



YOUR PARTNER IN VACUUM  
TECHNOLOGY



## **EOK<sup>®</sup> Series**

### Vacuum Oil Purifying Plants

Hering - VPT GmbH  
[www.hering-vpt.de](http://www.hering-vpt.de)

# HERING – Vacuum Process Technology

## Invaluable experience and customized solutions powered by German Engineering

HERING VPT has specialized in improving the life cycle of transformers. Already in 1909 the first HERING oil purification plant was built and gave the possibility to carry out an internal and external insulating oil treatment by the use of a vapour-oil boiler. This was the starting point for a number of inventions like Transformer Drying ovens, Impregnating Plants and other vacuum products for the transformer industry. With this **experience collected in over 100 years of successful operation**, continuous efficiency improvements of our plants are carried out.

Hering Systems are remarkable for their efficient and robust design, as well as their ease of operation and maintenance. We install **only high quality components from Germany**, respected West European brand manufacturers. Our systems are designed for **long lifetime, reliability** and effective operation. Each plant is **custom-made** and delivered with all required aggregates to leave nothing to be desired.

Together, we will develop the perfect solution for you and your company. We are looking forward to serving you!



# HERING – Vacuum Process Technology

## Provides a range of plants suitable for three main fields of application

In order to assist you with making an informed decision and to provide an optimal price-performance-ratio, we are offering our plants in three main series (EOK-Basic, EOK-Standard and EOK-Professional). Furthermore, if required each plant can be specifically tailored to your requirements.

### EOK - B BASIC

Filling of new transformers  
AND Treatment of oil in  
storage tanks

- Basic application
- Cost-efficient
- Simple operation
- Fast Amortization

### EOK - S STANDARD

On-site transformer  
service/repair

- Standard application
- Simple handling
- High comfort
- Automatic cleaning process

### EOK - P PROFESSIONAL

Complete spectrum

- Professional application
- High flexibility
- Very short cleaning time
- High ease of use

# HERING – Vacuum Process Technology

## Effective oil purification using vacuum technology is key to ensure sufficient dielectric strength

The standard purification plant is generally equipped with oil filters, oil pumps, an oil heater, a vacuum pump and the degassing tank.

The application of the vacuum process causes a decrease of the boiling point by reducing the pressure. The oil is consequently heated up in order to evaporate water inside the liquid.

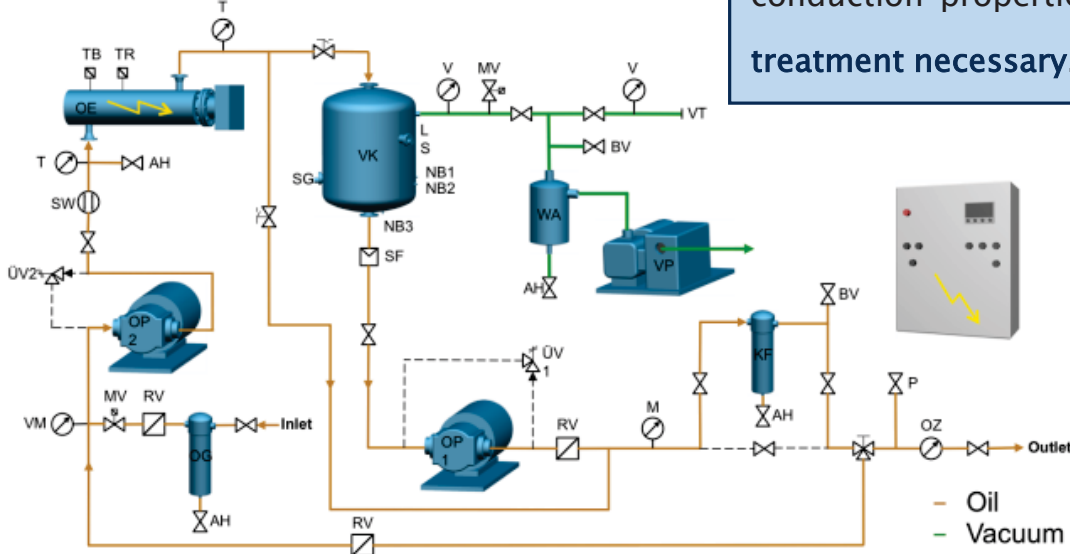
Other contaminations are removed using a filter system.

The dielectric strength of the oil filling decreases in practical operation.

The reason for this is oil aging or possible contaminations:

- External (e.g. water, water vapor or gases from housing leakage)
- Internal (e.g. erosion of micro particles, diffusion of residual humidity or internal arcing)

All these mechanical, physical and chemical processes reduce the electrical and thermal conduction properties of the oil and make treatment necessary.



