

Oil Sampling Kit

Mode of Operation

Siemens AG - Material testing laboratory Nuremberg

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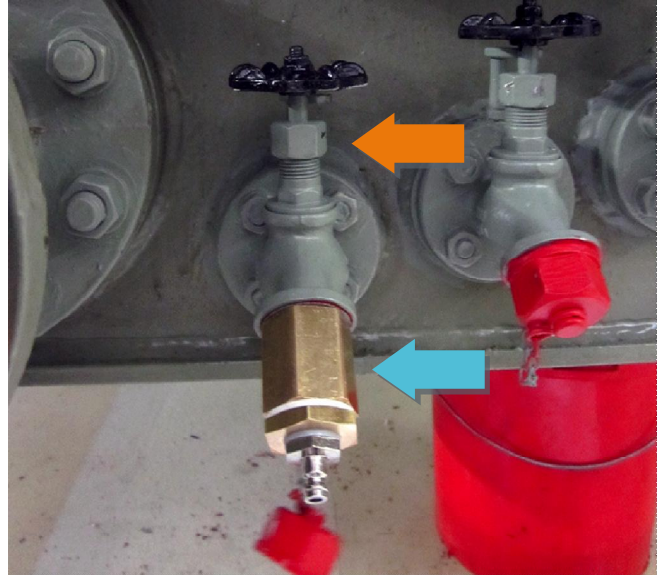
1. Content of the Oil Sampling Kit

- 2 x reinforced tubing with quick coupling connectors
- 1 x tubing with Luer Lock connection for syringes
- 4 x Adaptors (screws: G1/2" ; G3/8" ; G3/4" ; G5/8")
- 1 x Screwing bottle cap with quick coupling connection
- 1 x Multifunctional gripper
- 2 x Tubing for oil disposal with quick coupling connection

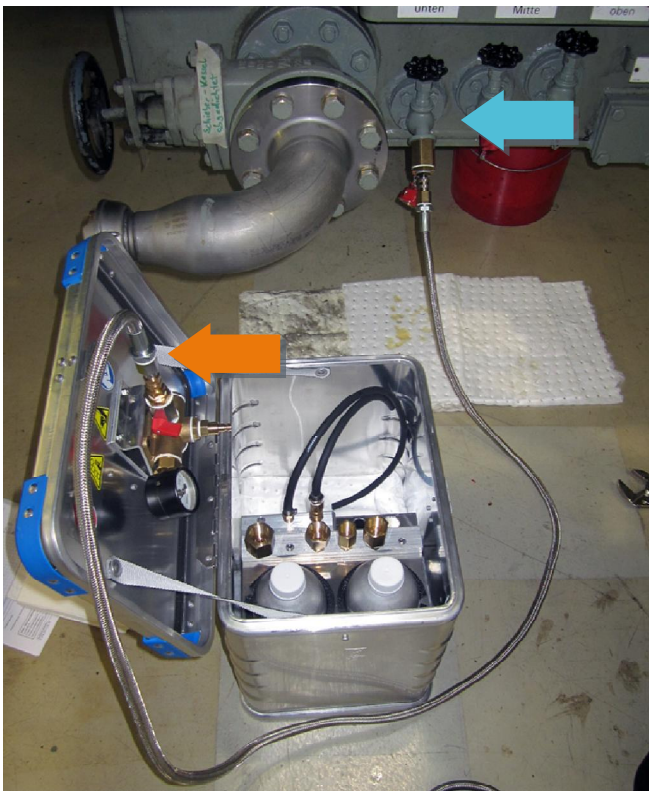
2. Sampling of an oil sample in a bottle



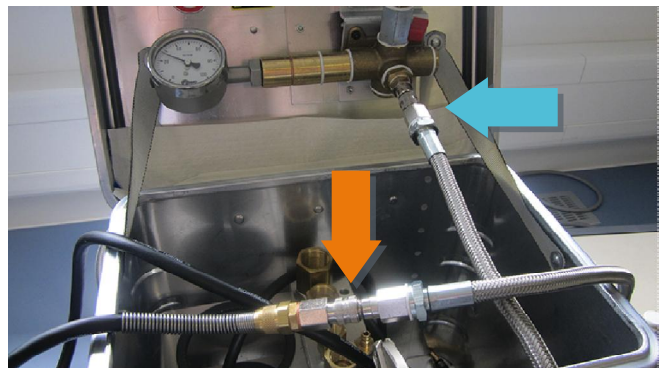
2.1. Choose the sampling location – AA021, AA022, AA023.



