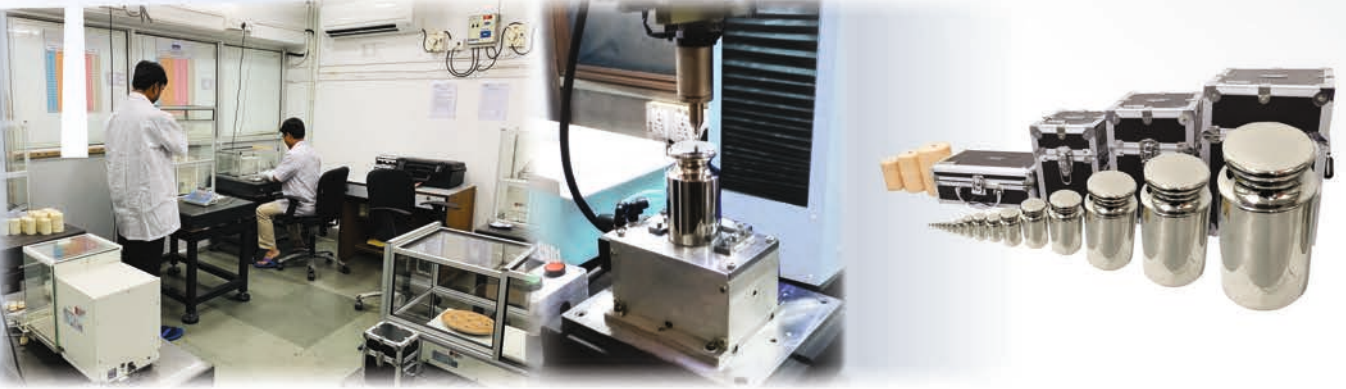


**PERFECT SOLUTION for**

**High precision laboratory Balances, accurate standard weights & calibration services from India's largest manufacturer of magnet based electronic balances**

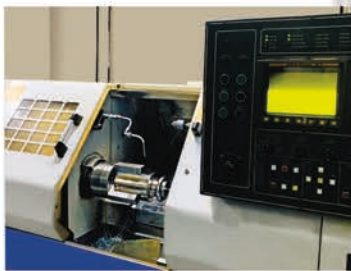


## Standard Weights

**CONTECH** Instruments Ltd, an ISO 9001, ISO 14001 & OHSAS 18001 Company established in the year 1992 is the only Indian manufacturer who has developed and manufactured in true sense the complete range of Electronic Balances from 0.01mg Analytical Balances to 50ton Crane Scales in its own setup illustrating the technical competence of the Company in the field of electronic weighing.

**CONTECH**'s vast experience and in depth knowledge of high precision laboratory weighing has enabled it to roll out complete range of calibration weights from 1mg to 20Kg in class E1 to M1 fully manufactured in house. The stainless steel test weights are manufactured from the finest quality material which prevents corrosion over life of weights. The weights are supplied in easy to clean sturdy and elegant aluminium or plastic boxes with protective foam material.

To obtain the best accuracy results from high precision balances, the balances need to be frequently calibrated using accurate standard weights with documented metrological traceability as required by the approved standards of internal quality assurance departments for most industries.



▶ Total in house manufacturing to achieve OIML Quality Standard accuracy requirement of E1 class

▶ Marking as per OIML R111 Standards



▶ M1,F2,F1 weight box  
1 mg ~ 200g (23 pcs)

▶ E2,E1 weight box  
1 mg ~ 200g (23 pcs)

▶ M1, F2, F1, E2, E1  
loose weights  
500g ~ 20kg



*Where innovation never stops...*



# Calibration Lab



**Contech Calibration Laboratory**, a unit of Contech Instruments Ltd. is an accredited mass laboratory to calibrate, adjust the test weights and document results in calibration certificate having logos of ilac MRA (International Laboratory Accreditation Corporation) and NABL (National Accreditation Board for Testing and Calibration Laboratories) with uncertainties and traceability information according to ISO/IEC 17025:2005.

Contech Calibration lab is equipped with combination of highly advanced mass comparators and well maintained high accuracy standard weights for the reliable & accurate measurement performances.

