



MANUFACTURERS OF  
STAINLESS STEEL  
FASTENERS



# COMPANY PROFILE



Classic-Fastener Division, a pioneer in manufacturing Stainless Steel Fasteners in the Middle East, is a wholly owned subsidiary of The Classic Group based in Sharjah, United Arab Emirates (U.A.E). This latest and most ambitious venture of The Classic Group is a cold-forging fasteners manufacturing facility. Construction of this state-of-the-art facility commenced in November 2007, and started its operation in December 2008.

This 120,000 sq ft facility boasts modern cold and hot forging machines, wire-drawing plant, and polishing facilities under one roof. These advanced high-tech machines employed for production and stringent quality control ensure flawless quality in order to meet and exceed the customer requirements.

Currently, we manufacture Standard Hexagon Bolts, Hexagon Screws, Hexagon Nuts and Threaded Rods covering the diameter range of M6 to M56 according to the international standards DIN and ISO in grades A2-70, A2-80, A4-70 and A4-80.

With a monthly capacity of 800 metric tons of Stainless Steel Fasteners, this new unit will further strengthen the Sharjah-based Classic Group's presence as a leading manufacturer in the fastener industry.

To give a brief synopsis, The Classic Group comprises 4 operating companies in four business sectors: Industrial and Automotive Fasteners, Aluminium Extrusions, Steel Trading, Architectural Hardware and Tools, and Cold-forged Stainless Steel Fasteners. Mr. Shabbir A. Shaikh, the Managing Director is also the founder of the Group in 1992. A closely held family owned group, it operates on the 5 core values of integrity, commitment, excellence, unity and passion embedded in its everyday work culture.





# ABOUT STAINLESS STEEL

Stainless Steel has excellent corrosion resistance. Stainless Steel is a group of corrosion resistant steel alloys which contain a minimum of 11% chromium. Austenitic Stainless Steel is superior in corrosion resistance and is used in construction applications. These high chromium steels are ductile and strong. Two main grades of Austenitic stainless steel used to manufacture fasteners are 304 and 316.

## Chemical Composition for Stainless Steel Grades

Grade	Chemical composition % m/m								
	C	Si	Mn	P	S	Cr	Mo	Ni	Cu
304	0.10	1.00	2.00	0.050	0.030	15 to 20	-	8 to 19	4.00
304 L	≤0.03	1.00	2.00	0.050	0.030	15 to 20	-	8 to 19	4.00
316	0.08	1.00	2.00	0.045	0.030	16 to 18.5	2 to 3	10 to 15	1.00
316 L	≤0.03	1.00	2.00	0.045	0.030	16 to 18.5	2 to 3	10 to 15	1.00

• All values are maximum unless otherwise indicated • Standard: ISO 3506 -1 for bolts/screws/studs and ISO 3506-2 for nuts

## Mechanical Properties of Stainless Steel Bolts/Screws and Studs - Austenitic grades

Grade	Property class	Thread diameter range	Tensile Strength min (N/mm <sup>2</sup> )	Stress at 0.2% permanent strain R <sub>p</sub> 0.2 Min. (N/mm <sup>2</sup> )	Elongation after fracture A min. (mm)
A2	70	≤ M24	700	450	0.4d
A4	80	≤ M24	800	600	0.3d

d= nominal thread diameter

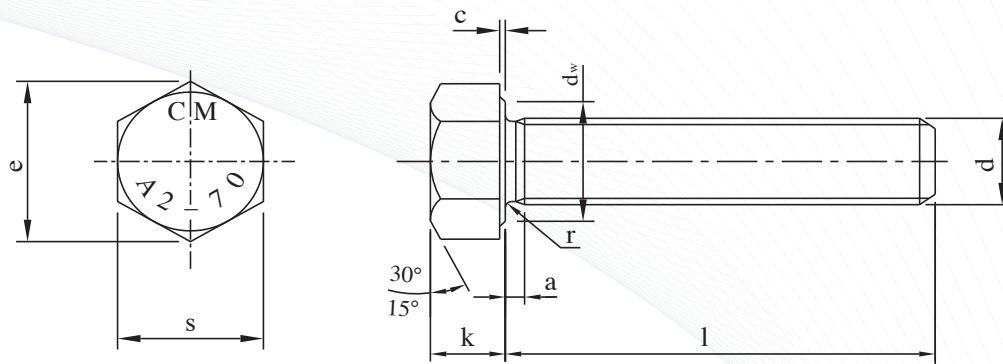
## Mechanical Properties of Stainless Steel Nuts - Austenitic grades