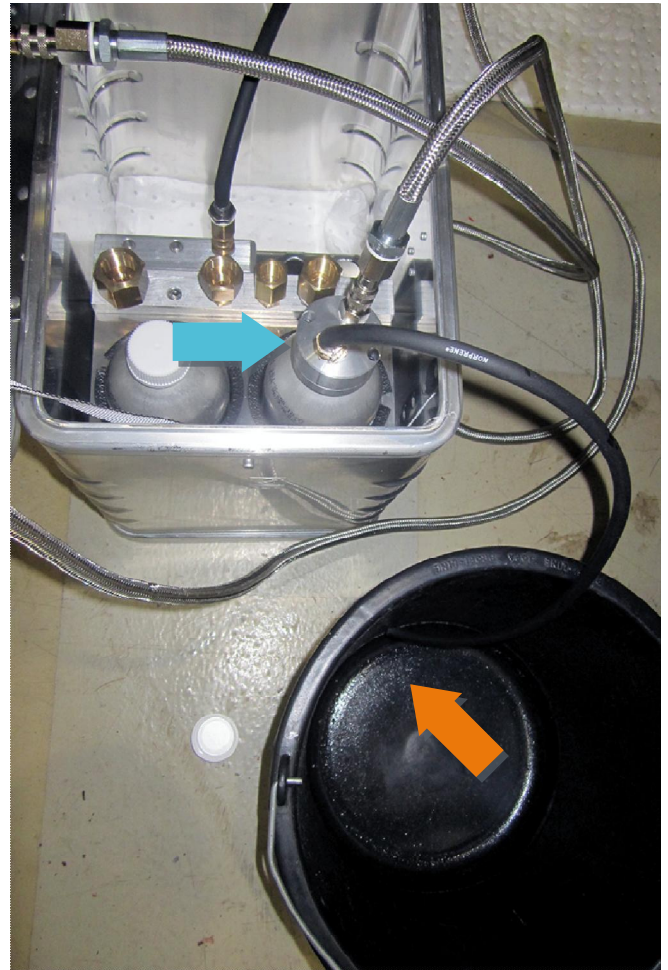
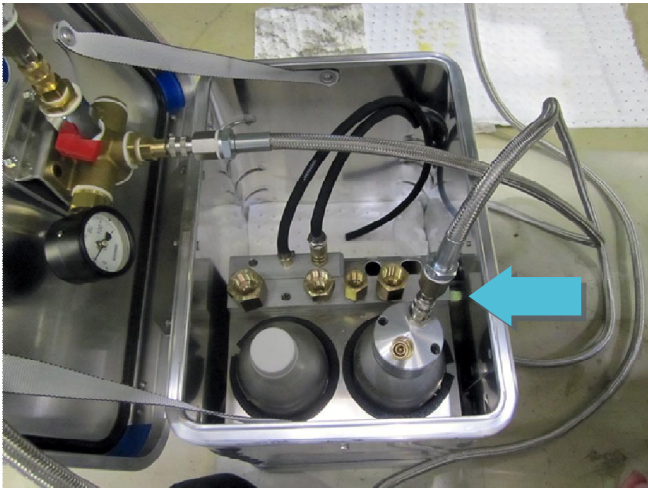
2.2. Use an adequate adapter and loose the tap screw nut with the gripper.



