

TYPICAL MECHANICAL PROPERTIES

The following typical properties are not guaranteed since in most cases they are averages for various sizes and methods of manufacture and may not be exactly representative of any particular product or size. The data is intended for comparing alloys and tempers and should not be used for design purposes.

Alloy	Temper	Tensile Strength	Yield Strength	Elongation (%) for the following gauge ranges:		Tensile Strength	Yield Strength	Elongation (%) for the following gauge ranges:	
		(ksi)	(ksi)	0.010-0.050"	0.051-.125"	(MPa)	(MPa)	0.25-1.25mm	1.26-3.0mm
1100	O	13	5	30	32	89.6	34.5	30	6
	H12	16	15	4	12	110.3	103.4	4	12
	H14	18	17	3	10	124.1	117.2	3	10
	H16	21	20	2	8	144.8	137.9	2	8
	H18	24	22	2	6	165.5	151.7	2	6
1350	O	12	4	34	42	82.7	27.6	34	42
	H12	14	12	5	12	96.5	82.7	5	12
	H14	16	14	3	9	110.3	96.5	3	9
	H16	18	16	3	8	124.1	110.3	3	8
	H19	27	24	2	6	186.2	165.5	2	6
2024	O	27	11	18	20	186.2	75.8	18	20
	T3	70	50	16	18	482.6	344.7	16	18
	T4	68	47	20	19	468.8	324.1	20	19
3003	O	16	6	30	33	110.3	41.4	30	33
	H12	19	18	9	11	131.0	124.1	9	11
	H14	22	21	3	7	151.7	144.8	3	7
	H16	26	25	3	5	179.3	172.4	3	5
	H18	29	27	3	5	199.9	186.2	3	5
3004	O	26	10	19	23	179.3	68.9	19	23
	H32	31	25	6	15	213.7	172.4	6	15
	H34	35	29	5	10	241.3	199.9	5	10
	H36	38	33	5	8	262.0	227.5	5	8
	H38	41	36	4	6	282.7	248.2	4	6
3005	O	20	8	22	23	137.9	55.2	22	23
	H12	26	24	5	13	179.3	165.5	5	13
	H14	29	28	4	9	199.9	193.1	4	9
	H16	31	30	3	5	213.7	206.8	3	5
	H18	37	36	2	3	255.1	248.2	2	3
5005	O	18	6	22	25	124.1	41.4	22	25
	H12	20	19	5	9	137.9	131.0	5	9
	H14	23	22	4	7	158.6	151.7	4	7
	H16	26	25	3	5	179.3	172.4	3	5
	H18	29	28	2	2	199.9	193.1	2	2
	H32	20	17	8	9	137.9	117.2	8	9
	H34	23	20	6	8	158.6	137.9	6	8
	H36	26	24	5	6	179.3	165.5	5	6
	H38	29	27	3	4	199.9	186.2	3	4
5050	O	21	8	20	25	144.8	55.2	20	25
	H32	25	21	9	13	172.4	144.8	9	13
	H34	28	24	5	10	193.1	165.5	5	10
	H36	30	26	4	7	206.8	179.3	4	7
	H38	32	29	2	4	220.6	199.9	2	4
5052	O	28	13	20	21	193.1	89.6	20	21
	H32	33	28	7	10	227.5	193.1	7	10
	H34	38	31	6	8	262.0	213.7	6	8
	H36	40	35	4	5	275.8	241.3	4	5
	H38	42	37	3	4	289.6	255.1	3	4
5056	O	42	22	23	24	289.6	151.7	23	24
	H38	60	50	6	13	413.7	344.7	6	13
5182	O	40	21	21	25	275.8	144.8	21	25
	H32	41	22	20	21	282.7	151.7	20	21
	H34	48	37	11	14	330.9	255.1	11	14
	H36	51	42	9	11	351.6	289.6	9	11
	H38	54	47	6	7	372.3	324.1	6	7
6061	O	18	8	25	26	124.1	55.2	25	26
	T4	35	21	22	24	241.3	144.8	22	24
	T6	45	40	12	17	310.3	275.8	12	17
7075	O	33	15	16	18	227.5	103.4	16	18
	T6	83	73	11	12	572.3	503.3	11	12

