

**Table 2.1 Flow-Pattern Maps for Horizontal Two-Phase Flow Systems Based on Generalized Coordinate Parameters**

Author	Fluids	Pipe Diameter	Coordinate Parameter
Bergelin & Gazley (1949)	Air-Water	1 in.	$W_f, W_g$
Kosterin (1949)	Air-Water	1, 2, 3 & 4 in.	$\beta, j$
Johnson & Abou-Sabe (1952)	Air-Water	0.87 in.	$W_f, W_g$
Krasiakova (1952)	Air-Water	30 mm.	$j_f, j_g$
Alves (1954)	Air-Water	1.049 in.	$j_f, j_g$
Baker (1955)	Air-Oil	Data from Others	$G_g/\lambda, G_f \lambda\phi/G_g$
	Air-Water		
White & Huntington (1958)	Natural Gas-Oil	1, 1.5 & 2 in.	$G_g, G_g$
	Air-Water		
	Air-Oil		
Hoogendoorn (1959)	Natural Gas-Oil	24-140 mm	$\beta, j$
	Air-Water		
Hoogendoorn & Beutelaar (1961)	Air-Oil	Data from Others	$G_g/\lambda, G_f \lambda\phi/G_g$
Scott (1963)	Air-Water		
Knowles et al. (1965)	Air-Oil	2 & 4 in.	$Re_T, We_T$
	Natural Gas-Liquid		
Eaton et al. (1967)	Natural Gas-Water	Data from Others	$Re_{EA}, We_{EA}$
	Natural Gas-Crude Oil		
	Natural Gas-Distillate Systems		
Schicht (1969)	Air-Water	94 mm	$\lambda G_g, G_f \lambda\phi/G_g$
Al-Sheikh et al. (1970)	Gas-Liquid	Data from Others	Ten Parameters
Govier & Aziz	Air-Water	Data from Others	$Y_{j_f}, X_{j_g}$
	Natural Gas-Oil	UC Multiphase	$j_f, \zeta, j_g$
Mandhane et al. (1964)	Gas-Liquid		
Simpson et al. (1977)	Air-Water	Data Bank	$G_f, G_g$
		127 mm	
Weisman et al. (1979)	Freon-113	2.5 ~ 4.5 cm	$j_g/\phi_1, j_f/\phi_2$
Spedding & Nguyen (1980)	Air-Water	4.55 mm	$j/\tilde{A}g_b, j_f/j_g$
Spedding & Chen (1981)	Gas-Liquid	Data from Others	$j_f, j_g$

