



#### Rock Bolt:

#### The introduction of product:

A rock bolt is a long anchor bolt, for stabilizing rock excavations, which may be used in tunnels or rock cuts. It transfers load from the unstable exterior to the confined (and much stronger) interior of the rock mass.

This Rock Bolt has thread as per requirement and could be cut to any length. The accessory of Plate, Nuts, Spherical washers, Couplers, expansion shell are also available.

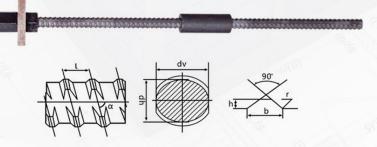
Screw-thread steel bars for the pre-stressing of concrete.

# Flat Hex Nut Flat Steel Plate Lock Nut Coupler Full Thread Bar

# **Product Specifications:**

ASTM A615 (American Standard for Testing and Materials) and are available in sizes ranging from 10mm to 40mm.

- 1. Length: 4m, 6m, 9m, 12m or as per customers' requirements.
- 2. Technology: Hot rolled.
- 3. Accessories: full hex nut, spherical hex nut, Bearing plate, Domed nut, Anchor bolt,
- **4.** Foundation bolt, Couplers, Spacer.
- 5. Coating: Galvanized, Black or Plain.





# **Bar Specification:**

ASTM-A 615 / A 615M

Deformed bar designation number nominal weights.

	Nominal Weight		Diameter		Cross Sectional Area	
Bar#	Lb/ft	Kg/m	Inches	Mm	Inch	Mm
3(10)	0.376	0.56	0.375	9.5	0.11	71
4(13)	0.668	0.994	0.5	12.7	0.2	129
5(16)	1.043	1.552	0.625	15.9	0.31	199
6(19)	1.502	2.235	0.75	19.1	0.44	284
7(22)	2.044	3.042	0.875	22.2	0.6	387
8(25)	2.67	3.973	1	22.2	0.79	510
9(29)	3.4	5.06	1.128	28.7	1	643
10(32)	4.303	6.404	1.27	32.3	1.27	819
11(36)	5.313	7.907	1.41	35.8	1.56	1006
14(43)	7.65	11.38	1.693	43	2.25	1452
18(57)	13.6	20.24	2.257	57.3	4	2581

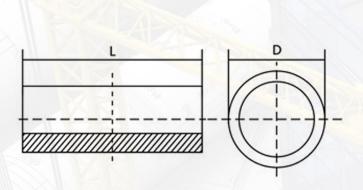
Dia/ Inch	Area Mm	Area in"	Lbs/ Foot	Kgs/ Foot	Meter/ Ton	Foot/ Ton	Fee/ 50Kgs
1/4	6.35	0.049	0.167	0.075	4024	13197	660
3/8	9.525	0.11	0.376	0.17	1788	5862	293
1/2	12.7	0.196	0.668	0.303	1006	3299	165
5/8	15.875	0.307	1.043	0.474	644	2113	106
3/4	19.05	0.442	1.502	0.682	447	1467	73
7/8	22.225	0.601	2.044	0.929	328	1078	54
1	25.4	0.785	2.67	1.213	251	825	41
1-1/8	28.575	0.994	3.38	1.536	199	652	33
1-1/4	31.75	1.227	4.172	1.896	161	528	26
1-3/8	34.925	1.485	5.05	2.295	133	436	22
1-1/2	38.1	1.766	6.01	2.731	112	367	18

Dia/mm	Area Mm	Kgs/Meter	Kgs/Foot	Meter/Ton
6	28.2	0.222	0.067	4504
8	50.3	0.395	0.12	2532
10	78.5	0.617	0.188	1621
12	113.1	0.888	0.27	1126
14	153.9	1.208	0.368	828
16	201.1	1.578	0.48	634
18	245.5	1.998	0.6.9	500
20	314.2	2.466	0.751	406
22	380.1	2.984	0.909	335
25	490.9	3.853	10174	259
28	615.8	4.834	1.473	207
32	804.3	6.313	1.924	158



# Coupler:

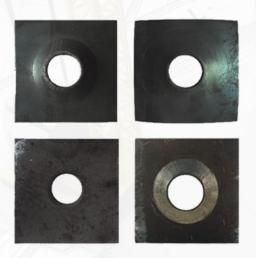
Coupler is designed to connect the thread bar to increas the length where projects request.

