f = friction factor for single-phase flow.
f' = friction factor for gas flow inside pipes with wetted walls (see Fig. 14).
G = mass velocity, pounds mass per (hour) (square foot). Subscripts have following meanings:
  i = total at inlet.
  l = liquid, based on total cross section of tube.
  m = mean.
  max = for velocity through minimum face area.
  o = total at outlet.
  v = vapor, based on total cross section of tube.
g = gravitational acceleration = 4.17×10^8, feet per (hour) (hour).
h = heat transfer coefficient, Btu per (hour) (square foot) (Fahrenheit degree). Subscript c indicates convection and subscript r = radiation.
h_{fg} = latent heat of vaporization, Btu per pound.
J = mechanical equivalent of heat = 778.16 foot pounds per Btu.
K_f = dimensionless number (see Equations 14–17, Table 7).
k = thermal conductivity, Btu per (hour) (square foot) (Fahrenheit degree per foot thickness). Subscript f indicates conductivity at film temperature t_f. Subscript l indicates liquid, subscript v indicates vapor.
L = length of tube or height of plate, feet.
L_m = mean length of heat flow path, feet.
L_{mf} = mean length of fin = a_f/D_m, feet. (See Equation 7a, Table 8.)
M = mass, pounds.
m = exponent in heat transfer equations.
N = number of tubes in a vertical tier.
(NTU) = number of exchanger heat transfer units (see Equation 37).
n = exponent in heat transfer equations.
q = heat flow rate, Btu per hour. Subscript c indicates convection, r indicates radiation, and rc indicates combined convection and radiation.
R = thermal resistance, (hour) (Fahrenheit degrees) per Btu. Subscripts c, o, and r indicate convection, overall, and radiation, respectively.
r_i = inside radius, feet.
r_o = outside radius, feet.
T = absolute temperature, Rankine degrees.
t = temperature, Fahrenheit. Subscripts have the following meaning:
  e = surrounding environment.
  f = film.
  s = surface.
  sat = saturation or dew point of vapor.
U = overall heat transfer coefficient, Btu per (hour) (square foot) (Fahrenheit degree).
V = linear velocity, feet per second.
W = total rate of energy emission, Btu per (hour) (square foot). Subscript b refers to radiation from a black body.
W_λ = monochromatic emissive power, ergs per (sec) (square centimeter per centimeter). Subscript b refers to the monochromatic emissive power of a black body.
w = total mass flow rate, pounds mass per hour.
w_l = liquid mass flow rate (in particular, flow rate of condensate from lowest point on condensing surface), pounds mass per hour.
w_v = vapor mass flow rate.
x = vapor fraction = w_v/w.
x, y, z = lengths along principal coordinate axes.
Z = ratio of fluid capacity rates (see Equation 38).
α = thermal diffusivity = $k/\rho c_p$, square feet per hour.
α = absorptivity. Subscript λ refers to monochromatic absorptivity.
β = coefficient of thermal expansion (Rankine degree)$^{-1}$.
Γ = mass rate of flow of condensate from lowest point on condensing surface, divided by the breadth; pounds per (hour) (foot). For a vertical tube, $\Gamma = w_l/\pi d$; for a vertical plate, $\Gamma = w_l/b$; for a horizontal tube, $\Gamma = w_l/2L$.
ΔP = difference in saturation pressure in a boiling liquid corresponding to the temperature difference Δt, pounds per square foot.
Δp = pressure difference, inches of water.
Δt = temperature difference, Fahrenheit degrees. For boiling or condensing, $\Delta t = \pm (t_{sat} - t_s)$.
Δt_m = mean temperature difference, Fahrenheit degrees.
δ = distance between fins, feet.
ϵ = hemispherical emissivity. Subscript λ refers to monochromatic emissivity.
λ = wave length, centimeters.
η = exchanger heat transfer effectiveness (see Eq. 36).
θ = contact angle between bubble and surface, radians.
μ = absolute viscosity, pounds per (foot) (hour). Subscript f indicates viscosity at film temperature t_f and s indicates viscosity at surface temperature t_s. Subscripts l and v indicate liquid and vapor, respectively.
ν = kinematic viscosity = μ/ρ, square feet per hour.
σ = Stefan-Boltzmann constant = 1713×10^{-12} Btu per (hour) (square feet) (Rankine degrees).[1]
σ_t = surface tension, pounds per foot.
ρ = density, pounds per cubic foot. Subscript f indicates density at film temperature t_f. Subscripts l and v indicate liquid and vapor, respectively.
ρ = reflectivity. Subscript λ refers to monochromatic reflectivity.
τ = transmissivity. Subscript λ refers to monochromatic transmissivity.
τ = time, hours.
ϕ = fin efficiency (see Equation 18).
ϕ_s = surface efficiency (see Equation 20).

Subscripts, unless specifically defined with a symbol, have the following meaning:
c = convection
e = environment
f = evaluated at film temperature
i = inlet
l = liquid
m = mean
o = outlet
r = radiation
s = surface
rc = combined convection and radiation
sat = evaluated at saturation temperature
v = vapor

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