



CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

H.Rohloff (Pty) Limited
188 Northlands Business Park, 29 Newmarket Road
North Riding, Randburg, 2194 South Africa

has been assessed by ANAB
and meets the requirements of international standard

ISO/IEC 17025:2005

while demonstrating technical competence in the field of

CALIBRATION

Refer to the accompanying Scope of Accreditation for information regarding the types of calibrations to which this accreditation applies.

AC-2519
Certificate Number


ANAB Approval

Certificate Valid: 11/13/2017-11/13/2019
Version No. 001 Issued: 11/13/2017



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

H.Rohloff (Pty) Limited

188 Northlands Business Park, 29 Newmarket Road,
North Riding, Randburg, 2194 South Africa
Natasha van der Walt +27 (0) 11 704 2233

CALIBRATION

Valid to: November 13, 2019

Certificate Number: AC-2519

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Magnetic Particle Unit Power Packs Benches	(50 to 19 990) A	0.27 A/A	Current Timer
Magnetometer / Gauss meter & Hall Effects Probes	5 Gauss 10 Gauss 20 Gauss 25 Gauss 50 Gauss 65 Gauss 75 Gauss 100 Gauss	0.05 Gauss 0.1 Gauss 0.2 Gauss 0.25 Gauss 0.5 Gauss 0.75 Gauss 0.8 Gauss 1 Gauss	Helmholtz Coil, Current Source
Eddy Current Flaw Detector	100 Hz 1 kHz 2 MHz	0.31 Hz 0.51 kHz 23 kHz	Oscilloscope Gain test Box

Length – Dimensional metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Coating Thickness Meter	(0 to 24) μm (24.1 to 52) μm (52.1 to 253) μm	2.1 μm 2.1 μm 2.2 μm	Coating Thickness Foil
Ultrasonic Thickness Gauges	(0 to 5) mm (5.1 to 10) mm (10.1 to 25) mm (25.1 to 100) mm	0.13 mm 0.13 mm 0.14 mm 0.25 mm	Step Wedge V1 Block



Length – Dimensional metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Ultrasonic Flaw Detector	Vertical Linearity: Horizontal Linearity: 1.Noninterfering Back Reflections 2. 80/20	2.3 mm 1.1 mm 1.1 mm	ASTM E317 Calibration Blocks
Surface Roughness Testers	(0 to 0.8) μm (0.9 to 1.6) μm (1.7 to 3.2) μm	0.21 μm 0.21 μm 0.21 μm	Surface Roughness Standards
Eddy Current Crack Detectors	0.2 mm 0.5 mm 1.0 mm 2.0 mm 4.0 mm	0.038 mm 0.039 mm 0.039 mm 0.039 mm 0.045 mm	Crack Depth Calibration Blocks

Mass

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
UCI Hardness Testers	(50 to 312) HV (313 to 534) HV (535 to 767) HV	4 HV 8.3 HV 9.2 HV	Hardness Blocks
Rebound Hardness Tester	(50 to 188.6) HV (188.7 to 396.4) HV (396.5 to 717.7) HV	2.2 HV 5 HV 13 HV	Hardness Block
AC and DC Hand Yoke	4.5 kg 18 kg	0.03 kg 0.03 kg	Weight Lift Test Bar
Densitometers	(0 to 0.15) Optical Density (0.16 to 2.06) Optical Density (2.07 to 4.13) Optical Density	0.031 Optical Density 0.047 Optical Density 0.095 Optical Density	X-Ray Denstep

Photometry and Radiometry

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Visible Light Lux Meters	(0 to 9.99) lux (10 to 272) lux (273 to 530) lux (531 to 1 095) lux (1 096 to 2 000) lux	3.5 lux 4.0 lux 6.0 lux 10.0 lux 16.0 lux	Lux Meter



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Photometry and Radiometry

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
UV-A UV-A Meters	(0 to 820) $\mu\text{W}/\text{cm}^2$ (821 to 1 025) $\mu\text{W}/\text{cm}^2$ (1 026 to 1 530) $\mu\text{W}/\text{cm}^2$ (1 531 to 2 040) $\mu\text{W}/\text{cm}^2$ (2 041 to 3 080) $\mu\text{W}/\text{cm}^2$	80 $\mu\text{W}/\text{cm}^2$ 100 $\mu\text{W}/\text{cm}^2$ 150 $\mu\text{W}/\text{cm}^2$ 200 $\mu\text{W}/\text{cm}^2$ 300 $\mu\text{W}/\text{cm}^2$	UVA-Meter

Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Temperature IR Cameras IR Thermometers	(10 to 200) $^{\circ}\text{C}$ (200 to 980) $^{\circ}\text{C}$	2.1 $^{\circ}\text{C}$ 5.1 $^{\circ}\text{C}$	Black Body
Temperature Ovens	(0 to 100) $^{\circ}\text{C}$	0.26 $^{\circ}\text{C}$	Thermometer

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2519.


Vice President

