

DISCOVERY METALS FZC



ديسكفري ميتالز ش.م.ح.

Specialized in Aluminium & Steel Products
(Oil & Gas, Construction, Marine & Automobile)

P.O.Box: 7073, UAQ FREE TRADE ZONE, UAE.

المتخصصة في منتجات الألمنيوم والصلب
(النفط والغاز والبناء والسيارات والبحرية)

ص.ب: ٧٠٧٣ الإمارات العربية المتحدة التجارة الحرة أم القيوين

Leading Manufacturers & Suppliers of Specialised ALUMINIUM & STEEL Products





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Leading Manufacturers & Suppliers of Specialised ALUMINIUM & STEEL Products

Discovery Metals FZC is one of the Middle East's leading suppliers of an extensive range of high quality products in Oil & Gas, Construction, marine, Automobile and industrial products. Discovery Metals, is a pioneering business conglomerate of UAE, the business hub of Middle East market. The directors and promoters of "Discovery Metals" are in the business of this segment for the past so many years.

DISCOVERY PRODUCTS- AT A GLANCE

FASTENERS

SPECIALISED GRATINGS & ACCESSORIES

WELDED WIRE MESH

SPECIALIZED STEEL & METAL PRODUCTS

SEWERAGE RELATED PRODUCTS

SCAFFOLDINGS

HIGH FREQUENCY WELDED TUBES

DISCOVERY MANAGEMENT MESSAGE

We strongly believe that quality counts and we have based our business strategy on the belief that the best quality product and service always wins through. It is on this basis that we have grown into a major supplier in the Middle east region in such a short time. High Quality standards are ensured by our manufacturer through Hi-tech facilities like heat treatment, hot-dip galvanizing and electro-galvanizing. These techniques satisfy specialized demands for the product covered under product range. We acknowledge that the cooperation and patronage of its customers remains a contributing factor in its growth. We return our thanks to them in the shape of a commitment for a never ending dedication to service till the customer satisfaction both in terms of product quality and turnaround time.



DISCOVERY PRODUCTS-IN DETAILS



FASTENERS

Discovery Metals FZC is one of the trusted names in GCC, involved in supply of variety of standard and special-grade fasteners. We supply a whole range of quality fasteners to international standards consisting of a broad range of extremely reliable, precise and accurate Stud Bolts, Anchor Bolts, U Bolts, Threaded Bars in Steel and Steel Alloys of different sizes from high quality Graded raw material. At the same time we can facilitate customers for hex nuts, heavy hex nuts, jam nuts and washers in black, electro galvanized, hot dip galvanized, stainless steel finish.



Our detailed fasteners range is as below:

NUTS & BOLTS

BOLTS

STUD BOLTS, HEX HEAD BOLTS,
SOCKET HEXAGON HEAD SCREW ANCHOR BOLTS
U-BOLTS, J BOLTS, T- HEAD BOLTS
MUSHROOM HEAD SQUARE NECK BOLTS, WING SCREW
EYE BOLT, FOUNDATION BOLTS, STRUCTURAL BOLTS

WASHER

PLAIN WASHER, PLAIN BIG & SMALL OD WASHER
SPRING LOCK WASHER, SPRING WASHER HEAVY DUTY
TOOTH WASHER, STAR WASHER
TAB WASHER WITH ONE & TWO TAB





NUTS

- HEXAGON NUTS
- HEXAGON COUPLING NUTS
- HEXAGON THIN NUTS, SQUARE NUTS
- HEXAGON CASTLE NUTS
- SELF LOCKING NUTS
- HEXAGON DOMED CAP NUTS



SCREWS

- PAN HEAD SLOTTED SCREWS
- CHEESE HEAD SLOTTED SCREWS
- COUNTERSUNK HEAD SLOTTED SCREWS
- COUNTERSUNK RAISED HEAD SLOTTED SCREWS
- PAN PHILLIPSE HEAD SCREW ,
- COUNTERSUNK PHILLIPSE RAISED HEAD SCREWS
- SLOTTED CHEESE TRIM HEAD MACHINE SCREWS
- SOCKET HEAD ALLEN CAP SCREWS
- ALLEN COUNTERSUNK SOCKET HEAD CAP SCREWS
- SOCKET HEAD SHOULDER SCREWS
- SOCKET HEAD CAP SCREW LOW HEAD
- HEXAGON SOCKET SET SCREW WITH FLAT POINT
- HEXAGON SOCKET SET SCREWS WITH CONE POINT
- HEXAGON SOCKET SET SCREWS WITH DOG POINT
- HEXAGON SOCKET SET SCREWS WITH CUP POINT
- IMPRIAL SOCKET CAP SCREWS



OTHERS

THREADED ROD

AS PER DRAWING AND CUSTOMERS SPEC.

