

DC30 (DCC30)

Double Contour

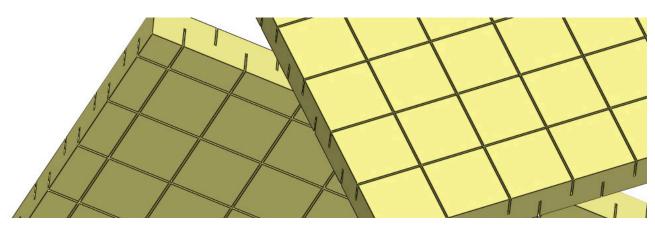


Figure 1: DCC30 top view (right picture) and bottom view (left)

MAIN FEATURE: FORMABLE

DC30 is a grid scored material in two directions, which makes it formable and flexible for use in curved moulds or applications.

DESCRIPTION

DC30 is grid scored in two directions on both sides of the core, the grids opposing each other are at a offset of 50%. Where the grids intersect perforations are created.

Typical measurements	
Center-to-center	30 mm
Depth (D)	~55% of thickness
Width (W)	~0.9mm

BENEFITS

- Formable
- Core bedding vacuum bonding
- Fibre scrim backing not needed

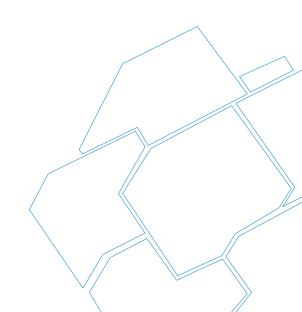
GS30 is probably one of the most commonly used and appreciated finishes due to its flexibility and easy to use characteristics.

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

- Hulls
- Superstructures
- Tanks



PROCESS CHARACTERISTICS

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

The grid score grooves are only for curvature and should not be confused with infusion grooving. It is used in hand lay-up or sprayed lay-up processes.

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

In infusion or other vacuum resin transfer molding processes DCC30 is often combined with flow meshes or flow mats to secure a good wet out of the surface of the core.

LIMITATIONS AND CONSIDERATIONS

In curved applications DCC30 will open up its grid scores, which increases resin consumption and risk of resin shrinkage affecting the surface finish.

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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