



# RenShape® BM 5060

Epoxy board material

OBO-Werke GmbH

Am Bahnhof 5 · 31655 Stadthagen · Germany  
Telefon (0 57 21) 78 01-0  
Telefax (0 57 21) 7 78 55  
www.obo-werke.de  
info@obo-werke.de  
USt-Id: DE171274404  
St -Nr : 44/210/02193

RenShape® BM 5060 – Technical Data Sheet

## Application

- Prepregs
- Data control models
- Cubing models
- Vacuum forming moulds

## Properties

- very fine surface structure
- easily machinable
- very good dimensional stability
- high deflection temperature up to 140°C

## Technical Data\*

Colour	blue
Density <b>kg/m<sup>3</sup></b>	700 – 750
Compressive strength (DIN EN ISO 604 ) approx. <b>MPa</b>	65 - 70
Flexural strength (DIN EN ISO 178) approx. <b>MPa</b>	2400 - 2700
Bending strength (DIN EN ISO 178 ) approx. <b>MPa</b>	35 - 40
Linear thermal expansion coefficient temperature from approx. 25 – 70 °C (according to DIN 53752) <b>10<sup>-6</sup> · K<sup>-1</sup></b>	30 - 40
Shore hardness (DIN 53505) <b>Shore-D</b>	70 - 80
Deflection temperature °C	135 - 140

## Machining recommendation

	<b>Roughing cut</b>	<b>Finishing / contour cut</b>
Spindle speed ( <b>n</b> )	8.000 – 15.000 1/min	8.000 – 15.000 1/min
Feed rate ( <b>v<sub>f</sub></b> )	2.000 – 3.000 mm/min	1.000 – 3.000 mm/min
Cutting depths ( <b>a<sub>p</sub></b> )	3,0 – 5,0 mm	0,2 – 0,5 mm
	Solid carbide cutters with 2 or 3 cutting edges	Solid carbide cutters with 2 or 3 cutting edges or solid carbide ball milling cutters

## Dimensions:

- 1524 x 610 x 50 / 75 / 100 / 150 / 200 mm

Other dimensions, cuts, bonded blocks, rough pre-milling on request.

Boards, finished tools and models should be stored flat in dry conditions.  
The material should be acclimatized to 18 – 25 °C prior to machining.  
Temperature variations should be kept as moderate as possible.

Status: 05.09.2019