Calibration Certificate

TRUE COPY

Name of Customer → **National Centre For Quality Calibration** 4, Abhishree Corporate park, Iskcon-Ambli Road, Nr.Swagat Bunglows, Ambli, Ahmedabad – 380058, Gujarat, India.	Certificate No. Date of Issue Date of Calibration Suggested Due Date	MMD/200819/02 21–08–2019 20–08–2019 19–08–2022
Date Of Receipt / Ref. No.→ 17–08–2019	F/CAL/02/CR, Issue No.03 Page 1 of 1	

Discipline	Mechanical – Mass		
Details of Observation of Unit Under Calibration	Identification No. : **NCQC/M-167** Name of Instrument : **Weight**		
Weights	1000g/1 Total= 01 pcs		
Type	Cylindrical Knob Type		
Material	Stainless Steel		
Assumed Density	7950 ± 140 kg/m^3		
Make Location	MMD ====	Visual Inspection Barometric Pressure	OK 1005 ± 15 hPa

Results of Calibration

Id. No.	Denomination (Unit under calibration)	Mass value in g.	Deviation in g.	Uncertainty (±) in mg.	Class
NCQC/M-167	1000 g.	1000.0001	0.0001	0.15	E1

Remarks:

- Mass values of all the weights are conventional mass values and within the maximum errors permissible in "E_1" Accuracy Class of weights as per OIML R 111–1.
- Thermal stabilization time 48 hours.
- These results are obtained at the time of calibration.
- Suggested due date is given based on customer requirements.
- Any hand written corrections (except @ marked) or photocopies of the report invalidates this certificate.
- Environment condition during calibration: Temperature – 23 ± 0.5°C, Relative Humidity – 40 to 60 %Rh. (Change in temperature was controlled and maintained less than ± 0.3 °C per hour with a maximum of ± 0.5 °C per 12 hours, and relative humidity was controlled and maintained with a maximum of ± 5% Rh per 4 hours)
- Average temperature → 23.0°C, Average pressure 1004 hPa and average humidity 47.4% Rh was maintained during calibration.
- The uncertainty of measurement has been evaluated in compliance with documented quality procedure. The expanded uncertainty assigned corresponds to a coverage probability of 95.45% for normal distribution and the coverage factor k=2. The uncertainty does not include the possible effect of magnetism. The contribution of uncertainty originating from the standards and the balances used, the weighing process, and air buoyancy corrections are taken in to account.
- Condition of instrument found satisfactory during receipt.
- Calibration is performed on the electronic weighing balance against standards mass by comparison method under controlled conditions (ABBA Method).
- Reference standard no.: OIML R 111 – 1 for calibration and classification of weights.
- Reference Calibration method no.: MMD/CM/02.
- Master equipment / reference standards are traceable to NABL accredited calibration laboratory.
- Corrected mass value is calculated based on ABBA method.
- Shape of reference standard weights : Cylindrical knob
- **ULR – CC234619000000611F**

Details of Master Instrument Used for Calibration

Nomenclature	Make / Model	Serial No. / ID No.	Class	Calibration Due Date
Reference weight box	MMD / =====	MMD/CAL/05	E1	19–03–2022
Mass Comparator	Mettler Toledo / XPE2004SC	541536030	===	======

NCQC System Certificate No.358

NCQC
Valid up to 19-08-2022
Reviewed

Traceable To National / International Standards

Calibrated By	Reviewed and Approved By
Vilas Prajapati	Viral Mistry

M.M.D. KANTAWALA CALIBRATION INCHARGE AHMEDABAD