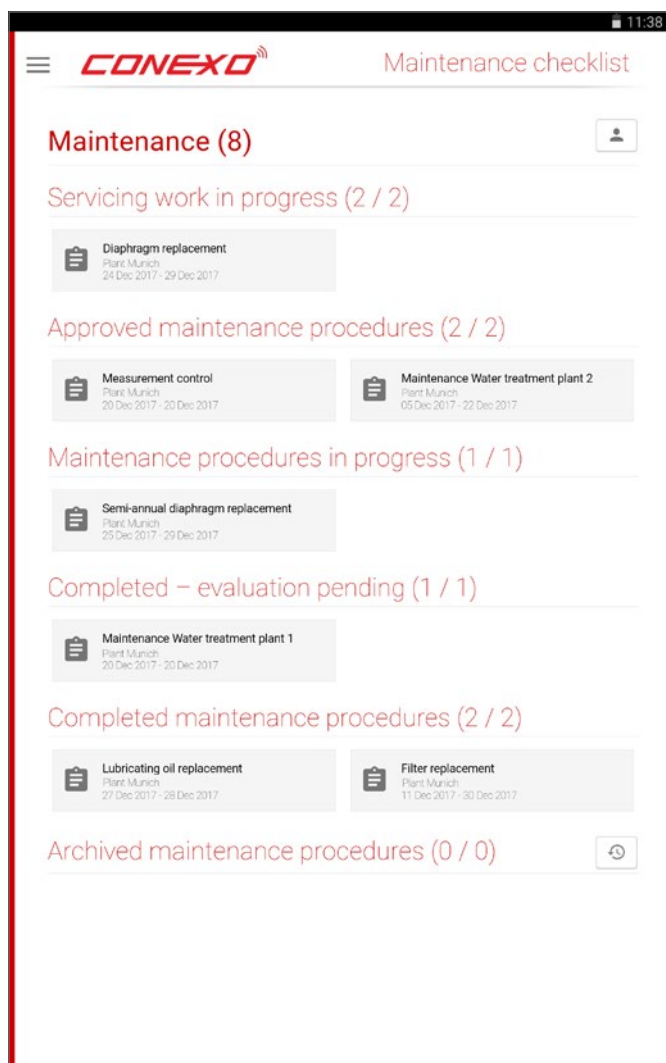


Workflow templates can be used to define individual maintenance process steps for relevant components in advance.

All documents needed to do this, such as datasheets, and assembly/operating instructions, can also be displayed.

# CONEXO app

## Application examples



The maintenance list provides a quick overview of the current status of all servicing work. The overview also includes servicing tasks that are still outstanding.

# CONEXO portal

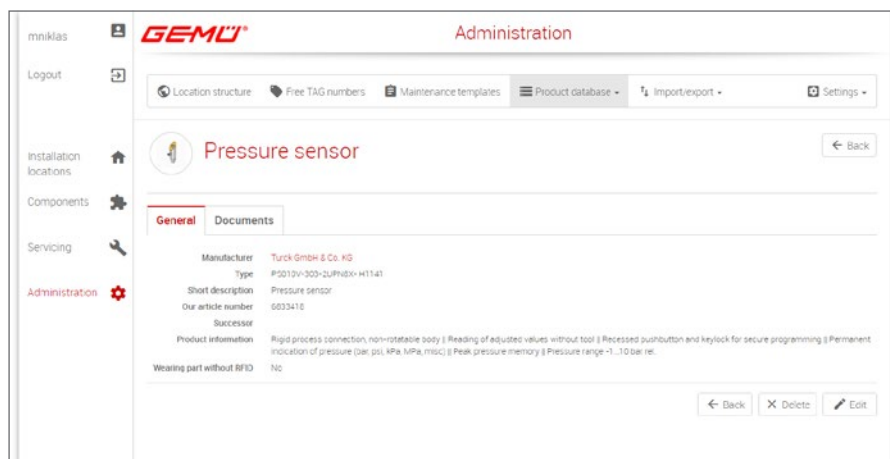
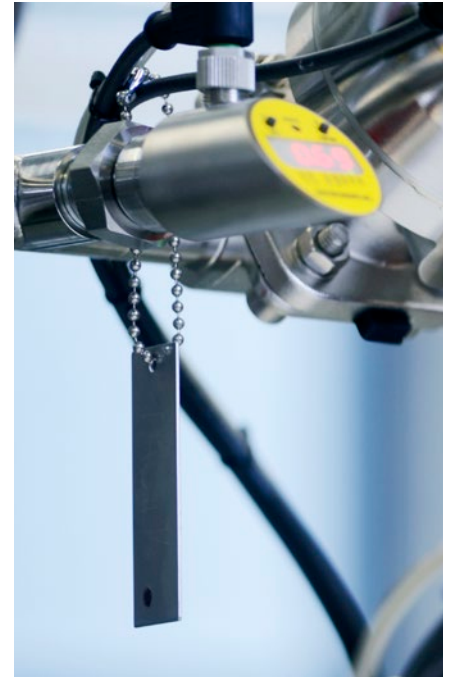
## Descriptions and application examples