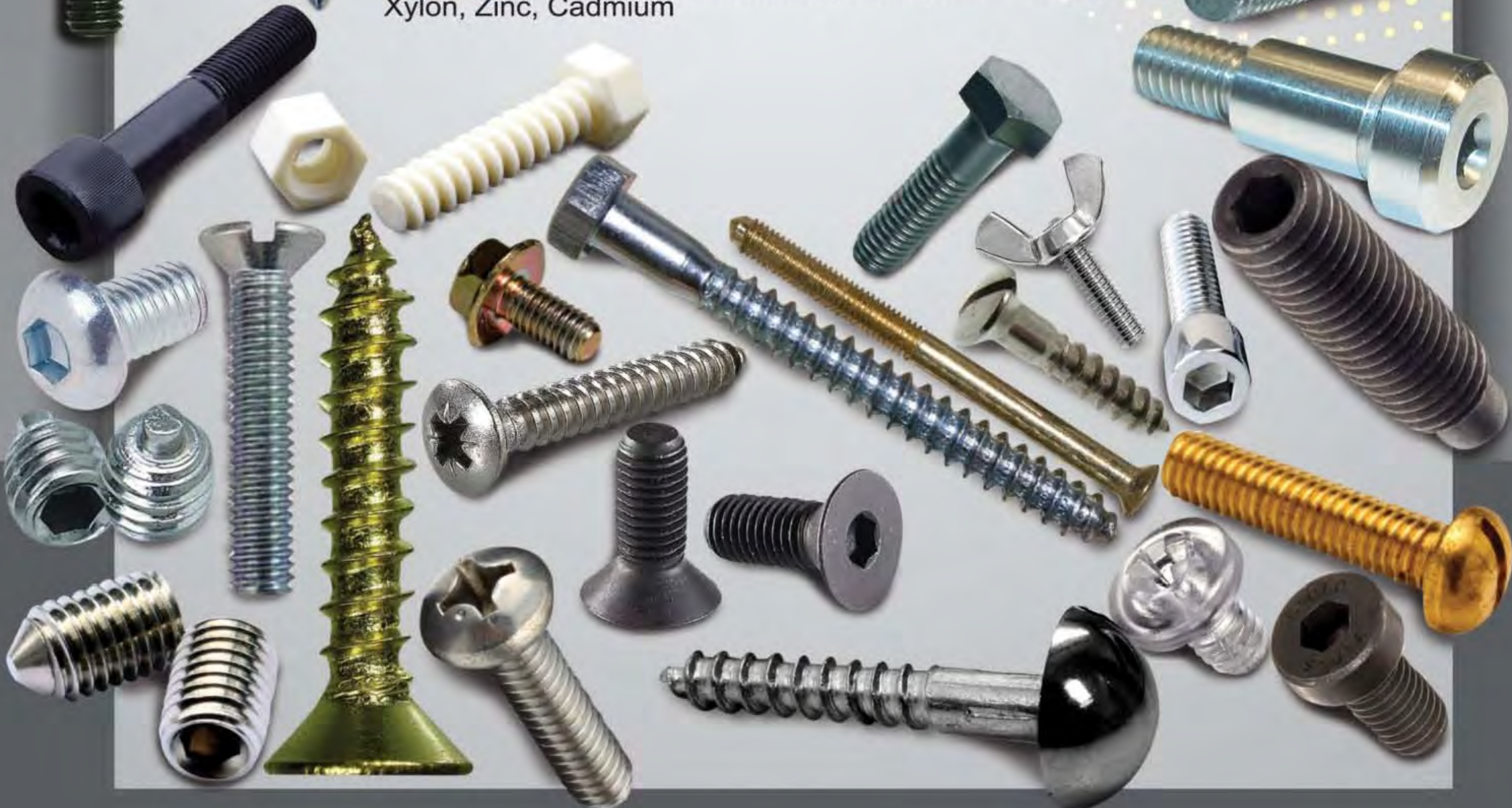
Specifications:

Range: M10 to M100 , LENGTH Upto 5 Meters

Standards: DIN, ASTM, SAE, BS, JIS, ISO

Materials: Carbon steel, Stainless Steel, Duplex Steel, Nickel alloys like, nickel, Monel, Inconel, Hastelloy, Alloy 20

Coating: Hot Dipped Galvanizing, Phosphate, Teflon, Xylon, Zinc, Cadmium



SPECIALISED GRATINGS & ACCESSORIES

Discovery Metals FZC is the leading supplier of Gratings (walkways), Handrails, stairtreads, cabletrays, fixing clips etc. for Oil & Gas, Power and desalination, Marine, water treatment plants and construction. We have established a reputation for managing projects of all sizes and supplying quality gratings on time.

Discovery Metals is focusing on all your gratings requirement from carbon steel, Stainless steel, GRP, FRP, Aluminum, Copper-Nickel etc.

Discovery Metals supplies premium quality gratings and related accessories which complies all the international standards like DIN, NAAM, BS etc.

GRP & FRP GRATINGS

Fibre Reinforced Plastic (FRP) grating is a moulded, one-piece fibreglass reinforced plastic grating, available in standard panels or fabricated into panels of the shape you require to fit your floor.

