


CERTIFICATE OF CALIBRATION

DATE OF ISSUE: Wed 02/Aug/2023

CERTIFICATE NUMBER: DBSN001788

ISSUED BY D BRASH & SONS LTD

**D Brash & Sons Ltd**37 Stamperland Crescent
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Customer Volker Gruppe Ltd, Unit 6, Woodhead Road, Chryston, Glasgow, G69 9HZ Contact John Rennie		Calibration Site Volker Gruppe Ltd, Unit 6, Woodhead Road, Chryston, Glasgow, G69 9HZ		Approved Signatory  Pat McLaughlin	
Equipment Make Marsden Model I-100 Serial No 22724 Customer Ref Location Warehouse		Capacity 1 3 000kg 2 3 4		Division 0.5kg Test Equipment Used LA - Roller Weights 2023 LA-T1-T50	

Comments**Notes**

The weighing equipment described above has been calibrated using weights traceable to National Standards and in accordance with the following procedures (where relevant). The results were recorded.

ENGINEER CHECKS

The engineer has made the following checks prior to calibration and recorded any deviation that may affect the results. i. Equipment available for duration of calibration ii. Operation and parameters iii. Environmental factors iv. Condition of the equipment under test

CERTIFICATES AND TOLERANCES

D Brash & Sons will record measurements taken over the equipment's range and provide a Calibration Certificate showing performance to a specified tolerance. Unless otherwise agreed, tolerances will be +/- 0.1% of test point.

LINEARITY

A series of weights were added to the centre of the load receptor. The reading at each load was recorded. In the case of equipment with a capacity in excess of 500 kg or with restricted platform sizes it may be necessary to use 'make-up' weights. This does not affect the validity of the test.

ECCENTRICITY TEST

A load of 1/3 or greater of the capacity of the machine was placed in the centre of the load receptor and the reading recorded. The load was then placed at each pan support in turn and again at the centre, the readings were recorded. Lesser loads may be used to meet customers' requirements.

REPEATABILITY

The repeatability load was applied to the centre of the load receptor and the reading recorded. The repeatability load was removed and the reading recorded.

ACCURACY

The certificate issued under this service is based on readings taken at a particular point of time and a particular location, it does not guarantee the accuracy of the equipment at any future time. The interpretation of the results declared is the responsibility of the customer having regard to the nature of the machine's use.

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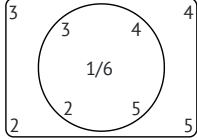
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Make Marsden
Model I-100
Serial No 22724
Customer Ref
Location Warehouse
Range Calibrated 3 000kg x 0.5kg
Type of Calibration As Found

Date of Calibration Wed 02/Aug/2023
Next Calibration Due August 2024
Calibrator Patrick McLaughlin
Approved Signatory Pat McLaughlin
Internal Calibration Weight Activated N/A

As Found Eccentricity Test					Post Adjustment Eccentricity Test			
Applied Load: 1 000.0kg					Applied Load: 1 000.0kg			
Ref	Indicated Reading (kg)	Ref	Indicated Reading (kg)	Ref	Indicated Reading (kg)	Ref	Indicated Reading (kg)	
1	1 000.5	4	1 000.5	1	1 000.5	4	1 000.5	
2	1 000.5	5	1 000.0	2	1 000.5	5	1 000.0	
3	1 000.0	6	1 000.5	3	1 000.0	6	1 000.5	

As Found Linearity	
Applied Load (kg)	Indicated Reading (kg)
0.0	0.0
500.0	500.0
1 000.0	1 000.5
1 500.0	1 501.0
3 000.0	3 001.5

Post Adjustment Linearity	
Applied Load (kg)	Indicated Reading (kg)
0.0	0.0
500.0	500.0
1 000.0	1 000.5
1 500.0	1 501.0
3 000.0	3 001.5

As Found Repeatability Test		
Applied Load: 3 000.0kg		Zero Offset Load: 0.0kg
Unloaded (kg)	Loaded (kg)	Difference (kg)
0.0	3 001.5	3 001.5
0.0	3 002.0	3 002.0
0.0	3 001.5	3 001.5

Post Adjustment Repeatability Test		
Applied Load: 3 000.0kg		Zero Offset Load: 0.0kg
Unloaded (kg)	Loaded (kg)	Difference (kg)
0.0	3 001.5	3 001.5
0.0	3 002.0	3 002.0
0.0	3 001.5	3 001.5

END OF CERTIFICATE