



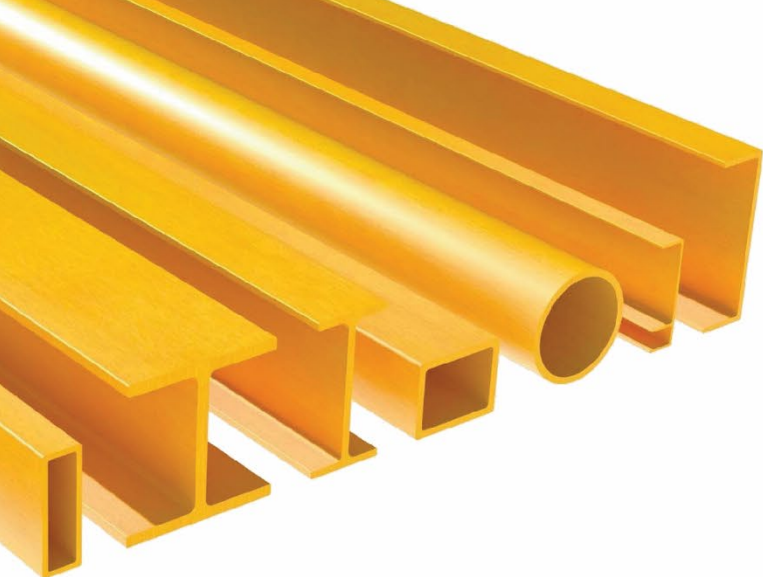
DALIN COMPOSITE NOVIN

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Composite Products

FRP Structural Solutions

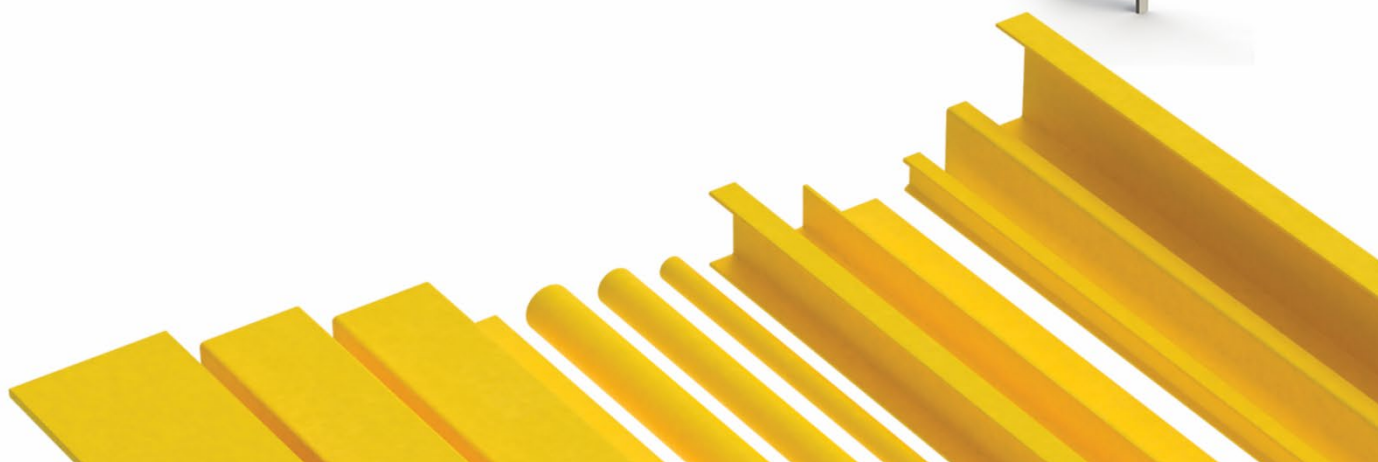
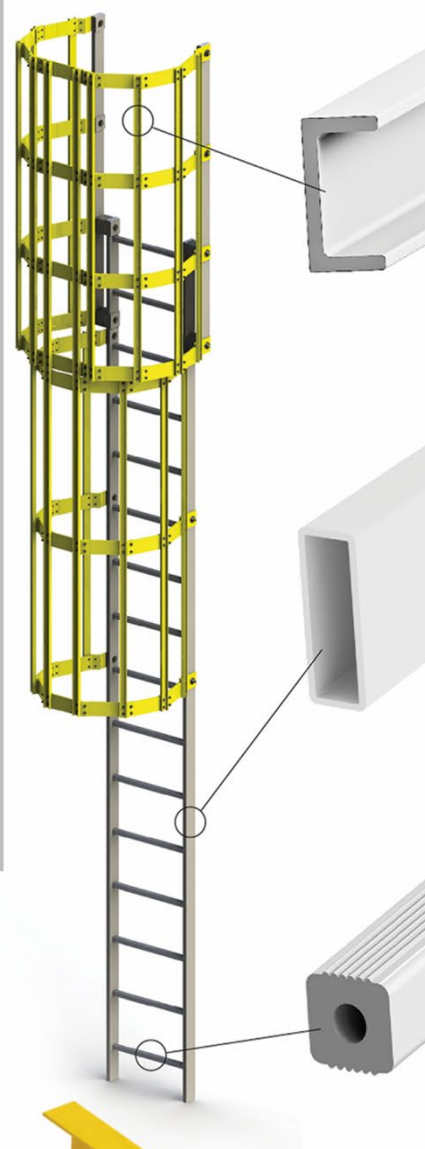
GENERAL CATALOGUE



DALIN COMPOSITE NOVIN

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COMPANY OVERVIEW

Dalin Composite Novin is a leading Company in the field of FRP/GRP fiberglass polymer composites using BMC & Pultrusion Processes. The company's R&D department is responsible for research and development plans for its products, ISO certificates and local laboratories. A skilled and well experienced engineering team analyses and executes the frames, equipment and products. The success of Dalin company is a direct result of its strong engineering and R&D Teams and its Diverse Products which are provided for different markets.

