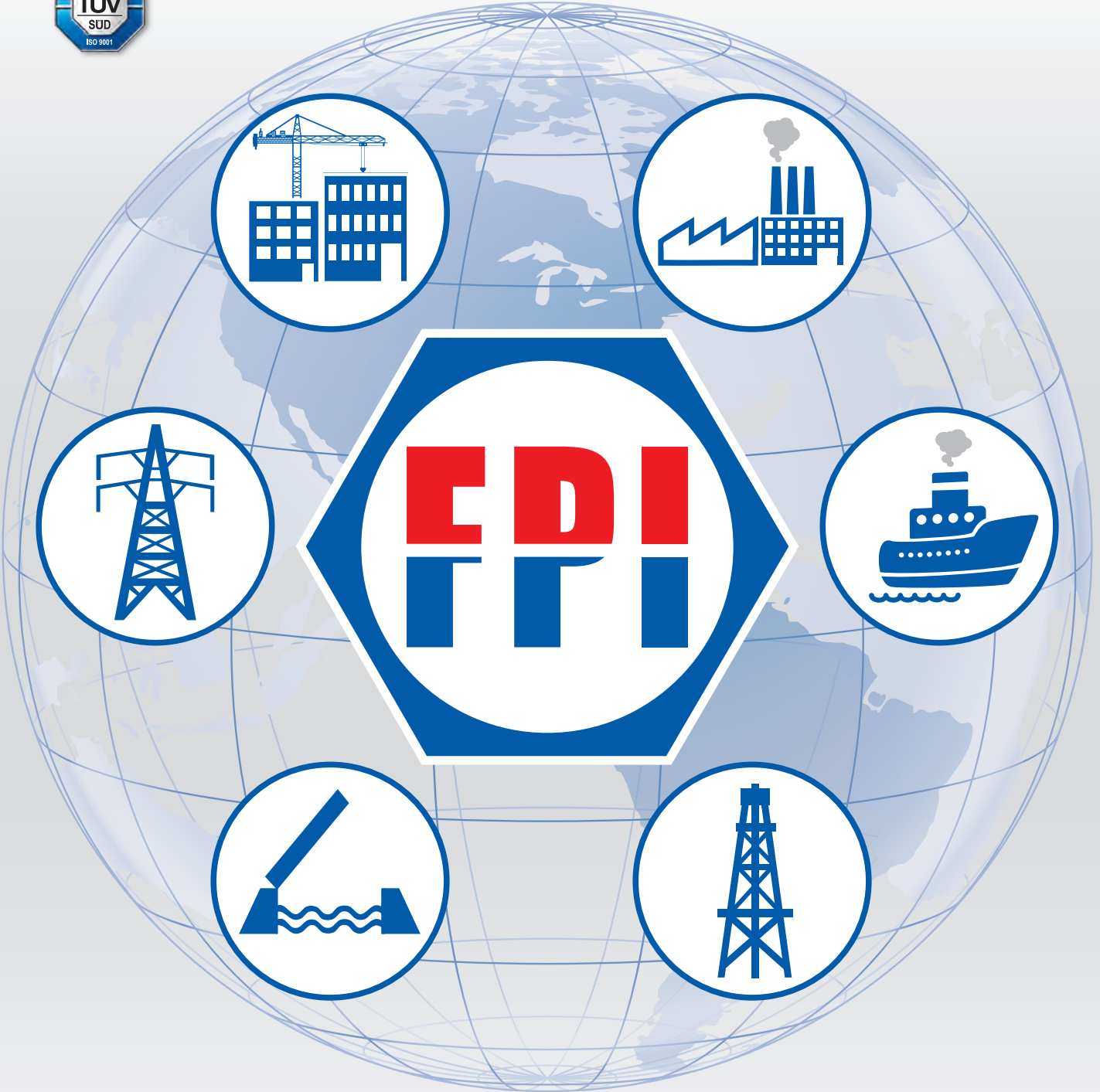




فاسترن بوينت للصناعات (ش.ذ.م.م.)

EASTERN POINT INDUSTRIES LLC

Manufacturer of Custom Made and Standard Fasteners



Fasteners for all applications...





INDEX



• INTRODUCTION.....	4
• OUR ASSETS.....	5
• ANCHOR BOLT GRADES.....	6
• ANCHOR BOLT CONFIGURATIONS.....	7
• U BOLTS – GRIP TYPE.....	8
• U BOLTS – NON GRIP TYPE.....	9
• U BOLTS CONFIGURATONS.....	10
• SADDLE CLAMP.....	11
• TWO PIECE PIPE CLAMP.....	12
• STUD BOLTING - A193(M)/A320(M) SERIES.....	13
• HEX HEAD BOLTS – BS 3692 Gr 8.8.....	14
• HEAVY HEX BOLTS - A325/A325M.....	15
• HEAVY HEX BOLTS - A490/A490M.....	16
• HEX NUT – ISO 4032 / BS 3692.....	17
• HEAVY HEX NUT - A194(M)/A563(M).....	18
• HSFG BOLTS - BS EN 14399.....	19
• HARDENED WASHER.....	20
• STAINLESS STEEL & NON FERROUS FASTENER.....	21
• FABRICATED PRODUCTS.....	22

Although utmost care has been take for compilation of this catalogue, all information given here in is for reference purpose only, the company accepts no liability for any loss or damage either direct or consequential arising out of use of this catalogue. Customers are requested to refer the latest relevant original standards for up to date information.



www.fpind.ae

INTRODUCTION

Fastener point industries LLC, an ISO 9001:2008 company is a leading manufacturer of custom made and standard fastener products for construction, power, marine, oil & gas industries. A company promoted and managed by Technocrats having vast experience in fastener manufacturing. A dedicated team of well qualified and trained staff ensures that all aspect of order execution right from inquiry inception to delivery is handled with prompt response and stringent quality procedure are followed to supply a superior product to our client.

With a new state of the art 45,000 sqft manufacturing facilities at Umm Al Quwain and a support facility at Dubai has immensely increased our manufacturing capacity with lower turn around time and faster deliveries to our customers. The factory is equipped with latest manufacturing machinery and an in house testing laboratory which ensures that our customers can get quality products at short notice.

All raw material is sourced from quality suppliers and all product are issued with Material test certificate which ensure full material traceability. Products are manufactured as per latest international standards or as per customer specific requirement with an eye on the smallest detail to ensure a high quality product. A fleet of pick-ups and truck trailer ensure that the goods are delivered to near and far flung project site as quickly as possible.

We at Fastener Point Industries believe in progress through customer appreciation based on competitive price, quality products and timely delivery. We continue to build up on our commitments and capabilities in the fastener field while adhering to the highest standards of safety and quality.



OUR ASSETS



www.fpind.ae





www.fpind.ae

ANCHOR BOLT GRADES

Standard Specification : As per ASTM F1554 Gr 36/55/105, ASTM A307 Gr C, ASTM A193/193M Gr B7, ISO Gr 4.6/8.8/10.9, BS 7419 etc.

Range : M6 to M100 (Metric Series)
1/4" to 4" (Inch Series)

Surface Finish : Black, Zinc plated, Hot Dip Galvanized etc.

Properties of Various grades of Anchor Bolts

Desc	ISO 898 - 1			ASTM F 1554			ASTM A307 Gr C	ASTM A 193M Gr B7	ASTM A354 Gr BD		
	Gr 4.6	Gr 8.8	Gr 10.9	36	55	105					
CHEMICAL PROPERTIES											
CARBON	0.26	0.25-0.55	0.15-0.35	-0.29			-0.33	0.37-0.49	0.33-0.55		
MANAGENESE	0.75	-0.25	0.7-	0.54-0.98			0.75	0.65-1.10			
SULPHUR	-0.05	-0.035	-0.035	-0.06	-0.058	-0.058	-0.05	-0.040	-0.04		
PHOSPHOROUS	-0.04	-0.035	-0.035	-0.05	-0.048	-0.048	-0.04	-0.035	-0.035		
SILICON								0.15-0.35			
CHROMIUM								0.75-1.20			
MOLYDENUM								0.15-0.25			
NICKLE											
VANADIUM											
BORON		-0.003	-0.003		-						
ALLOY ELE- MENTS		YES	YES		YES	YES		YES	YES		
MECHANICAL PROPERTIES											
		d<16	d>16							1 /4"TO 2-1/2"	OVER 2-1/2"
TENSILE(N/mm²)	400	800	830	1040	400-558	517-655	862-1034	400-552	860	1034	965
YIELD(N/mm²)	240	640	660	940	248	380	724	248	720	896	793
ELONGA- TION(%)	22%	12%	12%	9%	20% *	18% *	12% *	23% **	16% ***	14% **	14% **
REDUCTION(%)	-	52%		48%	40%	30%	45%	40%	50%	40%	40%
HARDNESS	67 HRB	22-32 HRC	23-34 HRC	32-39 HRC	-	-	-	-	24-35 HRC	33-39 HRC	31-39 HRC
*	Elongation in 200mm			**	Elongation in 50mm		***	Elongation in 4D			

TENSILE AND SHEAR CAPACITY OF ANCHOR BOLT AS PER BS5950-1

Bolt Size	Stress Area (mm²)	Gr 4.6		Gr 8.8	
		Tensile (Ft) capacity at 240 N/mm² (KN)	Single Shear (Fs) at 160 N/mm²(KN)	Tensile(Ft) capacity at 0.8 x 560 N/mm² (KN)	Single Shear (Fs) at 375 N/mm²(KN)
M12	84.3	20.2	13.5	38	31.6
M16	157	37.7	25	70.3	58.9
M20	245	58.8	39	110	91.9
M24	353	84.7	56.5	158	132
M27	459	110	73.4	207	172
M30	561	134.6	89.8	251	210
M36	817	196	130.7	366	306

For combined Shear & Tensile loading :

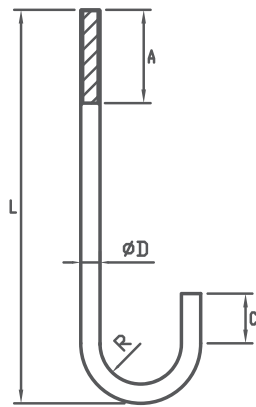
$$\frac{F_{at}}{F_t} + \frac{F_{as}}{F_s} < 1.4 \text{ (None of the individual ratio should exceed 1)}$$

Where Fat & Fas is Actual factored Tensile and Shear loading on the Anchor bolt.