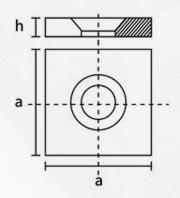


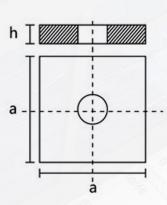


## **Anchor Plate:**

Anchor plate works closely working with the nuts and there are different types like Flat, Domed, Spherical plate etc.





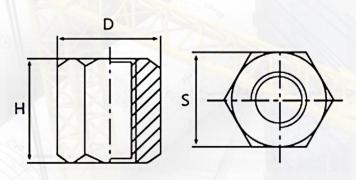




# High Strength Thread Bar System:

#### Flat Hex Nuts & Spherical Hex Nut

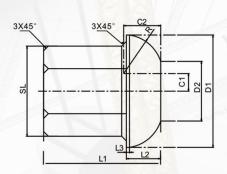
Normally there are full hex nut and spherical hex nut used is construction. There is also nut, which is shorter and thinner than normal hex nut in the tensioning end.

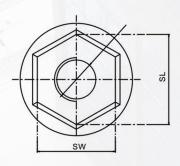


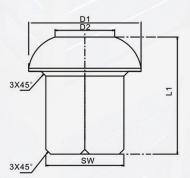


#### **Domed Nut:**

Sizes can be as customer's drawing.











### **Application:**

IS / ANSI / ASME / DIN

Range size: (M6 - M100), (Length up to 6 meters).

Anchor Bolt Reinforcement Anchor Systems used to anchor the concrete or steel structures and machinery to concrete base structures. Product range is suitable for high loading conditions. This multi-purpose anchor bolt is widely approved and adopted.



#### Material (All Grade):

Mild Steel, Stainless Steel, Carbon Steel, Alloy Steel.

## Surface Finish:

Blackening, Cadmium Zinc Plated, Galvanized, Hot Dip Galvanized, Nickel Plated, Tin Coating, Epoxy Coating etc.





# **Application:**

All industry.



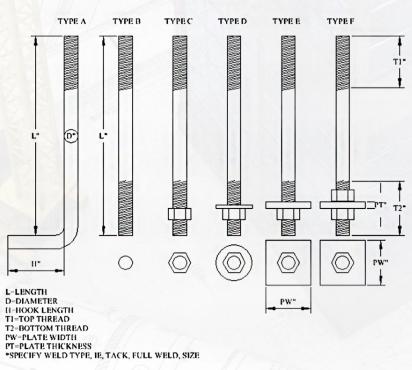


### Threads:

Metric, BSW, BSF, UNC and as per costumers required.



#### ANCHOR BOLT TYPES

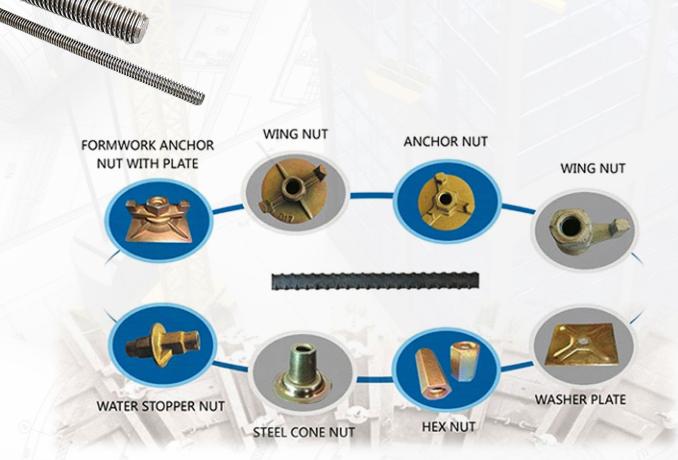




#### Formwork Tie Rod:

Formwork Threaded Tie Bar is produced from high tensile steel with a screw thread (Deformation conforming to ASTMA 618 for reinforcing steel bars).