A wide range of Pultrusion products with fixed profile including composite profiles for handrail, ladder, cable tray, cable ladder, pultrude grating, steps, floor Covering, panels, sign boards, platforms, structures and so on are provided by the company. The company also provides different manhole covers for fluid transfer lines inspection as well as lightening towers, lamella and pultrusion plates and other composite products.

Missions

Manufacturing high quality FRP/GRP Products with value creation for the clients and establishing secure employment for our future development and profit.

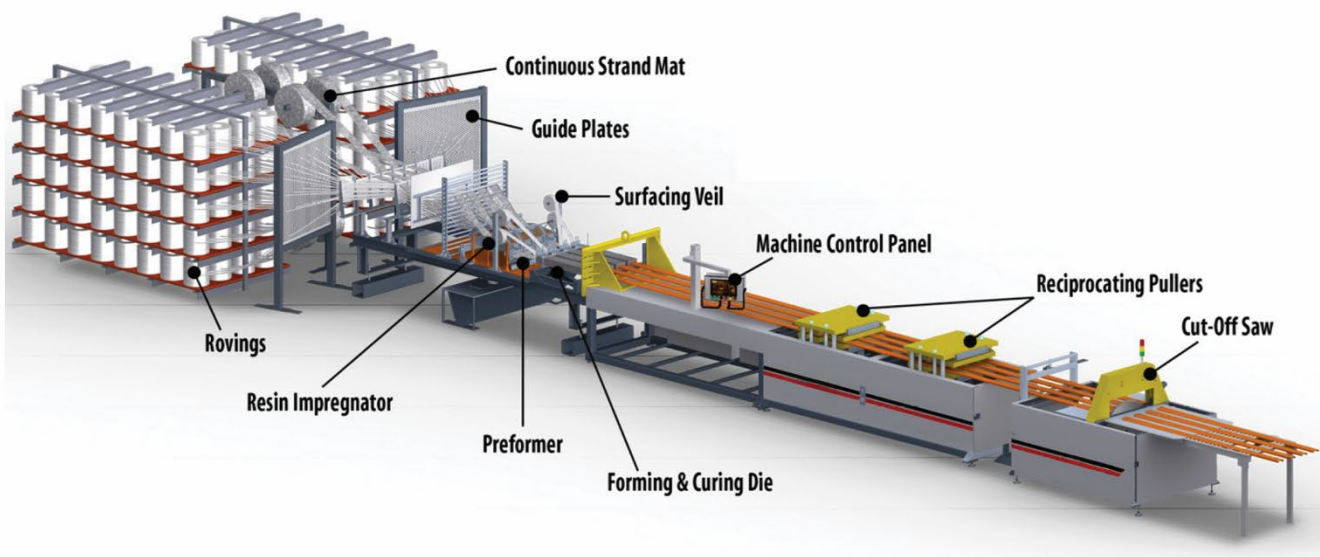
Views

Observing our guidelines and standards and knowing the advantages of fiberglass polymers, the Dalin Composite Novin Company is the leading supplier of composite products and Pultrude structures relying on innovations and value making.



The **PULTRUSION PROCESS**

44 Pultrusion is a continuous process for manufacturing fixed-profiles products using a combination of Resin matrix and fibers. Roving/stitch mat are used as reinforcing agents in this process for manufacturing a resistant product in all directions. Resin matrix is used as the base glue. As it is mentioned in the following figure, fibers are passed through guide plates to enter resin bath. After mixing, fibers are directed toward forming and curing die through the performer. then the manufactured piece is cured and pulled using hydraulic jacks and reciprocating pullers and then be cut using the cut-off saw and transported to the warehouses.



Benefits of **PULTRUDED FIBERGLASS**



LOW WEIGHT



GREAT STRENGTH



CORROSION-FREE



ELECTRICAL INSULATION



THERMALLY INSULATING



CHEMICAL RESISTANCE



EASY TO WORK WITH



SUSTAINABLE

PRODUCT COMPARISION



Low Weight



High Strength



Chemical
resistance



Electrical
insulation

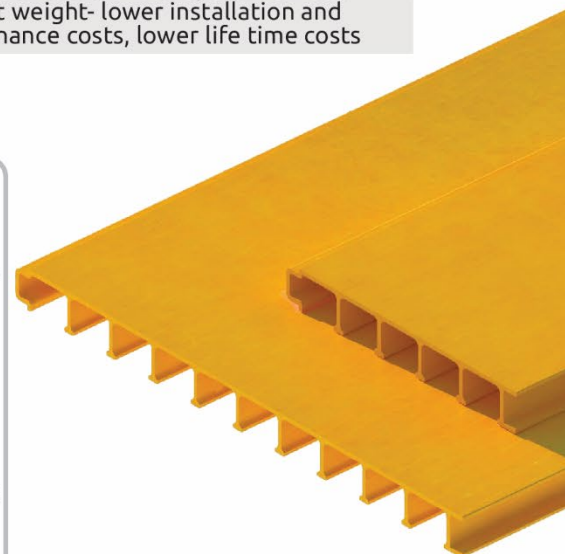
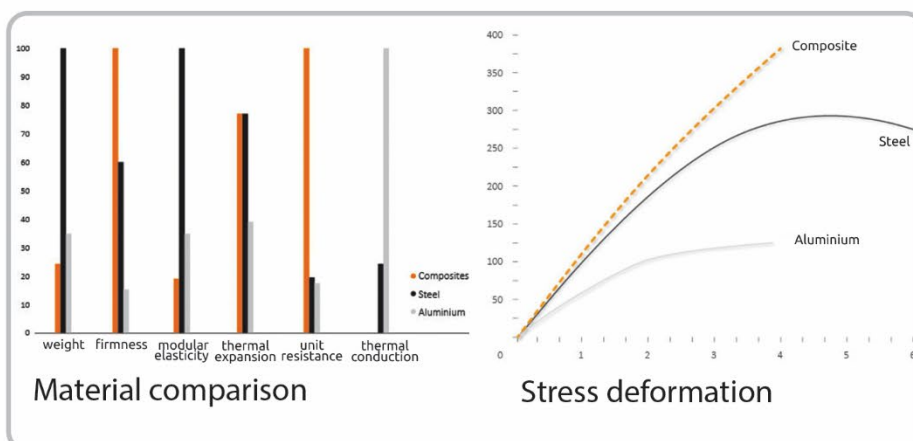


