Certificate of Calibration

ISSUED BY APEX Metrology Ltd

DATE OF ISSUE 28/05/2026 CERTIFICATE NUMBER 5677

UKAS CALIBRATION 9817

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Approved Signatory
Name Mark Robinson
Signature
M. Robinson

Customer:	Manchester Metrology Ltd (For Alan Dick Engineering Ltd)	Test location if different from customer address: Manchester Metrology Ltd
Address:	Unit 3, The Wellington Centre, Whitelands Road,	Unit 3, The Wellington Centre, Whitelands Road,
City/Town:	Ashton-under-Lyne	Ashton-under-Lyne
Postcode:	OL6 6UY	OL6 6UY
Country:	United Kingdom	

Date of Verification:	28/05/2026
Manufacturer / Model:	Faro Prime
CMM Software:	Aberlink 3D V4
Serial Number:	R06-02-13-28959
Temperature Comp.	No
CMM measuring range:	1828 mm
CMM scale resolution:	0.001
Reduced Volume:	Yes Reduced Volume Range = 1515mm
Probe:	Fixed (Tactile)
Stylus:	6mm
Reference Tool:	Cone-Trivet

The Coefficient of Thermal Expansion (CTE) of the test length has been taken as: 11.7 x10-6 µm/°C
CMM fitted with workpiece thermal expansion compensation ☐
If true then the uncertainty in CTE of the Test Length is

ISO10360-12:2016 Articulated arm coordinate measuring machines (CMM)

Length measurement error
EBi, MPE = 75.00 (µm)
EBi = 68.00 (µm) **PASS**
U = ±3.8 + 2.3 x L in m (µm)

Probing form error, tactile
***P*Form, MPE = 21.00 (µm)**
***P*Form = 7.27 (µm)** **PASS**
U = 5.80 (µm)

Decision Rules are based on ISO14253-1

PASS	Complies with the specification.
IN	The result is less than the specification limit but by a margin less than half the uncertainty interval; it is therefore not possible to state compliance base on the 95% coverage probability between LSL/USL. However, the result indicate that compliance is more probable than non-compliance.
OUT	The result is greater than the specification limit but by a margin less than half the uncertainty interval; it is therefore not possible to state compliance base on the 95% coverage probability between LSL/USL. However, the result indicate that non-compliance is less probable than compliance.
FAIL	Does not comply with the specification.

Results given within this certificate only relate to the item calibrated. The uncertainty limits quoted refer to the measured values only, with no account being taken of the instruments ability to maintain its calibration. The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k = 2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.
This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with prior written approval of the issuing laboratory.

Certificate of Calibration

Probing size error, tactile ***P*Size, MPE = 21.00 (µm)** ***P*Size = 15.70 (µm)** **U = 5.80 (µm)**	**PASS**	
Articulated location error ***L*Dia, MPE = 52.00 (µm)** ***L*Dia = 46.96 (µm)** **U = 5.80 (µm)**	**PASS**	
Optional:		
RUBi.0::Tact,MPE (µm) =20.00	**RUBi.0::Tact (µm) =7.00**	**PASS**
Regions excluded from measuring volume:		
Table mounting did not allow for access to the lower hemisphere of the measurement volume		

Environmental Conditions

a) General

Machine is located in the inspection room which is air conditioned and relatively clean and dust free. The CMM is used to measure metal and plastic components.

b) Temperature

The temperature control in this area was found to be very good, with minimal thermal gradients across the machine.

Ambient temperature:	Minimum 18.86 ºC	Maximum 19.88 ºC
Artifact temperature:	Minimum 19.13 ºC	Maximum 19.35 ºC

c) Humidity

No checks were performed on the humidity. No problems associated with excessive humidity were observed during the test

d) Electrical Power

The electrical power is fed directly from the ring main – no UPS or power cleaners are used. No checks were performed on the power supply and no problems associated with fluctuating electrical supply were observed during the period of the test

e) Air Supply

No air supply required.

f) Vibration

No measurements were performed on the vibration of the machine, and no problems associated with vibration were observed during the test.

Traceability

Artefact type	Nominal (mm)	Serial Number.
Mitutoyo Step Gauge	1010	2330056
Test Sphere	25.00	2204644
Thermometer & Probes		Pico 5B

End of report