

STANDARD NOMENCLATURE

Independent Variables

r	Radial coordinate in cylindrical geometry
t	Time
θ	Azimuthal coordinate in cylindrical geometry
x	Coordinate for one-dimensional geometry
z	Axial coordinate in cylindrical geometry

Other Variables

A	Area
c	Shear or friction coefficient in two-fluid equations
c_p	Specific heat at constant pressure
c_v	Specific heat at constant volume
D	Diameter
e	Specific internal energy
FA	Flow area
g	Acceleration caused by gravity
G	Mass flux ($\rho_m V_m$)
h	Specific enthalpy or heat-transfer coefficient
h_{g}	Latent heat of vaporization
H	Pump head ($\Delta P/\rho$)
k	Thermal conductivity, form-loss coefficient, pipe roughness, or reactor multiplication constant
m	Mass
Nu	Nusselt number
p	Pressure or power
q	Heat-generation rate
q''	Heat flux
q'''	Volumetric heat-generation rate
Q	Pump volumetric flow
R	Radius or neutronic reactivity
Re	Reynolds number
T	Temperature

Other Variables

V	Velocity
vol	Hydrodynamic cell volume
We	Weber number
X	Quality
α	Vapor volume fraction or absorptivity
Γ	Net volumetric vapor-production rate caused by phase change
δ	Mean fuel-surface roughness
Δ	Increment
ϵ	Emissivity
μ	Viscosity
ρ	Microscopic density
σ	Surface tension or Stefan-Boltzmann constant

τ	Shear stress
ϕ^2	Two-phase friction-factor multiplier
ω	Angular velocity
Ω	Pump-impeller angular velocity

Subscripts

a	Noncondensable-gas component
b	Bubble
c	Cladding
d	Droplet
f	Fuel or friction
g	Gas field or vapor
h	Hydraulic
i	Interface (liquid-vapor) quantity or one-dimensional cell in heat-transfer equations
j	One-dimensional cell index in hydrodynamics equations
l	Liquid field
ℓ	Liquid field
ℓg	Liquid to vapor
m	Mixture quantities
s	saturation conditions
sat	saturation conditions
v	vapor
w	wall property