Thermal
insulation



Easy to
machine

Compared Item	Steel	Pultruded Sample
Weight	Heavy needing elevators	Low weight-1/4 to 1/6 steel ones
Corrosion Resistance	Needing coloring and galvanization	Resistant against chemical factors and humidity - no need to coloring
Conductivity	Conductor-high thermal conductivity	No electrical conductor, very low thermal conductivity
Strength	High resistance (300MPa)	High strength/ weight ratio- more longitude strength 400MPa
Roughness	Elasticity module 29×10^6 psi	Elasticity module 2.8×10^6 psi
Impact Resistant	Permanent Deformable under impacts and shocks	Impact Resistant-no deformations
Electromagnetic waves	No radar stealth capability	radar stealth
Installation, repair and maintenance costs	Needing welding and burner cut and special tools for installation and displacement, higher life time costs	Needing carbon and diamond blades for installation-ease of transportation due to light weight- lower installation and maintenance costs, lower life time costs



FRP/GRP PROFILES



Low Weight



High Strength



Chemical
resistance



Electrical
insulation

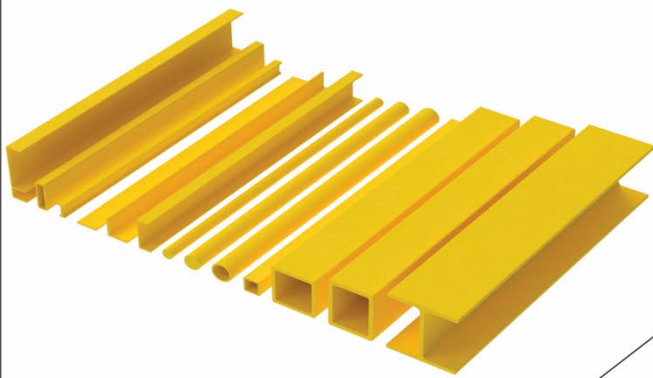


Thermal
insulation



Easy to
machine

GRP is a composite which is manufactured by combining fiberglass and a resin matrix with high mechanical properties.



ESTANDARD PROFILES

The **Dalin Composite Novin** Company manufactures different types of standard GRP Profiles including angle, square and rectangle, flat strip, I Beams, U channel, round tubes and solid rods.

CUSTOM PULTRUSIONS

The customized pultrusions products of Dalin Composite Novin Company can be considered as an excellent solution for a wide range of problems resulted by using standard and common fiberglass forms. Pultrusion products should be customized for achieving unique properties. The company can customize its products as per its clients request to improve the products' service life and performance.



The Power of **DALIN COMPOSITE**

Why Dalin **Composite** Company?

