



Lab Code : C-1074

Test - Verification - Calibration - Adjustment of Digital Weighing Balances & Scales (0.0001 mg To 300 MT)

CALIBRATION CERTIFICATE OF WEIGHING BALANCE

Name of Customer : MARUTI Weigtech Pvt. Ltd. 255 - 258, Level 2, Shukan Mall, Science City Road, Sola, Ahmedabad - 380060 www.marutiweigtech.com	Certificate No : EWS-0318-060 Certificate Issue Date : March 26, 2018 Calibration Done Date : March 26, 2018 Next Calibration Date : March 25, 2019
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Calibration Procedure : MWPL-SOP-002 Rev.09 Issue 00 Page : 01 of 02

INSTRUMENT DETAILS

Name of Instrument :	Mass Comparator	Make :	RAD-WAG
Model :	WAY 100.3Y.KO	Serial No :	458637
Capacity :	110 g	Equipment ID :	MWPL/MASSCOMP/001
Display Resolution :	0.001 mg	Instrument Location :	Laboratory

Linearity Test Results

Sr No.	Weights Placed on PAN	Value of Mass Standards (g)	Observed Mass Value (Average) (g)	Error (g)	Uncertainty at Coverage factor K=2 (±) (g)
1	5 g	5.000 011	5.000 010	-0.000 001	0.000 005
2	10 g	10.000 009	10.000 007	-0.000 002	0.000 006
3	20 g	20.000 015	20.000 010	-0.000 005	0.000 008
4	50 g	50.000 017	50.000 011	-0.000 006	0.000 010
5	100 g	100.000 034	100.000 031	-0.000 003	0.000 016

Corner Test Results / Eccentricity Test Results

PLACE	CENTRE	NORTH	EAST	SOUTH	WEST
Single Test weight :	0	0	0	0	0
	0	0	0	0	0
0	0	Measurement Movement : C>N>E>S>W>C>W>S>E>N>C (Clockwise & Anti Clockwise)			
Mean	0	0.0	0.0	0.0	0.0
Aboslute Eccentric Error Relative to Centre		0.0	0.0	0.0	0.0
Calibrated By : Naitik Patel		Approved By : Kishan Patel			

An ISO 9001 & ISO/IEC 17025 Certified Company



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REPEATABILITY TEST					
AT FULL LOAD		100 g	AT HALF LOAD		50 g
OBSERVED READINGS			OBSERVED READINGS		
100.0000	100.0000	100.0000	50.0000	50.0000	50.0000
100.0000	100.0000	100.0000	50.0000	50.0000	50.0000
100.0000	100.0000	100.0000	50.0000	50.0000	50.0000
100.0000			50.0000		
Standard Deviation		0.000 000 876	Standard Deviation		0.000 000 816
Note : Max Value of Above Two Standard Deviation (Highlighted) is used for Uncertainty Calculation.					
HYSTERESIS TEST					
HALF LOAD					
FULL LOAD					
Only Applicable to New Balance or After Major Repairing				Hysteresis Error	0
Used Master(s) Certificate Details					
Sr. No	Instrument Details	Calibration Done by	Certificate Details	Calibration Due Date	
1	1 mg to 20 kg - E1 Class	NPL, New Delhi	15120987/D5.01/C-286	February 23, 2019	
Important Remarks :					

- > This certificate is issued for Items submitted to and calibrated by MARUTI Weigtech Pvt. Ltd.
- > Balance location is mentioned in certificate. Moving the balance after calibration shall be avoided otherwise calibration certificate shall not be accepted as evidence of traceability.
- > Thermal stabilization for 1 hr of reference weights is done before performing the actual calibration process.
- > The calibration certificate issued for weighing balance used for scientific or industrial purpose only.
- > The reported uncertainty is at coverage factor k=2 which corresponds to a coverage probability of approximately 95% for a normal distribution. The contribution of uncertainty originating from the mass standards & balances used, the weighing process and the air buoyancy correction are taken into account.
- > Calibration done as per the guidelines of OIML R -76, NABL - 122*
- > Calibration results reported in this certificate are obtained at the time of calibration of weighing balance under stated environmental conditions. Environmental conditions observed during the calibration as follows.

Temperature : 25.2 °C Pressure : 1001 mbar Humidity : 48% Rh

> Any changes or correction need in this certificates will be re-issue as "Amended Calibration Certificate" and this new certificate automatically cancels the original ones. certificate will not reproduce except in full without written permission of MWPL Laboratory. Any hand written correction or marking in this Calibration Certificate are not accepted and invalid.

MWPL/FMT/EXE-03 Rev : 09

MARUTI WEGTECH PRIVATE LIMITED

AUTHORIZED SIGNATORY

Calibrated By : Naitik Patel	Approved By : Kishan Patel
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