

STANDARD WEIGHT

PERFECT SOLUTION for

High precision laboratory Balances, accurate standard Weights & Calibration services from India's largest manufacturer of magnet based electronic Balances



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FACTORY



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

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 E ₁	Class E ₂	Class F ₁	Class F ₂	Class M ₁	Class M ₂
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	