1.ECONOMICAL
SAVING

2.SAFETY

3.TRUST

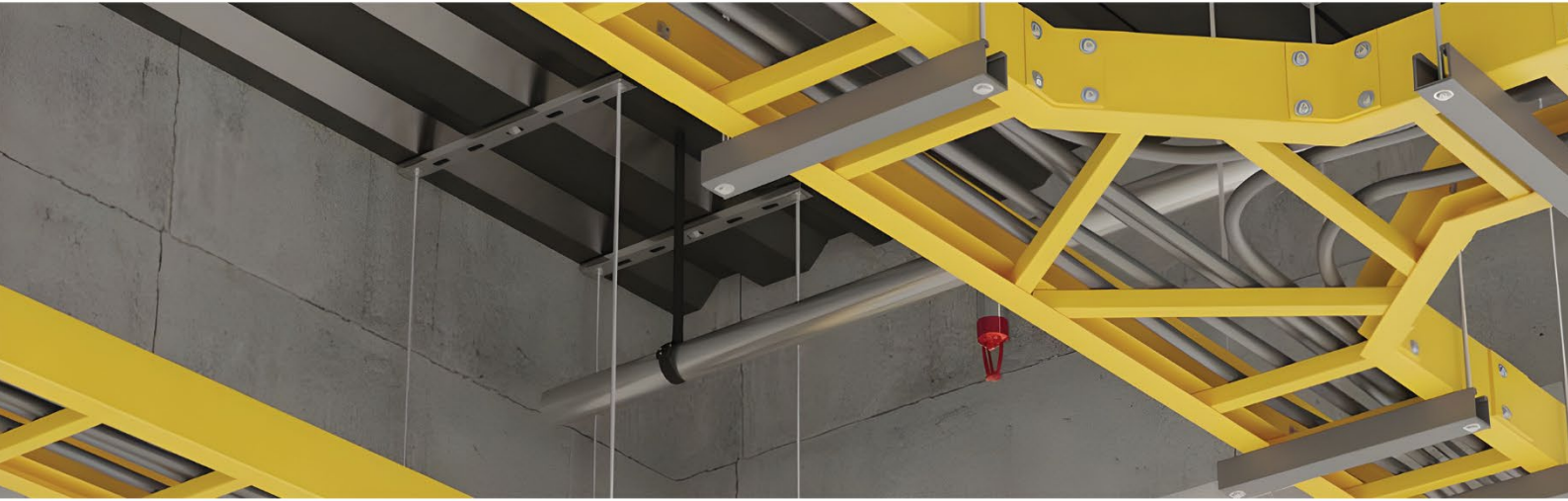
GRP SYSTEMS

Cable Management
Gratings
Railings
Ladders
Structures
Sign Boards

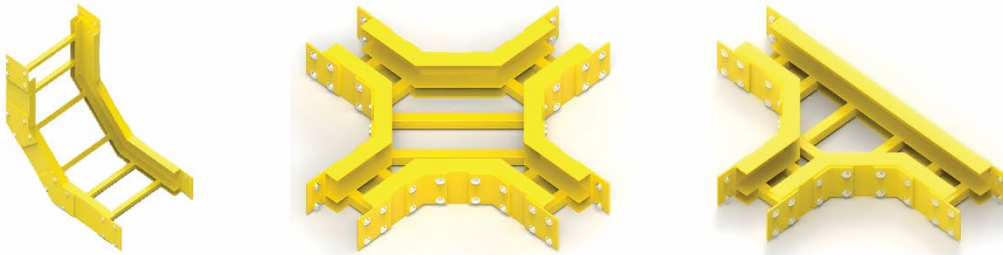
GR
P
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GRP CABLE MANAGEMENT

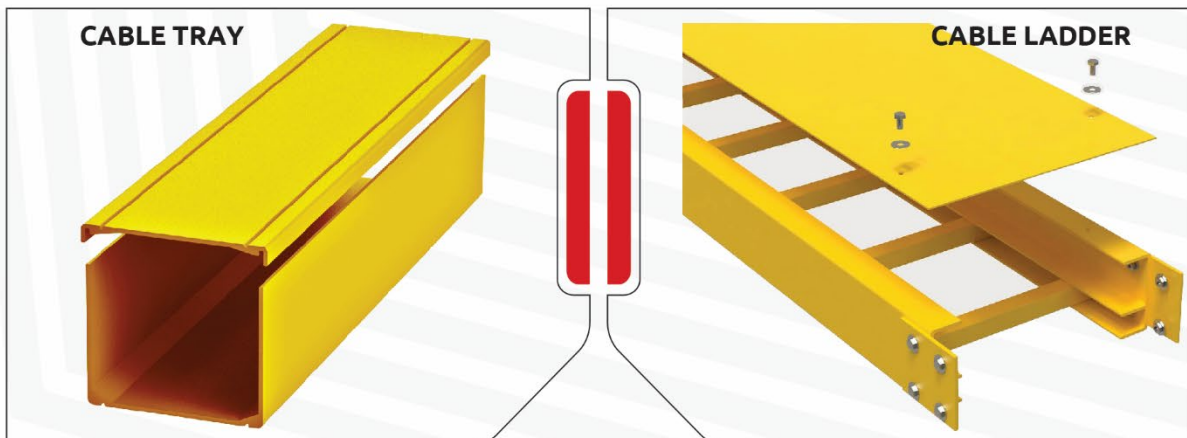


The composite cable tray is used for cable operations and protecting different cable systems. The DALIN Composite Novin Company is the manufacturer and executer of all composite cable ladders and trays with corrosion and chemical factors resistance, electrical and thermal insulation, high strength, low weight, easy assembly and installation properties, for all working environments. The properties and ideal quality of these products are in accordance with EN13706 comprehensive pultrusion products standard. As shown below, all connections and types of cable ladders can be supplied.



CABLE LADDER & CABL TRAY

Composite Cable ladder and channel are assembled using pultrusion pieces. Also, cover can be used for protecting the cables inside trays. Uniform holes can be embedded for helping air circulation inside cable trays. The cable trays can be used in chemical factories and treatment plants, off-shore platforms, power plants, tunnels, marine industries, metallurgy factories, mines, construction works, radars, railways, petrochemical, transmission, post and highways bridge cable systems.



GRP FIBERGLASS GRATINGS

MOLDED GRATING

Grating molded composites are meshed plates with uniform holes on its surface. ASTM F3059 Standard is used as a basis for qualitative/quantitative evaluation of these products.

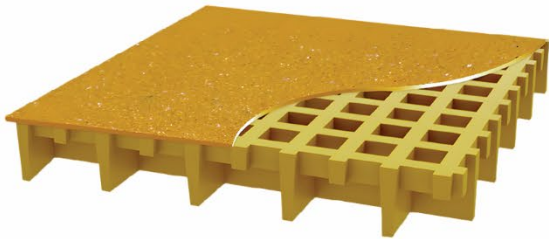
PULTRUDED GRATING

In Dalin Composite Novin Company, optimized solutions for improving the quality and appearance of products in all environmental conditions is our priority. The composite pultrudes involves a combination of I shape pieces and composite rods. Multi-directional reinforce agents, improve the corrosion resistance property of these products



