

## DESCRIPTION

Abrasion resistant machining slab designed for foundry patterns, core boxes and any other tools made by CNC.

## PROPERTIES

- Outstanding impact resistance
- Very good abrasion resistance
- Easy machining
- Very good surface aspect after machining

### PHYSICAL PROPERTIES

Color		red	
Density at 73°F (23°C)	ISO 2781 : 1996	Lbs/ft <sup>3</sup> (g/cc)	74 (1.18)

### MECHANICAL PROPERTIES at 73°F (23°C)

Hardness			
- at 73°F (23°C)	ISO 868 :2003	Shore D1 / D15	80 / 78
- at 176°F (80°C)			55 / -
Flexural modulus	ISO 178 : 2001	psi (MPa)	203,000 (1,400)
Flexural strength	ISO 178 :2001	psi (MPa)	8,300 (57)
Tensile modulus	ISO 527 :1993	psi (MPa)	218,000 (1,500)
Tensile strength	ISO 527 :1993	psi (MPa)	8,300 (35)
Elongation at break	ISO 527 : 1993	%	35
Compressive strength	ISO 604 :2002	psi (MPa)	5,900 (41)
Impact strength (CHARPY) Unnotched specimens	ISO 179/1eU :1994	ft.lbf/in <sup>2</sup> (kJ/m <sup>2</sup> )	34 (72)
Abrasion loss	ISO 5470-1 : 1999	in <sup>3</sup> (mm <sup>3</sup> )	0.006 (93)
Glass transition temperature (Tg)	ISO 11359 : 2002	°F (°C)	176 (80)
Coefficient of thermal expansion (CTE) 50 – 140°F (10 - 60°C)	ISO 11359 : 1999	ppm/°F (°C)	53 (95)

## ASSEMBLY / FINISH

Axson tooling boards can be bonded with H8111 (short pot life – PU adhesive) or H9951 adhesive (long pot life – epoxy adhesive), consumption about 1lb/10 ft.<sup>2</sup> (400g/m<sup>2</sup>).

### MACHINING PARAMETERS

	Cutter edge velocity (Vc in ft/min or (m/min))	Feed per tooth (fz in in or mm/revolution)
Rough shape	328 – 1312 (100 – 400)	0.021 (0.53)
Finish	1312 (400)	0.002 (0.06)

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

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

- Vc: Cutter edge velocity in ft/min 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

- Product is guaranteed for 12 months stored flat in a dry place.

### 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.

### GUARANTEE

The information contained in this technical data sheet result from research and tests conducted in our Laboratories under precise conditions. It is the responsibility of the user to determine the suitability of AXSON products, under their own conditions before commencing with the proposed application. AXSON guarantee the conformity of their products with their specifications but cannot guarantee the compatibility of a product with any particular application. AXSON disclaim all responsibility for damage from any incident which results from the use of these products. The responsibility of AXSON is strictly limited to reimbursement or replacement of products which do not comply with the published specifications.