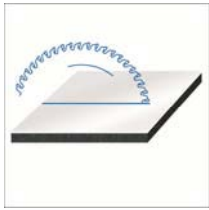


Machining Fabrication Techniques



Cutting and Sawing

DIBOND® can basically be cut or sawed with a vertical panel saw, circular or jig saw. The circular saw is applied for DIBOND® in the same as for aluminium sheets. The vertical has proven ideal for serial cut, high cutting volumes and whenever an extremely high precision of the cuts is required. For DIBOND® saw blades for cutting should be used. The cutting needs to be done on the reverse side of the panels. For cut-outs of the same format you can make cuts up to 5 panels.

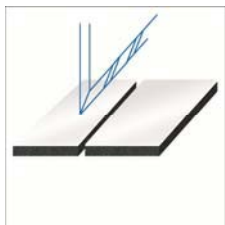
There are 5 basic measures for a perfect cutting result.

- Keep your workplace clean in order to avoid scratches on the DIBOND® surface.
- Use an appropriate vacuum cleaning system.
- Work on the reverse side of the panel



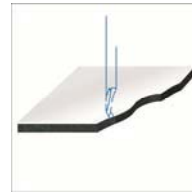
Drilling

DIBOND® can be drilled with twist drills which are used for aluminium and plastics on common machines for metals. The best results are achieved with metal drills for stainless steel with a centre point and a point angle between 100° - 140°.



Shearing

DIBOND® can be easily sheared with a guillotine for thin sheets. Slight compressions of the aluminium cover sheet on the edges may occur at the impact side. The clamp on the shear should be fitted with a shock-absorbing rubber pad to prevent damage to the cover sheet. Additionally corner-cutting tools can be used for punching DIBOND® Sheets.



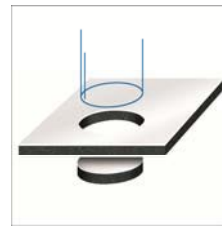
Contour cutting, contour milling

DIBOND® can be cut to shape using jig saws, scroll saws, contour mills, CNC machining centres and water jet cutting machines.

When cutting with jig saws, please use saw blades for wood and plastic materials.

Cut abrasively when using a water jet cutting machine. Pre-drilling of the panels is necessary when starting to contour cut in the middle of a panel as it is not possible to drill through with the water jet.

For contour cutting on CNC machining centres use a one-edged cutter. Whenever absolute precision is requested, CNC-machines are the best solution in order to achieve the most accurate and detailed cuts and forms.



Punching

DIBOND® panels of any thickness can be punched using standard metal punching machines.

Sharp tools and dies with minimal cutting clearance (0.1 mm) are important to achieve clear cuts. Punching will cause a slight deflection of the cut edge on the impact side. Holes of a minimum diameter of 4 mm can be punched. The minimum width of web between hole edges is also 4 mm. High volumes of the same punching format can be punched on serial punching machines.

Fettling

We recommend fettling tool with rotary blades or an abrasive pad for cleaning or deburring the edges of DIBOND®.

DIBOND FR has been tested to AS 5637.1 and achieved a Group 2 rating. To obtain a certificate please contact us.

We always recommend to discuss fire ratings and compliance with a qualified fire engineer prior to the use of products.