2.3. Connect the transformer and the sampling kit valve (top) with the reinforced tubing.

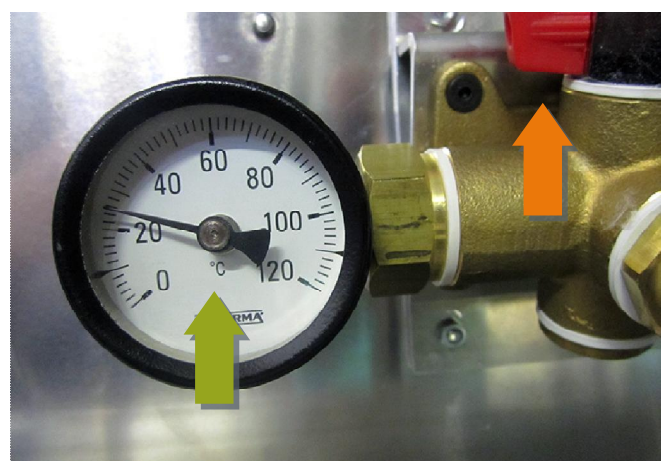
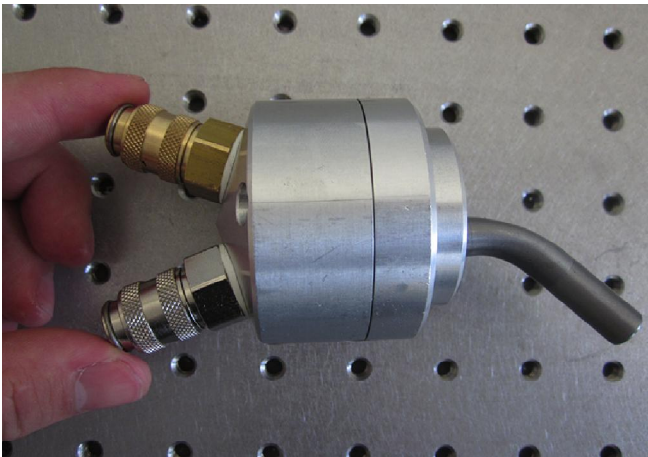


2.4. Connect the second reinforced tubing to the bottom sampling kit valve and from the other side with the black tygon flexible tubing with a coupling connector. The other end of the black flexible tubing leads to the oil disposal vessel. Open the red stop cock. Use this set up to rinse approx. 3 l of oil.

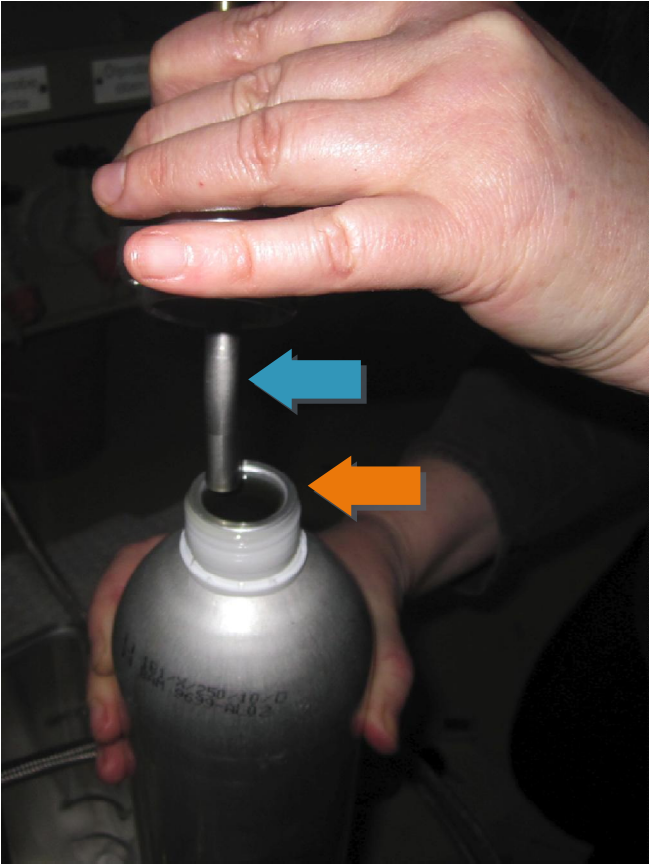


2.5. Close the red stop cock. Remove the tygon flexible tubing with the coupling connector. Connect the free end of the reinforced tubing to the bottle cap (silver coloured coupling).

2.6. Connect the tubing for oil disposal to the bottle cap (brass coloured coupling) and the end to a disposal vessel.



2.7. Open the red stop cock and start with the sampling (directing the oil in the disposal vessel), until the temperature remains constant (at least 2 l oil should be disposed). The temperature should be recorded.