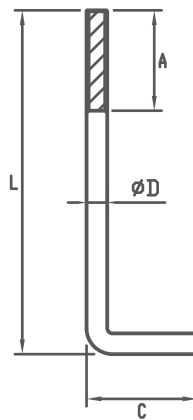
ANCHOR BOLT CONFIGURATIONS



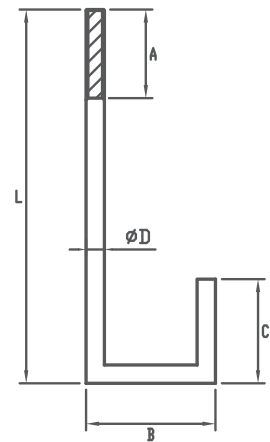
www.fpind.ae



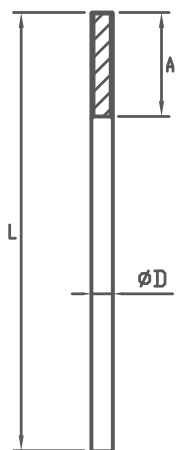
"J" SHAPE



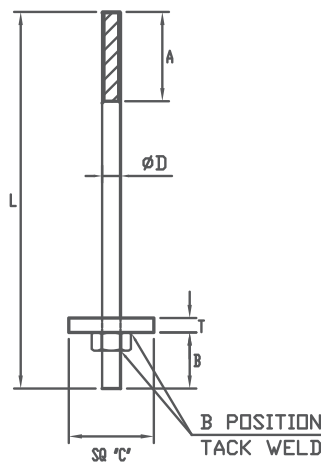
"L" SHAPE



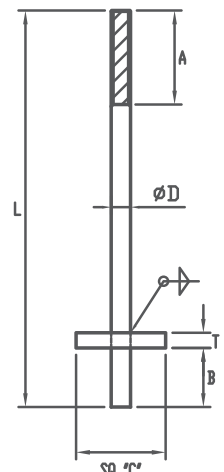
SQUARE "J" SHAPE



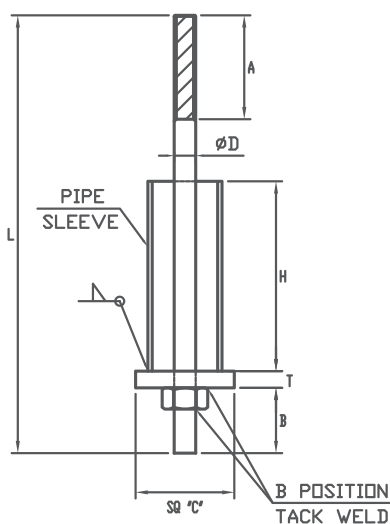
STRAIGHT TYPE



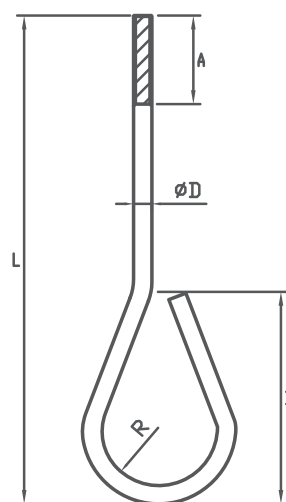
STRAIGHT TYPE WITH TACK WELDED PLATE



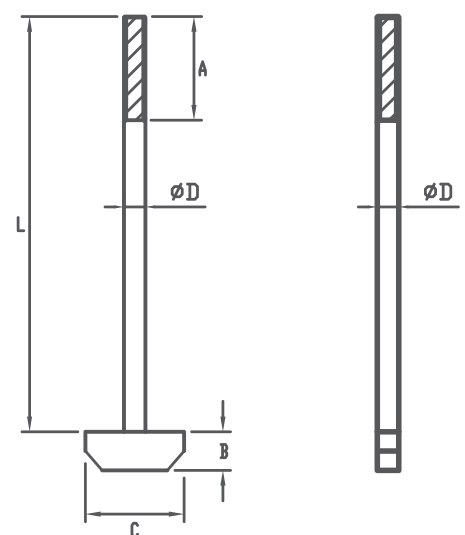
STRAIGHT TYPE WITH WELDED PLATE



PIPE SLEEVE TYPE WITH TACK WELDED PLATE



EYE SHAPE



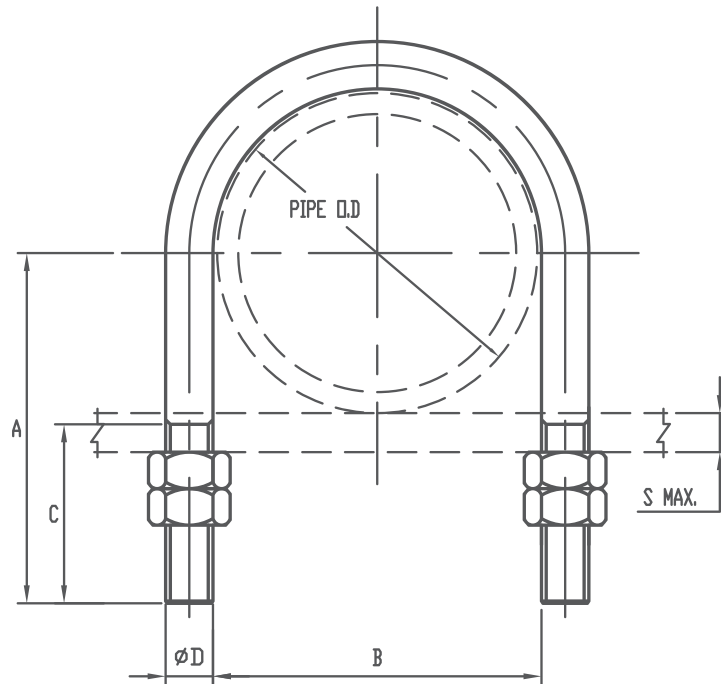
HAMMER HEAD

U-BOLT (TO GRIP PIPE)

Standard Specification : BS 3974

Material : ISO GR 4.6, 8.8, ASTM A 307, Gr B7, SS 304, SS 316

Surface Finish : BLACK, ZINC PLATED, HDG, PTFE COATED etc.



GRIP TYPE U-BOLT

S.No	Pipe Size (Inches)	Pipe OD	Dia D	A	B	C	S Max
1	1/2"	21.3	8	35	22	25	7
2	3/4"	26.9	8	42.5	27	25	10
3	1"	33.7	8	42.5	37	25	10
4	1-1/4"	42.4	8	47.5	47	25	10
5	1-1/2"	48.3	10	60	50	35	16
6	2"	60.3	10	62.5	65	35	16
7	2-1/2"	76.1	12	85	78	45	19
8	3-1/4"	88.9	16	97.5	89	50	19
9	4"	114.3	16	107.5	119	50	19
10	5"	139.7	16	120	144	50	19
11	6"	168.3	20	140	170	55	19
12	7"	193.7	20	152.5	195	55	19
13	8"	219.1	20	172.5	225	55	19
14	9"	244.5	20	175	250	55	22
15	10"	273	20	200	280	60	22
16	12"	323.9	20	225	330	60	22
17	14"	355.6	24	247.5	361	65	22
18	16"	406.4	24	282.5	411	65	22
19	18"	457	24	297.5	461	70	22
20	20"	508	24	330	516	70	22
21	22"	559	24	355	566	70	22
22	24"	610	24	380	616	70	22

U-BOLT (NOT TO GRIP PIPE)

