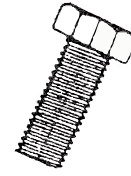


CAIN BOLT & GASKET INC.



CHEMICAL AND MECHANICAL PROPERTIES OF NUTS AND BOLTS

	ASTM Spec Grade		AISI Mat'l	C	Si	Mn	P	S	Ni	Cr	Mo	Others	Mechanical Properties					
													0.2% Yield Strength psi	Tensile Strength psi	Elongation %	Reduction %	Hardness HB	
BOLT	FERRITIC	A193 B5	501	min 0.10	max 1.00	max 1.00	max 0.040	max 0.030		4.00-6.00	0.40-0.65		min 80000	min 100000	min 16	min 50		
		B 8	410	max 0.15	max 1.00	max 1.00	max 0.040	max 0.030		11.50-13.50			min 85000	min 110000	min 15	min 50		
		B 7	4140	0.38-0.48	0.20-0.35	0.75-1.00	max 0.040	max 0.040		0.80-1.10	0.15-0.25		min 105000*	min 125000*	min 16*	min 50*		
		B 16		0.38-0.44	0.20-0.35	0.45-0.70	max 0.040	max 0.040		0.80-1.15	0.50-0.65		min 105000*	min 125000*	min 18*	min 50*		
	AUSTENITIC	A320 L7	4140	0.38-0.48	0.20-0.35	0.75-1.00	max 0.040	max 0.040		0.80-1.10	0.15-0.25		min 105000*	min 125000*	min 16*	min 50*		
		L7A	4037	0.35-0.40	0.20-0.35	0.70-0.90	max 0.035	max 0.040		0.80-1.10	0.20-0.30		min 105000	min 125000	min 16	min 50		
		L7B	4137	0.35-0.40	0.20-0.35	0.70-0.90	max 0.035	max 0.040		0.80-1.10	0.15-0.25		min 105000	min 125000	min 16	min 50		
		L7C	8740	0.38-0.43	0.20-0.35	0.75-1.00	max 0.035	max 0.040	0.40-0.70	0.40-0.60	0.20-0.35		min 105000	min 125000	min 16	min 50		
		L43	4340	0.38-0.43	0.20-0.35	0.80-0.85	max 0.040	max 0.040	1.65-2.00	0.70-0.90	0.20-0.30		min 105000	min 125000	min 16	min 50		
AUSTENITIC	A193/A320 B8	304	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	8.00-12.00	18.00-20.00			min 30000	min 75000	min 30	min 50	max 192		
	B8C	347	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	9.00-13.00	17.00-19.00			min 30000	min 75000	min 30	min 50	max 192		
	B8M	316	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	10.00-14.00	16.00-12.00	2.00-3.00		min 30000	min 75000	min 30	min 50	max 192		
	B8T	321	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	9.00-12.00				min 30000	min 75000	min 30	min 50	max 192		
AUSTENITIC	A453 660	660	max 0.08	max 1.00	max 2.00	max 0.040	max 0.030	24.00-27.00	13.00-16.00	1.00-1.50		min 85000	min 130000	min 15	min 18	248-341		
	651	651	0.28-0.35	0.30-0.80	0.75-1.50	max 0.040	max 0.030	8.00-11.00	18.00-21.00	1.00-1.75		min 50000**	min 95000	min 18**	min 35**	210-270		
NUT	FERRITIC	A194 3	501	min 0.10	max 1.00	max 1.00	max 0.040	max 0.030		4.00-6.00	0.40-0.65						248-352	
		6	416	max 0.15	max 1.00	max 1.50	max 0.060	max 0.150		12.00-14.00	max 0.60						248-352	
		2H	1045	min 0.40			max 0.040	max 0.050										248-352
		4		0.40-0.50	0.20-0.35	0.70-0.90	max 0.035	max 0.040			0.20-0.35							248-352
		7	4140	0.38-0.48	0.20-0.35	0.70-1.00	max 0.040	max 0.040			0.80-1.10							248-352
	AUSTENITIC	A194 8	304	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	8.00-12.00	8.00-20.00								128-192
		8C	347	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	9.00-13.00	7.00-19.00								128-192
		8M	316	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	10.00-14.00	6.00-18.00	2.00-3.00							128-192
		8T	321	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	9.00-12.00	7.00-19.00								128-192

DISCLAIMER: Properties and application parameters shown in this manual are presented in good faith but no warranty is expressed or implied. Failure to properly use gasket material could result in serious injury or death.

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