

Certificate number 47740
12 September 2024

Total Laboratory Services Limited
Unit 14C Sunrise Business Park
Higher Shaftesbury Road
Blandford Forum
Dorset
DT11 8ST

CERTIFICATE *of* CALIBRATION

We hereby certify that the seven cast iron slotted weights 10kg – 2kg and cast iron 1kg hanger weight in set TLS have been calibrated to fall within O.I.M.L. class M₁ tolerance.

Nominal Value	Difference from Nominal Value mg
10 kg TLS1	+ 417
10 kg TLS2	+ 273
10 kg TLS3	+ 440
10 kg TLS4	+ 356
10 kg R165	+ 449
5 kg TLS1	+ 237
2 kg TLS1	+ 98
2 kg TLS2	+ 7

The measured values reported in this certificate were determined by comparison weighing methods against our laboratory's reference standards with a hypothetical density of 8000 kg/m³ which in air of density 1.2kg/m³ would balance the nominal weight.

WEIGHTS standard class E₂ weight set number 988 certified on UKAS certificate number UP1228
Date of issue 21st August 2024 by Norfolk Calibration Services. UKAS calibration number 0260.

Traceability to National Standards is established by comparison to Norfolk Calibration Services class E₂ weight sets.

Recommended recalibration December 2025. Why should recalibration be carried out?

Recalibration of test equipment is a major requirement for quality management systems. All test weights vary with time due to wear and the collection of grime. The extreme of weight change varies with the environment the weights are used in, consequently periodic recalibration at regular intervals is required.

Signed



OIML +/- maximum permissible tolerance on calibration weights

Nominal Value	Class E ₁ mg	Class E ₂ mg	Class F ₁ mg	Class F ₂ mg	Class M ₁ mg	Class M ₂ mg
50kg	25	80	250	800	2,500	8,000
20kg	10	30	100	300	1,000	3,000
10kg	5.0	16	50	160	500	1,600
5kg	2.5	8.0	25	80	250	800
2kg	1.0	3.0	10	30	100	300
1kg	0.5	1.6	5.0	16	50	160
500g	0.25	0.8	2.5	8.0	25	80
200g	0.10	0.3	1.0	3.0	10	30
100g	0.05	0.16	0.5	1.6	5.0	16
50g	0.03	0.10	0.3	1.0	3.0	10
20g	0.025	0.08	0.25	0.8	2.5	8.0
10g	0.020	0.06	0.20	0.6	2.0	6.0
5g	0.016	0.05	0.16	0.5	1.6	5.0
2g	0.012	0.04	0.12	0.4	1.2	4.0
1g	0.010	0.03	0.10	0.3	1.0	3.0
500mg	0.008	0.025	0.08	0.25	0.8	2.5
200mg	0.006	0.020	0.06	0.20	0.6	2.0
100mg	0.005	0.016	0.05	0.16	0.5	1.6
50mg	0.004	0.012	0.04	0.12	0.4	-
20mg	0.003	0.010	0.03	0.10	0.3	-
10mg	0.003	0.008	0.025	0.08	0.25	-
5mg	0.003	0.006	0.020	0.06	0.20	-
2mg	0.003	0.006	0.020	0.06	0.20	-
1mg	0.003	0.006	0.020	0.06	0.20	-

Note: Non standard weights not listed, the next highest weight tolerance applies.