Grade	Property class Nut style 1 (m≥0.8d)	Thread diameter range	Stress under proof load S <sub>p</sub> min (N/mm <sup>2</sup> )
A2	70	≤ M24	700
A4	80	≤ M24	800

d= nominal thread diameter

# OUR PLANT





Standards Available:  
DIN 933, ISO 4017

Grades Available:  
A2-70, A2-80,  
A4-70, A4-80

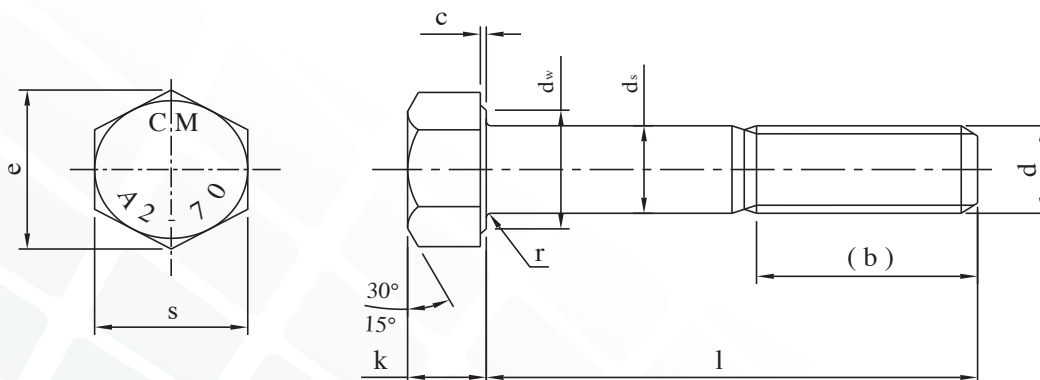
Materials Offered:  
304, 304L,  
316, 316L

Thread Type:  
Coarse Thread

## HEXAGON HEAD SCREWS

Threads ( d )		M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48	M52	M56
Across flat ( s )	Min	9.78	12.73	16.73	18.67	21.67	23.67	26.67	29.67	31.61	35.38	40.00	45.00	49.00	53.80	58.80	63.10	68.10	73.10	78.10	82.80
	Max	10.00	13.00	17.00	19.00	22.00	24.00	27.00	30.00	32.00	36.00	41.00	46.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00
Across corner ( e )	Min	11.05	14.38	18.90	21.10	24.49	26.75	30.14	33.53	35.72	39.98	45.20	50.85	55.37	60.79	66.44	71.30	76.95	82.60	88.25	104.86
Head Thickness ( k )	Min	3.85	5.15	6.22	7.32	8.62	9.82	11.28	12.28	13.78	14.78	16.65	18.28	20.58	22.08	24.58	25.58	27.58	29.58	32.50	39.50
	Max	4.15	5.45	6.58	7.68	8.98	10.18	11.72	12.72	14.22	15.22	17.35	19.12	21.42	22.92	25.42	26.42	28.42	30.42	33.50	40.50
Unthreaded Length ( a )	Min	1.00	1.25	1.50	1.75	2.00	2.00	2.50	2.50	2.50	3.00	3.00	3.50	3.50	4.00	4.00	4.50	4.50	5.00	5.00	5.50
	Max	3.00	4.00	4.50	5.30	6.00	6.00	7.50	7.50	7.50	9.00	9.00	10.50	10.50	12.00	12.00	13.50	13.50	15.00	15.00	16.50
Washer face	Min	0.15	0.15	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.30	0.30	0.30	0.30	0.30	0.30
Depth ( c )	Max	0.50	0.60	0.60	0.60	0.60	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00
Washer face Dia ( dw )	Min	8.88	11.63	15.60	17.40	20.50	22.49	25.30	28.19	30.00	33.61	38.00	42.70	46.50	51.10	55.90	59.90	64.70	69.45	74.20	78.66
Head Junction Radius ( r )	Min	0.25	0.40	0.40	0.60	0.60	0.60	0.60	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.20	1.20	1.60	1.60	2.00