### CONEXO portal description

The CONEXO portal manages all CONEXO system data. This includes:

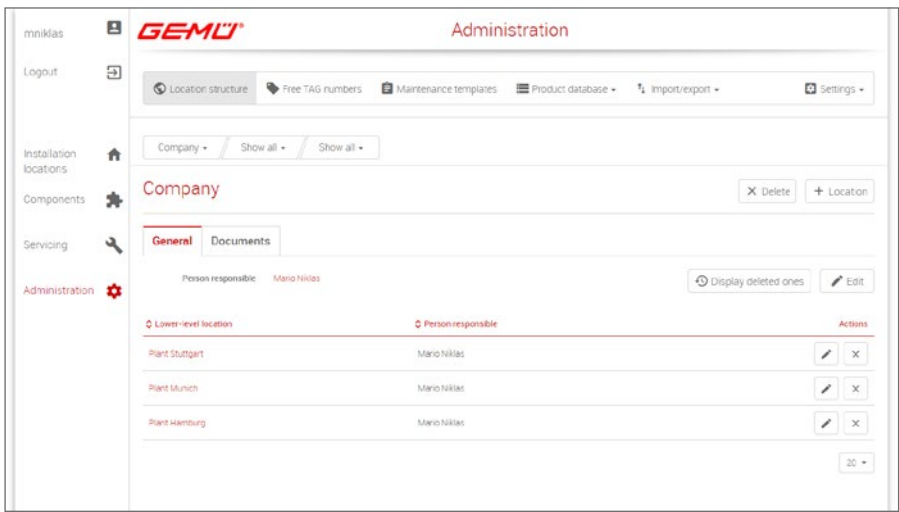
- Locations (plants, construction)
- Buildings
- RFID tags (components, valves, products from third-party providers)
- Users/maintenance staff and their access rights
- Maintenance processes (maintenance templates)
- Maintenance intervals
- History

The CONEXO portal contains interfaces to leading maintenance and ERP systems (SCADA and SAP, for example) and further interfaces can be added and customized according to customer requirements.