The square pattern design with interwoven construction allows load to be transferred to the adjoining bars providing a superior load-carrying capacity. The high resin-to-glass ratio provides maximum corrosion resistance to a wide range of chemicals frequently encountered in many industries.

Specifications :

- Material :** ISOPHTHALIC POLYESTER RESIN (ASTM E-84 Fire rating Class 1, 25 or less)
 : VINYL ESTER RESIN (ASTM E-84 Fire rating Class 1, 25 or less)
 : PHENOLIC RESIN (ASTM E-84 Fire spread index 4. Smoke developed value 1)
- Meets :** Class 1 Flammability per ASTM E-84.*
 Class A interior wall & ceiling finish per NFPA No. 255. * Available only in 38mm deep.

Top Surface

Safety

The slip resistance of the flooring and walkway product needs to be considered. Standard grating compares plain square edge flat bars. To increase slip resistance the following points should be considered on sloping walkways. Normally provided with an anti-skid surface. This is a coarse grit embedded into the resin. Plain top surface is available.

| | | | |
|----------|------|----------|-------|
| G | Grit | P | Plain |
|----------|------|----------|-------|

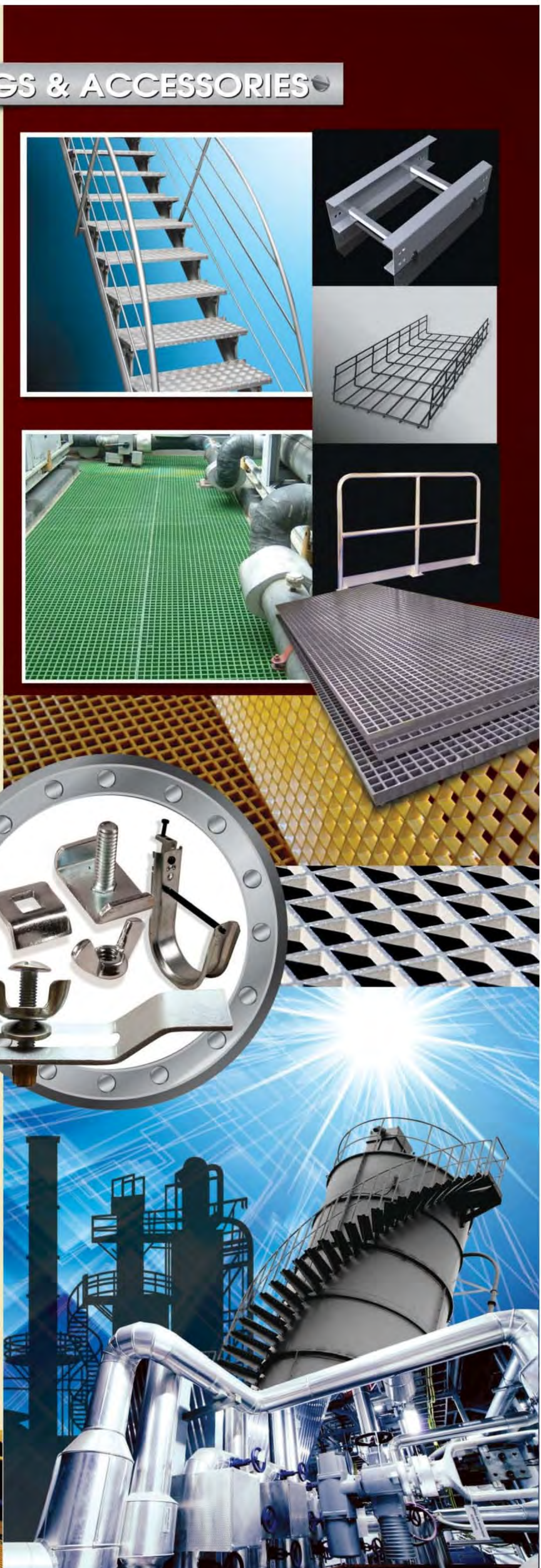
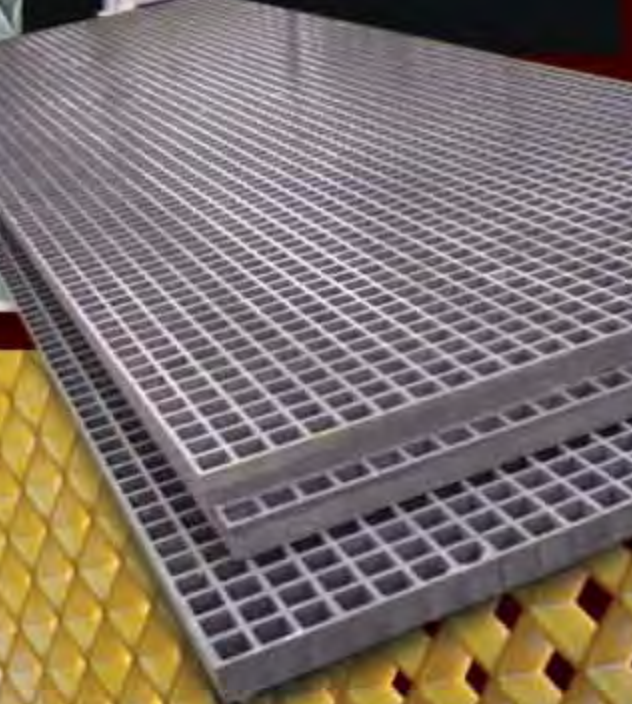
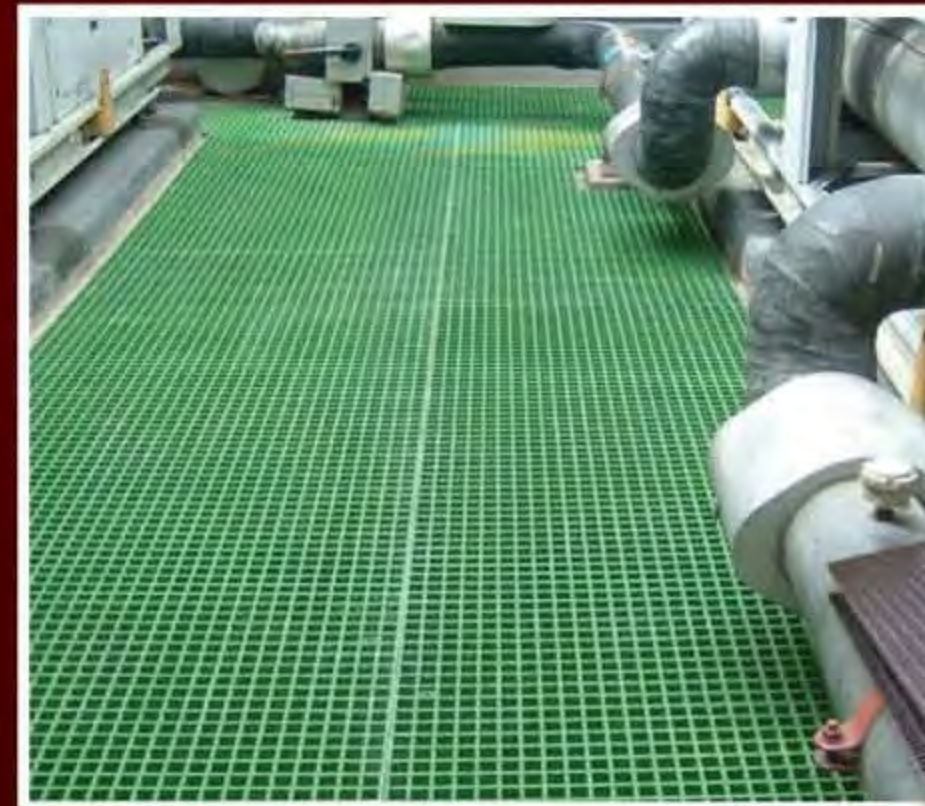
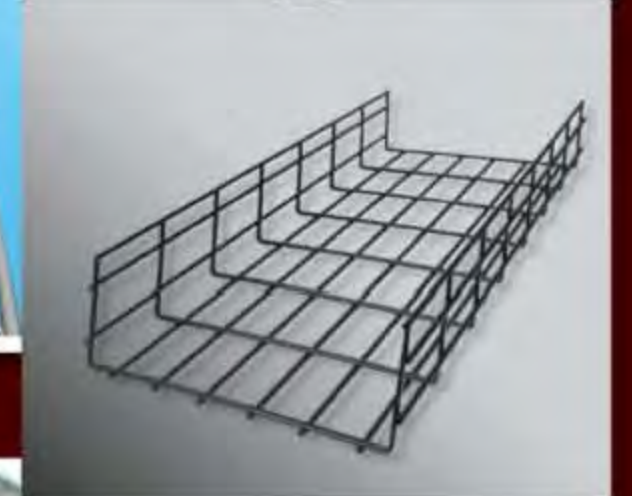
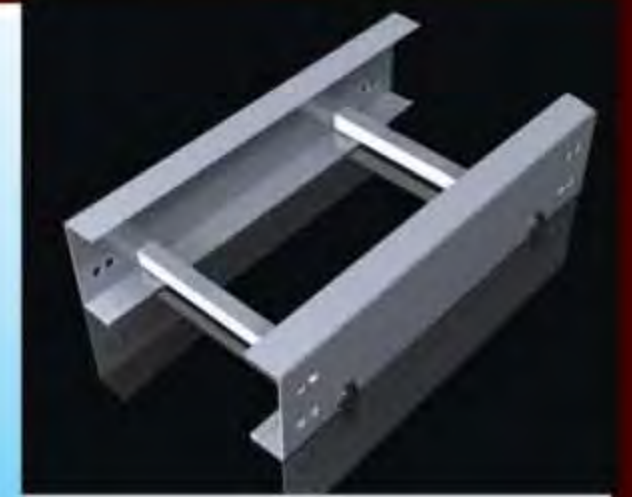
Treatment/Colour : Available in a variety of colours.

