

針對不同尺寸及不同材質的螺絲如何選定擰緊扭力

Torque recommendations

The torque is important to ensure the required clamping force. The table shows the recommended max tightening torque for the most common types of screws and bolts: untreated, oil-smearred screws (friction coefficient = 0.125) with metric coarse thread. The torque corresponds to approximately 62% of tensile stress.

M-threaded screws/bolts Tightening torque Nm, according to ISO 898/1

Thread	Bolt grade (螺絲材質等級)							Thread	Bolt grade (螺絲材質等級)					
	3.6	4.6	4.8	5.8	8.8	10.9	12.9		4.6	4.8	5.8	8.8	10.9	12.9
M1.6	0.05	0.065	0.086	0.11	0.17	0.24	0.29	M14	48	58	80	128	181	217
M2	0.10	0.13	0.17	0.22	0.35	0.49	0.58	M16	74	88	123	197	277	333
M2.2	0.13	0.17	0.23	0.29	0.46	0.64	0.77	M18	103	121	172	275	386	463
M2.5	0.20	0.26	0.35	0.44	0.70	0.98	1.20	M20	144	170	240	385	541	649
M3	0.35	0.46	0.61	0.77	1.20	1.70	2.10	M22	194	230	324	518	728	874
M3.5	0.55	0.73	0.97	1.20	1.90	2.70	3.30	M24	249	295	416	665	935	1120
M4	0.81	1.10	1.40	1.80	2.90	4.00	4.90	M27	360	435	600	961	1350	1620
M5	0.60	2.20	2.95	3.60	5.70	8.10	9.70	M30	492	590	819	1310	1840	2210
M6	2.80	3.70	4.90	6.10	9.80	14.0	17.0	M36	855	1030	1420	2280	3210	3850
M8		8.90	10.50	15.0	24.0	33.0	40.0	M42	1360		2270	3640	5110	6140
M10		17.0	21.0	29.0	47.0	65.0	79.0	M45	1690		2820	4510	6340	7610
M12		30.0	36.0	51.0	81.0	114.0	136.0	M48	2040		3400	5450	7660	9190

一般合金鋼螺絲的材質等級為 8.8