l = Overall length of the Bolt



Standards Available:  
DIN 931, ISO 4014

Grades Available:  
A2-70, A2-80,  
A4-70, A4-80

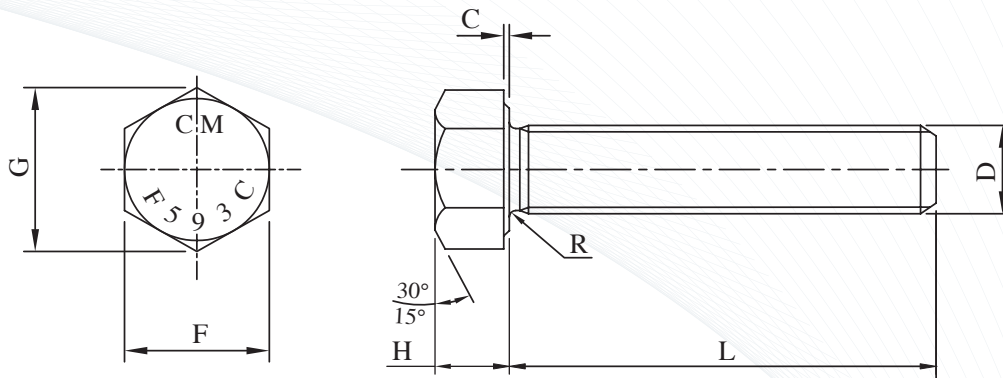
Materials Offered:  
SS304, SS316,  
SS304L, SS316L,

Thread Type:  
Coarse Thread

## HEXAGON HEAD BOLTS

Threads ( d )		M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48	M52	M56
Across flat ( s )	Min	9.78	12.73	16.73	18.67	21.67	23.67	26.67	29.67	31.61	35.38	40.00	45.00	49.00	53.80	58.80	63.10	68.10	73.10	78.10	82.80
	Max	10.00	13.00	17.00	19.00	22.00	24.00	27.00	30.00	32.00	36.00	41.00	46.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00
Across corner ( e )	Min	11.05	14.38	18.90	21.10	24.49	26.75	30.14	33.53	35.72	39.98	45.20	50.85	55.37	60.79	66.44	71.30	76.95	82.60	88.25	104.86
Head	Min	3.85	5.15	6.22	7.32	8.62	9.82	11.28	12.28	13.78	14.78	16.65	18.28	20.58	22.08	24.58	25.58	27.58	29.58	32.50	39.50
Thickness ( k )	Max	4.15	5.45	6.58	7.68	8.98	10.18	11.72	12.72	14.22	15.22	17.35	19.12	21.42	22.92	25.42	26.42	28.42	30.42	33.50	40.50
Washer face	Min	0.15	0.15	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.30	0.30	0.30	0.30	0.30	0.30
Depth ( c )	Max	0.50	0.60	0.60	0.60	0.60	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00
Washer face Dia ( dw )	Min	8.88	11.63	15.60	17.40	20.50	22.49	25.30	28.19	30.00	33.61	38.00	42.70	46.50	51.10	55.90	59.90	64.70	69.45	74.20	78.66
Shank Diameter ( ds )	Min	5.82	7.78	9.78	11.73	13.73	15.73	17.73	19.67	21.67	23.67	27.00	30.00	33.00	36.00	39.00	42.00	45.00	48.00	52.00	64.00
	Max	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00	24.00	26.48	29.48	32.38	35.38	38.38	41.38	44.38	47.38	51.26	63.26
	Min	0.25	0.40	0.40	0.60	0.60	0.60	0.60	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.20	1.20	1.60	1.60	2.00
Thread Length ( b )	≤125*	18	22	26	30	34	38	42	46	50	54	60	66	-	-	-	-	-	-	-	-
	125≤200	24	28	32	36	40	44	48	52	64	60	66	72	78	84	90	96	102	108	116	-
	≥200*	37	41	45	49	53	57	61	65	69	73	79	85	91	97	103	109	115	121	129	137