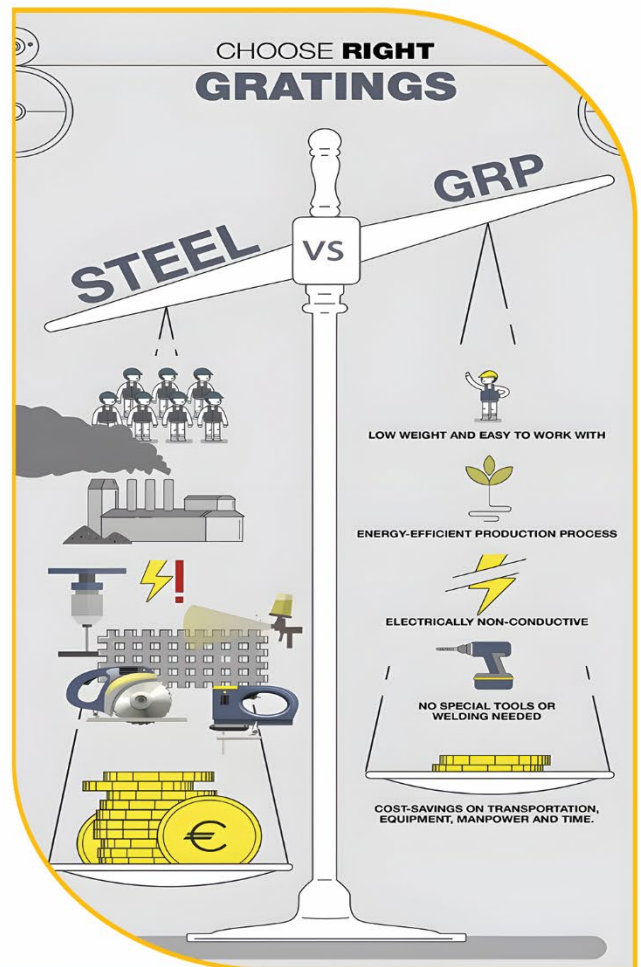
GRP FIBERGLASS GRATINGS

Gratings are composite coated products with meshed holes on their surface, known as checker plate or edged composite gratings. These coatings improve the safety requirements.



Applications

- Oil & gas platforms
- Off-shore structures
- Vessels
- Excavation and storage equipment
- Waste water treatment plants
- Chemical industries and power plants



FRP SIGN BOARDS



Low Weight



High Strength



Chemical
resistance



Electrical
insulation



Thermal
insulation



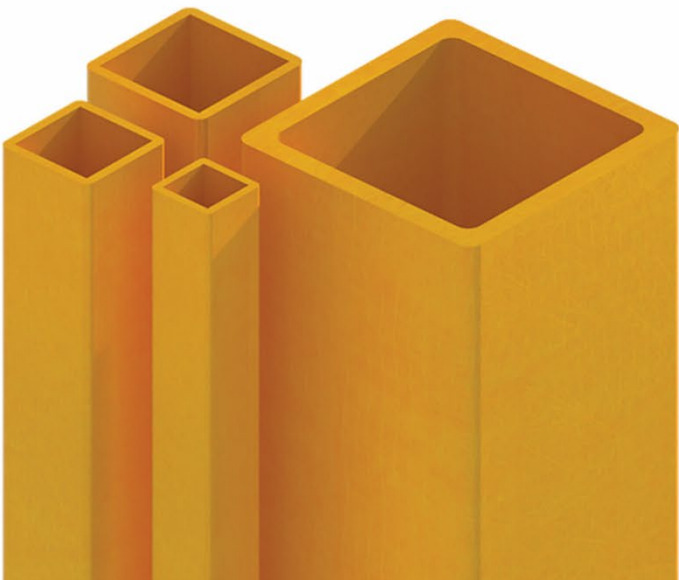
Easy to
machine

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The **Dalin Composite Novin** Company is the manufacturer of traffic sign boards with different shapes for roads and cross sections traffic control. EGP and HIP Marks (7 and 10 years) are used as luminous paints. The main advantages of these boards are ant-theft and low weight 1/4 - 1/6 metal competitors.

sign posts

The assembled sign boards bases are composite pultruded with UV Resistant, no-humidity, low-weight, corrosion/chemicals resistant, low transportation/installation/ Maintenance properties.