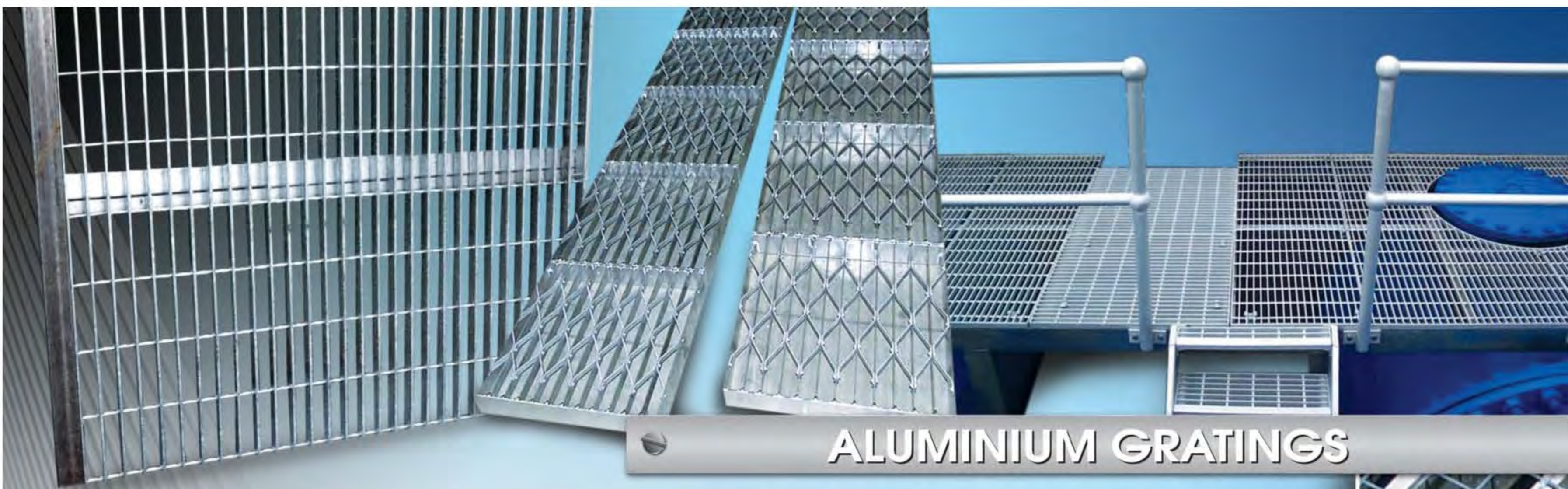
Discovery recommend : Isophthalic Polyester Resin –
 Green/Vinyl Ester Resin –
 Yellow/Phenolic Resin - Reddish Brown

| | | | | | |
|----------|-------|----------|--------|----------|-----------|
| G | Green | Y | Yellow | D | Dark Grey |
|----------|-------|----------|--------|----------|-----------|

| | | | |
|----------|-----|-----------|---------------|
| R | Red | RB | Reddish-Brown |
|----------|-----|-----------|---------------|

Panel Size : Available in a variety of sizes suitable for cutting to suit the application.





ALUMINIUM GRATINGS

Aluminium grating has grown from what was an option to mild steel products catering to different environment requirements, to a product that offers a distinctive and versatile design element now featured on a number of leading edge projects. It provides access to a building while being integrated into the overall design of the building.

Aluminium gratings can take advantage of a useful combination of the materials characteristics. It has a high load carrying capacity, low weight and good rigidity. Making it suitable for sun screening, façade coverings, staircases and ceiling panels. When combining the high resistance to corrosion and adding the anti-slip serrations the grating becomes ideal walkway and stairtread material for many of the harsher industrial environments.

Specifications:

Material

Recommended where light weight is important and where quality of appearance is paramount. Material 6063-T6.

| | |
|----------|-----------|
| A | Aluminium |
|----------|-----------|

Top Surface

Safety

The slip resistance of the flooring and walkway product needs to be considered. Standard grating compares plain square edge flat bars. To increase slip resistance the following points should be considered on sloping walkways.