Exemplary flow chart of a HERING purification plant



# HERING – Vacuum Process Technology

## Different plant layouts are available to satisfy your personal needs

PLANT MOUNTED ON A  
BASE PALTE <sup>1)</sup>



Without cover



With tarpaulin cover

PLANT MOUNTED ON A  
TROLLEY <sup>1)</sup>



With tarpaulin cover



With metal cover

PLANT MOUNTED  
ON A STREET  
LEGAL TRAILER <sup>1)</sup>



With tarpaulin cover



With metal cover

PLANT MOUNTED IN  
A SEA CONTAINER <sup>2)</sup>



<sup>1)</sup> The size of the base plate, trolley or trailer depends on the dimension of the plant.

<sup>2)</sup> The container is available in different sizes.

# HERING – Vacuum Process Technology

## Plants are available in different versions with a number of accessories

In order to guarantee the right size for your plant we are offering a wide range of plant capacities. Other sizes will be designed and provided on request.

	EOK 500	EOK 1000	EOK 2000	EOK 4000
<b>Flow rate [l/h]</b>	500	1000	2000	4000
<b>End value <sup>1)</sup> [ppm/Vol.%]</b>	<5 / <0,1	<5 / <0,1	<5 / <0,1	<5 / <0,1
	EOK 6000	EOK 8000	EOK 10000	EOK 12000
<b>Flow rate [l/h]</b>	6000	8000	10000	12000
<b>End value <sup>1)</sup> [ppm/Vol.%]</b>	<5 / <0,1	<5 / <0,1	<5 / <0,1	<5 / <0,1

1) Based on prior condition: 20°C, 50 ppm water content and 10 Vol.% gas content; after one passing for type P. on full flow rate capacity

## ACCESSORIES

### Measuring instruments:

- Dielectric Strength
- Moisture
- Dielectric Loss Factor
- Particle Counter

### Equipment & Special Applications:

- Fullers Earth Device
- Oil Regeneration Unit
- Cable Oil Purification Plants
- Special Customized Plants

# HERING – Vacuum Process Technology

## Provides complementary training services for your benefit

HERING VPT offers its costumers in the context of the order fulfillment a **free training** for a safe operation of your plant in our company's facility. Furthermore, on costumer's demand an **on-site training** can be offered.

To ensure a proper operation of your system HERING VPT recommends an **on-site service**. This will be coordinated directly by HERING VPT and partly carried out with qualified partners.

Plants older than 30 years fall naturally under the plant service.



We are available for you **24 hours** a day, **7 days a week** in order to help you with your plant problems.

# HERING – Vacuum Process Technology

## The standard in transformer oil purification and insulation treatment solutions



Vacuum Oil Purifying Plant

Transformer Oil Regeneration Systems

Vacuum Drying Plant

Bushing Dryer

Vacuum Pumping Station

Oil Storing and Filling Plant

Vacuum Pressure Impregnation Plant

Hot Oil Spraying System



### ADDRESS

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**HERING** **HERING VPT GmbH**  
Oil Purification Plants Germany



# Hering-VPT Transformer Solutions



Hering-VPT GmbH, Postfach 1 07, 91542 Dinkelsbühl, Germany

## Spare Parts

### Spare Parts for EOK12000

Pos.	Description
10	<b>Level limit switch</b> SCM-200-2WA-2WA02S
20	<b>Flow sensor</b> SE30/8030 Brass fitting with electronic device
30	<b>Vacuum Pump</b> SOGEVAC SV300B complete incl. Motor
40	<b>Roots Pump</b> WAU1001
50	<b>Oil Pump OP1</b> ASKG5001-013-11001 incl. Motor 5,5KW 1470Upm
60/70	<b>Oil Pump OP2</b> KF5/315H10BP000DP2/191 incl. Motor 4,0KW Incl Pressure relief valve DKF5D08

Hering-VPT GmbH

Ust.-IdNo.: DE254386087

Bank: VR Bank Dinkelsbühl eG

Managing Director: Dipl.-Ing; Dipl.-wirt.-Ing.  
Detlev Bastek

Tax-no.: 203 / 128 / 30613

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Commercial register: Ansbach

HRB 4305

BIC: GENODEF1DKV



During packing check of the 6 units level limit switch



During visual inspection of the level limit switch



During marking check of the level limit switch



During packing check of the level limit switch





During visual inspection of the electronic device of the flow sensor



During visual inspection of the oil pump op1



During nameplate check of the oil pump op1



During packing inspection of the roots pump







uring nameplate check of the oil pump op2



During visual inspection of the vacuum pump



uring nameplate check of the vacuum pump



Packing inspection of the vacuum pump

