



UNF Tightening Torque

Hex Bolts

Tightening Torque

UNF - RECOMMENDED TIGHTENING TORQUE									
Nominal Size	TPI	Grade 5				Grade 8			
		Plain		Zinc		Plain		Zinc	
	(mm)	Nm	lbft	Nm	lbft	Nm	lbft	Nm	lbft
1/4"	28	11.4	8.4	8.0	5.9	16.0	11.8	11.2	8.3
5/16"	24	22.7	16.7	15.9	11.7	32.0	23.6	22.4	16.5
3/8"	24	41.1	30.3	28.8	21.2	58.0	42.8	40.6	30.0
7/16"	20	64.9	47.9	45.4	33.5	91.6	67.6	64.1	47.3
1/2"	20	99.8	73.6	69.9	51.5	140.9	103.9	98.6	72.8
9/16"	18	142.7	105.2	99.9	73.7	201.4	148.6	141.0	104.0
5/8"	18	199.8	147.3	139.8	103.1	282.0	208.0	197.4	145.6
3/4"	16	349.3	257.6	244.5	180.3	493.1	363.7	345.2	254.6
7/8"	14	556.0	410.1	389.2	287.1	785.0	579.0	549.5	405.3
1"	12	827.7	610.5	579.4	427.4	1168.6	861.9	818.0	603.3
1-1/8"	12	1046.7	772.0	732.7	540.4	1697.3	1251.9	1188.1	876.3
1-1/4"	12	1457.8	1075.2	1020.5	752.7	2364.0	1743.6	1654.8	1220.5
1-1/2"	12	2577.6	1901.2	1804.3	1330.8	4179.9	3083.9	2925.9	2158.1



The tightening torque values given in the above table serve only as a guide. A k factor of 0.2 has been used which assumes threads are plain finish, burr-free with a light oil coating. A k factor of 0.14 has been used for zinc plated. Note that these figures are based on the first tightening of single assemblies in isolation.

Bolt Tension | Anti-Vibration | Product Reliability | Traceability