Although not mandated by AS 1657 the use of 10 x 10mm square bar cleats or abrasive strips can be used for additional security. ISO 14122.1 recommends cleats between 10° and 20°. Serrated grating can be specified. Stainless steel and any bars 20mm deep will not be serrated. In addition both steel and aluminium grating can improve their slip resistance by setting the direction of walking over the floor parallel to the loadbars. In steel grating there is better slip resistance in patterns with 100mm cross rod centres.

| | | | | | | | | | |
|----------|-------|----------|----------|----------|------|----------|--------|----------|-----------|
| P | Plain | S | Serrated | G | Grit | R | Raised | F | Flattened |
|----------|-------|----------|----------|----------|------|----------|--------|----------|-----------|

Treatment/Colour

| | | | | | | | |
|----------|----------|----------|---------|-----------|---------------|----------|-------------|
| A | Anodised | P | Painted | PC | Powder Coated | M | Mill Finish |
|----------|----------|----------|---------|-----------|---------------|----------|-------------|

Panel Size

Available in panels up to 1200 x 6000

| | |
|----------|------------------|
| 1 | 1000 x 6000 span |
| 2 | 1200 x 6000 span |



STAINLESS STEEL GRATINGS

Stainless steel grating has been the standard industrial foot walk product for severe corrosive environments and has been a popular grating choice for many years. Stainless steel grating are mainly used at chemical plants, food processing facilities, oil and gas producers and is also used in many other commercial and architectural applications. Stainless steel gratings are assembled by welding or pressure locking to suit the specific needs of each application.

Specifications:

Material

Recommended where rust resistance or hygienic environment is required. ATSM A240 GR316 or 304.

| | | | | | |
|----------|-----------------|-----------|-----------|-----------------|-----------|
| S | Stainless Steel | Grade 316 | S1 | Stainless Steel | Grade 304 |
|----------|-----------------|-----------|-----------|-----------------|-----------|

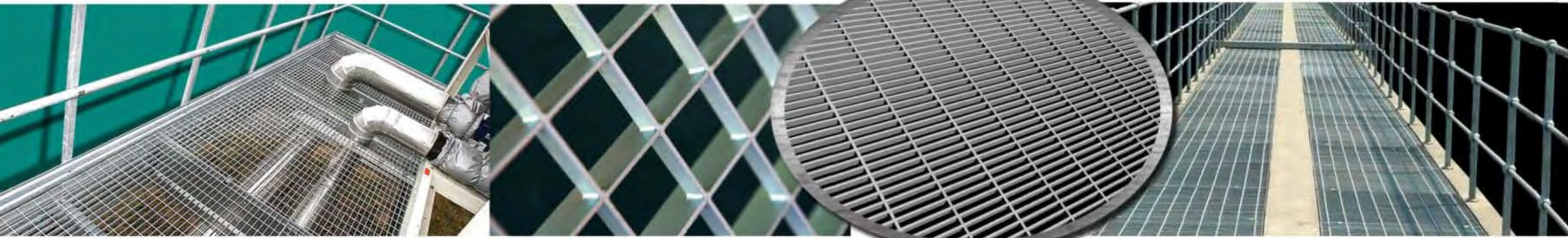
Top Surface

Stainless steel and any bars 20mm deep will not be serrated. **P** Plain

Treatment/Colour

| | | | | | |
|----------|-----------------|----------|------------------|----------|-------------|
| S | Standard finish | E | Electro Polished | M | Mill finish |
|----------|-----------------|----------|------------------|----------|-------------|

Panel Size : As dictated by the availability of the raw material flat bar usually 4000 span.



CAST IRON & DUCTILE GRATINGS

Ductile iron and cast iron gratings are widely used in roads, bridges, airports etc for sewerage and drainage applications. Our range of C. I. Castings and D.I includes Square Manhole Cover, Rectangular Manhole Cover, Triangular Manhole Cover, Lockable Manhole Cover, Recessed Manhole Cover, Square Gully Grating, Hinged Grating, Double Triangular Gully Grating, Trench Grating(channel Gratings) and many more.

Specifications- Casting Flexibility:

- Grey Iron & Ductile Iron to International Standards.
- Customized slow-mold cooling and stress relieved.

Casting Range & Standards:

- Grey Iron – 1kg to 2000kg
- Ductile Iron – 1kg to 700 kg

Finishing:

- Shot blasting, grinding and inspection
- Primer painting to customer specification
- Epoxy painting

Patterns:

- Wood, Metal and Expanded Polystyrenes
- Custom designed gating systems

Core Making:

- Co2
- Flexible Core and box equipment designs

Molding:

- George Fisher Air Impact High Pressure Molding Machine
- 45 Moulds per hour
- Box size of 900mm x 700mm x300mm

ASTM A536
80-55-06
65-45-12
DIN-EN-1563
EN-GJS-500-7
EN-GJS-600-3



COPPER NICKEL GRATINGS (Cupro-Nickel)

Cupro Nickel Gratings are basically used for desalination plants where gratings are directly in contact with sea water and where gratings are placed in highly corrosive environment. Cupro nickel gratings are available in different specifications. At our end, we supply specialized gratings that are engineered using 90/10 and 70/30 quality of copper nickel. The nickel gratings have excellent corrosion resistance property that makes it the best option for desalination plants.

ACCESSORIES

STAIR TREADS

Stair treads can be supplied with any combination of pitch size, bearing bar type and serration profile. Each stair tread is supplied with end plates complete with slotted holes for easy installation. Typically we will supply the stair tread with a slip resistant pyramid nosing bar. Other types of nosing are available on request. Standard sizes of our stair treads are 250mm and 280mm wide x 800mm, 1000mm & 1200mm long. Customized sizes are available on request.

