

Table 8.1 Empirical Post-Dryout Correlations

Groeneveld

Geometry	a	b	c	d	No of points	RHS error
Tubes	$\times 10^{-3}$	0.989	1.41	-1.15	438	11.5%
Annuli	$\times 10^{-2}$	0.688	1.26	-1.06	266	6.9%
Tubes and annuli	3.27×10^{-3}	0.901	1.32	-1.50	704	12.4%

Slaughterbeck

Geometry	a	b	c	e	f	RHS error
Tubes	1.16×10^{-4}	0.838	1.81	-0.278	-0.508	12.0%

Range of data on which correlations are based

Geometry	Tube	Annulus
Flow Direction	Vertical and Horizontal	Vertical
De, cm	0.25 to 2.5	0.15 to 0.63
P, bars	68 to 215	34 to 100
C, g/cm ² s	70 to 530	90 to 410
x, fraction by weight	0.10 to 0.90	0.10 to 0.90
q, W/cm ²	12 to 210	45 to 225
Nu _g	95 to 1770	160 to 640
[Re _g (X.(1-X)ρ _g /ρ _o)]	6.6×10^4 to 1.3×10^6	1.0×10^5 to 3.9×10^5
Pr ^w	0.88 to 2.21	0.91 to 1.22
Y	0.706 to 0.976	0.610 to 0.963