l = Overall length of the Bolt



Standards Available:  
ANSI B 18.2.1

Grades Available:  
F593C, F593G

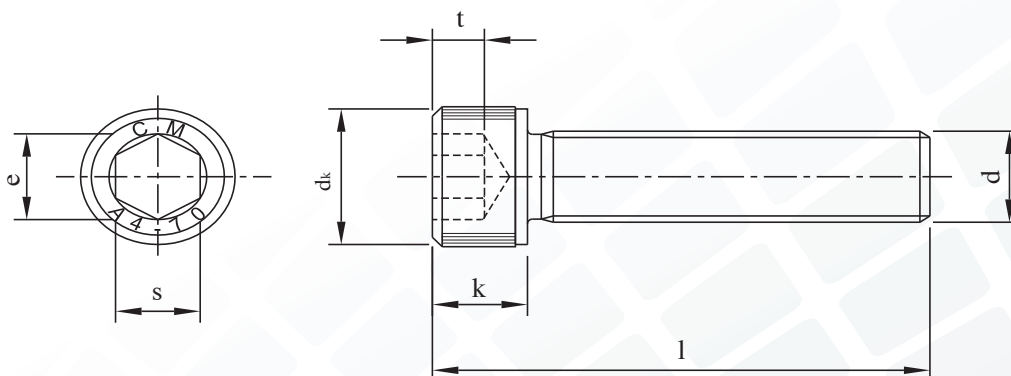
Materials Offered:  
304, 304L, 316, 316L

Thread Type:  
Coarse Thread

## HEXAGON HEAD BOLTS AND SCREWS

Threads ( D )		1 / 4	5 / 16	3 / 8	1 / 2
Across flat ( F )	Min	10.87	12.42	14.00	18.69
	Max	11.13	12.70	14.27	19.05
Across corner ( G )	Min	12.40	14.15	15.95	21.34
	Max	12.83	14.66	16.51	22.00
Head Thickness ( H )	Min	3.81	4.95	5.74	7.67
	Max	4.14	5.36	6.17	8.20
Washer face Depth ( C )	Min	0.38	0.38	0.38	0.38
	Max	0.64	0.64	0.64	0.64
Head Junction Radius ( R )	Min	0.38	0.38	0.38	0.38
	Max	0.64	0.64	0.64	0.64

L = Overall length of the Bolt



Standards Available:  
DIN 912, ISO 4762

Grades Available:  
A2-70, A2-80, A4-70, A4-80

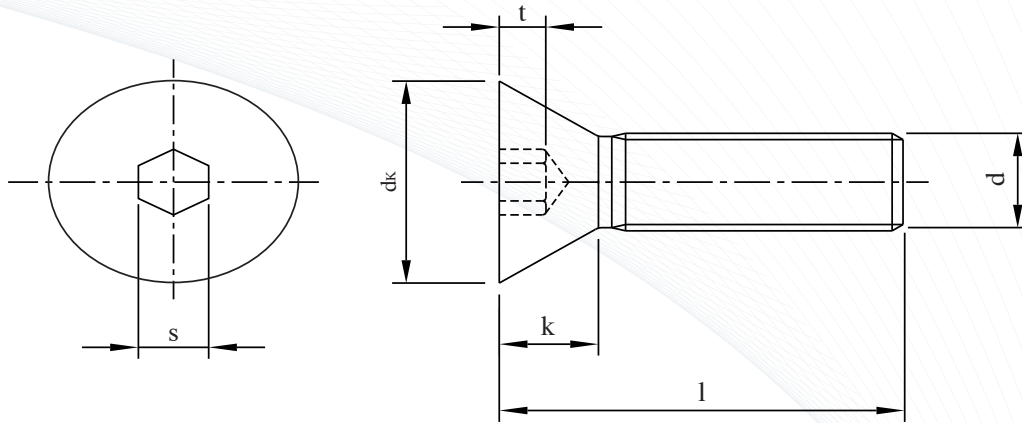
Materials Offered:  
304, 304L, 316, 316L