HANDRAILS

Handrails are generally used for safety applications where gratings and stair treads are placed. Also we have advanced protection systems in the multi story building construction applications and other industrial applications. Also we can manufacture customized hand rails as per the shop drawings.

All International standards

Carbon steel, stainless steel and aluminium



FIXING CLIPS

Gratings can be supplied with our standard saddle top fixing clip. Normally 4 clips are required in one square meter gratings area. We also supply customized clips for special applications when required.



CABLE TRAYS

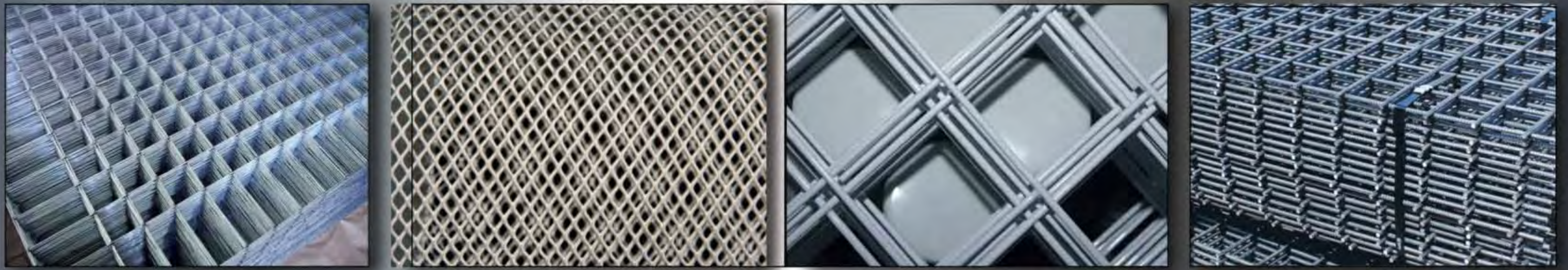
A cable tray system is used to support insulated electric cables used for power distribution and communication. Cable trays are used as an alternative to open wiring or electrical conduit systems, and are commonly used for cable management in commercial and industrial construction.



FENCING & WIRE MESH



Welded wire mesh is a method of reinforcing concrete using a mesh of high tensile steel bars which are resistance welded together. The bars used can be smooth, deformed or ribbed and are welded together using pressure and a high electrical current. The mesh is used as a substitution for the conventional method of reinforcement using loose bars tied together which is both time consuming and inaccurate.



We supply engineered sheets to required specific requirements. Specification parameters are as under:

| | | |
|-------------------------|---|---|
| Maximum sheet length | : | 6.00 Meters (with a view to ease handling problems both at production line and at site) |
| Maximum sheet width | : | 2.85 Meters |
| Maximum long wire dia. | : | 12.00 mm |
| Maximum cross wire dia. | : | 12.00 mm |
| Long wire spacing | : | Multiples of 50 mm. - Min. 100 mm. Max. 400 mm |
| Cross wire spacing | : | Multiples of 50 mm. - Min. 100 mm. Max. 400 mm |

If your requirement calls for production outside the above parameters, please contact us.

Standards

| | |
|------------------|--|
| British Standard | - BS4483 Steel Fabric for Reinforcement of Concrete |
| German Standard | - DIN 488 Welded Reinforcing Steel Fabrics to BST 50/55 RK |



SPECIALIZED STEEL & METAL PRODUCTS

We comply the below range of products with all international standards

BUTT WELD FITTINGS
FLANGES
BENDS
SHEETS, PLATES & COILS
STAINLESS STEEL SEAMLESS PIPES
CARBON STEEL SEAMLESS PIPES

SOCKET WELD FITTINGS
FERRULE FITTINGS
FORGED FITTINGS
COPPER NICKEL FITTINGS
STAINLESS STEEL WELDED PIPES
CARBON STEEL WELDED PIPES



Materials: Carbon Steel, stainless steel, Alloy Steel, Others like Monel, Nickel, Inconel, Hastalloy, Copper, Brass, Etc.

