Gallon ..... gal
Gallons per minute ..... gpm
Gallons per second ..... gps
Gram ..... g
Gram-calorie ..... g-cal
Horsepower ..... hp
Horsepower-hour ..... hp-hr
Hour ..... hr
Inch ..... in.
Inch-pound ..... in.-lb
Indicated horsepower ..... ihp
Indicated horsepower-hour ..... ihp-hr
Kilogram ..... kg
Kilowatt ..... kw
Kilowatthour ..... kwhr
Mass ..... mass
Melting point ..... mp
Meter ..... m
Micron ..... μ (mu)
Miles per hour ..... mph
Millimeter ..... mm
Minute ..... min
Molecular weight ..... mol. wt
Mol ..... mol
Ounce ..... oz
Pound ..... lb
Pounds per square inch ..... psi
Second ..... sec
Specific gravity ..... sp gr
Specific heat ..... sp ht
Square foot ..... sq ft
Square inch ..... sq in.
Watt ..... w
Watthour ..... whr

SYMBOLS

A letter symbol is a single character, with subscript or superscript if required, used to designate a physical magnitude in mathematical equations and expressions. Two or more symbols together always represent a product. The following have been compiled from a selected list of approved standards[3].

Acceleration, due to gravity ..... g
Acceleration, linear ..... a
Area ..... A
Change in specific volume during vaporization ..... v_{fg}
Density, Weight per unit volume, Specific weight ..... d or ρ (rho)

$$d = \frac{1}{v}$$

Distance, linear ..... s
Dry saturated vapor, Dry saturated gas at saturation pressure and temperature, vapor in contact with liquid ..... *Subscript* g
Entropy. (The capital should be used for any weight, and the small letter for unit weight) ..... S or s
Force, total load ..... F
Head ..... H or h
Heat content, Total heat, Enthalpy. (The capital should be used for any weight and the small letter for unit weight) ..... H or h
Heat content of saturated liquid, Total heat of saturated liquid, Enthalpy of saturated liquid, sometimes called heat of the liquid ..... h_f
Heat content of dry saturated vapor, Total heat of dry saturated vapor, Enthalpy of dry saturated vapor ..... h_g

[3]Letter Symbols for Mechanics of Solid Bodies, Z10.3-1942, and Letter Symbols for Heat and Thermodynamics, Z10.4-1943 (*American Standards Association*).

Heat of vaporization at constant pressure ..... L or h_{fg}
Internal energy, Intrinsic energy. (The capital should be used for any weight and the small letter for unit weight) ..... U or u
Length of path of heat flow, thickness L
Load, total ..... W
Mechanical efficiency ..... e_m
Mechanical equivalent of heat ..... J
Power, Horsepower, Work per unit time ..... P
Pressure, Absolute pressure, Gage pressure, Force per unit area ..... p
Quantity (total) of fluid, water, gas, heat; Quantity by volume; Total quantity of heat transferred ..... Q
Quality of steam, Pounds of dry steam per pound of mixture x
Saturated liquid at saturation pressure and temperature, Liquid in contact with vapor ..... *Subscript* f
Specific heat c
Specific heat at constant pressure ..... c_p
Specific heat at constant volume ..... c_v
Specific volume, Volume per unit weight, Volume per unit mass v
Temperature (ordinary) F or C. (*Theta* is used preferably only when t is used for Time in the same discussion) ..... t or θ (*theta*)
Temperature (absolute) F abs or K. (Capital *theta* is used preferably only when small *theta* is used for ordinary temperature) ..... T or Θ (*capital theta*)
Thermal conductance[4]: heat transferred per (unit time) (degree) C

$$C = \frac{1}{R} = \frac{kA}{L} = \frac{q}{t_1 - t_2}$$

Thermal conductance per unit area, Unit conductance: heat transferred per (unit time) (unit area) (degree) ..... C_a

$$C_a = \frac{C}{A} = \frac{1}{RA} = \frac{q}{A(t_1 - t_2)} = \frac{k}{L}$$

Thermal conductivity: heat transferred per (unit time) (unit area) (degree per unit length) ..... k

$$k = \frac{\frac{q}{A}}{\frac{(t_1 - t_2)}{L}}$$

Surface coefficient of heat transfer, Film coefficient of heat transfer, Individual coefficient of heat transfer: heat transferred per (unit time) (unit area) (degree) ..... f

$$f = \frac{\frac{q}{A}}{t_1 - t_2}$$

(In general f is not equal to k/L, where L is the actual thickness of the fluid film.)

Over-all coefficient of heat transfer, Thermal transmittance per unit area: heat transferred per (unit time) (unit area) (degree over-all) ..... U

$$U = \frac{\frac{q}{A}}{t_1 - t_2}$$

Thermal transmission (heat transferred per unit time) ..... q

$$q = \frac{Q}{t}$$

[4]Terms ending *ivity* designate properties independent of size or shape, sometimes called *specific properties*. Examples: conductivity, resistivity. Terms ending *ance* designate quantities depending not only on the material, but also upon size and shape, sometimes called *total quantities*. Examples: conductance, transmittance. Terms ending *ion* designate rate of heat transfer. Examples: conduction, transmission.