Thread Type:  
Coarse Thread

## HEXAGON SOCKET HEAD CAP SCREWS

Threads ( d )		M6	M8	M10	M12
dk	Min	9.78	12.73	15.73	17.73
	Max	10.22	13.27	16.27	18.27
s	Min	5.02	6.02	8.03	10.03
	Max	5.14	6.14	8.18	10.18
e	Min	5.72	6.86	9.15	11.43
k	Min	5.70	7.64	9.64	11.57
	Max	6.00	8.00	10.00	12.00
t	Min	3.00	4.00	5.00	6.00

l = Overall length of the Bolt



Standards Available:  
DIN 7991, ISO 10642

Grades Available:  
A2-70, A2-80, A4-70, A4-80

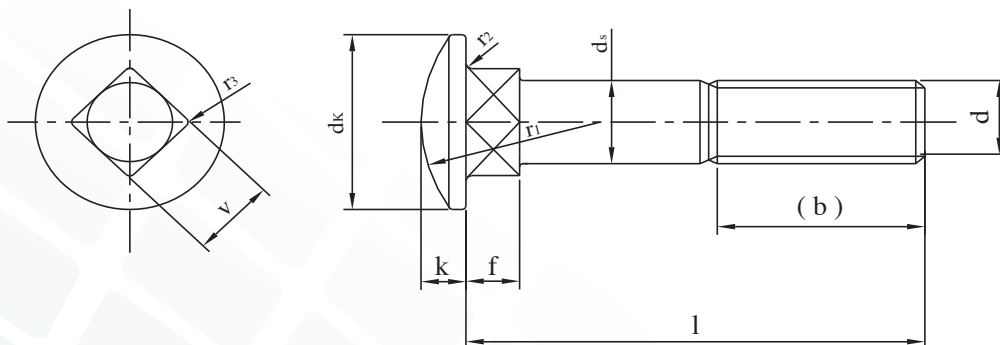
Materials Offered:  
SS304, SS316, SS304L, SS316L

Thread Type:  
Coarse Thread

## HEXAGON COUNTERSUNK HEAD CAP SCREWS

Threads ( d )		M6	M8	M10	M12
dk	Min	11.57	15.57	19.48	23.48
	Max	12.00	16.00	20.00	24.00
s	Min	4.02	5.02	6.02	8.025
	Max	4.12	5.14	6.14	8.175
k	Max	3.30	4.40	5.50	6.50
t	Min	2.25	3.20	4.10	4.30

l = Overall length of the Bolt



Standards Available:  
DIN 603, ISO 8677

Grades Available:  
A2-70, A2-80, A4-70, A4-80

Materials Offered:  
SS304, SS316, SS304L, SS316L

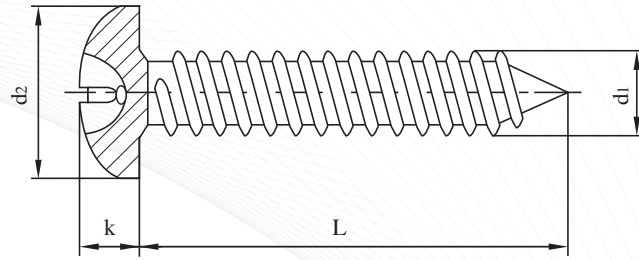
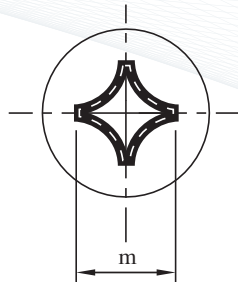
Thread Type:  
Coarse Thread

## MUSHROOM HEAD SQUARE NECK BOLTS

Threads ( d )		M6	M8	M10	M12
dk	Min	15.45	19.35	23.35	29.35
	Max	16.55	20.65	24.65	30.65
ds	Min	5.52	7.42	9.42	11.30
	Max	6.00	8.00	10.00	12.00
f	Min	3.40	4.40	5.40	7.25
	Max	4.60	5.60	6.60	8.75
k	Min	3.12	4.12	4.62	6.05
	Max	3.88	4.88	5.38	6.95
r1	Approx	12.60	16.00	19.20	24.10
r2	Max	0.50	0.50	0.50	1.00
r3	Max	0.90	1.20	1.50	1.80
v	Min	5.52	7.42	9.42	11.30
	Max	6.48	8.58	10.58	12.70
( b )	l ≤ 125*	18	22	26	30
	125 ≤ 200	24	28	32	36
	l > 200*	-	41	45	49

