

# Deutsche Akkreditierungsstelle GmbH

# Annex to the Accreditation Certificate D-K-17061-01-00 according to ISO/IEC 17025:2017

Period of validity: 11.09.2020 to 30.03.2022

Date of issue: 11.09.2020

Holder of certificate:

Bureau of Standards, Jamaica (BSJ) Mass Metrology Laboratory and Flow & Volume Metrology Laboratory 6 Winchester Road, P. O. Box 113, Kingston 10, Jamaica W. I.

Calibration in the fields:

**Mechanical quantities** 

- Mass (mass standards)

Chemical analysis, reference materials

- Volume of liquids

Abbreviations used: see last page



# Annex to the accreditation certificate D-K-17061-01-00

# **Permanent Laboratory**

# Calibration and Measurement Capabilities (CMC)

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement <sup>1)</sup>	Remarks
Mass	1 mg	OIML R 111-1: 2004 (E)	0.003 mg	For weight pieces
Mass standards	2 mg		0.003 mg	according to OIML recommendation R 111-1:2004, Class E <sub>2</sub>
	5 mg		0.003 mg	
	10 mg		0.003 mg	
	20 mg		0.003 mg	
	50 mg		0.004 mg	
	100 mg		0.005 mg	
	200 mg		0.006 mg	
	500 mg		0.008 mg	
	1 g		0.010 mg	
	2 g		0.012 mg	
	5 g		0.016 mg	
	10 g		0.020 mg	
	20 g		0.025 mg	
	50 g		0.03 mg	
	100 g		0.05 mg	
	200 g		0.1 mg	
	500 g		0.25 mg	
	1 kg		0.5 mg	
	2 kg		1.0 mg	
	5 kg		2.5 mg	
	10 kg		5 mg	
	20 kg		10 mg	

<sup>1)</sup> The expanded uncertainties according to EA-4/02 M:2013 are part of CMC and are the best measurement uncertainties within accreditation. They have a coverage probability of approximately 95 % and have a coverage factor of k = 2 unless stated otherwise. Uncertainties without unit are relative uncertainties referring to the measurement value unless stated otherwise.



### Annex to the accreditation certificate D-K-17061-01-00

#### **Permanent Laboratory**

# Calibration and Measurement Capabilities (CMC)

Measurement quantity / Calibration item	Range			Measurement conditions / procedure	Expanded uncertainty of measurement <sup>1)</sup>	Remarks
Mass standards	> 1 mg	to	5 mg	ME04_W_03 00 (2018)	0.006 mg	For free
	> 5 mg	to	10 mg		0.008 mg	nominal values
	> 10 mg	to	20 mg		0.010 mg	
	> 20 mg	to	50 mg		0.012 mg	
	> 50 mg	to	100 mg		0.016 mg	
	> 100 mg	to	200 mg		0.020 mg	
	> 200 mg	to	500 mg		0.025 mg	
	> 500 mg	to	1 g		0.03 mg	
	> 1 g	to	2 g		0.04 mg	
	> 2 g	to	5 g		0.05 mg	
	> 5 g	to	10 g		0.06 mg	
	> 10 g	to	20 g		0.08 mg	
	> 20 g	to	50 g		0.10 mg	
	> 50 g	to	100 g		0.16 mg	
	> 100 g	to	200 g		0.3 mg	
	> 200 g	to	500 g		0.8 mg	
	> 500 g	to	1 kg		1.6 mg	
	> 1 kg	to	2 kg		3.0 mg	
	> 2 kg	to	5 kg		8.0 mg	
	> 5 kg	to	10 kg		16 mg	
	> 10 kg	to	20 kg		30 mg	
Volume Test Measures (prover)	5 L 20 L			Gravimetric Calibration by double substitution method	0.05 %	Reference temperature is 20 °C. The CMC refers to the pominal value
	5 L			Volumetric Calibration EURAMET cg-21	0.08 %	Reference temperature is 20 °C.
		20 L		Version 1.0		The CMC refers to the nominal value.

#### Abbreviations used:

- OIML International Organization of Legal Metrology
- EURAMET European Association of National Metrology Institutes
- CMC Calibration and measurement capability

<sup>1)</sup> The expanded uncertainties according to EA-4/02 M:2013 are part of CMC and are the best measurement uncertainties within accreditation. They have a coverage probability of approximately 95 % and have a coverage factor of k = 2 unless stated otherwise. Uncertainties without unit are relative uncertainties referring to the measurement value unless stated otherwise.