Rod	spell out
Root mean square	rms
Round	rd
Secant	sec
Second	sec
Second foot (cubic feet per second)	cfs
Shaft horsepower	shp
Shilling	s
Sine	sin
Specific gravity	sp gr
Specific heat	sp ht
Spherical candlepower	sc
Square centimeter	sq cm or cm^2
Square foot	sq ft
Square inch	sq in.
Square kilometer	sq km or km^2
Square meter	sq m or m^2
Square micron	sq μ (sq mu) or μ^2
Square millimeter	sq mm or mm^2
Square root of mean square	rms
Standard	std
Tangent	tan
Temperature	temp
Tensile strength	tens str
Thousand	M
Ton	spell out
Ton-mile	spell out
United States gage	USg
Versed sine	vers
Volt	v or V*
Volt-ampere	va or VA*
Volt-coulomb	vc or VC*
Watt	w or W*
Watt-hour	wh or Wh*
Watts per candle	wpc
Week	spell out
Weight	wt
Yard	yd

MATHEMATICAL SYMBOLS[3]

General Principles

1. It is urged that a complete table of symbols and units used by an author be included at a convenient place in each book, chapter, or paper.

2. In most cases the same symbol shall be used, regardless of systems of units. Thus v is specific volume, whether cc per gram, cc per mol, cu ft per lb, etc.

3. In cases where more than one system of units is used in a discussion, a single symbol may be used, with addition of subscripts, superscripts, or indices to denote units other than the primary one, such as, p, p_t, p', p''.

4. The same symbol should be used for a given concept, regardless of the number of special values which occur, and subscripts or superscripts should be used to designate them.

5. Letter subscripts should be used to denote values under special conditions or in special states. A double letter subscript without comma denotes a value or change of a value between two conditions or states.

Specific heat at constant pressure	c_p
Specific heat at constant volume	c_v
Thermal efficiency	e_t
Mechanical efficiency	e_m
Heat content of dry saturated vapor	h_g
Change in specific volume during vaporization	v_{fg}

6. Numerical subscripts should be used to denote values at designated points in an apparatus, process, or cycle. A double numerical subscript without comma denotes a value or change of a value between two points, sometimes requiring specification of path.

Initial pressure	p_1
Final pressure	p_2
Weight of a major item	W
Weights of auxiliary items	W_1, W_2, W_3
Heat transferred per pound between point 3 and 4	q_{34}

*Abbreviation recommended by the *International Electrotechnical Commission*.

[3]Proposed American Tentative Standard Symbols prepared by Sectional Committee on Scientific and Engineering Symbols and Abbreviations, February, 1930.

7. In order to increase the clarity of printed matter, which is practically always Roman, symbols alone or in equations should be printed in Italics.

8. Where possible, capital letters denote total quantities and small letters denote specific quantities, or quantities per unit. Thus,

S may be entropy of any mass, and
s may be entropy of unit mass.

9. When in a given discussion different concepts from one or more symbols lists have the same symbol without alternatives, this symbol preferably should be used for each concept, with the addition of a subscript selected by the author in all or all but one case.

General Symbols

Acceleration due to gravity, for most engineering work, where it is not necessary to distinguish between the exact local value and the standard value	g
Acceleration due to gravity. Internationally adopted standard value 980.665 cm/sec^2 or 32.1740 ft/sec^2, for precise work where it is necessary to distinguish between the standard value and the local value at any point	g_o
Acceleration due to gravity. Local value at a given point, for precise work where it is necessary to distinguish between this local value and the standard value	g_L
Time; τ (tau) should be used only when t is used for ordinary temperature in the same discussion. See *Temperature*.	τ (tau) or t
Angular Velocity (omega)	ω
Velocity[4] (Additional symbols may be found necessary in steam turbine and allied problems).	V
Revolutions per unit time	n
Length	L
Diameter	D
Radius	r
Area	A
Total Volume[4]	V

Symbols for Force, Weight, Work, Power

Force, Total Load	F
Pressure, Absolute Pressure, Gage Pressure, Force per Unit Area	p
Mean Effective Pressure	p_m
Total Quantity of fluid, water, gas, heat; Quantity by volume	Q
Volume per unit time, Rate at which quantity of material passes through a machine; Quantity of heat per unit time, Quantity of heat per unit weight	q
Total Weight[4]	W
Weight rate, Weight per unit of power, Weight per unit of time[4]	w
Weight per unit time per unit area of cross section, commonly called mass velocity	G
Mass	m
Total Work[4]	W
Work per unit weight	w
Power, Work per unit time	P
Efficiency	e or (eta) η

Symbols for Properties

Molecular Weight	M
Concentration; Amount of particular constituent per given amount of Mixture	C
Specific volume, Volume per unit weight, Volume per unit mass	v
Density, Weight per unit volume, Mass per unit volume specific weight	d or (rho) ρ
$\rho = 1/v$	
Specific Heat	c
Specific heat at constant pressure	c_p
Specific heat at constant volume	c_v
Ratio of specific heats	κ (kappa) or k.
$k = c_p/c_v$	
Absolute viscosity, Coefficient of viscosity, usually in poises or similar units of stress/shear rate	(mu) μ
Relative viscosity, Ratio of absolute viscosity of any fluid to absolute viscosity of water	Z
$Z = \mu/\mu_w$	
Kinematic Viscosity (absolute viscosity divided by density)	(nu) ν

[4]See Principle 9. W_k and w_k are suggested for Total work and Work per unit weight when necessary.