l = Overall length of the Bolt





Standards Available:  
DIN 7981, ISO 7049

Grades Available:  
A2, A4

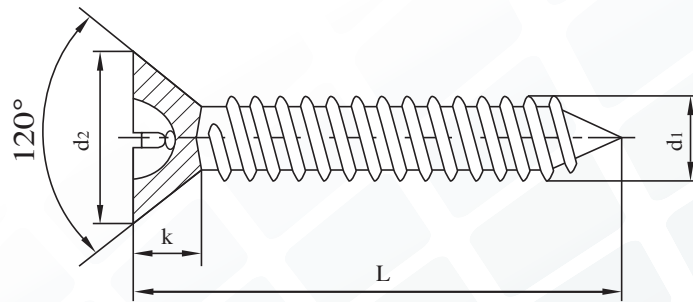
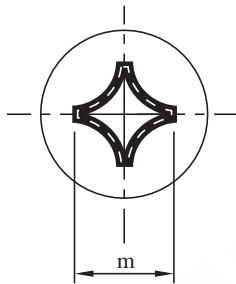
Materials Offered:  
SS304, SS316

Thread Type:  
A, B, AB, Coarse Thread

## CROSS RECESSED PAN HEAD TAPPING SCREWS

d1	d2 max	k max	m approx.	Cross recess No.
M2.2	4.2	1.8	2.6	H1
M2.9	5.6	2.2	3	H1
M3.5	6.9	2.6	4.2	H2
M3.9	7.5	2.8	4.4	H2
M4.2	8.2	3.05	4.6	H2
M4.8	9.5	3.55	5	H2
M5.5	10.8	3.95	6.5	H3
M6.3	12.5	4.55	7.1	H3

L = Overall length of the Bolt



Standards Available:  
DIN 7982, ISO 7050

Grades Available:  
A2, A4

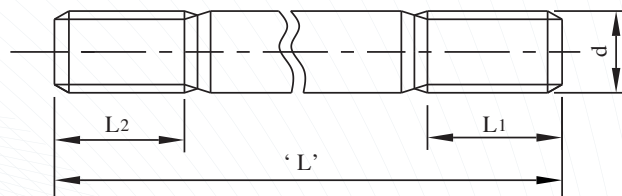
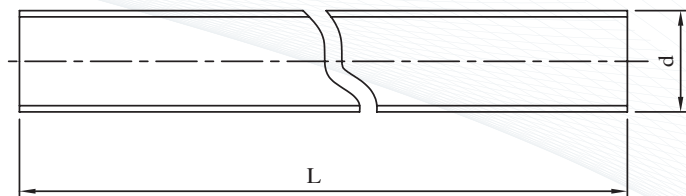
Materials Offered:  
SS304, SS316

Thread Type:  
A, B, AB, Coarse Thread

## CROSS RECESSED COUNTERSUNK HEAD TAPPING SCREWS

d1	d2 max	k max	m approx.	Cross Recess No.
M2.2	4.3	1.3	2.5	H1
M2.9	5.5	1.7	3	H1
M3.5	6.8	2.1	4.2	H2
M3.9	7.5	2.3	4.6	H2
M4.2	8.1	2.5	4.7	H2
M4.8	9.5	3	5.1	H2
M5.5	10.8	3.4	6.8	H3
M6.3	12.4	3.8	7.1	H3

L = Overall length of the Bolt



Standards Available:  
DIN 975, DIN 976, IFI 136-2002, A193

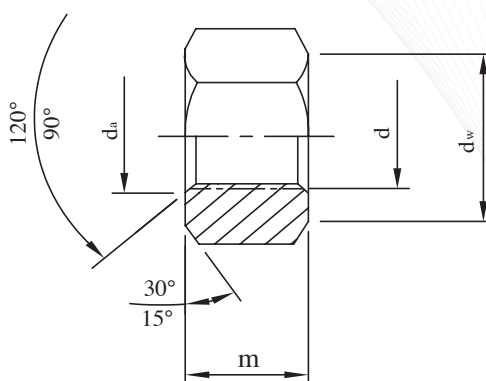
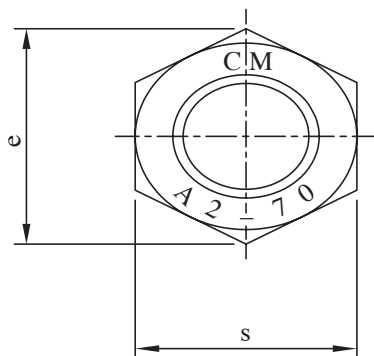
Grades Available:  
A2-70, A2-80, A4-70, A4-80

