



LAB 975 New

Heat resistant Epoxy Tooling Board with high dimensional stability

LAB 975 New is the first choice for the construction of prepreg tools, master models and vacuum forming moulds for temperatures up to 130°C.

- Density 0.70 kg/ltr.
- High temperature resistance up to 130° C
- Very low coefficient of thermal expansion α_T 35-40 x 10⁻⁶
- High compressive strength
- Easy workability
- Excellent surface quality

Axson

BUILDING TRUST



LAB 975 New

AREAS OF APPLICATION

- Manufacturing of heat resistant master models for the construction of prepreg tools for the autoclave up to 130°C
- Manufacturing of master models, vacuum forming moulds and laminating moulds

PRODUCT BENEFITS

- High dimensional stability
- Easy workability
- Very good surface after finishing
- Medium density
- High temperature resistance
- Good price-performance-ratio

DESCRIPTION

- **Basis:** Epoxy, green
- **Adhesive:** H8973/GC 15
- **Filler:** H8973/GC 15 + Filler RZ55
- **Dimensions in mm:** 1500 x 500 x Thickness 50/75/100/150/200

PHYSICAL DATA (APPROX. VALUES)

Density	ISO 2781	kg/ltr.	0.70
Shore hardness, 23° C	ISO 868	-	D 75
Flexural E-Modulus	ISO 178	MPa	2,300
Flexural strength	ISO 178	MPa	30
Compressive strength	ISO 604	MPa	50
Processing temperature	-	°C	130
Glass transition temperature (Tg)	ISO 11359	°C	130
Linear coefficient of thermal expansion α_T	ISO 11359	K ⁻¹	35-40 x 10 ⁻⁶

MILLING PARAMETERS

Milling steps	1.	2.	3.	4.	5.	6.	7.
Strategy	Roughing Z - constant	Rest material Z - constant	Rest material Z - constant	Rest material Z - constant	Finishing flat areas	Finishing Z - constant	Finishing rest material shapes
Milling tool	Torus cutter	Torus copying cutter	Ball nose copying cutter	Ball nose copying cutter	Torus copying cutter	Ball nose copying cutter	End mill cutter
Diameter [mm]	42	20	12	6	8	8	4
Number of teeth	3	2	2	2	2	2	2
Radius [mm]	3	4	6	3	1	4	2
Cutting speed (Vc) [m/min]	540	500	600	300	400	400	200
Revolutions [1/min]	4,100	7,957	16,000	16,000	16,000	16,000	16,000
Feedrate per tooth [mm]	0.6	0.5	0.2	0.18	0.13	0.13	0.13
Feed rate (Vf) [mm/min]	7,380	7,957	6,366	5,760	4,160	4,160	4,160
Cutting depth (ap) [mm]	3	2	1	0.3	0.3	0.15	0.1
Cutting width/Line spacing (ae) [mm]	30	10	2	0.5	4	0.3	0.1