# RAMPF WB-1223

# Polyurethane Board for Tools and Molds

#### **Typical Properties**

Color	Red
Density (ρ)	76.3 lb/ft³ [1.2 g/cm³]
Hardness	75- 85 Shore D
Flexural Strength	10,000 – 12,000 psi [70-80 MPa]
Compressive Strength	8,700 – 10,000 psi [60-70 MPa]
Coefficient of Thermal	(44-47) x 10 <sup>-6</sup> in/in <sup>0</sup> F [(79.2-84.6) x 10 <sup>-6</sup> m/m/ <sup>0</sup> C]
Expansion (CTE)	
Deflection Temperature, HDT	176 – 194°F [80 – 90°C]

#### Machining

Cutters: Roughing - 1"(25.4mm) Hog Ball End Mill, 4-flute, HS Steel 8% Cobalt

Finishing - 5/8"(15.875mm) Ball End Mill, 2-flute carbide

**Depth:** Roughing - varied from  $\frac{1}{4}$ " (6.35mm) to 2.5" (63.5mm) with 40% stepover

Finishing: 1/8"(3.175mm) deep leaving 0.002" (0.05mm) scallop height

Blades: Use carbide offset-tooth blade for faster cutting and less binding

Roughing speed: 1,600RPM · Roughing Feed 70-140IPM Finishing speed: 10,000RPM · Finishing Feed 100-200IPM

#### **Processing**

The product should be machined at ambient room temperature (68-77°F (20-25°C)).

#### Storage

The material should be stored flat and in a dry place. Temperature variations should be avoided during storage and transportation.

#### **Handling Precautions**

Good workplace ventilation is to be ensured during processing. At the same time, the employer's liability insurance association's industrial hygiene safety regulations regarding the handling of reaction resins and their hardeners are to be observed. Please take heed of the appropriate safety data sheets.

#### **Available Sizes**

1.2" x 20" x 40" (30.5mm x 508mm x 1016mm)

2.0" x 24" x 60" (50.8mm x 610mm x 1524mm)

3.0" x 24" x 60" (76.2mm x 610mm x 1524mm)

4.0" x 24" x 60" (101.6mm x 610mm x 1524mm)



CMT Materials, Inc. 107 Frank Mossberg Drive Attleboro, MA 02703 USA

T: +1(508)226-3901 F: +1(508)226-3902 Email: info@cmtmaterials.com

## **Key Properties**

- Low wear of milling tools
- Resistant to amine
- Most proven working board on the foundry market
- Resistant to dry ice cleaning
- Good abrasion resistance

## **Applications**

- Foundry Pattern Plates
- Hammer Tools
- Checking Fixtures for Metal Parts

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