Materials Offered:  
304, 304L, 316, 316L

Thread Type:  
Coarse Thread

## THREADED RODS, STUDS, SINGLE & DOUBLE END THREADED STUDS

Threads ( d )	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24
Overall Length ( L )	1/4"	5/16"	3/8"	1/2"	-	5/8"	3/4"	-	7/8"	1"
	From 1MT to 3MT									



Standards Available:  
DIN 934, ISO 4032

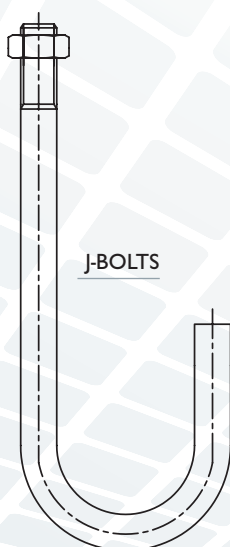
Grades Available:  
A2-70, A2-80,  
A4-70, A4-80

Materials Offered:  
304, 304L,  
316, 316L

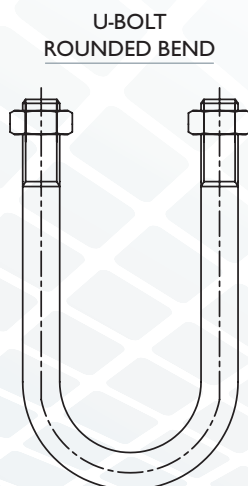
Thread Type:  
Coarse Thread

## HEXAGON NUTS

Threads ( d )		M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48	M52	M56
Across flat ( s )	Min	9.78	12.73	16.73	18.67	21.67	23.67	26.16	29.16	31.00	35.00	40.00	45.00	49.00	53.80	58.80	63.10	68.10	73.10	78.10	82.80
	Max	10.00	13.00	17.00	19.00	22.00	24.00	27.00	30.00	32.00	36.00	41.00	46.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	85.00
Across corner ( e )	Min	11.05	14.38	18.90	21.10	24.49	26.75	29.56	32.95	35.03	39.55	45.20	50.85	55.37	60.79	66.44	71.30	76.95	82.60	88.25	93.56
	Max	11.05	14.38	18.90	21.10	24.49	26.75	29.56	32.95	35.03	39.55	45.20	50.85	55.37	60.79	66.44	71.30	76.95	82.60	88.25	93.56
Nut Thickness ( m )	Min	4.70	6.14	7.64	9.64	10.30	12.30	14.30	14.90	16.90	17.70	20.70	22.70	24.70	27.40	29.40	32.40	34.40	36.40	40.40	43.40
	Max	5.00	6.50	8.00	10.00	11.00	13.00	15.00	16.00	18.00	19.00	22.00	24.00	26.00	29.00	31.00	34.00	36.00	38.00	42.00	45.00
Bearing face Dia ( d_w )	Min	8.80	11.30	15.30	17.20	20.20	22.20	25.30	28.20	29.50	33.20	38.00	42.70	46.60	51.10	55.90	60.60	64.70	69.40	74.20	78.70
	Max	8.80	11.30	15.30	17.20	20.20	22.20	25.30	28.20	29.50	33.20	38.00	42.70	46.60	51.10	55.90	60.60	64.70	69.40	74.20	78.70
Counter Sunk Diameter ( d_a )	Min	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00	24.00	27.00	30.00	33.00	36.00	39.00	42.00	45.00	48.00	52.00	56.00
	Max	6.75	8.75	10.80	13.00	15.10	17.30	19.50	21.60	23.70	25.90	29.10	32.40	35.60	38.90	42.10	45.40	48.60	51.80	56.20	60.50



J-BOLTS



U-BOLT  
ROUNDED BEND



ANCHOR BOLTS

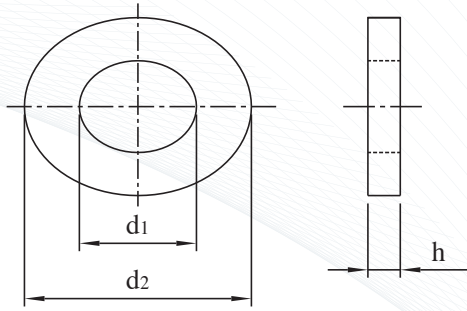
Grades Available:  
A2-70, A2-80, A4-70, A4-80

Materials Offered:  
304, 304L, 316, 316L

## U-BOLTS AND BENT ANCHOR BOLTS

We also manufacture custom bent U Bolts and anchor bolts in Stainless Steel from M6 to M56 diameter to virtually any specification or special drawings.





