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## NOMENCLATURE

A	exchange surface m <sup>2</sup>
b	plate pitch mm
c <sub>p</sub>	specific heat J·kg <sup>-1</sup> ·K <sup>-1</sup>
C	Nusselt correlation coefficient
D	diameter m

EG	generated entropy
F	pressure drop function
f	friction factor
G	normalized flow rate kg·s <sup>-1</sup> ·m <sup>-2</sup>
$\bar{h}$	mean convect. heat transf. coeff. W·m <sup>-2</sup> ·K <sup>-1</sup>
H <sub>e</sub>	PHE global heat transf. coeff. W·m <sup>-2</sup> ·K <sup>-1</sup>
L	heat exchanger length m
$\dot{m}$	mass flow rate kg·s <sup>-1</sup>
n	Nusselt exponent correlation
N	number of passes
NTU	PHE number of transfer units
Nu	Nusselt number
p	Pressure Pa
Pr	Prandtl number
$\dot{Q}$	thermal power W
Re	Reynolds number
$\dot{S}$	entropy W·K <sup>-1</sup>
s	specific entropy J·kg <sup>-1</sup> ·K <sup>-1</sup>
t	plate thickness mm
T	temperature K
v	fluid velocity m·s <sup>-1</sup>
w	plate width cm
y	vertical direction

## Greek symbols

β	<i>chevron</i> angle
Δ	variation
ε	PHE efficiency
λ	thermal conductivity W·m <sup>-1</sup> ·K <sup>-1</sup>
μ	dynamic viscosity Pa·s
η	quality index
ρ	density kg·m <sup>-3</sup>
σ	pressure drop coefficient
τ	temperature ratio
ω	thermal capacity ratio

## Subscripts

av	average
c	cold
eff	plate height
eq	equivalent
h	hot
in	inlet
out	outlet
p	pipe port
w	wall