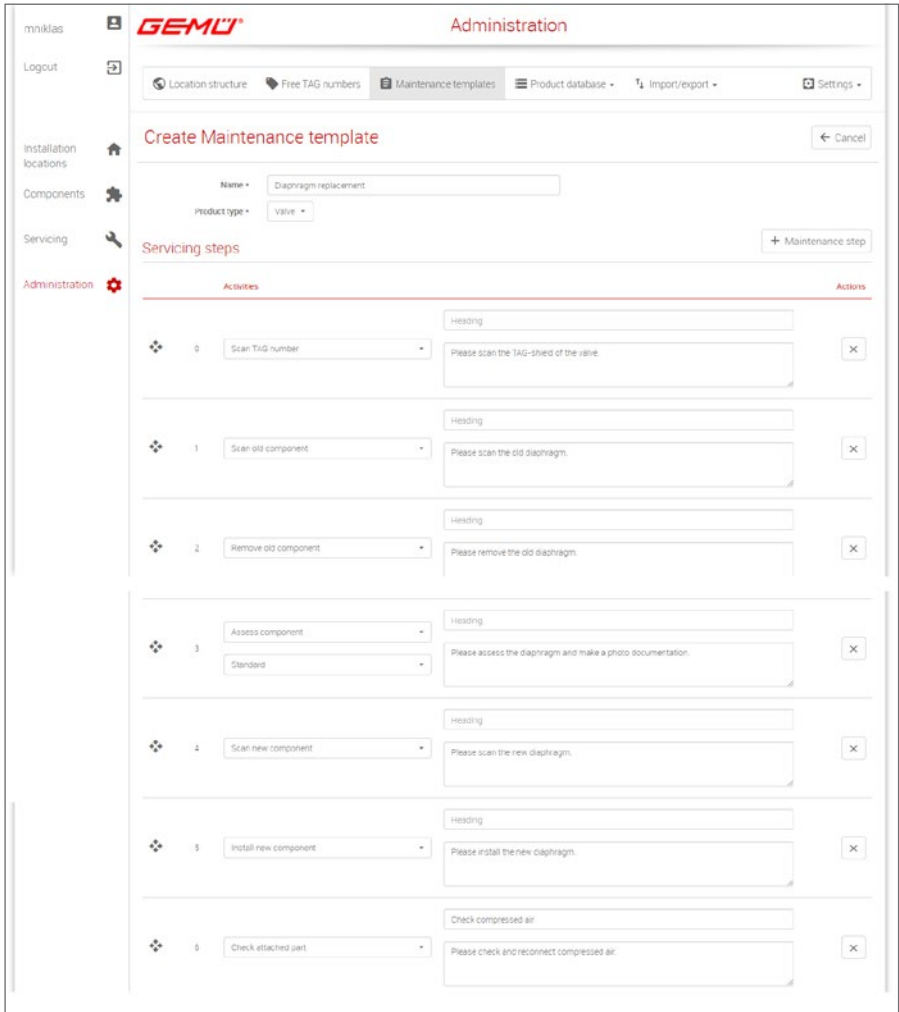


Products from third-party providers can also be managed on the CONEXO portal and corresponding documentation can be stored there as well.





All locations, buildings, plants and RFID tags can be displayed and managed on the CONEXO portal.



So-called maintenance templates can be used to define and store specific steps and measures for upcoming maintenance work.

# Clear identification

## Fixing of RFID chip

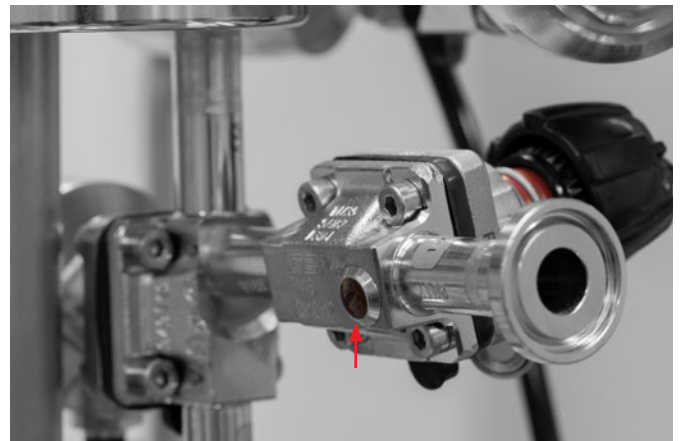
### RFID chip features

- Captive electronic identification of components
- Simplified identification and inventory of devices in the plant
- Traceability of the individual components by providing the serial number
- Electronic supply of product and project-specific documentation



### Fixing of RFID chip - Actuator and valve body

The RFID chip is welded onto stainless steel components. To protect the chip and prevent it from being removed from the chip holder, the latter has been designed so that this is not possible. To prevent the creation of dead spaces in which dirt could accumulate, the chip area is also encapsulated.



### Diaphragm

The chip is integrated in the diaphragm lug (outside the media wetted area) and encapsulated with epoxy resin.



# Ordering information

## CONEXO software sales

The CONEXO System is operated by GEMÜ subsidiary inevvo solutions.  
For more information on the CONEXO pen, app and portal, visit [www.inevvo-solutions.com](http://www.inevvo-solutions.com).



