





## **ACCREDITATION CERTIFICATE**

## **LB-CAL-019**

### **E**mirates International **A**ccreditation **C**entre

has accredited

#### **AL HOTY-STANGER LABORATORIES**

Industrial City Abu Dhabi (ICAD 1) | Plot 9R7B | Near ICAD 1 Gate no. 2

Beside Emirates Steel | Abu Dhabi | United Arab Emirates

In accordance with the requirements of

ISO/IEC 17025:2017

## General requirements for the competence of testing and calibration laboratories

to undertake the calibration in the attached accreditation scope

This Accreditation is invalid without the attached accreditation scope and shall remain in force within the validity period printed below, subject to continuing compliance with the requirements of the accreditation criteria.

Validity: 09-05-2023 to 15-04-2026

Initial Accreditation Date: 16-04-2014





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Date: 09-05-2023 Valid to: 15-04-2026

Accreditation History				
Scope	Issue No.	Details	Date	
Balance	9	Renewal of the acceditation	09-05-2023	
Force	9	Renewal of the accreditation and modification in Range and Specification and CMC Values		
Temperature	5	Renewal of the acceditation and extension in scope (add  Base metal thermocouples)		
Pressure	5	Renewal of the acceditation		
Dimensional	1	Granted accreditation		
Balance, Force	8	Cetificate validity was extended for 6 months from 16-04-	16-04-2023	
Temperature, Pressure	4	2023 up to 15-10-2023		
Balance	7	Renewal accreditation from EIAC	12/05/2020	
Force	7			
Temperature	3			
Pressure	3			
Balance	6	Transfer to ISO/ IEC 17025:2017 and first issuance under	15/09/2019	
Force	6	the name of EIAC (which was formerly known as DAC)		
Temperature	2			
Pressure	2			



#### **Balance Calibration**

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Calibration Field/ Measuring Quality	Calibration Method	Range and Specification	Calibration  Measurement Capability  (CMC)*	Location
Weighing Scales	SOP/02:2014 rev.2	1mg to 500mg	0.3mg	Customer
	"Calibration of Non-			Premises
	automatic Weighing	Up to 6kg	4.0mg	
	Machines"	Up to 30kg	34.0mg	
	according to EURAMET	GP 13 351.8	5B	
	cg 18 (2015)	Up to 60kg	0.2g	

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#### **Force Calibration**

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Calibration Field/ Measuring Quality	Calibration Method	Range and Specification	Calibration Measurement Capability (CMC)*	Location
Force Verification/ Calibration of Universal testing machines	SOP/01/rev.3/2020 "Calibration of Force Measuring Systems"	100 kN to 400 kN	0.53 % of indicator reading	Customer Premises
(Tension)	Comparison method using force proving instruments based on BS EN ISO 7500-1:2018	>400 kN to 2000 kN	0.30 % of indicator reading	
Force Verification/ Calibration of Compression testing machines	SOP/01/rev.3/2020 "Calibration of Force Measuring Systems" Comparison method using force proving instruments based on BS EN ISO 7500-1:2018	60 kN to 100 kN >100 kN to 150 kN	1.3 % of indicator reading for increasing forces  0.57 % of indicator reading for increasing forces	Customer Premises
		>150 kN to 250 kN	0.39 % of indicator reading for increasing forces	

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Calibration Field/ Measuring Quality	Calibration Method	Range and Specification	Calibration Measurement Capability (CMC)*	Location
Force Verification/	SOP/01/rev.3/2020	>250 kN to 400 kN	0.27 % of indicator	Customer
Calibration of	"Calibration of Force		reading for increasing	Premises
Compression testing	Measuring Systems"		forces	
machines	Comparison method	>400 kN to 500 kN	0.22 % of indicator	
	using force proving		reading for increasing	
	instruments based on BS		forces	
	EN ISO 7500-1:2018	>500 kN to 600 kN	0.20 % of indicator	
			reading for increasing	
			forces	
Force Verification/	SOP/01/rev.3/2020	>600 kN to 3000 kN	0.30 % of indicator	Customer
Calibration of	"Calibration of Force		reading for increasing	Premises
Compression testing	Measuring Systems"		forces	
machines	Comparison method			
	using force proving			
	instruments based on BS			
	EN ISO 7500-1:2018			

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### **Temperature Calibration**

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Calibration Field/ Measuring Quality	Calibration Method	Range and Specification	Calibration Measurement Capability (CMC)*	Location
Liquid-in-glass	SOP-04	-20 °C – 150 °C	0.1 °C	Laboratory
thermometers				Premises
Direct reading thermometers with RTD	SOP-05	-20 °C − 150 °C	0.1 °C	
sensor		>150 °C – 500 °C	0.8 °C	
Direct reading thermometers with TC	SOP-07	-20 °C − 150 °C	0.3 °C	
sensor		>150 °C – 500 °C	0.8 °C	
Dial thermometers	SOP-06	-20 °C − 150 °C	0.1 °C	
		>150 °C – 500 °C	0.8 °C	
IR thermometers	SOP-08	-35 °C − 100 °C	1.5 °C	
		>100 °C – 150 °C	2.0 °C	