Standards Available:  
DIN 125, ISO 7089

Grades Available:  
A2, A4

Materials Offered:  
SS304, SS316

## FLAT WASHER

Washer Size	Inner Diameter (d1)	Outer Diameter (d2)	Thickness (h)
M6	6.40	12.00	1.60
M8	8.40	16.00	1.60
M10	10.50	20.00	2.00
M12	13.00	24.00	2.50
M14	15.00	28.00	2.50
M16	17.00	30.00	3.00
M18	19.00	34.00	3.00
M20	21.00	37.00	3.00
M22	23.00	39.00	3.00
M24	25.00	44.00	4.00
M27	28.00	50.00	4.00
M30	31.00	56.00	4.00
M33	34.00	60.00	5.00
M36	37.00	66.00	5.00
M39	40.00	72.00	6.00
M42	43.00	78.00	7.00
M45	46.00	85.00	7.00
M48	50.00	92.00	8.00
M52	54.00	98.00	8.00
M56	58.00	105.00	9.00

# CERTIFICATES





# PACKAGING

## SMALL BOXES:

We carefully pack exact quantities as per customer's order. Boxes are strong enough to withstand the weight of the products and labels are carefully printed with required specifications on each box.

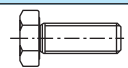
## STANDARD CARTONS:

Small boxes are put in outer cartons with a maximum weight of 25 Kg. Each outer carton also has a label with required information.

## STANDARD PALLET:



## STANDARD LABEL

<b>DIN 933</b>	<b>Stainless steel Hex Screw</b>
<b>A2 - 70</b>	<b>QTY : 50 Nos</b>
	<b>Lot No : CM 315</b>
	<b>M10 X 50</b>

# IN-HOUSE TESTING MACHINES

## UNIVERSAL TESTING MACHINE

Fully Computerized Universal Testing Machine used for testing the tensile strength of the wire rod/products and also the upset test for the product.

## HARDNESS TESTING MACHINE

To test the Rockwell Hardness in C Scale and B Scale for the Products, tools and Wire Rod.

## PROFILE PROJECTOR

Profile Image Projector for checking profile dimensions such as thread angle, head junction radius and tools Profile.

## CHEMICAL ANALYSIS

To test Chemical composition of elements in Wt%.





# GROUP COMPANIES



## CLASSIC METALLIC SHEET FACTORY LLC (CMSF) - SHARJAH

Classic Metallic Sheet Factory LLC is located in Sharjah Industrial Area 15, United Arab Emirates (U.A.E). Established in the year 1992, Classic Metallic is an ISO 9001-2000 certified manufacturer of Non Standard Fasteners; Bent Anchor Bolts; Type J and Type L (as per customer drawing), U Bolts and Stud Bolts with in-house Hot Dip Galvanizing facilities and PTFE in the U.A.E.



## CLASSIC EXTRUSIONS LLC (CLEX) - SHARJAH

Classic Extrusions LLC (CLEX) is located in the Sharjah Industrial Area 17, United Arab Emirates (U.A.E). Established in the year 2004, the sophisticated and modern plant is equipped with 1375 Ton & 1800 Ton Oil Hydraulic Extrusion Presses. The plant has an annual capacity of 10,800 Tons. Aluminium Sections are extruded and supplied to Doors, Windows and Kitchen Cabinets fabricators and available with standard thickness in anodized, powder coating or any other surface treatment of different shapes as per customer's requirements.



## CLASSIC FASTENING SYSTEMS PVT LTD (CFS) - MUMBAI

Classic Fastening Systems Pvt Ltd (CFS) is situated in Mumbai, India. CFS has been incorporated in 2005 in the state of Maharashtra, India. The primary focus of the company is to manufacture quality fasteners for the local manufacturing industries. CFS manufactures Pop Rivets (Blind Rivets) and supplies them to various reputed automotive and engineering industries. CFS has been established with a vision of becoming one of the leading suppliers of rivets and related tools to major industries throughout India.





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**Factory:**

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