Class 10 Steel Nuts

Please be advised that class 10 steel nuts can be made from number of different specific grades and alloys of steel.

Some fasteners may exhibit reduced mechanical properties dependant on their shape. For example a thin nut may be marked with a leading zero "010", indicating the possibility of thread stripping at reduced load.

Nuts should be mated with a male fastener of the same class, or lower, in this instance a grade 10, or lower, screw.

The full technical information offered is available on standard ISO 898.

Chemical Content %

	Carbon	Manganese	Phosphorus	Sulphur
	Max %	Min %	Max %	Max %
Coarse Threaded Nut	0.58	0.30	0.048	0.058
Fine Thread Nut	0.58	0.30	0.048	0.058

All class 10 nuts are to be quenched and tempered.

Other alloying elements may be added, provided no mechanical properties are compromised.

Proof Load Values (N)				
Thread Form (Metric Coarse)	Class 6	Class 8	Class 10	Class 12
M5 x 0.8	9,500	12,140	14,800	16,300
M6 x 1	13,500	17,200	20,900	23,100
M7 x 1	19,400	24,700	30,100	33,200
M8 x 1.25	24,900	31,800	38,100	42,500
M10 x 1.5	39,400	50,500	60,300	67,300
M12 x 1.75	59,000	74,200	88,500	100,300
M14 x 2	80,500	101,200	120,800	136,900
M16 x 2	109,900	138,200	164,900	186,800
M18 x 2.5	138,200	176,600	203,500	230,400
M20 x 2.5	176,400	225,400	259,700	294,000
M22 x 2.5	218,200	278,800	321,200	363,600
M24 x 3	254,200	324,800	374,200	423,600
M27 x 3	330,500	422,300	486,500	550,800
M30 x 3.5	403,900	516,100	594,700	673,200
M33 x 3.5	499,700	638,500	735,600	832,800
M36 x 4	588,200	751,600	866,000	980,400
M39 x 4	702,700	897,900	1,035,000	1,171,000

Physical Properties	M5 - M16	> M16
Hardness properties - Coarse Pitch		
Vickers Hardness (HV) - Maximum	353	
Vickers Hardness (HV) - Minimum	272	
Brinell Hardness (HBW) - Maximum	336	
Brinell Hardness (HBW) - Minimum	259	
Rockwell hardness (HRB) - Maximum	-	
Rockwell hardness (HRB) - Minimum	-	
Rockwell hardness (HRC) - Maximum	36	
Rockwell hardness (HRC) - Minimum	26	
Hardness properties - Fine Pitch		
Vickers Hardness (HV) - Maximum	353	
Vickers Hardness (HV) - Minimum	295	60
Brinell Hardness (HBW) - Maximum	336	
Brinell Hardness (HBW) - Minimum	280	247
Rockwell hardness (HRB) - Maximum	-	
Rockwell hardness (HRB) - Minimum	-	
Rockwell hardness (HRC) - Maximum	36	
Rockwell hardness (HRC) - Minimum	29	24