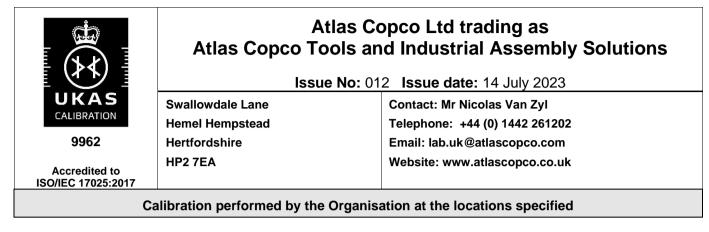
# **Schedule of Accreditation**

issued by

**United Kingdom Accreditation Service** 

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



# Locations covered by the organisation and their relevant activities

## Laboratory locations:

Location details		Activity	Location code
Innovation Drive Coven Wolverhampton WV9 5GA	Local contact Mr Nicolas Van Zyl	TORQUE	P

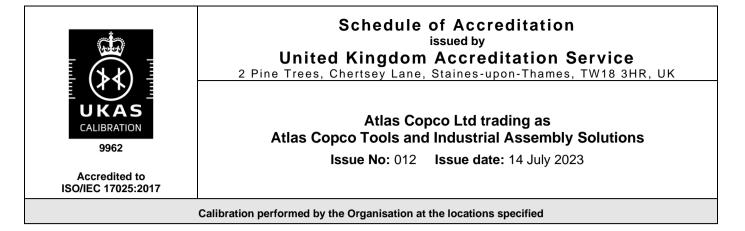
## Site activities performed away from the locations listed above:

Location details		Activity	Location code
Customers' sites or premises The customer's sites or premises must be suitable for the nature of the particular calibrations undertaken and will be subject of contract review arrangements between the laboratory and the customer	Contact Mr Nicolas Van Zyl	TORQUE	S

UKAS CALIBRATION 9962	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK	
	Atlas Copco Ltd trading as Atlas Copco Tools and Industrial Assembly Solutions	
Accredited to ISO/IEC 17025:2017	Issue No: 012 Issue date: 14 July 2023	
	Calibration performed by the Organisation at the locations specified	

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty $(k = 2)$	Remarks	Location Code		
TORQUE Hand torque tools (excluding torque screwdrivers)	To BS EN ISO 6789-2:2017 1 N·m to 1500 N·m	1.5 %	The uncertainties quoted are for both the application of the calibration torque and the characteristics of the device being calibrated. Calibrated. Calibration results may also be given in imperial units.	P, S		
Mechanical and Electronic Torque Calibration Equipment	To BS EN 7882:2017 0.2 N⋅m to 1400 N⋅m	1.0 %	Calibrated statically using an un-supported beam and masses.	Ρ		
Mechanical and Electronic Torque Calibration Equipment	To BS EN 7882:2017 0.2 N⋅m to 3000 N⋅m	1.0 %	Calibrated statically by comparison to a reference transducer.	P, S		
Torque measuring device angle parameters	To VDI/VDE2648-1 0° to 360°	1.0°	Calibrated statically by comparison to a reference angle encoder.	P, S		
Electrically powered and controlled Torque devices	in House method 0.2 N*m to 2000 N*m	2.5%	Static calibration against reference torque transducer. This does not include Pneumatic and Hydraulic powered devices.	P, S		
END						

Calibration and Measurement Capability (CMC)



## Appendix - Calibration and Measurement Capabilities

#### Introduction

The definitive statement of the accreditation status of a calibration laboratory is the Accreditation Certificate and the associated Schedule of Accreditation. This Schedule of Accreditation is a critical document, as it defines the measurement capabilities, ranges and boundaries of the calibration activities for which the organisation holds accreditation.

### Calibration and Measurement Capabilities (CMCs)

The capabilities provided by accredited calibration laboratories are described by the Calibration and Measurement Capability (CMC), which expresses the lowest measurement uncertainty that can be achieved during a calibration. If a particular device under calibration itself contributes significantly to the uncertainty (for example, if it has limited resolution or exhibits significant non-repeatability) then the uncertainty quoted on a calibration certificate will be increased to account for such factors.

The CMC is normally used to describe the uncertainty that appears in an accredited calibration laboratory's schedule of accreditation and is the uncertainty for which the laboratory has been accredited using the procedure that was the subject of assessment. The measurement uncertainty is calculated according to the procedures given in the GUM and is normally stated as an expanded uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of k = 2. An accredited laboratory is not permitted to quote an uncertainty that is smaller than the published measurement uncertainty in certificates issued under its accreditation.

### Expression of CMCs - symbols and units

It should be noted that the percentage symbol (%) represents the number 0.01. In cases where the measurement uncertainty is stated as a percentage, this is to be interpreted as meaning percentage of the measurand. Thus, for example, a measurement uncertainty of 1.5 % means  $1.5 \times 0.01 \times q$ , where q is the quantity value.

The notation Q[a, b] stands for the root-sum-square of the terms between brackets: Q[a, b] =  $[a^2 + b^2]^{1/2}$