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Calibration Field/ Measuring Quality	Calibration Method	Range and Specification	Calibration Measurement Capability (CMC)*	Location
Climatic Chambers (also	SOP-09	-80 °C – 5 °C	1.0 °C	Customers
Ovens, Freezers, Chillers, Incubators) (9 sensors)		>5 °C – 110 °C	0.6 °C	Premises
		>110 °C – 400 °C	1.1 °C	
Liquid baths (5 sensors)	SOP-10	-80 °C – 5 °C	0.7 °C	Customers Premises
		>5 °C – 95 °C	0.4 °C	
		>95 °C – 200 °C	0.7 °C	
Muffle furnace (1 sensor)	SOP-11	200 °C – 500 °C	0.9 °C	Customers
		>500 °C – 800 °C	2 °C	Premises
		>800 °C – 1200 °C	10 °C	
Autoclaves (temperature indicator)	SOP-12	50 °C - 100 °C	0.4 °C	Customers
		>100 °C – 140 °C	0.7 °C	Premises

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	SOP-07	-20 °C – 150 °C	0.3 °C	Laboratory
thermocouples		>150 °C – 500 °C	0.8 °C	Premises

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#### **Pressure Calibration**

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Calibration Field/ Measuring Quality	Calibration Method	Range and Specification	Calibration Measurement Capability (CMC)*	Location
Gas Pressure (gauge)/	SOP/03: 2018 rev. 1	-0.85 bar to 0 bar	0.30 % F.S.	Laboratory
Digital and analogue	"Calibration of pressure			Premises
indicating devices	gauges" acc. to DKD-R 6-1 (03/2014)	0 bar to 40 bar	0.20 % F.S.	
Liquid Pressure (gauge)/	SOP/03: 2018 rev. 1	0 bar to 1200 bar	0.20 % F.S.	
Digital and analogue	"Calibration of pressure			
indicating devices	gauges" acc. to DKD-R 6-1 (03/2014)			

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#### **Dimensional Calibration**

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Calibration Field/ Measuring Quality	Calibration Method	Range and Specification	Calibration Measurement Capability (CMC)*	Location
Vernier Caliper (Analog	SOP-013	0 – 300 mm	0.027 mm	Laboratory
& Digital)	(As per BS EN ISO			Premises
	13385-1: 2019 )	>300 mm – 600 mm	0.030 mm	
Height Gauge (Analog &	SOP-014	0 – 300 mm	0.027 mm	Laboratory
Digital)	As per JIS B 7517:2018			Premises
		>300 mm – 600 mm	0.030 mm	
External Micrometer	SOP-015 As per JIS B 7502:2016	0 – 25 mm	0.002 mm	Laboratory Premises
(Analog & Digital)		>25 mm – 100 mm	0.004 mm	
Micrometer Head for	SOP-016	0 – 25 mm	0.0015 mm	Laboratory
Calibration Tester	(In-house Method)			Premises
Dial Gauge & Digital	SOP-017	0 – 12.7 mm	0.0026	Laboratory
Indicator	As per JIS B 7503:2017			Premises
Lever Type Test	SOP-018	Up to ±1 mm	0.002 mm	Laboratory
Indicator	As per JIS B 7533:2015			Premises
(Analog & Digital)				

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Calibration Field/ Measuring Quality	Calibration Method	Range and Specification	Calibration Measurement Capability (CMC)*	Location
Micro Indicator	SOP-019	Up to ± 1 mm	0.002 mm	Laboratory
(Analog & Digital)	As per JIS B 7519:1994			Premises
Precision Linear	SOP-020	0 – 25 mm	0.0015 mm	Laboratory
Displacement Transducer	(In-house Method)			Premises
Feeler Gauge	SOP-021	Up to 1 mm	0.004 mm	Laboratory
	As per JIS B 7524:2008			Premises
LVDT	SOP-022	Up to 25 mm	0.002 mm	Laboratory
	(In-house Method)			Premises
Squares	SOP-023	Up to 200 mm	0.009 mm	Laboratory
	As per JIS B 7526:1995			Premises
Straight Edge	SOP-024	Up to 300 mm	0.005 mm	Laboratory
	As per JIS B 7514:1977			Premises
Metal Ruler	SOP-025	Up to 600 mm	0.60 mm	Laboratory
	As per JIS B 7516:2005			Premises
Coating Thickness Foils	SOP-026	Up to 1533 μm	3.0 µm	Laboratory
	(In-house Method)			Premises
Coating Thickness Gauge	SOP-027	Up to 1500 μm	8.0 µm	Laboratory
	(In-house Method)			Premises

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