Available in 12mm, 14 mm, 16 mm, 18 mm or 20mm options, and standard lengths of either 1mtrs 2mtrs, 3mtrs or 6mtrs.s Associated ancillary products such as nuts, sleeves, cones, wing nuts, plates and connectors are available.





## Centralizer:

Centralizer is designed for primary cementing consists of several metal strips shaped like a hunting bow and attached to a tool or to the outside of casing It is all proper centralization can lead to severe cementing problems including lack of zonal isolation and improper casing support.

Centralizer is be able to ensure the straightness of self drilling rock anchor in deep drill hole and make it in the middle of drill hole. It helps to make grouting being uniform and enhance the anchoring effect







#### **Barbed Wire:**

Materials: High quality low carbon steel wire, PVC wire.

Weaving and Characteristic: Twisting and weaving.

**Usage:** In Protecting Grass Boundary, Railways, Freeways etc.



#### **Barbed & Razor Wire Mesh:**

Put buckles of stainless steel sheet on zinc coated steel sheet between two pieces of blade-gill wire net to make strength more. The spiral intersecting barbed net presents intersecting state after unrolling with beautifull feature and practicality.









# Fencing:

Medium: Barbed Wire, Razor Wire, Chainlink Fence.

Type: Type-Y1/1, L1/1, U1/1, 1-1/1.

















# All kinds of Wires:

Wires: Stainless steel wire, Galvanized iron wire, Black iron wire, PVC wire, The cutting

wire used in construction

Uses: Twisting and weaving.





### Welded Wire Mesh:

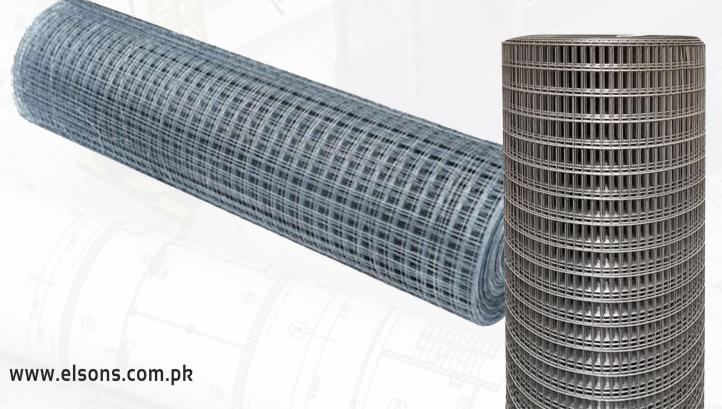
The introduction of products:

Materials: High quality low carbon steel wire, stainless steel wire.

Weaving and characteristic: Including galvanizing after welding. Galvanizing before welding. It is divided to hot dipped and electro galvanized. PVC coated, plastic soaked. Special electric welded wire mesh. It has the characteristics corrosion resisting and oxidation resisting.

**Uses:** Used widely in industry, Agriculture, Building, Transportation, Minefield, Lawn, Cultivation, etc.

Security, Decoration and Protection etc.





# **Expanded Plate Mesh:**

#### The introduction of products:

Materials: Aluminium plate, Thin low carbon steel plate, Stainless steel, AL-MG alloy plate, Coper plate, Nickle plate.

Weaving and characteristic: It is punched to mesh, including, aluminium plate mesh and stainless steel plate mesh; according to the hole, it is divided to diamond, Square, Round, Triangle, Scale-hole, it is strong and Wear-resisting, Artistic and Tasteful.

Uses: Protecting all kinds of machines and electrical equipments.







# **Crimped Wire Mesh:**

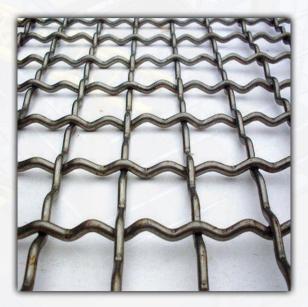
#### The introduction of product:

Materials: Black iron wire, Galvanized iron wire, lead wire, Stainless steel wire etc.

Weaving and characteristics: The structure becomes stronger when weaving is followed by crimping.

Uses: Mostly used in Mines and Coal factory construction etc.











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