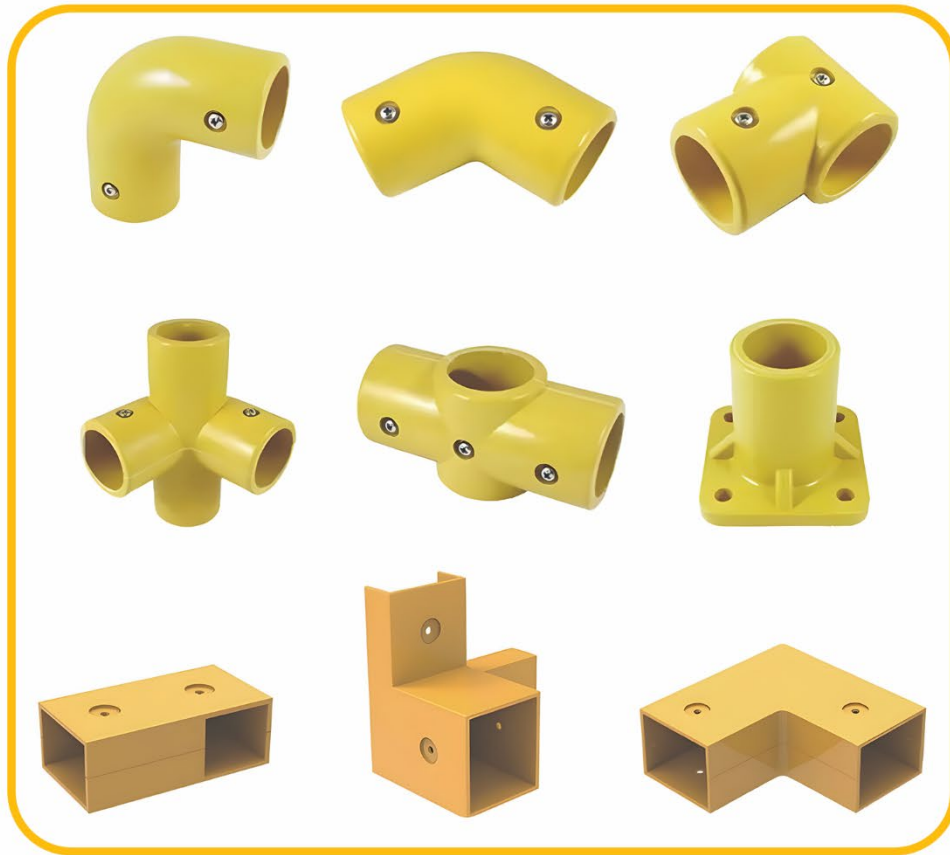


Advantages

Low thermal transfer of direct sun radiations to the composite sign and its boards with improves visibility in comparison with metal ones. Additives and especially self-fire extinguishing materials are used for improving fire-resistance properties.

Resistance against corrosions and oxidation in acidic and alkaline environments, urea, salt, sea water, acidic rains, oil and alkaline factors is very high in comparison with metal ones which needs color coatings with high concerning costs. In case of accidents, composite sign boards create lower damages and risks. Mechanical strength, aesthetics, machinability and flexibility are the other advantages of composite sign boards manufactured by Dalin Composite Novin Company.

FRP HANDRAIL FITTINGS



The FRP handrail fittings are an ideal choice for safe connections with low weight, fire-corrosion resistance, electrical insulation and low repair/maintenance costs properties.



FRP MANHOLE COVER

Full-mechanized production of GRP and GRVE manhole covers for chemical, oil, gas, petrochemical water delivery, waste water treatment plants, electricity, transportation, transmission, fuel pumps industries and factories, also residential, commercial regions, roads, streets cobblestones, and urban and industrial major needs. Thermoset materials with reinforced fiberglass polyesters are used for manhole covers for being resistance against heavy vehicles loads.



STRENGTH AND RESISTANT TO DEFORMATION



RESISTANT TO TEMPERATURE INVERSIONS



LIGHT AND HANDY



ENVIRONMENTALLY FRIENDLY



ELECTRIC INSULATED



CUSTOMIZABLE



RESISTANT TO CORROSION



NOISE REDUCTION



PERMEABLE TO ELECTROMAGNETIC WAVES



THEFT PREVENTION

CLASS

APPLICATION

A15

Side walk and bicycle paths

B125

Side walk and parking places

C250

Streets margins maximum 0.5 m from car path or 0.2 m to side walk path, industrial sites

D400

Main streets

E600

Heavy vehicles paths like Anchor places and airports

F900

Heavy vehicles paths like Airports

FRP LAMELLA CLARIFIERS

Lamella plates (filtration or sediment plates) are used for removing fluids suspensions. In fact, the flocculation case of different chemicals (such as lime, aluminum, ferrous sulfates, poly electrolytes and ...) are added to water in a given amount which in turns cause the small and light particles and colloids become larger and heavier settle-able ones. Then, the fluid is moving toward lamella plates bottom. As the water moves upward along with sloped lamella plates, suspended solids are hit the plate and become sediment. Finally, water will be treated without any suspensions and exited from the plates upper side.

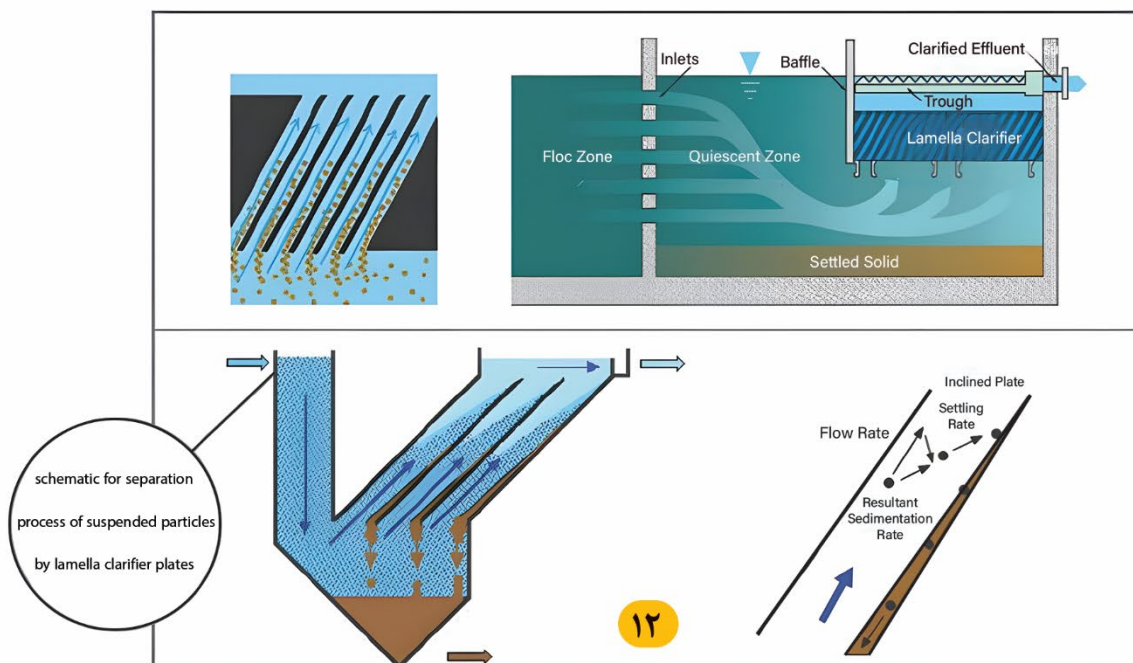


Applications

- Initial/ secondary sedimentation
- Water pre-filtration salty water filtration
- Separation of coal and other minerals
- Waste water treatment
- Fe removal gravity degreasers vessels
- Metal hydroxides separation

