CERTIFICATE OF CALIBRATION

Issue:-	Certificate Number:	**96616**
96616_10	Date of Issue:	**02-Jun-23**
	Approved Signatory:	**Mark Norfolk**
Page 1 of 2	Signed:	

UKAS CALIBRATION 0352

Kent County Council kent.gov.uk

Submitter:-
Mecmesin Limited
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Issued by:-
Kent Scientific Services
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West Malling
Kent
ME19 4YT
Tel: 03000 415 100
Fax: 01732 220006

EQUIPMENT: Weights Set AH8

SERIAL NUMBER: P01 - P15

MAKE/TYPE: N/A

STANDARDS USED: Set 12412

DATE RECEIVED: 22 May 2023

DATE CALIBRATED: 1 June 2023

DETAILS: 1 Brass, 14 Cast Iron

MEASUREMENTS:

Kent Scientific Services method used: CAL SMALL, Calibration of Small Masses.
The calibrations took place in a controlled environment with the temperature held between 18°C and 22°C, and with the relative humidity held between 40% and 60%.
The measurement results obtained in the table, where each measured value given represents not the true mass, but the mass of a hypothetical weight of density 8,000 kg.m^{-3}, which in air of density 1.2 kg.m^{-3} would balance the corresponding weight identified in the first column at 20°C.
The method of weighing was by substitution (Borda's method). In each instance the standard weight used had been calibrated by UKAS Calibration Laboratory number 0474, 0260 or 0352 within the previous three years.
The uncertainty of measurements for each of the different denominations is listed in the last column of the table
Duplicate weights, where present, are indicated by a dot or dots.
Customer supplied information is notated with a ~, and results relate only to the item(s) calibrated.
Unless otherwise notated, samples are tested in as received condition at Kent Scientific Services.

TABLE OF MEASUREMENT RESULTS

Identity Mark	Nominal Mass		Measured Value	Error from Nominal	Estimated Uncertainty
P01	0.5N		50.960 52 g	- 0.30 mg	± 0.61 mg
P02	1N		101.895 1 g	- 26.5 mg	± 1.1 mg
P03	1N		101.902 9 g	- 18.7 mg	± 1.1 mg
P04	1N		101.908 5 g	- 13.1 mg	± 1.1 mg
P05	1N		101.900 9 g	- 20.7 mg	± 1.1 mg
P06	5N		509.563 8 g	- 44.3 mg	± 5.1 mg
P07	10N		1019.127 g	- 89 mg	± 11 mg
P08	20N		2038.392 g	- 40 mg	± 21 mg
P09	20N		2038.401 g	- 32 mg	± 21 mg
P10	50N		5095.928 g	- 154 mg	± 51 mg
P11	100N		10192.17 g	+ 10 mg	± 110 mg
P12	100N		10192.15 g	- 10 mg	± 110 mg
P13	100N		10192.30 g	+ 140 mg	± 110 mg
P14	100N		10191.98 g	- 180 mg	± 110 mg
P15	5N		509.539 9 g	- 68.3 mg	± 5.1 mg
P02	1N	*	101.922 8 g	+ 1.1 mg	± 1.1 mg
P03	1N	*	101.920 5 g	- 1.2 mg	± 1.1 mg
P04	1N	*	101.921 0 g	- 0.6 mg	± 1.1 mg
P05	1N	*	101.921 2 g	- 0.5 mg	± 1.1 mg
P06	5N	*	509.618 1 g	+ 9.9 mg	± 5.1 mg
P07	10N	*	1019.050 g	+ 33 mg	± 11 mg
P15	5N	*	509.604 9 g	- 3.3 mg	± 5.1 mg

* Denotes post adjustment calibration

END OF RESULTS

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2 providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.