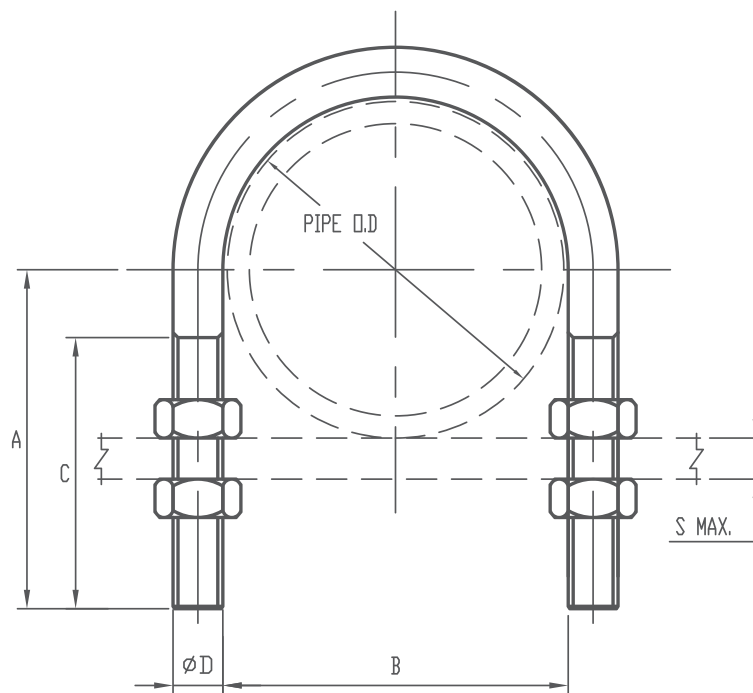


www.fpind.ae

Standard Specification : BS 3974

Material : ISO GR 4.6, 8.8, ASTM A 307, Gr B7, SS 304, SS 316

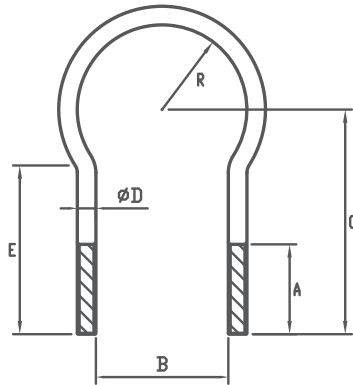
Surface Finish : BLACK, ZINC PLATED, HDG, PTFE COATED etc.



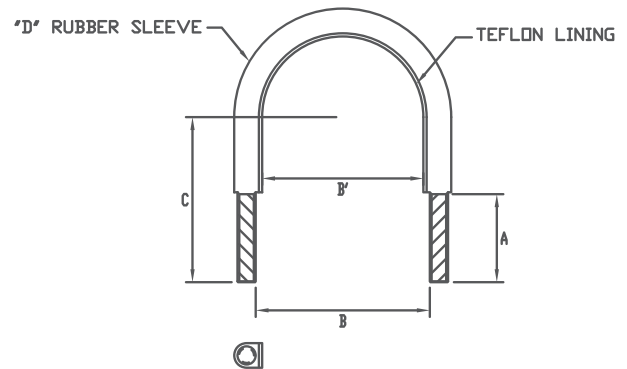
NON GRIP TYPE U-BOLT

S.No	Pipe Size (Inches)	Pipe OD	Dia D	A	B	C	S Max
1	1/2"	21.3	8	25	32	25	10
2	3/4"	26.9	8	32.5	37	30	10
3	1"	33.7	8	35	42	30	10
4	1-1/4"	42.4	8	40	52	30	10
5	1-1/2"	48.3	10	52.5	55	40	16
6	2"	60.3	10	60	70	40	16
7	2-1/2"	76.1	12	72.5	83	50	19
8	3-1/4"	88.9	16	85	94	55	19
9	4"	114.3	16	95	124	55	19
10	5"	139.7	16	107.5	149	55	19
11	6"	168.3	20	127.5	175	65	19
12	7"	193.7	20	140	200	65	19
13	8"	219.1	20	150	230	65	19
14	9"	244.5	20	162.5	255	65	19
15	10"	273	20	182.5	285	75	22
16	12"	323.9	20	207.5	335	75	22
17	14"	355.6	24	230	366	80	22
18	16"	406.4	24	255	416	80	22
19	18"	457	24	277.5	471	80	22
20	20"	508	24	302.5	521	80	22
21	22"	559	24	327.5	571	80	22
22	24"	610	24	352.5	621	80	22

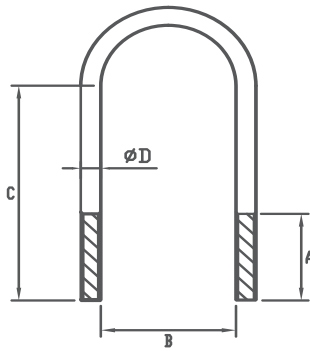
U BOLT CONFIGURATIONS



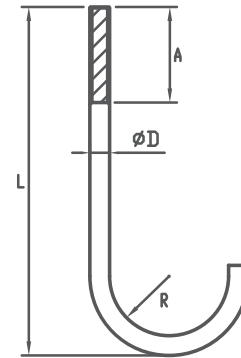
BALLOON TYPE U-BOLT



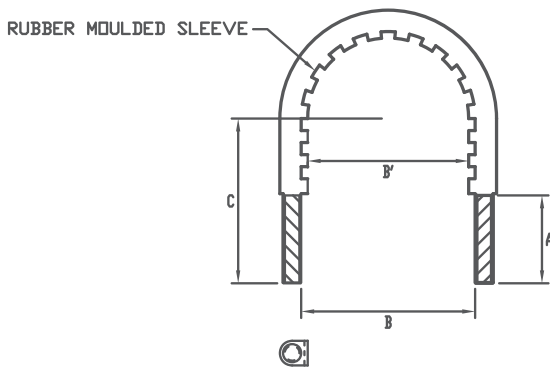
"D" RUBBER SLEEVED WITH TEFLON LINED U-BOLT



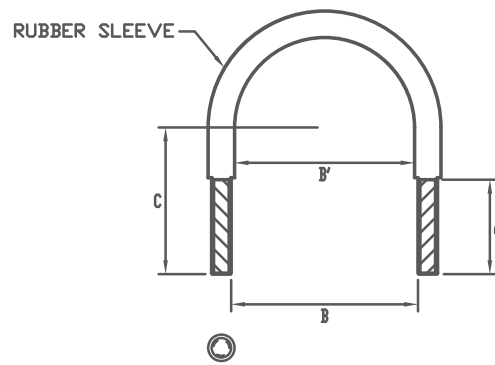
GRIP TYPE U-BOLT



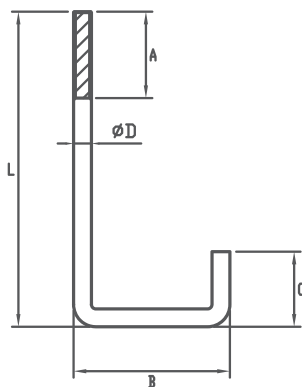
HALF PIPE CLAMP



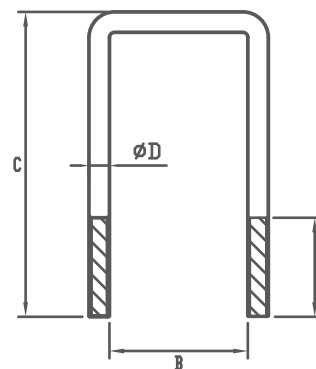
RUBBER MOULDED SLEEVED U-BOLT



RUBBER SLEEVED U-BOLT



SQUARE "L" TYPE CLAMP



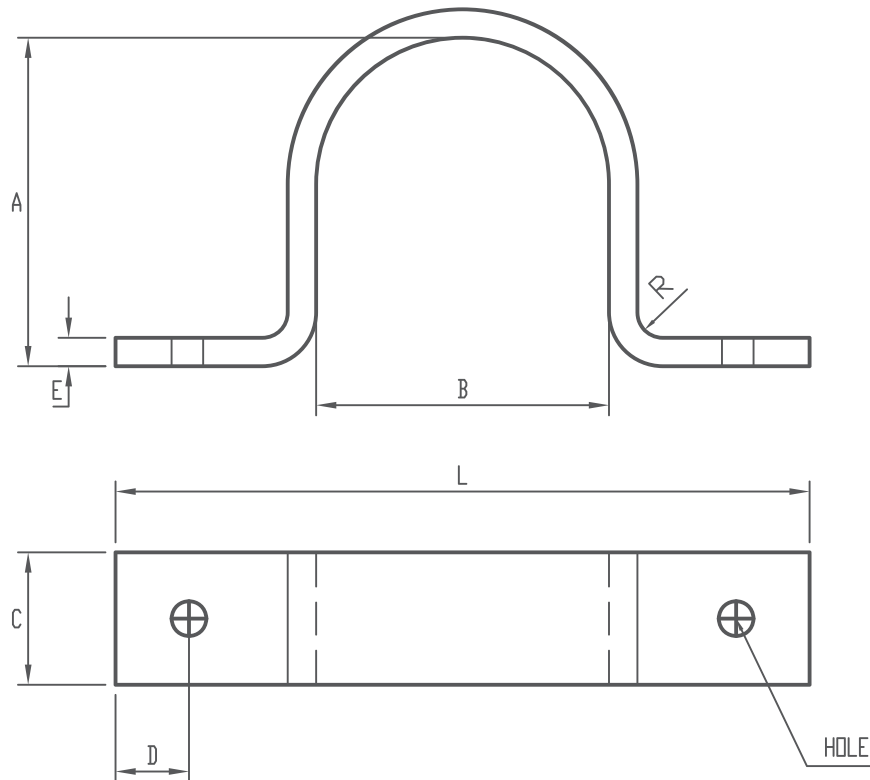
SQUARE TYPE U-BOLT

SADDLE CLAMP

Standard Specification : NS 5551

Material : MILD STEEL, SS 304, SS 316

Surface Finish : BLACK, ZINC PLATED, HDG, PTFE COATED etc.



