

PUBLOCK 800

Custom-cast polyurethane blocks

Applications

PUBLOCK 800 is a high-performance, machinable polyurethane block that can be custom-cast to the customer's required shape and dimensions. It is used primarily for master models, reference models and prototypes, and can also be used for foundry patterns, checking fixtures and patterns for composite tools made by hand lay-up or vacuum forming.

Features

- Excellent surface finish • Uniform, dense structure
- Good edge dimensional stability • Good machinability
- Low residual stress • Low dust generation during machining

Physical properties

Property	PUBLOCK800
Color	Reddish brown
Density	0.80±0.02g/cm ³

Mechanical properties

Property	Test standard	PUBLOCK800
Hardness	ISO868:2003	Approx. D70
Flexural strength	ENISO178	Approx. 36MPa
Flexural modulus	ENISO178	Approx. 2000MPa
Compressive strength	ENISO604	Approx. 38MPa
Impact strength	ENISO179	Approx. 8KJ/m ²
Coefficient of thermal expansion	ENISO113590-2	Approx. 60*10-6K-1

Processing guidelines

Recommendations for machining blocks

- Rough-machine first
- Preferably remove the clamps if leaving the block overnight
- Re-clamp before finish machining
- Finish-machine

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We recommend brown adhesive and brown repair compound for bonding and repairs.

The repair compound can be used as a fast-curing adhesive. To control working time, blend it separately with the adhesive according to the mixing table.

Dimensions

Custom casting to the customer's shape and dimensions, or one-piece casting, is available for specific workholding fixtures, checking fixtures, molds and other models.

Safety precautions

Cured PUBLOCK 800 polyurethane blocks are thermosets and do not generate hazardous dust during machining. Follow the safety recommendations. Under the regulations, PUBLOCK blocks require no additional labelling during transport and storage.

Notes

All data above were measured under specified conditions. As actual processing methods and other factors may affect performance, customers should conduct the necessary tests before use to confirm suitability for their application. We guarantee that our products meet our quality specifications.

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US customary-unit equivalents

US customary-unit equivalents are provided for convenience alongside the original SI test data. The original source values and test methods remain the controlling reference. Converted values are rounded.

Source value	US equivalent
0.80±0.02 g/cm ³	49.9 ± 1.249 lb/ft ³
36 MPa	5221 psi
2000 MPa	290075 psi
38 MPa	5511 psi