



## Milligram weights Assorted Calibration Weights - E1 class

### Application

Weights intended to ensure traceability between national mass standards (with values derived from the International Prototype of the kilogram) and weights of class E2 and lower.

Class E1 weights or weight sets shall be accompanied by a calibration certificate.

Used as a primary reference for calibrating other reference standards and weights where the stability of the environment and careful handling are assured. Class E1 weights have no method of adjustment and are not suitable for general laboratory use. The uncertainty is guaranteed to be 1/3 the tolerance.

## Technical Specifications

Brand	NSTAR
Model	As shown in table
Class	OIML E1
Shape	Wire type
Material	Austenitic stainless steel (Density $8.00 \pm 0.03 \text{ g/cm}^3$ )
Cavity	Monoblock construction, No adjustable cavity
Surface	Highly polished mirror finish
Magnetic Properties	Maximum magnetic polarization, $\mu_0 M$ , ( $\mu\text{T}$ ) $< 2.5$
Contents of Weights	1-2-5-10-20-50-100-200-500 mg
Marking	No denomination marking on test weights
Standards	OIML R-111, 2004 (E)
Certificate	NABL accredited certificate - 2 years validity



## Shape

## Denomination

Pentagon	500 mg, 50 mg, 5 mg
Square	200 mg, 20 mg, 2 mg
Triangle	100 mg, 10 mg, 1 mg

## Dimensions

Storage Case	Plastic storage case
Weight Box Size	40 x 40 x 55 mm ( L x W x H )
Net Weight	upto 500 mg
Number of Package	1
Gross Weight	70 g
External Packing	Corrugated boxes



## Tolerance and Uncertainties

Model	Capacity	Tolerance# (mg)	Uncertainty* (mg)
NC-001-E1-ASS	1 mg	0.003	0.0010
NC-002-E1-ASS	2 mg	0.003	0.0010
NC-005-E1-ASS	5 mg	0.003	0.0010
NC-010-E1-ASS	10 mg	0.003	0.0010
NC-020-E1-ASS	20 mg	0.003	0.0010
NC-050-E1-ASS	50 mg	0.004	0.0013
NC-100-E1-ASS	100 mg	0.005	0.0016
NC-200-E1-ASS	200 mg	0.006	0.0020
NC-500-E1-ASS	500 mg	0.008	0.0026

# Maximum Permissible Errors (MPE) as per OIML R-111

\* Accredited CMC of Precimass LLP (CC-3213)

NSTAR Corp is offering assured 1/3<sup>rd</sup> uncertainty to the MPE for OIML E1 class weights.



## India

**NSTAR CORP**  
**34, Pelican Estate,**  
**Road No. 5, Kathwada GIDC,**  
**Kathwada, Ahmedabad - 382430,**  
**Gujarat**



**[www.calibrationweights.in](http://www.calibrationweights.in)**



**+91 7567 222 900**



**[sales@calibrationweights.in](mailto:sales@calibrationweights.in)**