## Valve assembly (e.g. GEMÜ 650 diaphragm valve)

The letter „C“ is added to the order codes of CONEXO-equipped GEMÜ valve assemblies.

without Conexo: 650 25D60401712T1 1502  
with Conexo: 650 25D60401712T1 1502 - C

## Replacement diaphragms (e.g. code 17 diaphragms)

Code 17 EPDM diaphragms are available in diaphragm sizes 8 to 100 and come with RFID chips integrated.

88496285	EPDM diaphragm	Diaphragm size 8
88496286	EPDM diaphragm	Diaphragm size 10
88496287	EPDM diaphragm	Diaphragm size 25
88496288	EPDM diaphragm	Diaphragm size 40
88496289	EPDM diaphragm	Diaphragm size 50
88496290	EPDM diaphragm	Diaphragm size 80
88496292	EPDM diaphragm	Diaphragm size 100



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In addition to these subsidiaries, GEMÜ has a global partner network.

Contact details:

[https://www.gemu-group.com/en\\_GB/kontakte/](https://www.gemu-group.com/en_GB/kontakte/)



 GEMÜ manufacturing site

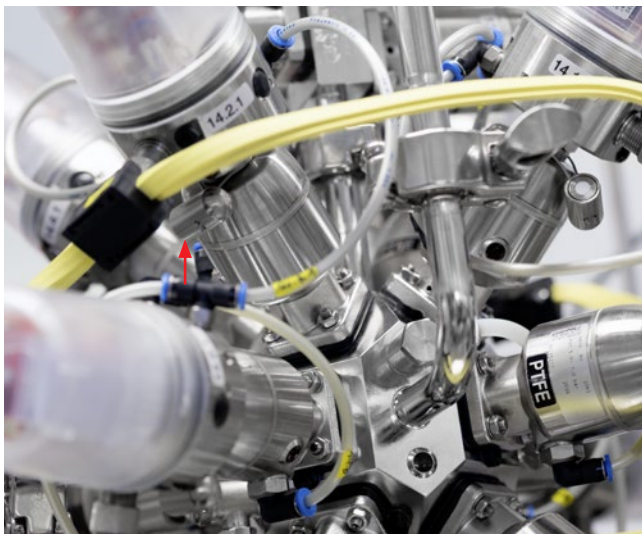
 GEMÜ subsidiary

# Clear identification

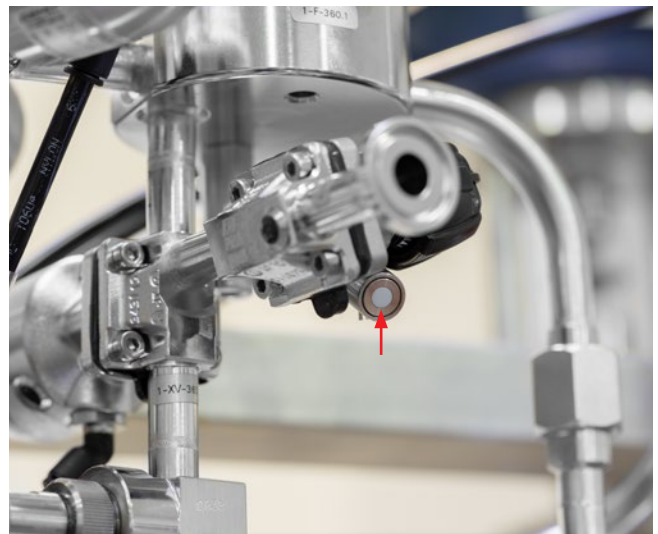
## Features and fixing of RFID chip

Products from third-party providers and retrofitting existing GEMÜ products without CONEXO

Even products from third-party providers (sensors, pumps, tanks, etc.) can be integrated into the CONEXO system. There are numerous ways in which the necessary RFID chips can be attached (TAG label, lead seal, self-adhesive label). Thus it is possible to store the individual products including their complete documentation in the CONEXO portal without any problems. By means of identical retrofitting solutions it is also possible to integrate already existing GEMÜ products which are not yet equipped with CONEXO as standard.



Solution with stainless steel seal



Solution with stainless steel seal



Solution with PVDF label



Solution with RFID label

Got any questions about GEMÜ CONEXO?

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