

# Table of Tolerances

NABL Accredited Laboratory : Weightronics Mass Calibration Laboratory (WMCL)

TABLE 1 - Maximum Permissible Errors for Weights ( $\pm$  in mg) as per OIML R111 - 1 Edition 2004 (E)

NOMINAL VALUE	CLASS - E <sub>1</sub>	CLASS - E <sub>2</sub>	CLASS - F <sub>1</sub>	CLASS - F <sub>2</sub>	CLASS - M <sub>1</sub>	CLASS - M <sub>2</sub>	CLASS - M <sub>3</sub>
1 mg	0.003	0.006	0.02	0.06	0.2	-	-
2 mg	0.003	0.006	0.02	0.06	0.2	-	-
5 mg	0.003	0.006	0.02	0.06	0.2	-	-
10 mg	0.003	0.008	0.025	0.08	0.25	-	-
20 mg	0.003	0.01	0.03	0.1	0.3	-	-
50 mg	0.004	0.012	0.04	0.12	0.4	-	-
100 mg	0.005	0.016	0.05	0.16	0.5	-	-
200 mg	0.006	0.02	0.06	0.2	0.6	-	-
500 mg	0.008	0.025	0.08	0.25	0.8	-	-
1 g	0.01	0.03	0.1	0.3	1	-	-
2 g	0.012	0.04	0.12	0.4	1.2	-	-
5 g	0.016	0.05	0.16	0.5	1.6	-	-
10 g	0.02	0.06	0.2	0.6	2	-	-
20 g	0.025	0.08	0.25	0.8	2.5	-	-
50 g	0.03	0.1	0.3	1	3	10	30
100 g	0.05	0.16	0.5	1.6	5	16	50
200 g	0.1	0.3	1	3	10	30	100
500 g	0.25	0.8	2.5	8	25	80	250
2 kg	1	3	10	30	100	300	1000
5 kg	2.5	8	25	80	250	800	2500
10 kh	5	16	50	160	500	1600	5000
20 kg	10	30	100	300	1000	3000	10000
50 kg	25	80	250	800	2500	8000	25000
100 kg	-	160	500	1600	5000	16000	50000
200 kg	-	300	1000	3000	10000	30000	100000
500 kg	-	800	2500	8000	25000	80000	250000
1000 kg	-	1600	5000	16000	50000	160000	500000

TABLE 2 - A Possible Selection Table of Weights for Calibration of Weighing Balances

Capacity	10 g	1 g	100 mg	10 mg	1 mg	0.1 mg	<0.1 mg
Upto 50 g	-	-	-	M1	F2	E2	E1
Upto 100 g	-	-	-	M1	F1	E1	E1
Upto 500 g	-	-	M1	F2	E2	-	-
Upto 1 kg	-	M1	M1	F1	E1	-	-
Upto 5 kg	-	M1	F2	E2	-	-	-
Upto 10 kg	-	M1	F1	E1	-	-	-
Up to 50 kg	M1	F2	E2	-	-	-	-
Upto 100 kg	M1	F1	-	-	-	-	-

