

PUBLOCK 900

Custom-cast polyurethane blocks

Applications

PUBLOCK 900 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	PUBLOCK900
Color	Reddish brown
Density	0.90±0.02g/cm3

Mechanical properties

Property	Test standard	PUBLOCK900
Hardness	ISO868:2003	Approx. D72
Heat deflection temperature	DINENISO75B	Approx. 72°C
Flexural strength	ENISO178	Approx. 46MPa
Flexural modulus	ENISO178	Approx. 2300MPa
Compressive strength	ENISO604	Approx. 52MPa
Impact strength	ENISO179	Approx. 8.6KJ/m2
Coefficient of thermal expansion	ENISO113590-2	Approx. 54*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

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- Finish-machine

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 900 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
0.90±0.02 g/cm ³	56.2 ± 1.249 lb/ft ³
72 °C	161.6 °F
46 MPa	6672 psi
2300 MPa	333587 psi
52 MPa	7542 psi