

POLYURETHANE MACHINABLE SLAB

CHECKING FIXTURES

DENSITY 47 lbs/ft³/(0.75 g/cc) – CTE 44 ppm/°F/(80 ppm/°C)

DESCRIPTION

polyurethane slab designed for the production of checking fixtures, patterns, mock-ups, prototypes and masters by milling or machining by hand.

PROPERTIES

- Low density
- Excellent surface aspect (after machining)
- Very good dimensional stability

PHYSICAL PROPERTIES			
Color		grey	
Density at 23°C	ISO 2781 : 1996	lbs./ft ³ /(g/cc)	47/(0.75)

MECHANICAL PROPERTIES at 23°C			
Hardness	ASTM D2583	Shore D1	76
Flexural modulus	ASTM D790	psi/(MPa)	145,000/(1,000)
Flexural strength	ASTM D790	psi/(MPa)	4,900/(34)
Compressive strength	ASTM D695	psi/(MPa)	4,100/(28)
Coefficient of thermal expansion (CTE) (50 – 140°F)/(10 – 60°C)		ppm/°F/(°C)	44/(80)
Glass transition temperature (Tg)	ASTM E1545	°F/(°C)	194/(90)

(1) Average values obtained on slabs

ASSEMBLY / FINISH

Axson tooling boards can be bonded with H 9951, AL 2108, or AL 2120

HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products :

Ensure good ventilation

Wear gloves, and safety glasses.

Do not smoke when machining.

For further information, please consult the material safety data sheet.

MACHINING PARAMETERS

	Cutter edge velocity (Vc in ft/min (or m/min))	Feed per tooth (fz in in (or mm/revolution))
Rough shape	820/(250)	0.011/(0.28)
Finish	1312/(400)	0.004/(0.09)

$$n = (12 \text{ English (or 1000 metric) } \times Vc) / (\text{PI} \times Dc)$$

$$Vf = n \times fz \times Z$$

- Vc: Cutter edge velocity in ft/mi or /(m/min)
- Dc: cutting diameter in in or (mm)
- n: Spindle speed in revolution/min
- fz: Feed per tooth in in (or mm)/revolution
- Z: number of teeth
- Vf: feed speed in in (or mm)/min

STORAGE CONDITIONS

The slabs must be stored in a dry place provided

GUARANTEE

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