

Description

Model Board M100 is a polyurethane board and block material with low density.

Features

- Easy to process
- Can be processed by hand or machine

Applications

- Test milling programmes
- Back filling of moulds and patterns
- Styling and display models
- Test models
- Draw dies
- Substructure for hard styling clay
- Large volume models

Technical Data

	Typical Value
Colour	Beige
Temperature Resistance	Approx 120 °C (Short term: 250°C)
Coefficient of Thermal Expansion	$50 - 80 \times 10^{-6} \text{ K}^{-1}$
Density	0.10 gcm^{-3}
Compressive Strength	0.9 Nmm^{-2}
Flexural Strength	1.3 Nmm^{-2}
Thermal Conductivity	0.026 W/m.K

Model Board M100 contains no halogens, plasticizer or solvent, it is manufactured fluorocarbohydrate free and is physiologically harmless.

Processing

Boards of M100 can be combined using Model Board Adhesive MG 301. We recommend that boards are square and plane-parallel to ensure good glue joints

Machining

Model Board M100 can be machined with wood or metal working tools and should be machined at 20 – 25°C.

Milling Parameters

	Roughing	Finishing
Type of Tool	Finishing Tools d = 80mm	Finishing Tools d = 80mm
Tool Diameter (d)	80 mm	80 mm
Cutting Speed (Vc)	50 m/sec	50 m/sec
Speed (n)	12000 min^{-1}	8000 min^{-1}
Feed Speed	12 m/min	8 m/min
Tooth Speed (fz)	0.25 mm	0.25 mm
Number of Teeth (z)	4	4
Cutting Depth (ae)	10 mm	0.5 mm
Cutter Mark Length (fzeff)	38 mm	15 mm

Storage and Transport

Model Board M100 should be stored on a flat surface, in dry conditions, at a temperature between 18 – 25°C. Variations in temperature should be avoided during storage.

Board Sizes

Product Code	Dimensions (mm)
M100-2	1000 x 1000 x 50
M100-24	1000 x 1000 x 100
M100-4	2000 x 1000 x 100

Surfaces are machined parallel.

The deflection may be up to 10mm per 2m.

Further Information

This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

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Before using any of our products, users should familiarise themselves with the relevant Technical Data Sheet (TDS) and Safety Data Sheets (SDS) provided by Alchemie Ltd.

This material does not contain any fillers that release harmful dust during machining. Nevertheless, the dust content in the air should not rise above 6 mg/m³. Safety procedures recommended by the vocational co-operative of the chemical industry should be complied with. The article is not a regulatory product according to ICC regulations. In accordance with general local and national regulations waste is to be disposed by incineration in authorised places or conveyed to authorised tips (EAK 120105).

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