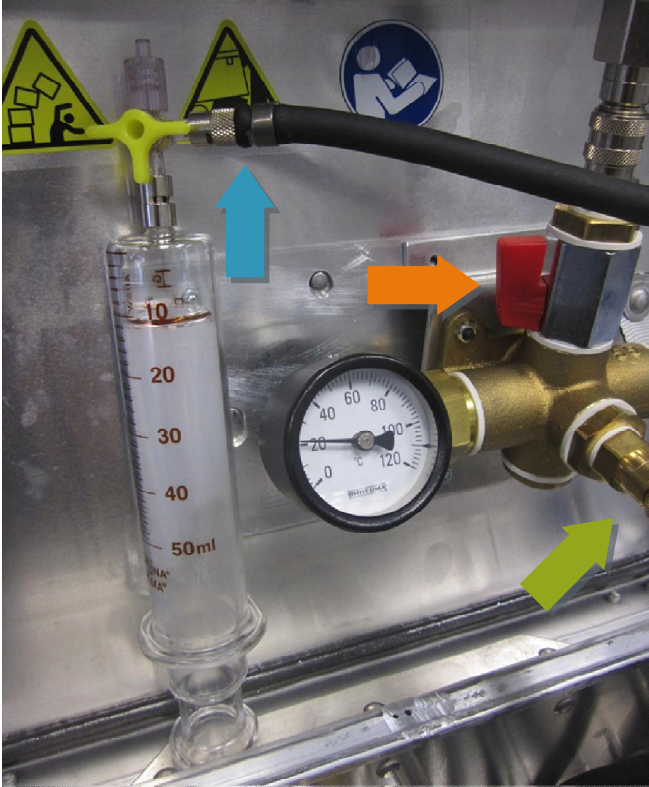


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2.8. Close the red stop cock and disconnect the tubing from the bottle cup. **Twist off the bottle cap** and let the oil from the tubing fill the bottle **full to the brim**.

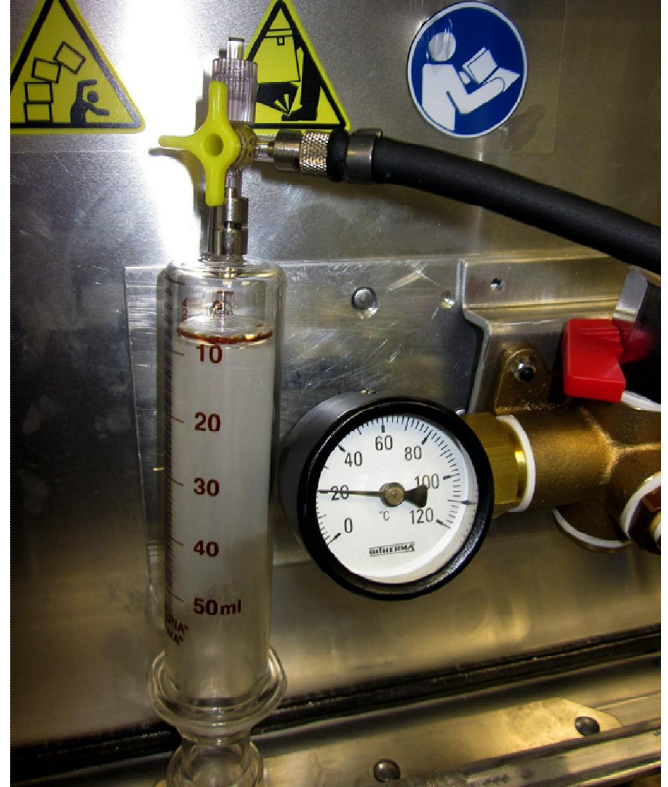
2.9. The bottle should be closed with the screw cap.

3. Sampling of an oil sample in a syringe



Repeat steps 2.1. – 2.4.

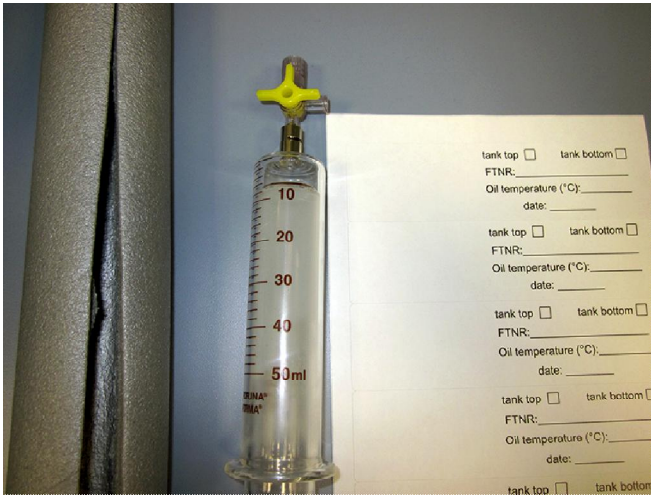
3.1. Connect the tubing with the Luer lock to the syringe 3 way stopcock and the other end to the quick coupling connection. Open the red stopcock. Turn the 3 way stopcock in the way shown on the foto and let the oil fill the syringe.



