

## Common Variables, Units & Symbols Used in Mass Metrology

Variable/Unit/Symbol	Definition
$X$	Unknown mass (Item under test)
$S$	Standard mass
$S_c$	Check standard (control standard)
$R$	Reference standard Note: sometimes used instead of Standard in equations
$N$	Nominal value
$C$ $C_s$	Correction (error) Correction (error) of the standard Note 1: may be true mass or conventional mass correction and must be noted Note 2: a positive correction indicates a mass larger than nominal
$M$ $M = N + C$ $M_x$	Mass Mass = Nominal value + Correction Mass of the unknown
$CM$ $CM_{Sc}$	Conventional Mass Conventional Mass of the check standard Note: formerly $AM = \text{Apparent Mass}$ versus $8.0 \text{ g/cm}^3$ at $20^\circ\text{C}$
$sw$	Sensitivity weight
$t$ $t_x$	Tare Tare of unknown
$V$ $V_x$	Volume Volume of the unknown
$T$	Temperature, $^\circ\text{C}$ (Celsius)
$P$	Pressure, Pa (Pascal), or mm Hg
% RH	Percent relative humidity
$\rho$ $\rho_a$	Greek letter rho, density Density of air
$u_c$	Combined uncertainty
$U$ $U_{k=2}$	Expanded uncertainty Expanded uncertainty, given at coverage factor $k$
$k$	Coverage factor Note: usually 2 or 3 for approximate 95 % or 99.7 % confidence interval unless small number of degrees of freedom
RSS	Root sum square
CCE	Cubical coefficient of expansion