

**INTERNORMEN**

**MOBILE OIL SERVICE UMFC 41/81**



Always equipped with  
Particle Counter Set CCT 01 and Watersensor WSPS 03

**internormen**   
*fluid management*



## Technical Description:

The UMFC is a mobile off-line-filter unit with "Fluid-Control"-function, simplifying off-line-filtration and filling of reservoirs, selectively equipped with the "Interporvlies"-filter elements or with our well proven "Watersorp"-filter elements. For a representative conclusion about the prevailing condition of a fluid, a continuous measurement of the contamination classes and the saturation of the oil with water is provided between pump and filter unit.

The output is displayed in contamination classes according to ISO 4406:99 and in percent (%) of saturation of the oil with water, additionally data may be read out and transferred to a standard PC via serial interface RS232.

The unit UMFC is equipped with 4 separate operating modes. By entering of the desired contamination classes and/or desired water saturation an automated shutdown of the UMFC is effected when reaching threshold for contamination classes, for water saturation or for contamination classes and water saturation.

As for a protection of the particle sensor, the unit is equipped with a temperature control function. For avoiding any damages, the sensor of the particle counter set CCT 01 is switched off, when reaching an oil temperature of over 122°F. The maximum allowable oil temperature of the system is up to 158°F, reaching this value causes an automated shutdown. All conditions are displayed via pilot lamps on the LCD-monitor.

## Functional principle:

### MODE 1

#### Manual Stop

Manual stop of the motor  
over the motor switch  
(possible for all modes)

### MODE 2

#### Auto-Stop Contamination Classes

Automated stop of the motor when  
all of the entered contamination classes  
are underneath the set values



### MODE 3

#### Auto-Stop Water Saturation

Automated stop of the motor  
when the entered maximum  
water saturation is underneath  
the set value

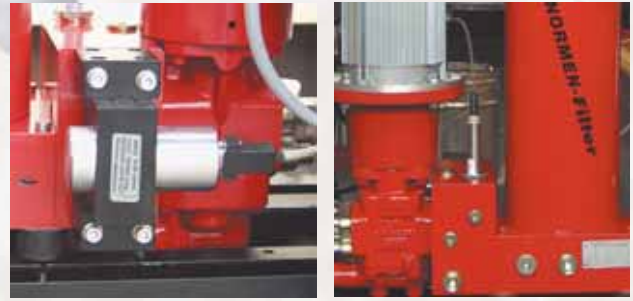
### MODE 4

#### Auto-Stop Contamination Classes and Water Saturation.

Automated stop of the motor when  
all of the entered contamination classes  
and the entered maximum water  
saturation are underneath the set values

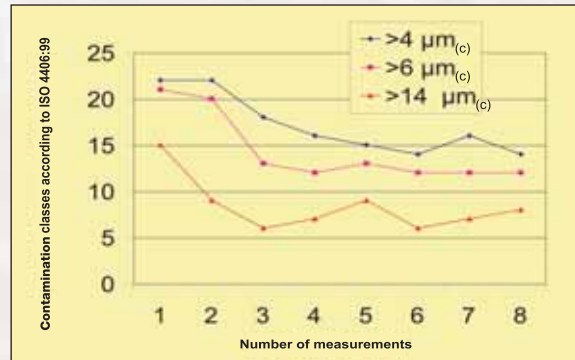
### High-value measuring technique

Specifically developed for a continuous monitoring, the CCT 01 - Set detects particles  $> 4\mu\text{m}_{(c)}$ ,  $> 6\mu\text{m}_{(c)}$  and  $> 14\mu\text{m}_{(c)}$  and classifies them according to ISO 4406:99. The sensor WSPS 03 determines the water saturation and offers a reliable conclusion on danger of free water in the fluid. The control unit examines the oil temperature and if necessary, prevents an overheating of the unit by switching it off automatically.



### Economic efficiency

Investment for an *INTERNORMEN* system pays off in a short time through extended service intervals and higher machine or system availability.



### Easy and comfortable handling

Element can be changed through anti-clockwise rotation of the handlebar and lifting of the tube cover. So there are no tools needed to change the filter element.



### Quality in detail

According to the customer requirements and the field of application, the unit UMFC 41/81 may be equipped with the "Interporvlies"-filter elements as well as with the "Watersorp"-filter elements. Highest separation rates and exceptional dirt holding capacity ensures accurately defined contamination classes and more favourable service ranges.



	<b>Technical Data UMFC 41</b> single phase AC motor	<b>Technical Data UMFC 81</b> three phase AC motor / pole changing	
Volume flow	11,3 GPM	11,3 GPM	22,5 GPM
Max. working pressure	87 PSI	145 PSI	
Viscosity	46-1840 SUS	46-3680 SUS	46-1840 SUS
Electrical connection	110 V - 60 Hz (1 phase)	460 V - 60 Hz (3 phase)	460 V - 60 Hz (3 phase)
Max. oil temperature	32...158°F particle measuring possible up to 122°F	32...158°F particle measuring possible up to 122°F	

