


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

 <p>Accredited to ISO/IEC 17025: 2005</p>	TUV SUD NEL Ltd Issue No: 024 Issue date: 18 April 2011	
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Calibration performed at the above address only		

DETAIL OF ACCREDITATION

Measured Quantity Instrument or Gauge	Range	Calibration & Measurement Capability (CMC) Expressed as an Expanded Uncertainty ($k=2$)	Remarks
DENSITY			
Hydrocarbon	750 kg/m ³ to 890 kg/m ³	0.015 %	Density of oil flowing through test device at viscosities of 2.2 cSt to 30 cSt
	750 kg/m ³ to 890 kg/m ³	0.20 %	
Water	1000 kg/ m ³	0.030 %	Density of water flowing through test device
FLOW			
Hydrocarbons Quantity (mass or volume)	0.002 l/min to 0.04 l/s 0.04 l/s to 100 l/s 100 l/s to 200 l/s	0.050 % 0.030 % 0.080 %	Conditions: Kerosine and gas oil substitutes and mineral oils viscosities between 2.2 cSt & 30 cSt Temperatures 5 °C to 50 °C Pressures 0 bar g to 8 bar g
Hydrocarbons Flowrate (mass or volume)	0.002 l/min to 100 l/s 100 l/s to 200 l/s	0.050 % 0.080 %	
Hydrocarbons Quantity and Flowrate (mass)	0.04 l/s to 100 l/s 100 l/s to 150 l/s	0.050 % 0.25 %	
Hydrocarbons Quantity and Flowrate (volume)	0.04 l/s to 150 l/s	0.25 %	Conditions@: oil viscosities between 30 cSt and 500 cSt Temperatures 5 °C to 50 °C Pressures 0 bar g to 8 bar g
Gas Flow			
Gas Quantity, Mass and flow rate	1.5 g/s to 4000 g/s	0.30 %	Reference nozzle standards
	0.02 l/min to 45 l/min (0 to 5 bar g)	0.20 %	Low flow rig (Califlow)



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Measured Quantity Instrument or Gauge	Range	Calibration & Measurement Capability (CMC) Expressed as an Expanded Uncertainty ($k=2$)	Remarks
Gas Flow (continued)			
Gas Quantity, Mass and flow rate	80 m ³ /h to 16000 m ³ /h	0.55 %	Fan lines
	100 m ³ /h to 1500 m ³ /h	0.30 %	High Pressure wet gas loop – dry
Water Quantity and Flowrate (Mass and volume)	0.002 l/min to 3.3 l/min 0.1 l/s to 200 l/s	0.050 % 0.10 %	Gravimetric diverter standards 0 to 10 bar g 15° C to 35° C Reference meter standards 0 to 10 bar g up to 200 l/s 0 to 5 bar g 200 l/s to 400 l/s 15° C to 35° C
	0.1 l/s to 400 l/s	0.15 %	
Multiphase Flow			Results can be reported as Total liquid flow, water/liquid ratio and Gas volume fraction
Water flow	0.07 to 40 l/s	1.0 %	
Oil flow	0.07 to 40 l/s	1.0 %	
Gas flow	5 to 500 g/s	1.5 %	Up to 10 bar
FORCE			
UNIVERSAL MATERIALS TESTING MACHINES			
Verification and calibration of the force measuring system by force proving instruments in tension and compression	From 4 kN up to 500 kN for Class 0.5, 1, 2 and 3 machines to BS EN ISO 7500-1:2004	0.22 % See Note 1	1 The uncertainties stated are for the application of the verification/calibration force and do not take into account the characteristics of the machine being verified.
	From 0.45 kN up to 500 kN for Class 1, 2 and 3 machines to BS EN ISO 7500-1:2004	0.32 % See Note 1	
Verification and calibration of the force measuring system by calibrated masses in Compression and Tension	From 2 N up to 500 N for Class 0.5, 1, 2 and 3 machines to BS EN ISO 7500-1:2004	0.10 % See Note 1	

END