



UNC Tightening Torque

Hex Bolts

Tightening Torque

UNC - 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"	20	9.9	7.3	6.9	5.1	14.0	10.3	9.8	7.2
5/16"	18	20.5	15.1	14.3	10.6	28.9	21.3	20.2	14.9
3/8"	16	36.3	26.8	25.4	18.7	51.2	37.8	35.9	26.4
7/16"	14	58.1	42.9	40.7	30.0	82.1	60.5	57.4	42.4
1/2"	12	88.6	65.3	62.0	45.7	125.1	92.2	87.5	64.6
9/16"	12	127.9	94.4	89.5	66.0	180.6	133.2	126.4	93.2
5/8"	11	176.3	130.1	123.4	91.0	249.0	183.6	174.3	128.5
3/4"	10	312.7	230.7	218.9	161.5	441.5	325.7	309.1	228.0
7/8"	9	504.7	372.2	353.3	260.6	712.5	525.5	498.8	367.9
1"	8	756.6	558.0	529.6	390.6	1068.1	787.8	747.7	551.5
1-1/8"	7	933.0	688.1	653.1	481.7	1512.9	1115.9	1059.1	781.1
1-1/4"	7	1316.5	971.0	921.6	679.7	2134.9	1574.6	1494.4	1102.2
1-3/8"	6	1726.2	1273.1	1208.3	891.2	2799.2	2064.6	1959.4	1445.2
1-1/2"	6	2290.7	1689.5	1603.5	1182.7	3714.6	2739.8	2600.2	1917.8
1-3/4"	5	3612.1	2664.1	2528.5	1864.9	5857.4	4320.2	4100.2	3024.2
2"	4.5	5430.2	4005.1	3801.2	2803.6	8805.8	6494.8	6164.0	4546.4
2-1/4"	4.5	7948.1	5862.2	5563.6	4103.5	12888.7	9506.3	9022.1	6654.4



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

hobson.com.au **QUALITY FASTENERS SINCE 1935**