GS10 (GSC10)

Grid Scored

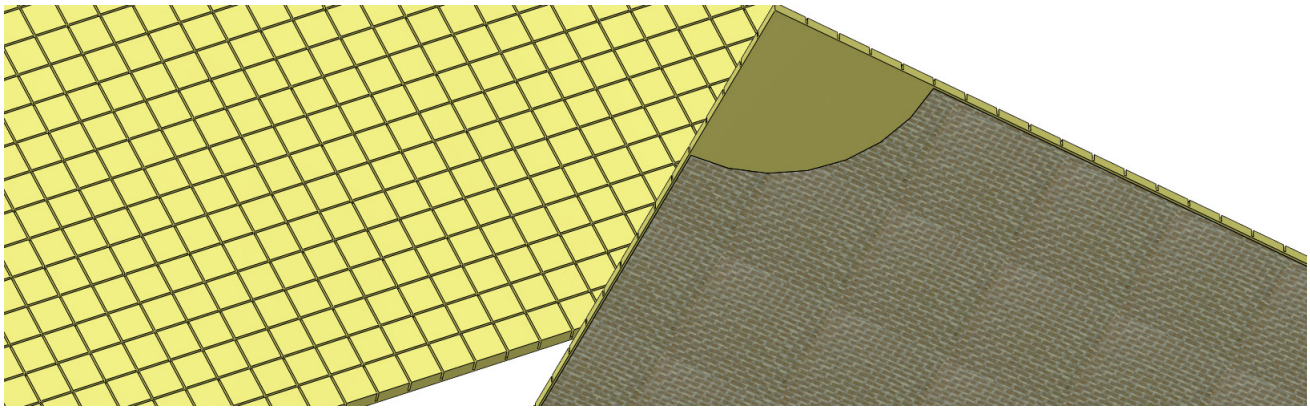

Figure 1: GS10 top view (left picture) and bottom view (right)

MAIN FEATURE: FORMABLE

GS10 is a grid scored material in two directions, which makes it formable and flexible for use in curved molds or applications.

DESCRIPTION

GS10 is only available up to 5 mm in thicknesses.The sheet has U-shaped cuts in length and width direction of the sheet almost all the way through the core. To reinforce the sheet a light weight fiberglass scrim is used on the opposite side of the cuts.

Typical measurements	
Center-to-center	10 mm
Depth (D)	~2mm from bottom of sheet
Width (W)	~0.6 U-shaped cut

BENEFITS

- Easy and robust to handle
- Multipurpose suitability
- Core bedding vacuum bonding
- Formable

The most common way to assemble grid scored materials in a curved mold is to allow the grid scores to close, in a concave (female) mold - the cuts faces the operator. This has the following benefits:

- Reduces resin uptake
- Decreases resin shrinkage - less surface printing
- Reduces exothermic temperature

TYPICAL APPLICATIONS

- Smaller vessels
- Canoes

GS10 is mostly used in thin sandwich constructions where an adaptable core is appreciated.

PROCESS CHARACTERISTICS

Suitable for curved surfaces, whether your manufacturing method is hand laminating, vacuum bonding or infusion.

The proper and recommended method in wet lay-up manufacturing is to use a vacuum bonding technique combined with a suitable core bedding adhesive.

The preferred way to turn the GS10 down in a laminate or mold is to enable it to close the grid scores, which reduces resin uptake, decreases exothermic peaks and decreases risk of surface printing.

LIMITATIONS AND CONSIDERATIONS

If the core is placed correctly in the mold, as described in process characteristics, the grid scores will be closed or next to closed. GS10 is limited is only available in thin thicknesses, up to 5mm.

FINISHING SOLUTIONS

Diab utilizes a combination of its complete range of finishing options to provide an optimized solution based on customers' requirements and objectives.
Should the standard range not fulfill the needs, tailor made cuts and solutions can be defined and developed. Normally this is not needed as the range of options and Diab competence covers majority of needs in various industries.

KITS

To fully optimize the application for cost, performance and quality Diab can engineer and design a core kit delivered in lay-up sequence. The kit of precut pieces is optimized for mechanical requirements, lay-up, manufacturing process, cost and quality objectives. The kit is produced by our skilled personnel using a combination of traditional and CNC equipment to achieve the desired result.

By working with kits our customers gain access to the full competence of Diab in terms of engineered design, core materials and range of manufacturing techniques, all having a profound impact on the ability to reach the objectives of the application from cost, quality and performance point of view.

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