Advantages

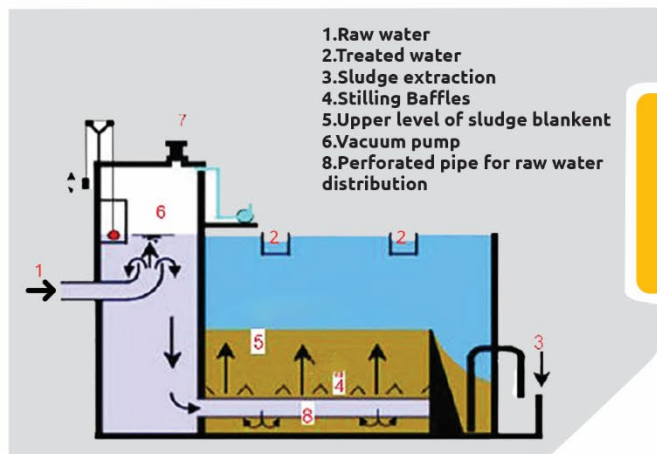
- Improving filtration bath efficiency
- Longer life time than metal ones
- Lower Weight
- Resistance against ultraviolet light
- Ease of sediments removing operation
- Lower utilization and maintenance costs



FRP CLARIFIER & SEPARATOR

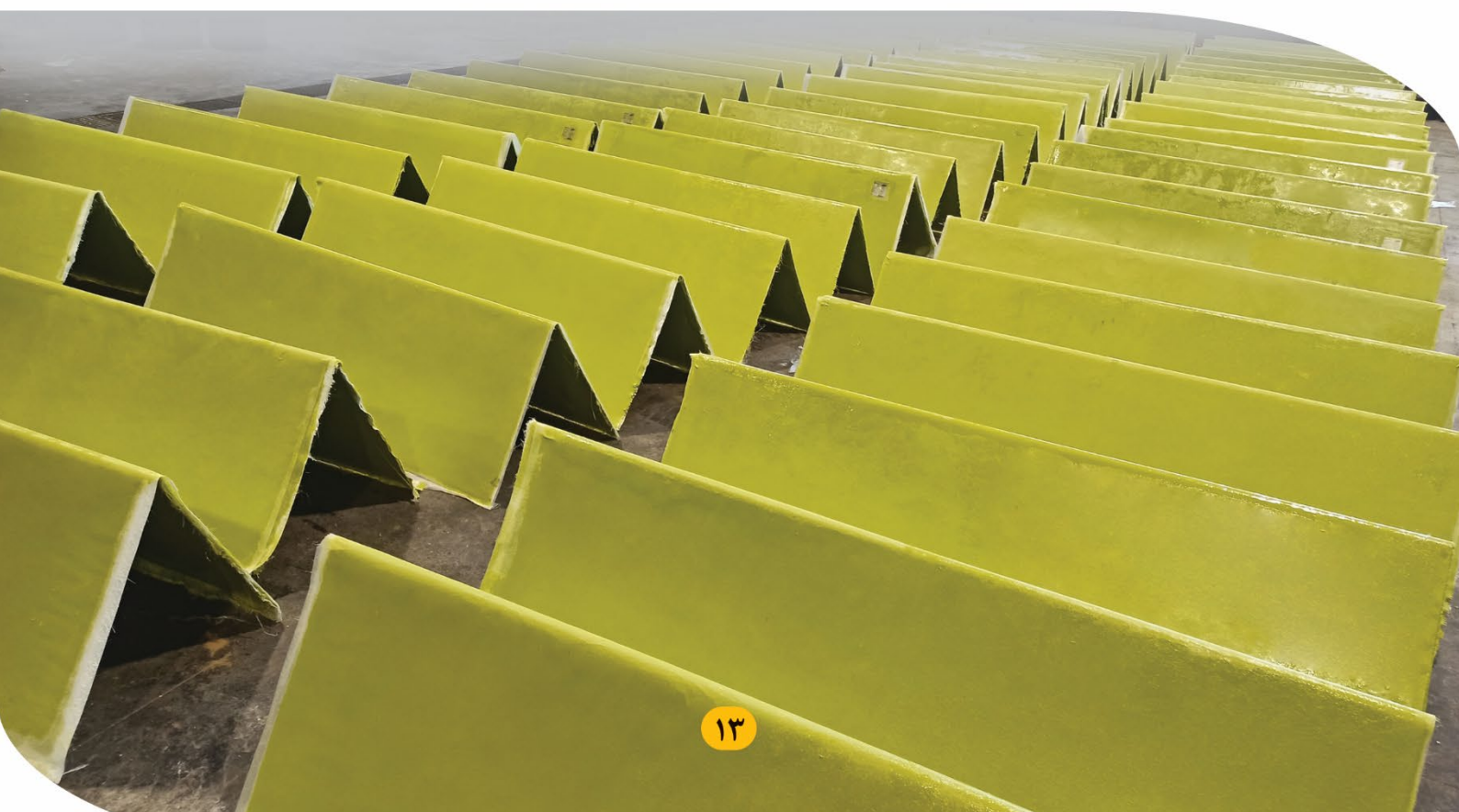
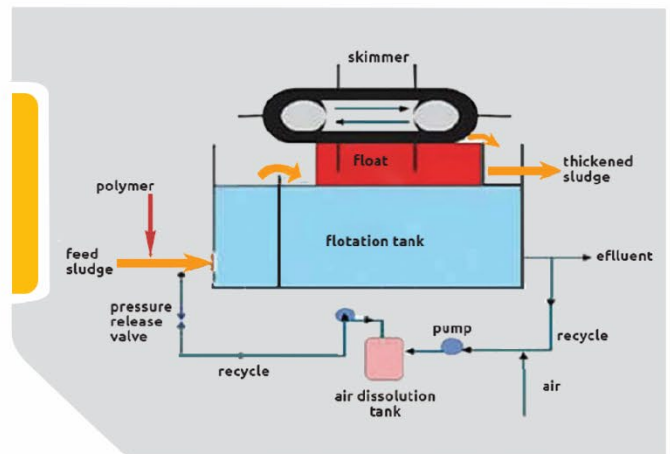
Composite Stilling Baffles