Dedicated software is used for the generation of computerized calibration certificates and storage of calibration data as per ISO/IEC 17025:2005 standards.



Highly advanced Mass Comparators for the testing of 1mg ~ 20kg weights up to E1 class

Mass Comparators - 6 numbers to cover the range from 1mg ~ 20kg for calibration accuracy E1 class

- 1mg~2g ---- 2.1g / 0.000001g
- 5g ---- 5.1g / 0.000001g
- 10g~100g ---- 100g / 0.000001g
- 200g~1kg ---- 1000g / 0.00001g
- 2kg~5kg ---- 5050g / 0.0001g
- 10kg~20kg ---- 25100g / 0.001g



Well maintained highest accuracy standard test weights



ISO/IEC 17025:2005 Calibration Certificates of standard weights used for calibration in the lab

## Selection of correct Standard Weights & Class

In principle, the standard weights used for the calibration of a weighing scale shall meet the metrological requirements of OIML R 111. The standard weights should not have an error greater than 1/3 of the maximum permissible error of the instrument for the applied load.

Selection of standard weights depends on weighing accuracy required for the application. The parameters to be considered are maximum capacity of the scale, least count and weighing tolerance.

Maximum permissible error for different class Standard Weights

NOMINAL VALUE	MAXIMUM PERMISSIBLE ERRORS FOR WEIGHTS ( $\pm$ mg)					
	Class E1	Class E2	Class F1	Class F2	Class M1	Class M2
5000kg			25 000	80 000	250 000	800 000
2000kg			10 000	30 000	100 000	300 000
1000kg		1600	5 000	16 000	50 000	160 000
500kg		800	2 500	8 000	25 000	80 000
200kg		300	1 000	3 000	10 000	30 000
100kg		160	500	1 600	5 000	16 000
50kg	25	80	250	800	2 500	8 000
20kg	10	30	100	300	1 000	3 000
10kg	5	16	50	160	500	1 600
5kg	2.5	8	25	80	250	800
2kg	1	3	10	30	100	300
1kg	0.5	1.6	5	16	50	160
500g	0.25	0.8	2.5	8	25	80
200g	0.1	0.3	1	3	10	30
100g	0.05	0.16	0.5	1.6	5	16
50g	0.03	0.1	0.3	1	3	10
20g	0.025	0.08	0.25	0.8	2.5	8
10g	0.02	0.06	0.2	0.6	2	6
5g	0.016	0.05	0.16	0.5	1.6	5
2g	0.012	0.04	0.12	0.4	1.2	4
1g	0.01	0.03	0.1	0.3	1	3
500mg	0.008	0.025	0.08	0.25	0.8	2.5
200mg	0.006	0.02	0.06	0.2	0.6	2
100mg	0.005	0.016	0.05	0.16	0.5	1.6
50mg	0.004	0.012	0.04	0.12	0.4	
20mg	0.003	0.01	0.03	0.1	0.3	
10mg	0.003	0.008	0.025	0.08	0.25	
5mg	0.003	0.006	0.02	0.06	0.2	
2mg	0.003	0.006	0.02	0.06	0.2	
1mg	0.003	0.006	0.02	0.06	0.2	



# Calibration Services



Contech metrology staff are trained to ensure the highest standards of metrological measurement performance of various accuracy weighing scales in the field.

Contech calibration team perform calibration of laboratory balances & weighing scales in the field using the test standard weights and issue calibration certificates as per ISO/IEC 17025:2005.

Contech metrology engineer calibrating high precision lab balance



Contech metrology engineer calibrating industrial weighing scale using appropriate standard weights

Scope and certificate of accreditation is for weighing scales and standard weights calibration of E1 class & coarser upto 5kg & E2 class and coarser for 10kg and 20kg



Calibration certificate issued by Contech calibration lab as per ISO/IEC 17025:2005



Certificate No. : CC-3074

## FACTORY / NABL LAB



Plot No. EL-221 TTC Indl. Area, MIDC (Electronic Zone),  
Mhape, Navi Mumbai - 400 710.



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### Impeccable Credentials