S.No	Pipe Size (Inches)	Pipe OD	A	B	C	D	E	R	L	Threads	Hole Dia
1	1/2"	21.3	18	23	25	10	3	2	80	M10	11
2	3/4"	26.9	24	28	25	10	3	2	85	M10	11
3	1"	33.7	33	37	25	10	3	2	95	M10	11
4	1-1/4"	42.4	39	44	30	10	5	4	110	M10	11
5	1-1/2"	48.3	45	50	30	10	5	4	120	M10	11
6	2"	60.3	56	62	40	15	5	6	145	M12	14
7	2-1/2"	76.1	72	79	40	15	5	6	165	M12	14
8	3-1/4"	88.9	85	92	40	15	5	6	180	M12	14
9	4"	114.3	109	117	50	15	6	6	215	M16	18
10	5"	139.7	135	142	50	15	6	6	245	M16	18
11	6"	168.3	162	170	50	15	6	6	275	M16	18
12	7"	193.7	189	198	50	15	6	6	300	M16	18
13	8"	219.1	214	222	50	15	6	6	325	M16	18
14	10"	273	267	276	60	20	8	8	405	M20	22
15	12"	323.9	318	328	60	20	8	8	460	M20	22
16	14"	355.6	350	360	60	20	8	8	495	M20	22
17	16"	406.4	400	410	70	25	10	8	565	M24	26
18	18"	457	451	461	70	25	10	8	615	M24	26
19	20"	508	502	512	70	25	10	8	665	M24	26
20	24"	610	604	614	80	25	12	10	775	M24	26



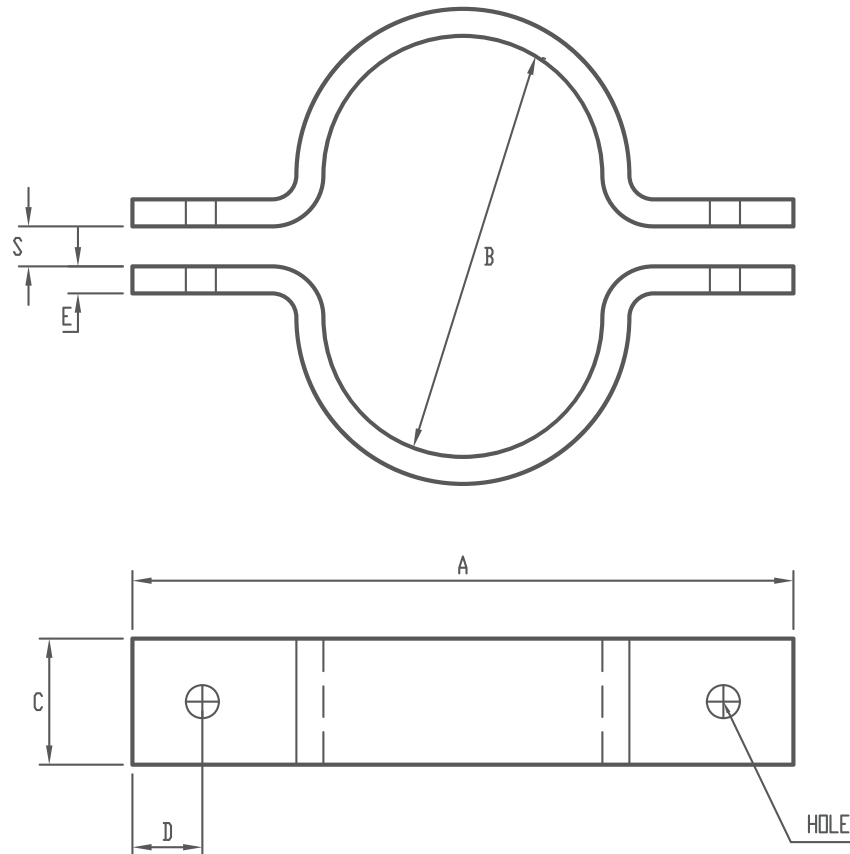
www.fpind.ae

TWO PIECE PIPE CLAMP

Standard Specification : NS 5553

Material : MILD STEEL, SS 304, SS 316

Surface Finish : BLACK, ZINC PLATED, HDG, PTFE COATED etc.



S.No	Pipe Size (Inches)	Pipe OD	A	B	C	D	E	S	Threads	Hole Dia
1	1/2"	21.3	80	21	25	10	6	3	M10	11
2	3/4"	26.9	85	26	25	10	6	3	M10	11
3	1"	33.7	95	34	25	10	6	3	M10	11
4	1-1/4"	42.4	110	43	30	10	6	5	M10	11
5	1-1/2"	48.3	120	49	30	10	6	5	M10	11
6	2"	60.3	145	59	40	15	8	5	M12	14
7	2-1/2"	76.1	165	77	40	15	8	5	M12	14
8	3-1/4"	88.9	180	89	40	15	8	5	M12	14
9	4"	114.3	215	115	50	15	10	6	M16	18
10	5"	139.7	245	140	50	15	10	6	M16	18
11	6"	168.3	288	170	50	20	12	6	M16	18
12	7"	193.7	314	194	50	20	12	6	M16	18
13	8"	219.1	340	220	50	20	12	8	M16	18
14	10"	273	400	273	50	20	16	8	M16	18
15	12"	323.9	454	324	60	22	16	8	M20	22
16	14"	355.6	486	356	60	22	16	8	M20	22
17	16"	406.4	536	470	60	22	20	8	M20	22

STUD BOLTING

A193(M) / A320(M) / A194(M)

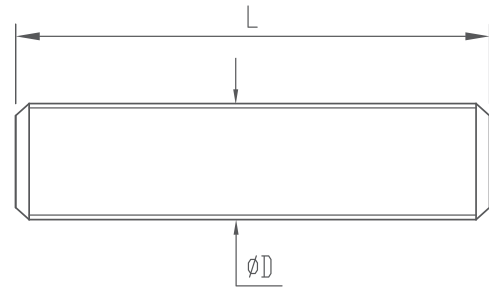


Standard Specification : Stud - ASTM A 193 Gr B7, B7M, B8, B8M
 Stud - ASTM A320 Gr L7, L7M, B8, B8M
 Nut - ASTM A194 GR 2H, 2HM, 8, 8M

Material : Alloy Steel

Range : 1/2" to 4" (Inch Series)
 M10 to M100 (Metric Series)

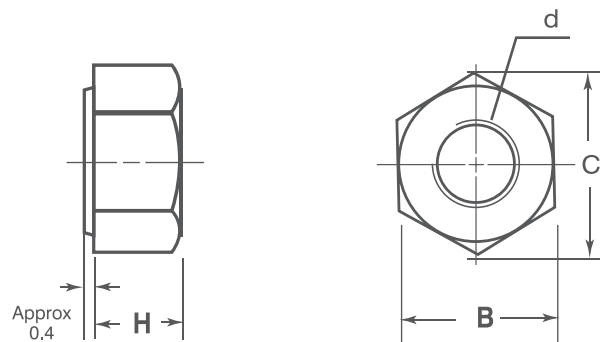
Surface Finish : Plain, Electro Galvanized
 Hot Dipped Galvanized
 PTFE Coated



MATERIAL SPECIFICATION OF HIGH TEMPERATURE & LOW TEMPERATURE BOLTING

Grade	Material	Min Tempering Temperature F (C)	Tensile strength (Min.)	Yield strength (Min.)	Elongation % (Min.)	Reduction % (Min.)	Brinell Hrdness	Recommended Bolting Temperature Range	
								Min. C	Max. C
ASTM A193 Gr. B7	ASTM 4140, 4142, 4145	1,100(593 C)	125 ksi / 860 Mpa	105 ksi / 720 Mpa	16	50	321 Max.	-100	400
ASTM A193 Gr. B7M	ASTM 4140, 4142, 4145	1,150(620 C)	100 ksi / 690 Mpa	80 ksi / 550 Mpa	18	50	235 Max.	-100	400
ASTM A320 Gr. L7	ASTM 4140, 4142, 4145	1,100(593 C)	125 ksi / 860 Mpa	105 ksi / 725 Mpa	16	50	321 Max.	-100 *	400
ASTM A320 Gr. L7M	ASTM 4140, 4142, 4145	1,150(620 C)	100 ksi / 690 Mpa	80 ksi / 550 Mpa	18	50	235 Max.	-100 *	400
ASTM A193 Gr. B16	Cr-Mo-Vanadium	1,200(650 C)	125 ksi / 860 Mpa	105 ksi / 725 Mpa	18	50	321 Max.	0	520
ASTM A193 Gr. B8	AISI 304	Carbide Solution Treated	75 ksi / 515 Mpa	30 ksi / 205 Mpa	30	50	223 Max.	-250	575
ASTM A193 Gr. B8M	AISI 316	Carbide Solution Treated	75 ksi / 515 Mpa	30 ksi / 205 Mpa	30	50	223 Mx.	-250	600
ASTM A320 Gr. B8	AISI 304	Carbide Solution Treated	75 ksi / 515 Mpa	30 ksi / 205 Mpa	35	50	223 Max.	-250	575
ASTM A320 Gr. B8M	AISI 316	Carbide Solution Treated	75 ksi / 515 Mpa	30 ksi / 205 Mpa	35	50	223 Mx.	-250	600