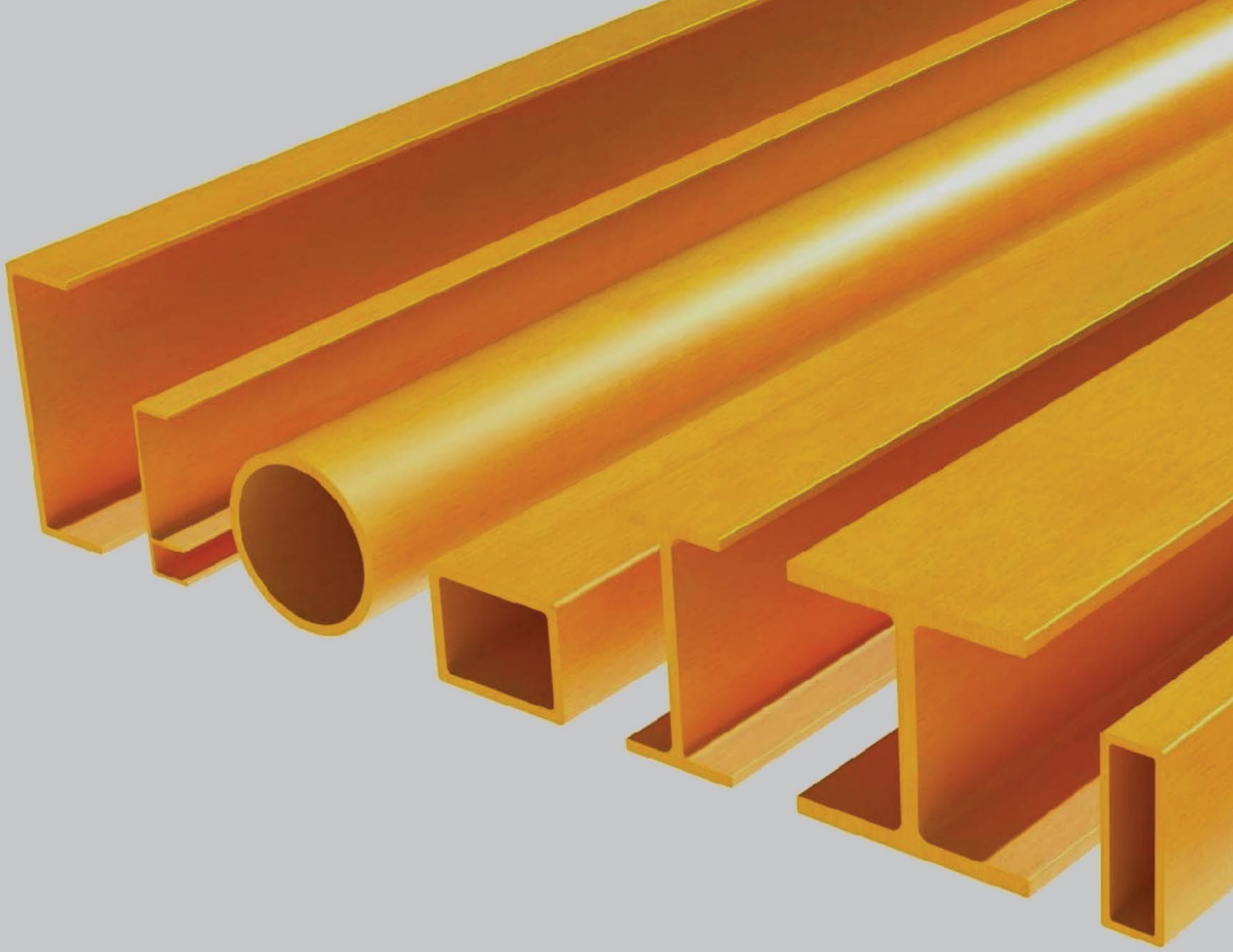
In water treatment process, after injection of coagulants, clarifiers systems or sedimentation materials should be used. Pulsate clarifiers or sedimentation system using sediments bed is one of the said systems. In this method, water is passed through the sediments bed and then sediments are absorbed and clarified water will flow up-stream. in these clarifiers, input water are transferred to the bath by the meshed pipes under the sediment bed. Baffles are placed on the holes to control the speed and direction of water. The advantages of such baffles is their corrosion resistance, high strength, light weight and UV resistant properties.



Dissolved Air Flotation-DAF

The DAF System is an excellent solution for filtering waters containing low weight particles and sediments and algae which can't be removed by sedimentation. In this floating unit, input water is mixed by a recycled flow from wastewaters. The resulting water will be transferred by a special pump and air saturation system. This makes a connection between air bubbles and suspensions. Consequently, the suspensions move upstream and removed by a tracker. Heavy particles are trapped and removed by sedimentation system. The advantages of these plates are corrosion resistance, higher efficiency, lighter weight than metal ones, UV resistant, fire-retardant, and ease of transportation.





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