

PMAC Atmospheric Wax Flow Loop

The Process Measurement and Control Group (PMAC) specialises in flow assurance and integrity support services offering products and services to the Oil and Gas industry worldwide. With offices in Aberdeen and Singapore as well as agents and facilities in other regions, PMAC covers a worldwide market from exploration through to production and transportation of hydrocarbons, utilising a unique blend of proprietary expertise and an established range of technologies. Drawing on a combined knowledge of practical experience in chemistry, corrosion, inspection and electronic engineering, PMAC group provides clients with a unique design and manufacturing capability complimented by a range of service capabilities.

PMAC provide a controlled wax flow loop flowing hot crude oil into a test coil mounted within a refrigerated water bath.

Automated Unit

The automated unit is controlled from a PC running labview software that remotely controls the hot plate stirrer and thus the oil temperature at the inlet to the water bath, refrigerated bath temperature and the flow rate via the pump. The software also records flow, inlet oil temperature, oil temperature in the coil and differential pressure against time. The System comes complete with single headed peristaltic pump built in to a main panel with individual power supply. Oil temperature is logged and controlled from a Pt100 probe at the inlet to the water bath, assuring test Integrity. The main panel also has local displays for Flow rate, Oil Temperature and differential pressure. The system comes with 1m x 1/8 in test coils as standard. The Hotplate Stirrer and water bath are mounted to either side of the main panel. The unit can be set to automatically cool the hot plate once a test is complete.

Basic unit

The basic model is a lower cost option that allows for certain elements to be provided by the end user available either as single or dual channel.

Both single and dual come with Pico logging of oil temperature at the inlet to the water bath via a PT100 probe and differential pressure against time.

The base unit houses:

The Peristaltic pumps, with their power supply, prime buttons and variable flow controller as well as local displays of oil temperature and flow rate.

The dual unit allows for two samples to be tested simultaneously but these will be at the same refrigerated temperature unless separate baths are used. The oil temperature is manually controlled at the hotplate stirrer, adjusting accordingly

Within certain limitations (minimum access required of 120 x 145 mm) the test loop can be built to suit your own water bath with sufficient temperature range for your test requirements, typically down to -20°C . Please advise us at time of enquiry if you intend to use your own water bath as it may cause difficulty in constructing appropriate attachment points for the loop. PMAC are able to supply a completed water bath and heater stirrer with the unit if so desired.



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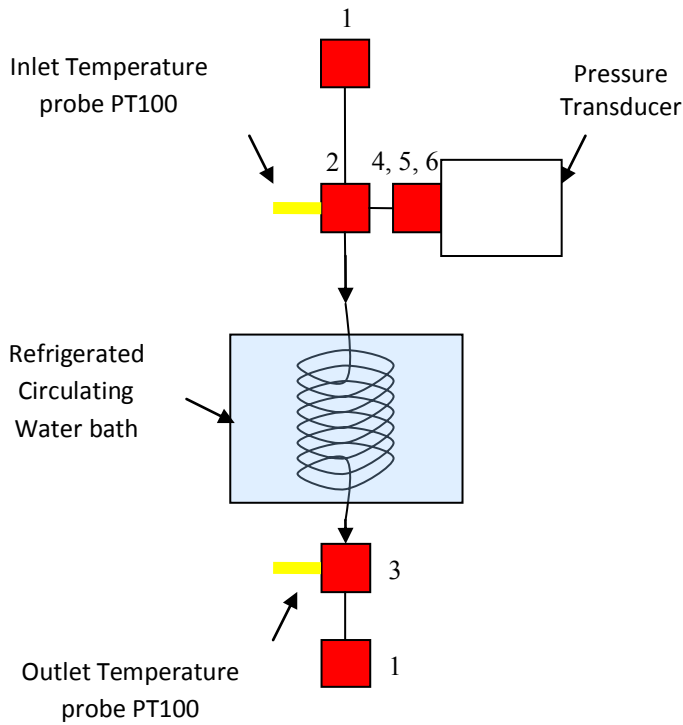
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Automated Unit Specifications:

Hotplate Stirrer power	500w
Total Internal Volume	2lt
Maximum pressure	Atmospheric
Coil Material	316 Stainless Steel
Coil Size	1/8" x 1m
Variable speed stirrer	100 to 1000 rpm
Maximum Flow Rate	Up to 24ml / min
Maximum Cooling	-20°C.

Please contact us for options on alternative pressure, volume, material, temperature and stirrer configurations.



Item	Description
1	Port Connector
2	1/8" Cross
3	1/8" Tee
4	1/8" to 1/4" Reducer
5	1/4 BSP female to 1/4 Tube
6	1/4 BSP Seal

Low Pressure Wax Loop

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