



PROPERTIES OF HSFG PART I BOLT & NUT

BOLT SIZE	PITCH	STRESS AREA MM ²	BOLT/STUD/SCREW BS 4395 Gr. 8.8						NUT BS 4395 Gr. 10		
			PROOF STRESS N/MM ²	PROOF LOAD KN	TENSILE STRESS N/MM ²	TORQUE* N-m	HARDNESS HRC	ELONGATION# %	PROOF STRESS N/MM ²	PROOF LOAD KN	HARDNESS HRC
M6	1	20.1									
M8	1.25	36.6									
M10	1.5	58.8									
M12	1.75	84.3	587	49.5	827.0	79.7	25-34	12.0	1176	99.1	-30
M14	2.0	115.0	587	66.5	827.0	126.9	25-34	12.0	1176	135.2	-30
M16	2.0	157.0	587	92.2	827.0	198.0	25-34	12.0	1176	184.6	-30
M18	2.5	192.0	587	112.7	827.0	272.3	25-34	12.0	1176	225.8	-30
M20	2.5	245.0	587	143.8	827.0	386.1	25-34	12.0	1176	288.1	-30
M22	2.5	303.0	587	177.9	827.0	525.3	25-34	12.0	1176	356.3	-30
M24	3.0	353.0	587	207.2	827.0	667.6	25-34	12.0	1176	415.1	-30
M27	3.0	459.0	512	235.0	725.0	851.8	25-34	12.0	1176	539.8	-30
M30	3.5	561.0	512	287.2	725.0	1,157	25-34	12.0	1176	659.7	-30
M33	3.5	694.0	512	355.3	725.0	1,574	25-34	12.0	1176	816.1	-30
M36	4.0	817.0	512	418.3	725.0	2,022	25-34	12.0	1176	960.8	-30
M39	4.0	976.0									
M42	4.5	1,120.0									
M45	4.5	1,310.0									
M48	5.0	1,470.0									
M52	5.0	1,760.0									
M56	5.5	2,030.0									
M60	5.5	2,360.0									
M64	6.0	2,680.0									
M68	6.0	3,060.0									
M72	6.0	3,460.0									
DIMENSIONS			HEAVY HEX (HSFG)						HEAVY HEX (HSFG)		
MARKINGS			'RS' '8.8HR'						'RS' '8HR'		
CARBON			0.25 - 0.55						-0.58		
MANGENESE									-0.30		
SULPHUR			-0.035						-0.15		
SILICON											
CHROMIUM											
MOLYDENUM											
NICKLE											
VANADIUM											
BORON			-0.003								
PHOSPHOROUS			-0.035						-0.06		
Material			Medium Carbon Steel						Medium Carbon or Alloy Steel		

NOTES:

Left hand side of '-' is minimum value
 Right hand side of '-' is maximum value
 Eg. 0.5 - 0.7 min. is 0.5 and max is 0.7
 Eg. -0.8 max is 0.8 no minimum value
 Eg. 2.0- min. is 2.0 no maximum value

* Torque value based on 75% of proof load and finish as recieved steel