* Minimum Impact Value of 20j at -101°C (Avj 27j)



DIMENSION FOR HEAVY HAXAGON NUTS ASTM A194 Gr 2H, 2HM, 8, 8M

Unit : mm

Nom. Size d x n in.	B		C		H		
	Basic	Min.	Max.	Min.	Basic	Max.	Min.
1/2 x 13	22.22	21.59	25.65	24.61	12.3	12.8	11.78
5/8 x 11	26.98	26.19	31.16	29.84	15.47	16.02	14.91
3/4 x 10	31.75	30.78	36.65	35.10	18.65	19.25	18.03
7/8 x 9	36.51	35.41	42.16	40.36	21.82	22.47	21.16
1 x 8	41.27	40.0	47.65	45.62	25.00	25.70	24.28
1-1/8 x 8	46.03	44.60	53.16	50.85	28.17	28.93	27.41
1-1/4 x 8	50.8	49.22	58.65	56.11	30.95	31.77	30.15
1-1/2 x 8	59.4	58.70	67.90	67.40	37.00	37.50	36.50

HEXAGON HEAD BOLT

Standard Specification : BS 3692

Also conforms to ISO 4014, DIN 931 / 933

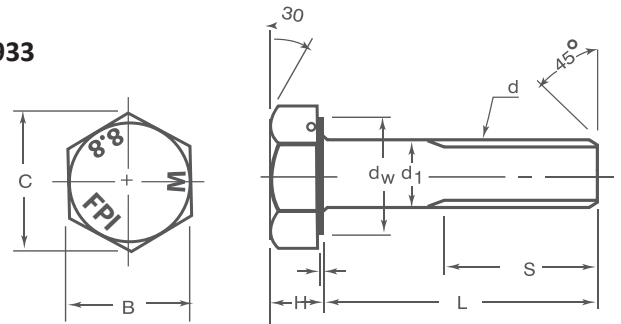
Material : High Tensile Steel

Mechanical Properties : BS 3692 / ISO 898 - 1

Strength Grade : 8.8, 10.9

Screw thread : 6g of ISO 965 / 2

**Surface Finish : Black Oxide, Zinc Plated
Hot Dipped Galvanized**



DIMENSIONS

Unit : mm

NOM SIZE d X p	d1		H		B		C		S		
	Max	Min	Max	Min	Max	Min	Max	Min	<= 125	>125<=200	>200
M6 X 1	6.0	5.82	4.150	3.850	10.0	9.78	11.5	11.05	18		
M8 X 1.25	8.0	5.82	5.650	5.350	13.0	12.73	15	14.38	22		
M10 X 1.5	10.0	9.78	7.180	6.820	17.0	16.73	19.6	18.90	26	32	
M12 X 1.75	12.0	11.73	8.180	7.820	19.0	18.67	21.9	21.10	30	36	49
M14 X 2	14.0	13.73	9.180	8.820	22.0	21.67	25.4	24.49	34	40	53
M16 X 2	16.0	15.73	10.180	9.820	24.0	23.67	27.7	26.75	38	44	57
M18 X 2. 5	18.0	17.73	12.215	11.785	27.0	26.67	31.2	30.14	42	48	61
M20 X 2. 5	20.0	19.67	13.215	12.785	30.0	29.67	34.6	33.53	46	52	65
M22 X 2. 5	22.0	21.67	14.215	13.785	32.0	31.61	36.9	35.72	50	56	69
M24 X 3	24.0	23.67	15.215	14.785	36.0	35.38	41.6	39.98	54	60	73
M27 X 3	27.0	26.67	17.215	16.785	41.0	40.38	47.3	45.63	60	66	79
M30 X 3. 5	30.0	29.67	19.260	18.740	46.0	45.38	53.1	51.28	66	72	85
M33 X 3. 5	33.0	32.61	21.260	20.740	50.0	49.38	57.7	55.80	72	78	91
M36 X 4	36.0	35.61	23.260	22.740	55.0	54.26	63.5	61.31	78	84	97
M39 X 4	39.0	38.61	25.260	24.740	60.0	59.26	69.3	66.96	84	90	103
M42 X 4	42.0	41.61	26.260	25.740	65.0	64.26	75.1	72.61	90	96	109
M45 X 4. 5	45.0	44.61	28.260	27.740	70.0	69.26	80.8	78.26	96	102	115
M48 X 5	48.0	47.61	30.260	29.740	75.0	74.26	86.6	83.91	102	108	121
M52 X 5	52.0	51.54	33.210	32.690	80.0	79.26	92.4	89.56	110	116	129
M56 X 5.5	56.0	55.54	35.310	34.690	85.0	84.13	98.1	95.07	118	124	137
M60 X 5.5	60.0	59.64	38.310	37.690	90.0	89.13	103.9	100.72	126	132	145
M64 X 6	64.0	63.54	40.310	39.690	95.0	94.13	109.7	106.37	134	140	153
M68 X 6	68.0	67.54	43.310	42.690	100.0	99.13	115.5	112.02	142	148	161

PRODUCT RANGE

[illegible]

 FULLY THREADED

☐ STANDARD THREADED

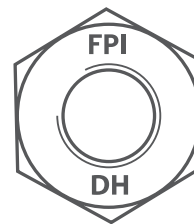
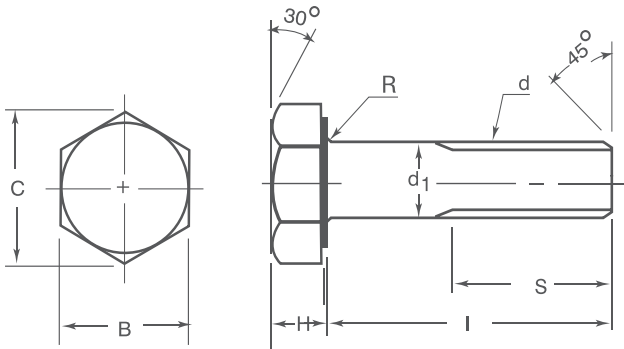
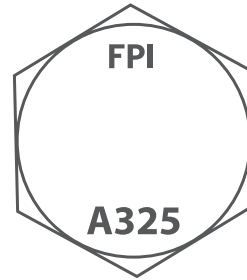
HEAVY HEXAGON BOLT

A325 / A325M

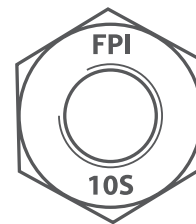


www.fpiind.ae

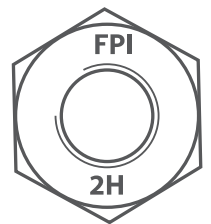
Standard Specification : ANSI / ASME B 18.2.1 / B 18.2.3.7M
Material : Medium Carbon Steel / Alloy Steel
Strength Grade : A325, A325M Type 1
Screw Threads : ANSI / ASME B 1.1 UNC / B1.13M
Class of Threads : Class 2A / 6g
Surface Finish : Black Oxide, Zinc Plated
 Hot Dipped Galvanized



GRADE A563



GRADE A563M

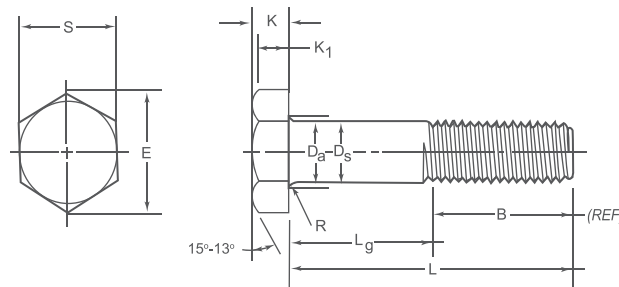


GRADE A194 2H

DIMENSIONS:

Unit : mm

Nom. Size d x n in	d1		B		C		H			S	R
	Max.	Min.	Max.	Min.	Max.	Min.	Basic	Max.	Min.	Basic	
1/2 x 13	13.08	12.24	22.22	21.59	25.65	24.61	7.94	8.20	7.67	25.40	0.23 to 0.79
5/8 x 11	16.30	15.36	26.99	26.19	31.16	29.84	9.92	10.23	9.60	31.75	0.53 to 1.57
3/4 x 10	19.50	18.51	31.75	30.78	36.65	35.13	11.90	12.27	11.56	35.05	0.79 to 1.57
7/8 x 9	22.73	21.64	36.51	35.41	42.16	40.36	13.89	14.30	13.49	38.10	1.57 to 2.36
1 x 8	25.96	24.79	41.27	40.00	47.65	45.62	15.48	15.92	15.01	44.45	
1-1/8 x 7	29.18	27.89	46.03	44.60	53.16	50.85	17.46	18.24	16.71	50.80	
1-1/4 x 7	32.43	31.06	50.80	49.22	58.65	56.11	19.84	20.65	19.02	50.80	
1-3/8 x 6	35.66	34.16	55.56	53.82	64.16	61.36	21.43	22.30	20.57	57.15	
1-1/2 x 6	38.89	37.34	60.32	58.42	69.64	66.60	23.81	24.74	22.91	57.15	



DIMENSIONS:

