

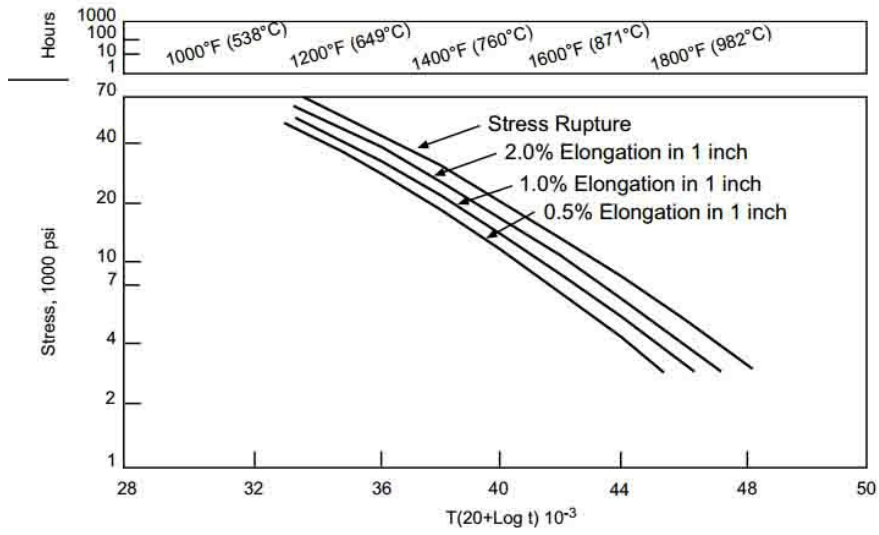
HASTELLOY<sup>®</sup> N alloy

Total Elongation

0.063 - in. SHEET

Test Temperature		Stress psi	Life h	Time, Hours, for Elongation of											
°F	°C			0.1%	0.2%	0.3%	0.4%	0.5%	0.75%	1.0%	1.5%	2.0%	3.0%	4.0%	5.0%
1300	704	20,000	285.5	0.29	15.0	26.9	33.7	40.5	57.0	70.5	96.8	121.7	168.7	209.5	245.5
		20,000	277.4	20.2	52.4	58.9	65.4	72.0	87.8	103.4	133.0	160.0	207.1	219.4	-
		20,000	462.9	0.86	16.2	29.4	46.6	50.2	62.0	73.7	96.7	141.7	225.5	326.9	369.9
		20,000	328.6	1.1	7.3	15.3	23.1	30.7	50.0	64.8	94.0	123.0	178.2	223.9	265.5
		25,000	109.6	-	0.14	1.14	2.43	5.14	7.74	10.3	15.4	20.6	41.2	60.6	78.6
		25,000	165.9	-	3.9	12.8	20.2	26.5	37.4	47.9	64.7	80.3	109.8	133.8	-
		25,000	116.9	-	1.9	5.63	9.5	13.2	22.8	28.5	37.4	46.4	63.1	78.6	91.9
		25,000	125.8	-	6.6	10.9	15.2	19.6	30.3	36.0	47.0	57.2	82.4	116.3	-
		35,000	19.0	-	-	-	-	-	-	-	0.62	4.78	-	-	-
		35,000	16.9	-	-	-	-	-	-	0.38	3.7	-	-	-	-
		35,000	23.3	-	-	-	-	-	-	-	3.0	5.9	-	-	-
		35,000	15.1	-	-	-	-	-	-	-	-	1.4	4.4	-	-
1500	816	8,000	157.7	2.34	7.31	11.6	16.0	20.4	29.7	37.7	53.4	69.4	95.4	116.8	132.4
		8,000	136.8	0.9	4.4	7.8	11.5	15.2	24.4	30.7	43.0	55.8	78.9	97.3	110.7
		8,000	210.0	0.75	3.7	7.0	10.6	14.2	23.5	31.1	46.1	59.2	89.5	114.4	136.2
		8,000	184.6	0.75	4.0	8.1	12.9	17.8	28.5	37.5	55.3	73.3	103.2	128.6	145.1
		10,000	80.2	0.67	3.8	7.0	8.4	9.4	13.3	16.8	23.8	28.3	38.4	47.3	56.8
		10,000	64.3	1.3	3.3	5.0	6.47	7.8	11.2	-	-	-	-	-	-
		10,000	86.5	1.58	4.17	6.5	9.3	10.4	15.3	20.2	28.8	36.6	51.6	62.5	73.5
		10,000	83.4	1.17	3.7	6.0	8.0	9.7	14.1	18.5	25.9	32.0	44.1	56.2	68.2
		15,000	19.8	0.15	0.73	1.02	1.55	1.94	2.9	3.85	5.76	-	-	-	-
		15,000	19.7	0.27	1.1	1.84	2.21	2.45	3.15	3.82	-	-	-	-	-
		15,000	20.9	-	-	0.2	0.48	0.76	1.53	2.32	3.9	5.5	-	-	-
		15,000	15.5	-	0.54	1.06	1.32	1.57	2.27	2.95	4.3	5.7	-	-	-
1700	927	3,000	297.7	1.67	7.5	13.1	18.7	24.3	38.7	53.0	78.4	97.8	130.1	155.2	176.0
		3,000	155.6	2.3	5.3	7.9	10.3	13.1	19.8	26.5	39.7	53.0	76.6	93.2	106.8
		3,000	237.5	2.14	5.54	8.8	11.7	14.6	22.0	29.4	44.0	58.7	83.4	102.9	119.0
		3,000	187.5	1.72	4.41	6.97	9.9	12.9	20.4	28.0	42.9	58.0	85.4	103.9	118.3
		4,000	69.0	0.18	0.55	0.9	1.25	1.6	3.67	6.53	12.1	17.8	28.6	-	-
		4,000	62.7	0.25	0.88	1.47	2.11	3.66	7.21	10.2	15.9	21.7	-	-	-
		4,000	87.0	1.54	3.85	6.0	7.8	9.1	14.4	18.9	28.0	34.8	48.2	58.6	66.8
		4,000	83.1	0.6	2.47	5.1	7.51	8.95	12.6	16.6	23.6	-	-	-	-
		6,000	23.4	0.26	0.7	1.1	1.5	1.9	2.8	3.67	5.23	6.25	8.3	10.3	12.3
		6,000	22.5	0.12	0.5	0.81	1.13	1.45	2.24	4.53	5.9	-	-	-	-
		6,000	17.5	0.13	0.57	0.9	1.2	1.47	2.2	2.9	4.25	5.5	-	-	-
		6,000	33.9	0.28	0.8	1.41	2.0	2.64	4.2	5.7	8.4	11.2	16.6	22.1	26.1

Larson-Miller Plot, Sheet\*\*



\*\* 0.063 inch thick, heat-treated at 2150°F, RAC