



ASTM A193 Grade-B7 Stud

Chemical requirement AISI 4140

Element	Range
Carbon	0.37 - 0.49
Manganese,max	0.65 - 1.10
Phosphorous,max	0.035
Sulphur,max	0.04
Silicon	0.15 - 0.35
Chromium	0.75 - 1.20
Molybdenum	0.40 - 0.65

Mechanical requirement B7

Req.	Size	Data
Tensile	upto 2 1/2 "	125 KSI,min
	2-5/8 - 4 "	115 KSI,min
	4-1/8 - 7 "	100 KSI,min
Yield	upto 2 1/2 "	105 KSI,min
	2-5/8 - 4 "	95 KSI,min
	4-1/8 - 7 "	75 KSI,min
Elong %	upto 2 1/2 "	16 min
	2-5/8 - 4 "	16 min
	4-1/8 - 7 "	18 min
Ra %	upto 2 1/2 "	50 min
	2-5/8 - 4 "	50 min
	4-1/8 - 7 "	50 min

Thread requirement

Coarse thread UNC : Most Common available thread.

Reg Office:79 Upendra Mitra Lane,Salkia Howrah-711106

Mumbai Office: Kesar Gardern Plot No-53 Sector-20 Kharghar Navi Mumbai-410210

Email: info@indanasteel.com Website:www.indanasteel.com CIN: U27106WB2011PTC164647



Generally used in sizes below 1"

Angle of thread 60 Degrees

8 UN Thread series : 8 threads per inch.
Generally used in sizes above 1"

B7

UNC				
Nominal Size	Basic Pitch Dia.	Section at Minor Dia.	Tensile Stress Area	Threads per inch
	In.	Sq in.	Sq in.	no.
3/8	0.3344	0.0678	0.0775	16
7/16	0.3911	0.0933	0.1063	14
1/2	0.45	0.1257	0.1419	13
9/16	0.5084	0.162	0.182	12
5/8	0.566	0.202	0.226	11
3/4	0.685	0.302	0.334	10
7/8	0.8028	0.419	0.462	9
8 UN	Basic Pitch Dia.	Section at Minor Dia.	Tensile Stress Area	Threads per inch
1	0.9188	0.551	0.606	8
1 1/8	1.0438	0.728	0.79	8
1 1/4	1.1688	0.929	1	8
1 3/8	1.2938	1.155	1.233	8
1 1/2	1.4188	1.405	1.492	8
1 5/8	1.5438	1.68	1.78	8
1 3/4	1.6688	1.98	2.08	8
1 7/8	1.7938	2.3	2.41	8
2	1.9188	2.65	2.77	8
2 1/4	2.1688	3.42	3.56	8
2 1/2	2.4188	4.29	4.44	8
2 3/4	2.6688	5.26	5.43	8
3	2.9188	6.32	6.51	8
3 1/4	3.1688	7.49	7.69	8
3 1/2	3.4188	8.75	8.96	8
3 3/4	3.6688	10.11	10.34	8
4	3.9188	11.57	11.81	8

Dimensional requirements :

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Length	Tolerance of B7 Stud
upto 12 "	+/- 0.062 "
12" to 18"	+/-0.125"
18" and up	+/-0.250"

Product Marking: Manufacturer ID and B7

Finish :

Plain - Light Oil

Finishing available :

HDG

Electroplated

CAD

Xylan

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