


# Schedule of Accreditation

issued by

## United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

 <p><b>UKAS</b> CALIBRATION 0256</p> <p>Accredited to ISO/IEC 17025:2005</p>	<h3>Norbar Torque Tools Limited</h3> <p>Issue No: 029    Issue date: 08 September 2016</p>	
	<p><b>Wildmere Road</b> <b>Banbury</b> <b>Oxfordshire</b> <b>OX16 3JU</b></p>	<p><b>Contact: Mr B Pratt</b> <b>Tel: +44 (0)1295-270333</b> <b>Fax: +44 (0)1295-753643</b> <b>E-Mail: enquiry@norbar.com</b> <b>Website: www.norbar.com</b></p>
<p><b>Calibration performed at the above address only</b></p>		

### DETAIL OF ACCREDITATION

Measured Quantity Instrument or Gauge	Range	Calibration and Measurement Capability (CMC) Expressed as an Expanded Uncertainty ( $k = 2$ )	Remarks
<b>TORQUE</b>			<b>NOTES</b>
Hand torque tools	To BS EN ISO 6789:2003 0.1 N·m to 3000 N·m	0.3 % See Notes 1 and 2	<p>1 The uncertainty quoted is for both the application of the calibration torque and the characteristics of the device being calibrated.</p> <p>2 Calibrations may also be given in lbf.in and lbf.ft.</p> <p>3 Calibrations may also be given in units of electrical signal output, including voltage Ratio measurements.</p> <p>4 The length may also be given in inch units.</p> <p>5 Calibrations may be given in units of torque as appropriate.</p> <p>6 The uncertainties quoted are for Norbar ETS 40320 series of display instruments. The uncertainties may be increased for other types of electrical torque indicator.</p> <p>7. The uncertainties quoted are for the Norbar Torque Tool Tester 43228 series of display instruments when used with a device which has a nominal output of 2 mV/V. The uncertainties may be increased if the Torque Tool Tester 43228 is used with devices whose nominal output is less than 2 mV/V. The uncertainties may also be increased for other types of electrical torque indicator.</p>
Torque Multiplying Gearboxes	Documented In-House Method 50 N·m to 6800 N·m	0.66 % See Notes 1 and 2	
Mechanical and Electronic Torque Calibration Equipment	To BS EN 7882:2008 0.005 N·m to 1500 N·m	0.02 % See Note 1, 2 and 3	
	To BS EN 7882:2008 0.005 N·m to 6800 N·m	0.03 % See Note 1, 2 and 3	
	To BS EN 7882:2008 1000 N·m to 4000 N·m 4000 N·m to 108500 N·m	0.4 % see note 1, 2 and 3 0.2 % see note 1, 2 and 3	
Electrical torque indicators	Documented In-House Method 0.5 mV dc 1.0 mV dc 2.0 mV to 16.5 mV dc 5 V dc 0.05 Vdc 0.10 Vdc 0.20 Vdc to 2.00 Vdc 10 mA to 22 mA dc	0.14 % See Notes 5 & 7 0.087 % See Notes 5 & 7 0.073 % See Notes 5 & 7 0.0014 % See Note 7 0.35 % See Notes 5 and 6 0.18 % See Notes 5 and 6 0.11 % See Notes 5 and 6 0.014 % See Note 6	
<b>LENGTH</b>			
Torque Beam Radius	Documented In-House Method 100 mm 250 mm 254 mm 305 mm 500 mm 610 mm 1000 mm 1220 mm	See Note 4 11 µm 14 µm 14 µm 15 µm 22 µm 26 µm 41 µm 50 µm	
<p><b>END</b></p>			