3.2. Close the red cock. Turn the syringe 3 way stopcock as shown on the foto. Press the piston of the syringe until all air bubbles are removed.



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Repeat procedures 3.1. and 3.2.
3.3. Fill in the syringe in position 3.1.
3.4. After filling the syringe, turn the 3-way stopcock in the way shown in the foto and disconnect the tubing.



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3.5. Label the syringe and place it in the protecting housing.

4. Documentation

After sampling all parameters should be documented and the bottle labelled.
A sampling protocol is included:

105.11 Required information concerning oil sample		Siemens AG Material Testing Laboratory Katzwangerstraße 150 D-90461 Nürnberg Phone: +49 (0)911/434 - 2324 Fax: +49 (0)911/434 - 2675		
Requested analysis:				
Colour	<input type="checkbox"/>	<table style="width: 100%; border: none;"> <tr> <td style="width: 30%; border: none;">} Small VDE - Analysis</td> <td style="width: 30%; border: none;">} Large VDE - Analysis</td> </tr> </table>	} Small VDE - Analysis	} Large VDE - Analysis
} Small VDE - Analysis	} Large VDE - Analysis			
Purity	<input type="checkbox"/>			
Neutralisation value	<input type="checkbox"/>			
Breakdown voltage	<input type="checkbox"/>			
Water content	<input type="checkbox"/>			
Loss factor at 90°C	<input type="checkbox"/>			
Interfacial tension	<input type="checkbox"/>			
PCB-content	<input type="checkbox"/>			
Furananalysis	<input type="checkbox"/>			
Gas-in-oil-analysis (DGA)	<input type="checkbox"/>			
Corrosive Sulfur	<input type="checkbox"/>			
DBDS	<input type="checkbox"/>			
Other analyses	<input type="checkbox"/>			
Please answer the following questions with care				
Make	<input type="text"/>	FTNR (Product No.) <input type="text"/>		
Customer	<input type="text"/>	WNR (Job No.) <input type="text"/>		
Location	<input type="text"/>	Sample No. <input type="text"/>		
Year of manufacture	<input type="text"/>	Date sample taken <input type="text"/>		
Type	<input type="text"/>	Type of oil <input type="text"/>		
Power rating	<input type="text"/>	Quantity of oil <input type="text"/>		
Ratio	<input type="text"/>	Oil temperature when sample taken <input type="text"/>		
Sample taken from				
<input type="checkbox"/> Oil sample valve	<input type="checkbox"/> Oil drainage device A 22/31/40 DIN 42 551	<input type="checkbox"/> Others		
Tank <input type="checkbox"/> Top	<input type="checkbox"/> Middle	<input type="checkbox"/> Bottom		
Conservator <input type="checkbox"/> Transformer	<input type="checkbox"/> OLTC	<input type="checkbox"/> Bushing		
OLTC <input type="checkbox"/> OLTC tank	<input type="text"/>	<input type="text"/>		
Bushing	<input type="text"/>	<input type="text"/>		
Others	<input type="text"/>	<input type="text"/>		
Reason for sample taking				
Date of operation fault <input type="text"/>	<input type="checkbox"/> Routine checkup			
Date of repair <input type="text"/>				
Date of oil treatment/ reclaiming <input type="text"/>	Others <input type="text"/>			
Further informations and previous history				
<input type="text"/>				
Sample taker				
Name in block letters <input type="text"/>	Date <input type="text"/>			
Company/Depmt. <input type="text"/>	Phone <input type="text"/>			
Lab information		Special features		
Consecutive No. <input type="text"/>	<input type="text"/>	<input type="text"/>		
Date sample received <input type="text"/>	<input type="text"/>			
Date sample analysed <input type="text"/>	<input type="text"/>			
Type of sample container <input type="text"/>	<input type="text"/>			

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