Unit : mm

D Nominal Bolt Size & Thread Pitch	S		E		K	
	Body Diameter		Width Across Flats		Width Across Corners	
	Max	Min	Max	Min	Max	Min
M12 x 1.75	12.70	11.30	21.00	20.16	24.25	7.95
M14 x 2	14.70	13.30	24.00	23.16	27.71	9.25
M16 x 2	16.70	15.30	27.00	26.16	31.18	10.75
M20 x 2.5	20.84	19.16	34.00	33.00	39.26	13.40
M22 x 3	24.84	23.16	41.00	40.00	47.34	15.90
M30 x 3.5	30.84	29.16	50.00	49.00	57.74	19.75
M36 x 4	37.00	35.00	60.00	58.80	69.28	23.55

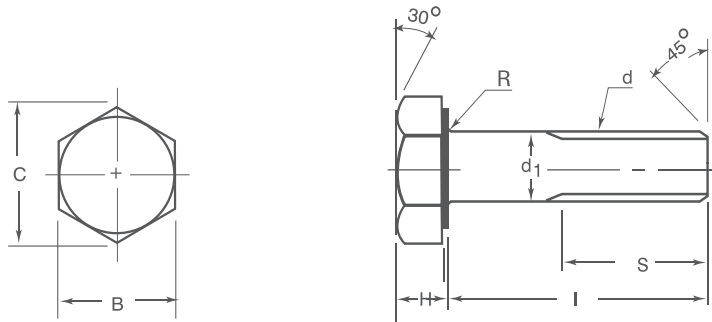


www.fpiind.ae

HEAVY HEXAGON BOLT

A490 / A490M

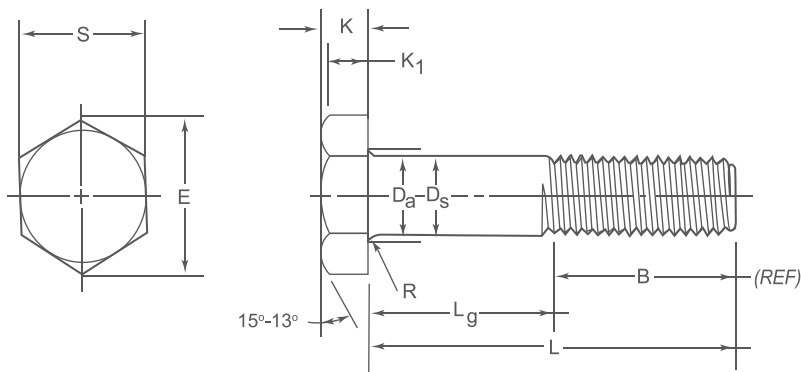
Standard Specification : ANSI / ASME B 18.2.1 / B18.2.3.7M
Material : Medium Carbon Steel / Alloy Steel
Strength Grade : A490 Type 1 / A490M Type 1
Screw Threads : ANSI / ASME B 1.1 UNC / B1.13M
Class of Threads : Class 2 A / 6g
Surface Finish : Black Oxide, Hot Dipped Galvanized



DIMENSIONS:

Unit : mm

Nom. Size d x n in	d1		B		C		H			S	R
	Max.	Min.	Max.	Min.	Max.	Min.	Basic	Max.	Min.	Basic	
1/2 x 13	13.08	12.24	22.22	21.59	25.65	24.61	7.94	8.20	7.67	25.40	0.23 to 0.79
5/8 x 11	16.30	15.36	26.99	26.19	31.16	29.84	9.92	10.23	9.60	31.75	0.53 to 1.57
3/4 x 10	19.50	18.51	31.75	30.78	36.65	35.13	11.90	12.27	11.56	35.05	0.79 to 1.57
7/8 x 9	22.73	21.64	36.51	35.41	42.16	40.36	13.89	14.30	13.49	38.10	1.57 to 2.36
1 x 8	25.96	24.79	41.27	40.00	47.65	45.62	15.48	15.92	15.01	44.45	
1-1/8 x 7	29.18	27.89	46.03	44.60	53.16	50.85	17.46	18.24	16.71	50.80	
1-1/4 x 7	32.43	31.06	50.80	49.22	58.65	56.11	19.84	20.65	19.02	50.80	
1-3/8 x 6	35.66	34.16	55.56	53.82	64.16	61.36	21.43	22.30	20.57	57.15	
1-1/2 x 6	38.89	37.34	60.32	58.42	69.64	66.60	23.81	24.74	22.91	57.15	



DIMENSIONS:

Unit : mm

D			S		E		K	
Nominal Bolt Size & Thread Pitch	Body Diameter		Width Across Flats		Width Across Corners		Head Height	
	Max	Min	Max	Min	Max	Min	Max	Min
M12 x 1.75	12.70	11.30	21.00	20.16	24.25	22.78	7.95	7.24
M14 x 2	14.70	13.30	24.00	23.16	27.71	26.17	9.25	8.51
M16 x 2	16.70	15.30	27.00	26.16	31.18	29.56	10.75	9.68
M20 x 2.5	20.84	19.16	34.00	33.00	39.26	37.29	13.40	12.12
M22 x 3	24.84	23.16	41.00	40.00	47.34	45.20	15.90	14.56
M30 x 3.5	30.84	29.16	50.00	49.00	57.74	55.37	19.75	17.92
M36 x 4	37.00	35.00	60.00	58.80	69.28	66.44	23.55	21.72

HEXAGON NUT-METRIC COARSE

Standard Specification : ISO 4032

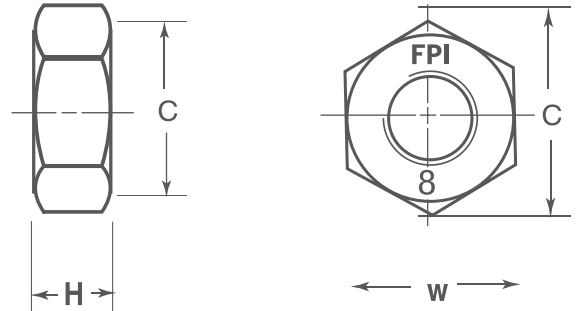
Also Conforms to BS 3692, DIN 934

Material : Medium Carbon Steel

Mechanical Properties : CI 8, 10

Threads : Conforms to Class 6H of ISO 965 / 2

Surface Finish : Black Oxide, Zinc Plated
Hot Dipped Galvanized



DIMENSIONS

Unit : mm

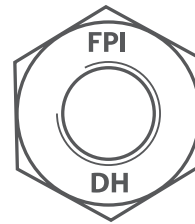
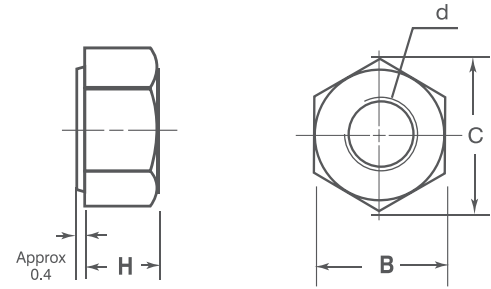
Nominal Size	Thread Pitch	W		C	H	
		Max	Min	Min	Max	Min
M4	0.7	7	6.78	7.66	3.2	2.9
M5	0.8	8	7.78	8.79	4.7	4.4
M6	1	10	9.78	11.05	5.2	4.9
M8	1.25	13	12.73	14.38	6.8	6.44
M10	1.5	16	15.73	17.77	8.4	8.04
M12	1.75	18	17.73	20.03	10.8	10.37
M14	2	21	20.67	23.35	12.8	12.1
M16	2	24	23.67	26.75	14.8	14.1
M20	2.5	30	29.16	32.95	18	16.9
M24	3	36	35	39.55	21.5	20.2
M30	3.5	46	45	50.85	25.6	24.3
M36	4	55	53.8	60.79	31	29.4
M42	4.5	65	63.1	71.3	34	32.4
M48	5	75	73.1	82.6	38	36.4
M56	5.5	85	82.8	93.56	45	43.4
M64	6	95	92.8	104.86	51	49.1



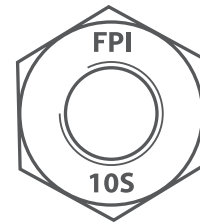
www.fpind.ae

HEAVY HEXAGON NUTS FOR A325(M), A490(M) & B7 BOLTS

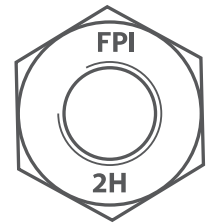
Standard Specification : ANSI / ASME B 18.2.2 1986
Material : Medium Carbon Steel
Mechanical Properties : ASTM A 563(M) / A 194(M)
Strength Grade : C / DH / 10S / 2H
Screw Threads : ANSI / ASME B 1.1 UNC / B1.13M
Class of Threads : Class 2 B
Surface Finish : Black Oxide, Zinc Plated
Hot Dipped Galvanized



GRADE A563



GRADE A563M

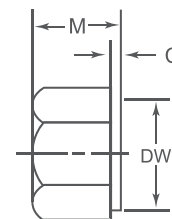
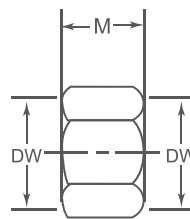
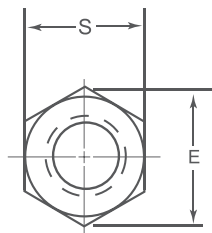


