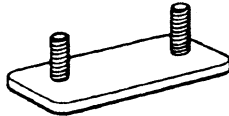


STANDARD BOLT TORQUE SPECIFICATIONS

IN008-01

HOW TO DETERMINE BOLT STRENGTH

	Mark	Class		Mark	Class
Hexagon head bolt	 Bolt head No. 4- 5- 6- 7- 8- 9- 10- 11-	4T 5T 6T 7T 8T 9T 10T 11T	Stud bolt	 No mark	4T
	 No mark	4T			
Hexagon flange bolt wl washer hexagon bolt	 No mark	4T		 Grooved	6T
Hexagon head bolt	 2 protruding lines	5T			
Hexagon flange bolt wl washer hexagon bolt	 2 protruding lines	6T	Welded bolt		4T
Hexagon head bolt	 3 protruding lines	7T			
Hexagon head bolt	 4 protruding lines	8T			

SPECIFIED TORQUE FOR STANDARD BOLTS

Class	Diameter mm	Pitch mm	Specified torque					
			Hexagon head bolt			Hexagon flange bolt		
			N-m	kgf-cm	ft-lbf	N-m	kgf-cm	ft-lbf
4T	6	1	5	55	48 in.-lbf	s	60	52 in.-lbf
	8	1.25	12.5	130	9	14	145	10
	10	1.25	2s	260	19	29	290	21
	12	1.25	47	480	35	53	540	39
	14	1.5	74	760	55	84	850	61
	16	1.5	115	1,150	83			
5T	8	1	6.5	65	56 in.-lbf	7.5	75 65 in.-lbf	
	10	1.25	15.5	160	12	17.5	175 13	
	12	1.25	32	330	24	36	360 26	
	14	1.25	59	600	43	65	670 48	
	16	1.5	91	930	67	100	1,050 76	
		1.5	140	1,400	101			
6T	6	1	8	80 69 in.-lbf		9	90	78 in.-lbf
	10	1.25	19	195 14		21	210	15
	12	1.25	39	400 29		44	440	32
	14	1.25	71	730 53		80	810	59
	16	1.5	110	1,100 80		125	1,250	90
		1.5	170	1,750 127				
7T	6	1	10.5	110	8	12	120	9
	10	1.25	25	260	19	28	290	21
	12	1.25	52	530	38	58	590	43
	14	1.25	95	970	70	105	1,050	76
	16	1.5	145	1,500	108	165	1,700	123
		1.5	230	2,300	166	-	-	-
8T	8	1.25	29	300	22	33	330	24
	10	1.25	61	620	45	68	690	50
	12	1.25	110	1,100	80	120	1,250	90
9T	8	1.25	34	340	25	37	380	27
	10	1.25	70	710	51	78	790	57
	12	1.25	125	1,300	94	140	1,450	105
10T	8	1.25	38	390	28	42	430	31
	10	1.25	78	800	58	87	890	64
	12	1.25	140	1,450	103	155	1,600	116
11T	8	1.25	42	430	31	47	480	35
	10	1.25	87	890	64	97	990	72
	12	1.25	155	1,600	116	175	1,800	130