CHEQUER PLATE



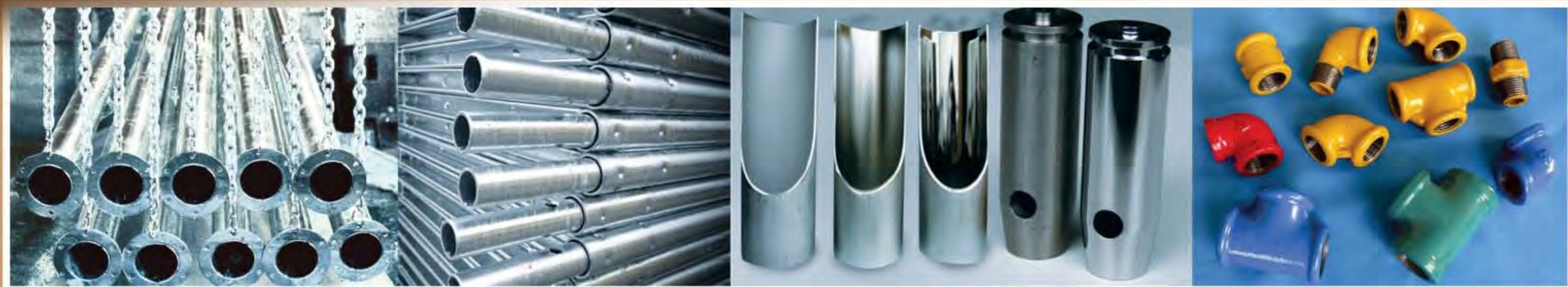
Specification : Aa3105
Mil Finish
Thickness : 2mm to 8mm
Size: 1220x2440



VALUE ADDED SERVICES

HOT DIP GALVANIZING • ELECTRO POLISH • EPOXY COATING

TEST CERTIFICATE : Mill Test Certificate as per EN 10204 / 3.1B



SEWERAGE RELATED PRODUCTS

HANGING LADDERS

Specifications :

Galvanized Steel Grade 60 (ASTM A-615) Dia 14mm coated with Tough Copolymer Polypropylene (AST-MD 4101)

General Properties: Anti Corrosion, waterproof chemical & gasses resistant

Vertical Deflection: 442.26 kg **Rung Distance:** 300mm

Polypropylene Thickness: 8 mm **Colour:** Black

Mounting: With Anchor \ Bolt 16 mm



MANHOLES STEP

Specifications :

All Poly steps meet the requirements of Galvanized steel 16 mm Dia (Grade 60) ASTM A-615 Coated with Tough Copolymer Polypropylene (ASTM D-4101).

All polypropylene steps meet the requirement of ASTM C-478 and AASHTOM-199

General Properties: Anti Corrosion, waterproof, chemical & gasses resistant

Pull Out Force: 550 kg **Vertical Deflection:** 442.26 kg

Polypropylene Thickness: 7.5 mm Max

Colour: Orange or as required by the customer

Mounting: Dry mounting by drilling 26mm Hole

Tightness: Absolute tightness by labyrinth Gasket and anchor sleeves.

MANHOLE HAND BAR

Specifications :

Galvanized steel 16 mm Dia (Grade 60) ASTM A-615 Coated with Tough Copolymer Polypropylene meets the requirement of ASTM C-478 and AASHTOM-199

General Properties: Anti Corrosion, waterproof, chemical & gasses resistant

Pull Out Force: 429 kg **Vertical Deflection:** 240 kg

Polypropylene Thickness: 4.5 mm

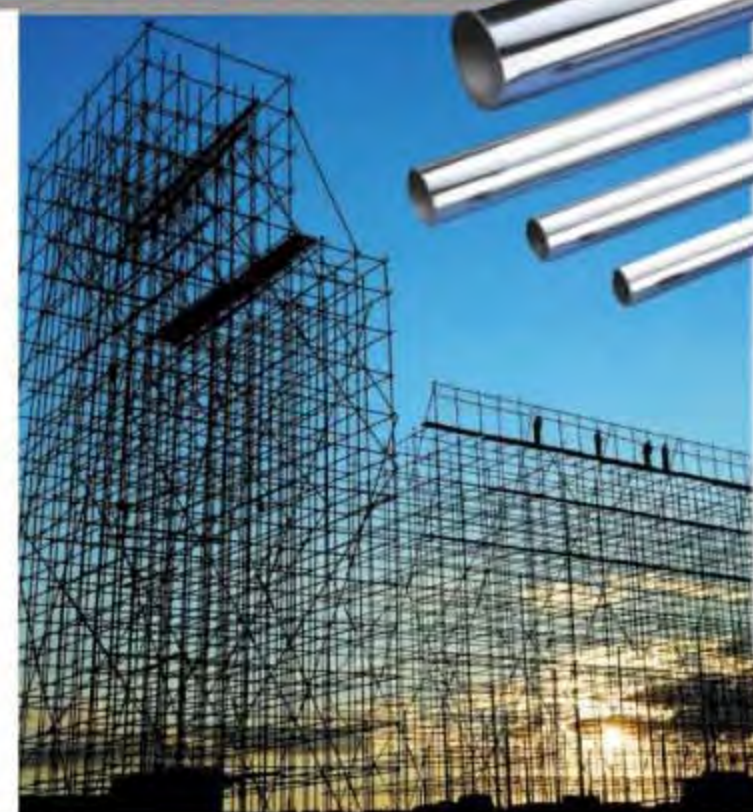
Colour: Orange or as required by the customer

Mounting: Dry mounting by drilling 26mm Hole

Tightness: Absolute tightness by labyrinth Gasket and anchor sleeves



We also deal with
SCAFFOLDINGS,
TRANSFORMERS,
& HIGH FREQUENCY
WELDED TUBES



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