GRADE A194 2H

DIMENSIONS:

Unit : mm

Nom. Size d x n in.	B		C		H		
	Max.	Min.	Max.	Min.	Basic	Max.	Min.
1/2 x 13	22.22	21.59	25.65	24.61	12.30	12.80	11.78
5/8 x 11	26.98	26.19	31.16	29.84	15.47	16.02	14.91
3/4 x 10	31.75	30.78	36.65	35.10	18.65	19.25	18.03
7/8 x 9	36.51	35.41	42.16	40.36	21.82	22.47	21.16
1 x 8	41.27	40.0	47.65	45.62	25.0	25.7	24.28
1-1/8 x 7	46.03	44.60	53.16	50.85	28.17	28.93	27.41
1-1/4 x 7	50.8	49.22	58.65	56.11	30.95	31.77	30.15
1-1/2 x 6	59.4	58.70	67.90	67.4	37.00	37.50	36.50



DIMENSIONS:

Unit : mm

Nominal Nut Dia and Thread Pitch	S		E		M	
	Width Across Flats		Width Across Corners		Thick ness	
	Max	Min	Max	Min	Max	Min
M12 x 1.76	21.00	20.15	24.25	22.78	12.3	11.9
M14 x 2	24.00	23.16	27.71	26.17	14.3	13.6
M16 x 2	27.00	26.16	31.18	29.68	17.1	16.4
M20 x 2.5	34.00	33.00	39.26	37.29	20.7	19.4
M22 x 2.5	36.00	35.00	41.57	39.55	23.6	22.3
M24 x 3	41.00	40.00	47.34	45.20	24.2	22.9
M27 x 3	46.00	45.00	63.12	50.55	27.6	26.3
M30 x 3.5	50.00	49.00	57.74	55.37	30.7	29.1
M36 x 4	60.00	58.80	69.28	66.44	36.6	35.0
M42 x 4.5	70.00	67.90	80.83	77.41	42.0	40.4
M48 x 5	80.00	77.60	92.38	88.46	48.0	46.4
M66 x 5.5	90.00	87.20	103.92	99.41	66.0	54.1
M64 x 6	100.00	96.60	116.47	110.35	64.0	62.1
M72 x 6	110.00	108.40	127.02	121.30	72.0	70.1
M80 x 6	120.00	116.00	138.58	132.24	80.0	78.1
M90 x 6	135.00	130.50	155.88	148.77	90.0	87.8
M100 x 6	150.00	145.00	173.21	165.30	100.0	97.8

www.fpind.ae

: Black, Hot Dipped Galvanized

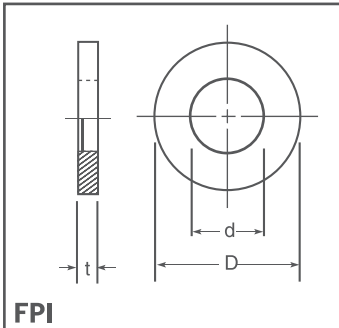




www.fpind.ae

HARDENED PLAIN WASHERS

Standard Specification : ASTM F 436M
Material : Medium Carbon Steel
Type : Type 1
Hardness : Black Washer 38 ~45 HRC,
 HDG Washer 26 ~45 HRC
Surface Finish : Black, Zinc Plated
 Hot Dipped Galvanized

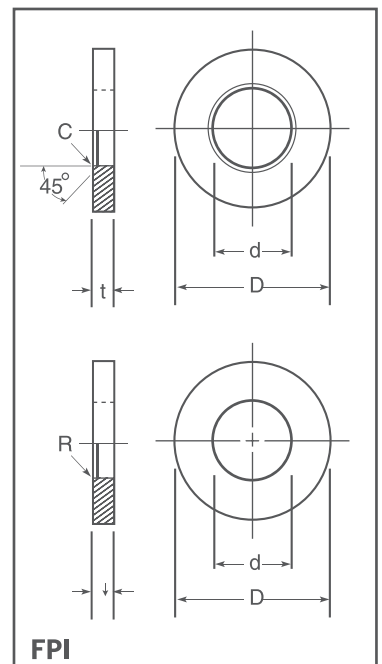


Bolt Size	Inner Diameter (d)		Outer Diameter (D)		Thickness (t)	
	Max.	Min.	Max.	Min.	Max.	Min.
M12	14.40	14.00	27.00	25.70	4.60	3.10
M14	16.40	16.00	30.00	28.07	4.60	3.10
M16	18.40	18.00	34.00	32.40	4.60	3.10
M20	22.50	22.00	42.00	40.40	4.60	3.10
M22	24.50	24.00	44.00	42.40	4.60	3.40
M24	26.50	26.00	50.00	48.40	4.60	3.40
M27	30.50	30.00	56.00	54.10	4.60	3.40
M30	33.60	33.00	60.00	58.10	4.60	3.40
M36	39.60	39.00	72.00	70.10	4.60	3.40
M42	45.60	45.00	84.00	81.10	7.20	4.60
M48	52.70	52.00	95.00	92.80	7.20	4.60
M56	62.70	62.00	101.00	104.50	8.70	6.10
M64	70.70	70.00	187.00	115.80	8.70	6.10
M72	78.70	76.00	130.00	127.50	8.70	6.10
M80	86.90	86.00	142.00	139.50	8.70	6.10
M90	96.90	96.00	159.00	156.50	8.70	6.10
M100	107.90	107.00	176.00	173.50	8.70	6.10

HIGH STRENGTH PLAIN WASHERS FOR FRICTION GRIP JOINTS

Material : Medium Carbon Steel
Strength Grade : F 35
Hardness : HRC 38 to 45
Surface Finish : Black, Hot Dipped Galvanized

NOM SIZE OF BOLT	DIMENSIONS OF HSFG FLAT WASHERS EN 14399								DIMENSIONS OF HSFG WASHERS DIN-6914		
	Inside Dia		Outside Dia		Thickness			HARDNESS	INSIDE DIA	OUTSIDE DIA	THICK NESS
	MIN	MAX	MIN	MAX	NOM	MIN	MAX				
M12	13	13.27	23.48	24	3	2.7	3.3	38-45	13	17	3
M16	17	17.27	29.48	30	4	3.7	4.3	38-45	17	30	4
M20	21	21.33	36.38	37	4	3.7	4.3	38-45	21	37	4
M22	23	23.33	38.38	39	4	3.7	4.3	38-45	23	39	4
M24	25	25.33	43.38	44	4	3.7	4.3	38-45	25	44	4
M27	28	28.52	49.00	50	5	4.4	5.6	38-45	28	50	5
M30	31	31.62	54.80	56	5	4.4	5.6	38-45	31	56	5
M33	34	34.62	59.80	61	6	5.4	6.6	38-45	34	61	5
M36	37	37.62	64.80	66	6	5.4	6.6	38-45	37	66	5



STAINLESS STEEL & NON FERROUS FASTENER



Products : Bolts & Nuts Washer, Stud Bolt, Threaded Bar, Machines Screws etc.
Material : Stainless Steel
Strength Grade : As Per the Table
Surface Finish : Natural

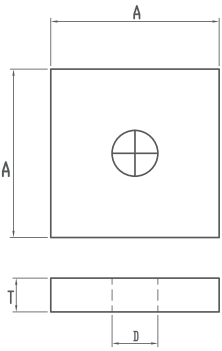
STAINLESS STEEL GRADES

MATERIAL	GRADE	COMPOSITION									
STAINLESS STEEL		C% (Max)	P% (Max)	S% (Max)	Mn% (Max)	Si% (Max)	Cr%	Ni%	Mo%	Ti%	N%
	AISI 304	0.08	0.045	0.03	2.0	1.0	18.0-20.0	8.0-11.0	-	-	-
	AISI 316	0.08	0.045	0.03	2.0	1.0	16.0-18.0	10.0-14.0	2.0-3.0	-	-
	AISI 316L	0.03	0.045	0.03	2.0	1.0	16.0-18.0	10.0-14.0	2.0-3.0	-	-
	AISI 321	0.08	0.045	0.03	2.0	1.0	17.0-20.0	9.0-13.0	-	5 x C	-
POPULAR DUPLEX	S31803	0.03	0.03	0.02	2.0	1.0	21.0-23.0	4.5-6.5	2.5-3.5	-	0.8-0.2
STAINLESS STEEL	S32205	0.03	0.03	0.02	2.0	1.0	22.0-23.0	4.5-6.5	3.0-3.5	-	0.14-0.2

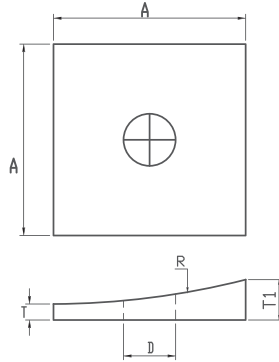
MATERIALS	PRODUCTS	NOMINAL COMPOSITION	STANDARDS
BRASS	HEX HEAD BOLT, NUT, FLAT WASHER, SPRING WASHER, COUNTER SUNK, PAN, ROUND HEAD SCREWS, EYE BOLT, WING NUT ETC	Cu : 62-64 Zn : rem	ISO 426/1 C36000 ASTM B16
COPPER	HEX HEAD BOLT, NUT, FLAT WASHER, AND SPRING WASHERS ETC	Cu : > = 99.9	ISO 1337 BS EN 1976
SILICON BRONZES	HEX HEAD BOLT, NUT, FLAT WASHER, SPRING WASHER, COUNTER SUNK, PAN, ROUND HEAD SCREWS ETC	Cu : 94.8, Si : 2.8-3.8 Zn : 15 Mn : 0.50-1.3 Fe : 0.8 Ni : 0.6 Pb : 0.05	C65100 ASTM F468 ASTM F467
MONEL-400	HEX HEAD BOLT, NUT, FLAT WASHER, SPRING WASHER ETC	Ni 66.50 Fe 2.50 Si 0.05 Mn 2.00 C 0.300 S 0.024	UNS : NO4400 ASTM B127 ASTM B164
NYLON	HEX HEAD BOLT, NUT, FLAT WASHER, SPRING WASHER ETC	THERMOPLASTIC POLYAMIDE PA6-6	

Fastener made from exotic material like, Inconel, Incoloy, Hastelloy, Duplex Stainless Steel, ASTM A453 660 A + B Cupro Nickel, 21CrM.V57 and other grade as per requirement.

