CERTIFICATE OF CALIBRATION

Issue:-	Certificate Number:	**93917**
93917_10	Date of Issue:	**24-Dec-19**
	Approved Signatory:	**Kim Hutchins**
Page 1 of 2	Signed:	

UKAS CALIBRATION 0352

Kent County Council kent.gov.uk

Submitter:-
Mecmesin Limited
Newton House
Spring Copse Business Park
Slinfold
West Sussex
RH13 0SZ

Issued by:-
Kent Scientific Services
8 Abbey Wood Road
Kings Hill
West Malling
Kent
ME19 4YT
Tel: 03000 415 100
Fax: 01732 220006

EQUIPMENT:	Weights
SERIAL NUMBER:	MS1 (3034)
MAKE/TYPE:	Reverifications
STANDARDS USED:	Local Standard Set 16521
DATE RECEIVED:	20 December 2019
DATE CALIBRATED:	23 December 2019
DETAILS:	13 Stainless Steel

MEASUREMENTS:

Kent Scientific Services method used: CAL-M2, 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 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 to the item calibrated.
Unless otherwise notated, samples are tested in as received condition at Kent Scientific Services.

TABLE OF MEASUREMENT RESULTS

Nominal Mass	Measured Value	Error from Nominal	Estimated Uncertainty
1 kg	1,000.000 3 g	+ 0.3 mg	± 3.0 mg
500 g	500.000 9 g	+ 0.9 mg	± 1.5 mg
200 g	199.999 60 g	- 0.40 mg	± 0.60 mg
200 g°	200.000 07 g	+ 0.07 mg	± 0.60 mg
100 g	100.000 10 g	+ 0.10 mg	± 0.30 mg
50 g	49.999 89 g	- 0.11 mg	± 0.20 mg
20 g	19.999 78 g	- 0.22 mg	± 0.16 mg
20 g°	19.999 94 g	- 0.06 mg	± 0.16 mg
10 g	9.999 82 g	- 0.18 mg	± 0.12 mg
5 g	4.999 93 g	- 0.07 mg	± 0.10 mg
2 g	1.999 912 g	- 0.088 mg	± 0.080 mg
2 g°	2.000 083 g	+ 0.083 mg	± 0.080 mg
1 g	1.000 067 g	+ 0.067 mg	± 0.060 mg

--------END--------

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.