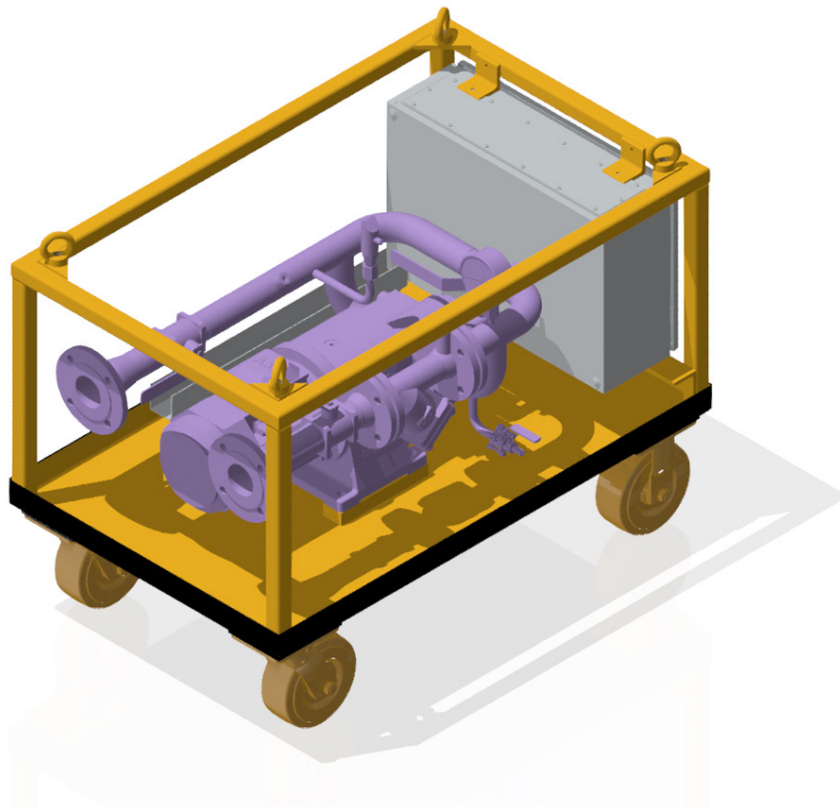


# Transformer Drying

Technical information type HOS  
Catalogue 2024



## Benefits and Applications:

Safe and easy handling  
High standard components  
Hot Oil Spray-Process

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# GENERAL INFORMATION

## PROCESS DESCRIPTION

### 1. Fitting for Hot Oil Spray

Sufficient nozzles shall be installed to permit a sufficient oil flow into the transformer. The nozzles shall be so located as to provide a uniform spray coverage of the entire top area of the phase and shall be as close to the top of the tank as possible.

Attach oil hoses, vacuum hoses to the transformer.

### 2. Vacuum test

Apply vacuum to the transformer including auxiliary compartments until low vacuum. If this absolute pressure cannot be attained, there are leaks present, which must be located and sealed. When the required absolute pressure is reached, close the valve connecting the transformer to the vacuum pump unit. If the pressure rises more than specified, the unit is not tight enough and the leaks in the system must be found and sealed before proceeding with the next process step.

### 3. Hot Oil Spray

Maintain an absolute pressure in the unit as specified. Admit oil through the spray nozzles to fill the transformer to certain level. Start oil circulation under vacuum, the vacuum may be broken briefly if necessary. Recirculate oil from the bottom of the transformer tank through the pumps, filters and heater.

Maintain the temperature of the oil out of the heater at a certain level. After then increase the oil temperature in steps and hold the temperature in each step for a certain time. Increase the temperature up to the maximum specified value.

The Hot Oil Spray shall continue for a minimum specified time and until the absolute pressure in the transformer has been reduced to certain value.

### 4. Oil drainage

After completing the Hot Oil Spray drain all oil from the transformer into the used oil storage tank.

### 5. Vacuum drying

If the vacuum was broken to drain the oil, reapply the vacuum down to the specified value and hold vacuum for a minimum required time.

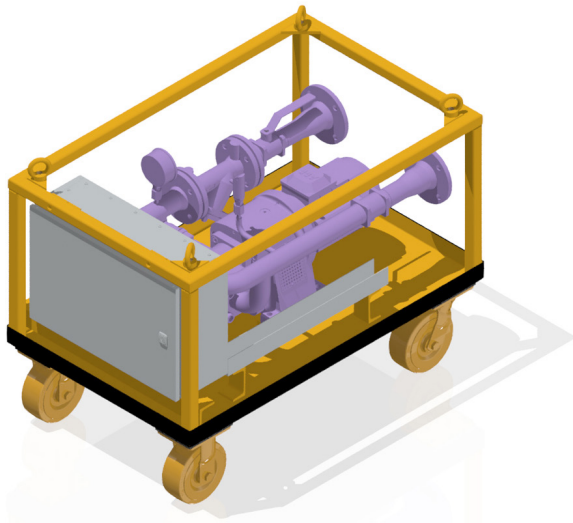
### 6. Oil impregnation

After the specified vacuum drying cycle is completed, proceed with the filling operation according your specification with fresh oil from fresh oil tank.

Manual water measuring can be made with condensate separator (refer to item 13) or with measuring instrument VZ 403 (refer to optional equipment

Z 75). With the instrument VZ 403 is also a registration possible.

## **HOS020**



The Transformer Drying plant covers the final re-drying of shell form power transformers in their own tanks, using the Hot Oil Spray-Process.

**Oil circulation capacity:** 10/20 m<sup>3</sup>/h

**Operating oil temperature, max:** 125 °C

**Cooling water consumption max.:** 2.5m<sup>3</sup>/h

**Heating capacity:** 250kW

**Power consumption approx.:** 278kW

**Supply voltage:** 3 x 380 V / 50Hz

**Electrical equipment according to:** IEC Standards



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