Continuous Fiber Reinforced Thermo-plastic- CFRTP

The penetration of plastic is at many levels and for many applications, we suggest add one more solid replacement to steel made from plastics.

Steel sheets and their corrugation is not only costly material but is costly to produce as well. Right from the heavy containers, to the steel truck bodies and many more steel made containers and shelters for hundreds of applications have an answer not which is cheaper, lighter and easy-to-handle, made from Plastics.

Specifically continuous glass fiber and plastics like PP/HDPE/PA6 (PET) are combined together as a sheet.

With or without honeycomb cores according to different applications. The thickness can be tailored for specific needs. The maximum width is up to 3 meters and the length could be customized.

- Completely recyclable
- Lightweight
- High strength
- Flame retardant
- Cost-effective
- Excellent chemical and corrosion resistance
- Consistent physical properties throughout the entire panel
- Higher energy absorption performance than thermoset

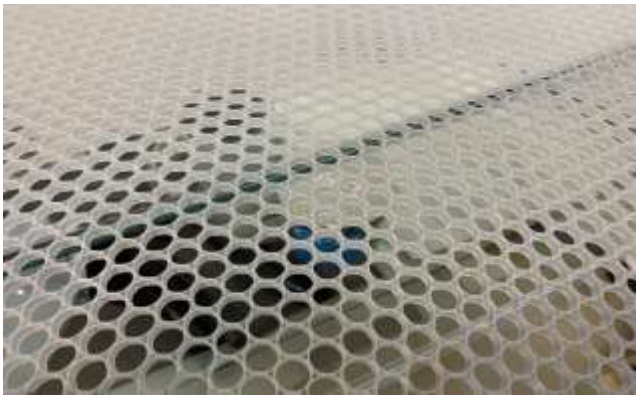
Can be made with Glass fibers, Basalt fibers, Carbon Fibers and Bamboo fibers

The Process is:

1) TO make sheet from Fibers.

2) Make core tubes PP + EVA Co-Extruded.

3) Tubes to join together, EVA assists as glue when heated, like hot melt glue.



4) Hot wire slicing machine to cut and make Honeycomb.

5) Thermoplastic Honeycomb panel lamination machine to make Composite sheets of Fibber Sheets at top and bottom and PP+EVA honeycomb as center.

Such made Composite sheets are best replacement to the steel sheet-made all the following.

- Storage containers
- Portable storage containers
- Refrigerated Container
- Combined Container House
- Prefabricated Office Container
- Portable House
- Prefabricated Container House
- Toilet and bathroom containers / Portable toilets
- Cargo Shipping Containers
- Customized Shipping containers
- Modular office containers
- Prefabricated and customized office containers
- Training institutes in containers
- Bunker bed containers
- Portable exhibition stall containers
- Site office cabins
- Portable on vehicle shop
- Security Hut Containers
- Sanitary Containers

The investment in for the machinery can be at Rs. 18.5 Cr landed and so is a business where much of competition is not expected. This is the freshest NEW project for INDIA worth going in for and much of export potential exists.

The Author is Ahmedabad based consultant assisting to set up new projects.

Kamal Shah 9624112091 9879552875

mail@positiveaggression.in, positive@positiveaggression.in