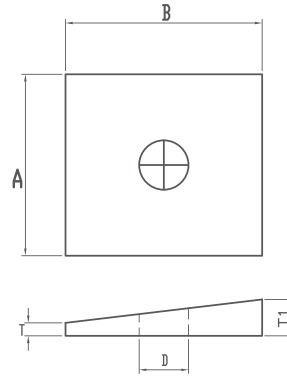
FABRICATED PRODUCTS



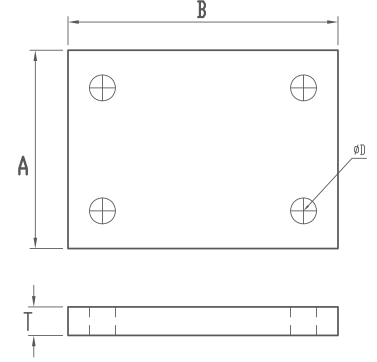
SQUARE WASHER



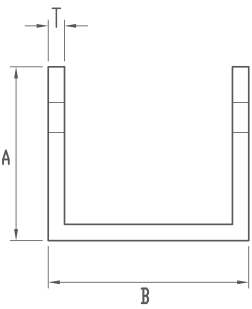
CURVED WASHER



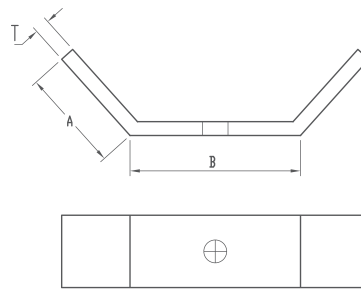
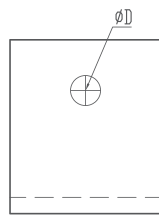
TAPER WASHER



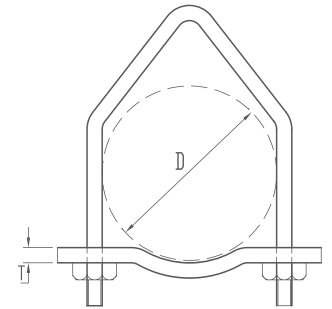
BASE PLATE



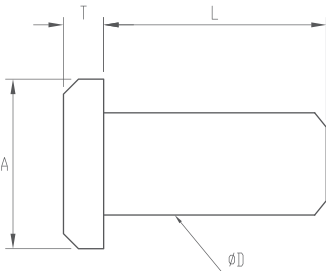
BRACKET CLAMP



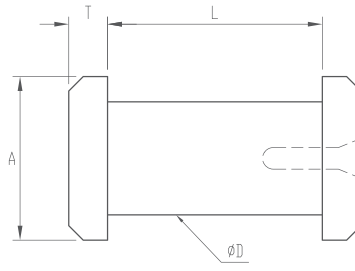
BRACKET CLAMP - 1



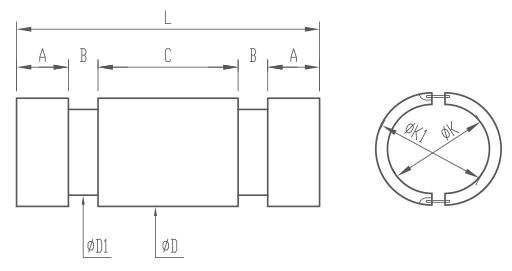
PIPE HANGER



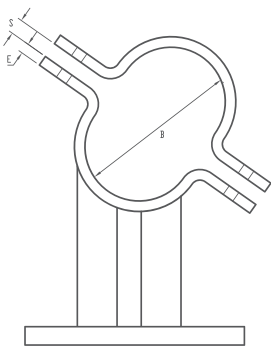
COLLARED PIN



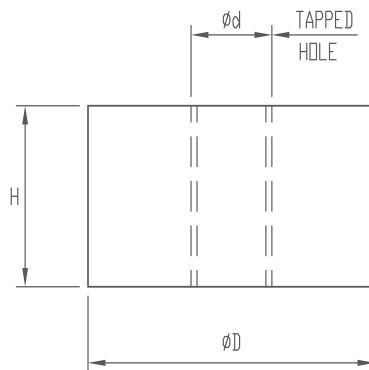
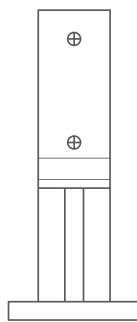
PIG NOSE BOLT



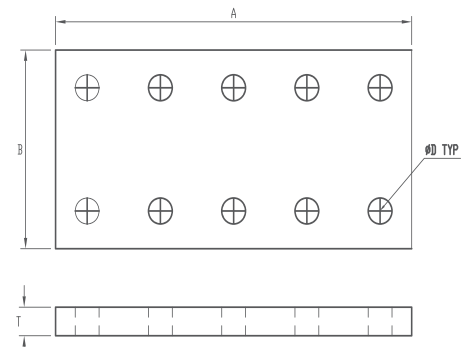
PIN WITH RING CLAMP



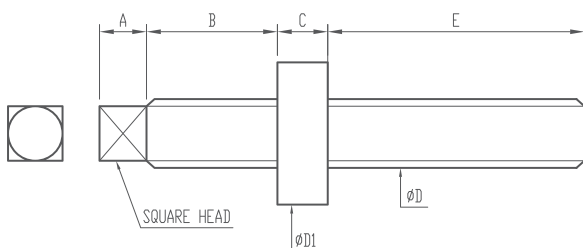
PIPE SHOE BLOCK



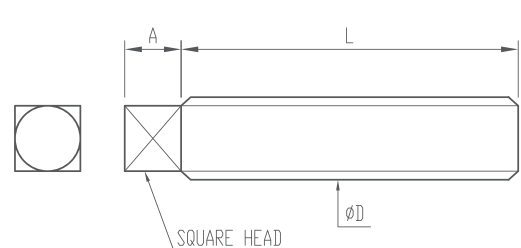
EARTH BOSS



TEMPLATE FOR ANCHOR BOLT



COLLAR BOLT



JACK SCREW

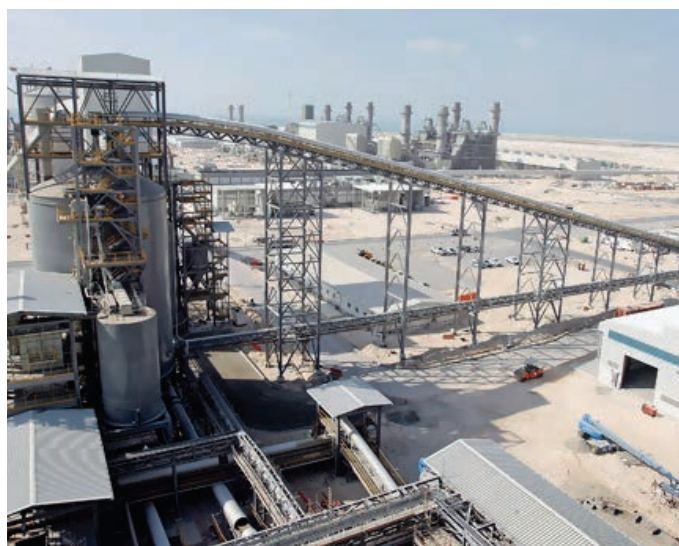
PROJECTS PHOTOS



www.fpind.ae



NEW DOHA INTERNATIONAL AIRPORT



EMIRATES ALUMINIUM SMELTER PROJECT



ABU DHABI CRUDE OIL PIPELINE



FPSO FRAIDE



THAMA & HABSHAN DEVELOPMENT



FERTIL PROJECT



www.fpind.ae

● **Sales & Factory:**

Tel: 06-7672667, Fax: 06-7672668
P.O. Box: 7452, UAQ, UAE
Plot No. 4, Block No. 4, Sector 2
Emirates Modern Industrial Area
Umm-al-Thaoob, UAQ
E-mail: fpisales@fp.ae

● **Administrative office:**

Tel: 04-3406877,
Fax: 04-3406876
P.O. Box: 26398, Dubai, UAE
NO: 368, Street 20 B,
Al Quoz Industrial Area Three
E-mail: hnc@eim.ae

Abu Dhabi Branch : Shop No 2, M-37, Plot No 57, Mussafah.