

Table 2.5 Experimental results.

Pressure (kPa)	Velocity (m/s)	$\eta v/p$ ( $\mu\text{m}$ )	$\mu$	Distance Slid (m)	Mass Loss (mg)	Volume Loss ( $\text{mm}^3$ )	MRR ( $\text{nm/min}$ )	NMRR ( $\text{nm/m}$ )	$k_p$ ( $\text{MPa}^{-1}$ )
14 (2 psi)	0.03	0.06	0.41	3.35	1.01	0.11	6.98	4.17	$302.13 \times 10^{-9}$
	0.05	0.10	0.49	5.59	1.77	0.20	12.24	4.38	317.69
	0.07	0.16	0.40	8.94	2.39	0.27	16.52	3.70	268.11
	0.13	0.28	0.17	15.64	1.93	0.22	13.34	1.71	123.71
	0.22	0.49	0.08	26.81	1.40	0.16	9.68	0.72	52.35
	0.37	0.81	0.04	44.69	0.63	0.07	4.36	0.19	14.13
	0.64	1.40	0.04	77.08	1.60	0.18	11.06	0.29	20.81
	1.12	2.43	0.05	134.06	1.88	0.21	13.00	0.19	14.06
	2.05	4.46	0.05	245.76	1.71	0.19	11.82	0.10	6.98
	3.91	8.51	0.05	469.20	6.36	0.71	43.97	0.19	13.59
48 (7 psi)	0.09	0.06	0.44	11.17	4.37	0.49	30.21	5.41	112.05
	0.17	0.10	0.39	20.11	7.38	0.83	51.03	5.06	105.14
	0.28	0.17	0.37	33.51	12.81	1.44	88.57	5.29	109.50
	0.47	0.29	0.33	55.86	19.64	2.20	135.79	4.86	100.70
	0.70	0.43	0.14	83.79	15.93	1.79	110.10	2.63	54.45
	1.40	0.87	0.09	167.57	23.88	2.68	165.11	1.97	40.80
	2.26	1.41	0.07	271.47	25.54	2.86	176.58	1.30	26.95
	3.91	2.43	0.06	469.20	32.18	3.61	222.49	0.95	19.65

Slurry:  $0.3\mu\text{m}$   $\text{Al}_2\text{O}_3$  (2-3 vol.%),  $\text{pH}=7$ ,  $\eta=0.03 \text{ Pa}\cdot\text{s}$ , Slurry flow rate = 150 - 250 ml/min

Pad: IC1400

Test duration = 2 min.