

# POLYPROPYLENE HONEYCOMB



Polypropylene honeycomb (PP) is the ideal component for any lightweight assembly. It is extremely light but very strong. It provides high stability at a low weight and is resistant to both heat and corrosion.

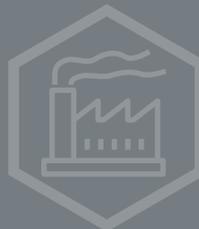
The polypropylene which Corex Honeycomb distributes is manufactured in Europe by TUBUS WABEN GmbH & Co. KG. Traditional honeycomb is assembled from hexagonal shapes but Tubus Waben are the only European manufacturer of PP honeycomb with the circular cell, manufacturing in excess of 500,000m<sup>2</sup> annually. The unique circular cylinder formation can accept forces from various directions and still maintain shape. These isotropic mechanical characteristics of the individual honeycombs ensure high stability for the whole honeycomb plate and therefore also the final product. Using polypropylene as the initial material, they are resistant to corrosion and their handling is extremely flexible.

A film or fleece is attached and thermally connected with the polypropylene honeycomb as a lamination layer. The polyester fleece is used as an adhesive for further processing. When using liquid resins, the polypropylene film guarantees that the honeycomb material is free of resin and does not fill the hollow spaces in the honeycomb.



Polypropylene honeycomb is available in four designs:

Without lamination (bare) | Laminated with polyester fleece | Laminated with polypropylene film combined with polyester fleece | Suitable for Vacuum Infusion



As a result of its thermoplastic properties, plastic honeycomb can be shaped thermally and can be cut to the desired shape using conventional tools. The polypropylene honeycombs are ideally suited for use in composites. With suitable processes and resources, virtually all materials can be attached as a cover layer on Corex polypropylene honeycombs. Fibre composites (Glass Reinforced Plastic, Glass Mat Reinforced Thermoplastics), metal sheets, wooden plates, High Pressure Laminate cover layers or minerals are frequently used.

The advantages of polypropylene honeycomb:

Extremely light, low weight: 60 bis 120 kg/m<sup>3</sup> | Extremely strong: high tensile strength, bending and pressure resistance | Extremely versatile: virtually unlimited application possibilities | Corrosion and moisture resistance | Reduces noise and vibrations | Highest dimensional stability due to precise cutting | Can be thermally moulded | Environmentally friendly plastic as it is 100% recyclable

Polypropylene honeycomb is ideally suited to commercial vehicle construction, boat and ship building, rail vehicles, automotive, transport/ logistics, construction and wind power systems. It ensures a reduction in mass and at the same time offers particularly high pressure, impact and bending stability, low water absorption and freedom from corrosion and optimum acoustic levels.

Please get in touch to discuss your requirements and to find out more about Polypropylene honeycomb :

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