

# Wax Content Testing

with the

## Multi-Rack Cold Finger CF15

### Characteristics

- Up to 15 measuring places for simultaneous tests
- Reproducible results and simple, user-friendly handling
- Small, reusable sample volume
- Precise sample temperature measurement
- Portable version mCF2 with two fingers available

The Cold Finger is well known for those who examine the wax deposition of crude oil and condensate.

The Cold Finger by PSL Systemtechnik improved the established test method in its operation and provides measurement recording by Software.

The Multi-Rack Cold Finger is equipped with up to 15 measuring places for multi-place testing in lab. Combining multiple cold fingers in one heating bath facilitates screenings on wax inhibitors, e.g. simultaneous testing of different chemicals on a single sample or testing of different inhibitor concentrations with the same sample.





Separately removable during tests

### Our Solution

Use the modern way to measure wax deposition with the Multi-Rack Cold Finger by PSL Systemtechnik. Up to 15 samples can be monitored simultaneously for quick screening and analysis.

Run your test with different temperatures in one test run. Remove the cold finger caps separately and reattach them to monitor deposition vs. time effects.

### The Simple Handling is Convincing

Three drawers with 5 measuring places each are set in a robust aluminium-frame.

The drawers can be easily pulled. Insert the filled sample beakers to the measuring places and lower the cold finger caps into the sample. Adjust the test conditions either directly at the instrument or via software and start the experiment.

After the test is finished you pull the drawer out again. Push the cold finger up to its holding bracket. You can just pull off the cold finger cap with the wax deposits. This is easy, as the knurl at the upper, dry rim of the cell is used as gripping surface. You can then weigh the cell and with the software you can save the weight of the wax deposit.

### Further Advantages

The cold finger caps are all calibrated with an accuracy of <0.01 g. So the caps can be changed between the measuring places and do not need to be weighed before a test to determine the tare weight.

The drawers with their integrated temperature control enable the removing of single samples during a test. Thus you can determine the time-behavior of deposits for one sample or start different tests separately.

The low sample amounts of max. 75 ml help to save test material.

Every drawer has its own temperature control, so samples can be tested simultaneously under different conditions.

With the high precision balance exact results can be provided with a relative measuring accuracy of 0.01 g.

### The Software

By using the Cold Finger with a PC and the software *WinCFC* you can control the temperature via PC and directly save the measuring data of the balance. With the software you can set the required parameters, which are documented for a test run. You can record single measurements or several measurements in an interval and evaluate the recorded data later.

We adapt the Multi-Rack Cold Finger CF15 to your requirements.

## Specifications:

Temperature range:	Standard range	Low temperature
Cold Finger (surface)	-5 .. +65 °C (+23 .. +149 °F)	-20 .. +65 °C (-4 .. +149 °F)
Dry bath (sample)	+30 .. +120 °C (+86 .. +248 °F)	-10 .. +80 °C (+14 .. +176 °F)
Number of measuring places:	5 (1 rack, basic), 10 (2 racks) or 15 (3 racks)	
Sample volume:	70 - 80 ml/finger	
Stirrer speed:	0 / 450 ... 1,200 rpm	
Power consumption:	1,450 W (CF) + 3,600 W (thermostat)	
Voltage input:	230 V~ or 115 V~	
Weight:	95 kg (CF) + 40 kg (each thermostat)	
Dimensions (WxDxH):	55 x 59 x 118 cm + PC, thermostat(s)	