

# **DQ-TOOL<sup>®</sup>**

*Polyurethane Tooling Boards  
For Modeling , Tooling ,  
Fixtures And Foundry*

# COMPANY SUPERIORITY

---

Established in 2008, Dongguan Dongquan Mould Material Co., Ltd is a leading manufacturer of polyurethane tooling boards in China. With our own 3800-square-meter factory and a team of 30 skilled professionals, we are committed to providing our customers with the highest quality polyurethane tooling boards and services.

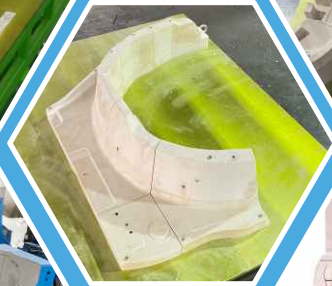
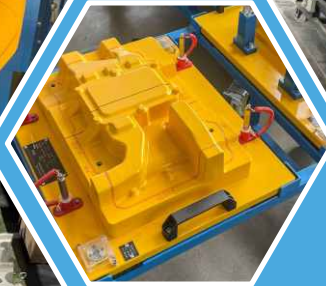
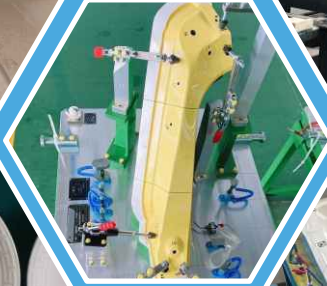
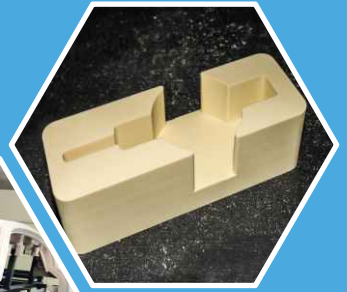
Our modern factories are equipped with cutting-edge technology and equipment, enabling us to produce polyurethane tooling boards with varying densities, hardness, sizes, colors, and mechanical characteristics. These tooling boards are lightweight, easy to machine, and have an excellent surface structure, making them widely used in the automotive industry and other sectors that require rapid prototype production and modeling.

We are proud to have achieved ISO9001:2019 international quality management system certification. We also hold more than 20 new practical patents and have been recognized as a high-tech enterprise in the tooling boards industry.

Enterprises at home and abroad are welcome to establish business ties with us on the basis of equality and mutual benefit so that we can enjoy sincere cooperation and common development.



# APPLICATIONS





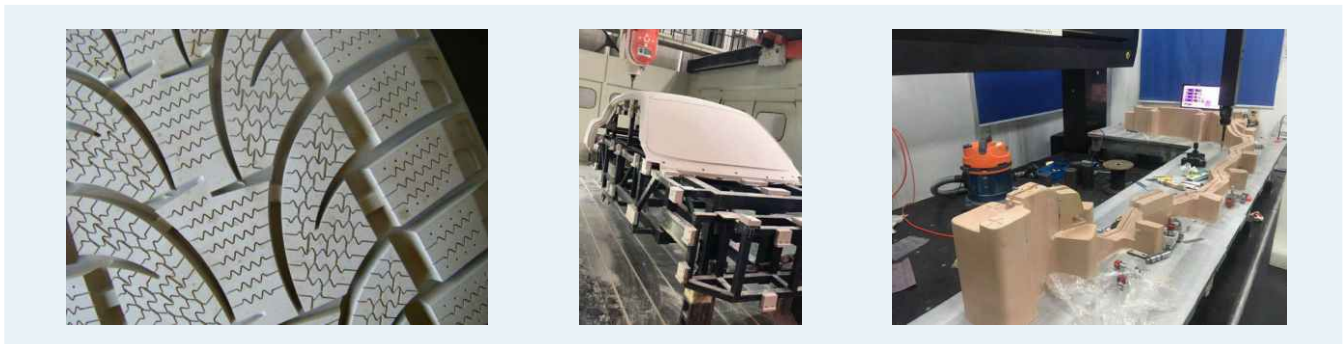
### DESCRIPTION:

- ◆ Easy to machine
- ◆ Less dust during processing
- ◆ Good compressive strength
- ◆ Excellent surface structure



### APPLICATION:

- ◆ Automotive die models
- ◆ Styling prototypes
- ◆ Master model
- ◆ Vacuum forming mould



### MECHANICAL PROPERTIES:

Type	DQ460
Color	Brown/white
Density(ISO 1183)	0.75g/cm <sup>3</sup> or 46 lb./ft. <sup>3</sup>
Hardness(ISO 868)	68-73 shore D
Coefficient of thermal expansion(ISO 11359)	40-45 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	75-80 °C
Flexural strength(ISO 178)	35-40 MPa
Compressive strength(ISO 604)	49-55 MPa
Tensile strength	25-30 MPa
Specifications	750x500x(30/35/50/75/100)mm 1500x500x(30/50/75/100)mm Other dimensions on request



# DQ473

## Medium Density PU Tooling Board



### DESCRIPTION:

- ◆ Easy to machine
- ◆ Good compressive strength
- ◆ Less dust during processing
- ◆ Excellent surface structure



### APPLICATION:

- ◆ Model bases
- ◆ Patterns
- ◆ Master model
- ◆ Check fixtures



### MECHANICAL PROPERTIES:

Type	DQ473
Color	Gray
Density(ISO 1183)	0.83g/cm <sup>3</sup> or 50 lb./ft. <sup>3</sup>
Hardness(ISO 868)	73-78 shore D
Coefficient of thermal expansion(ISO 11359)	40-45 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	75-80 °C
Flexural strength(ISO 178)	35-40 MPa
Compressive strength(ISO 604)	45-50 MPa
Tensile strength	25-30 MPa
Specifications	750x500x(35/50/75/100)mm 1500x500x(30/50/75/100)mm Other dimensions on request

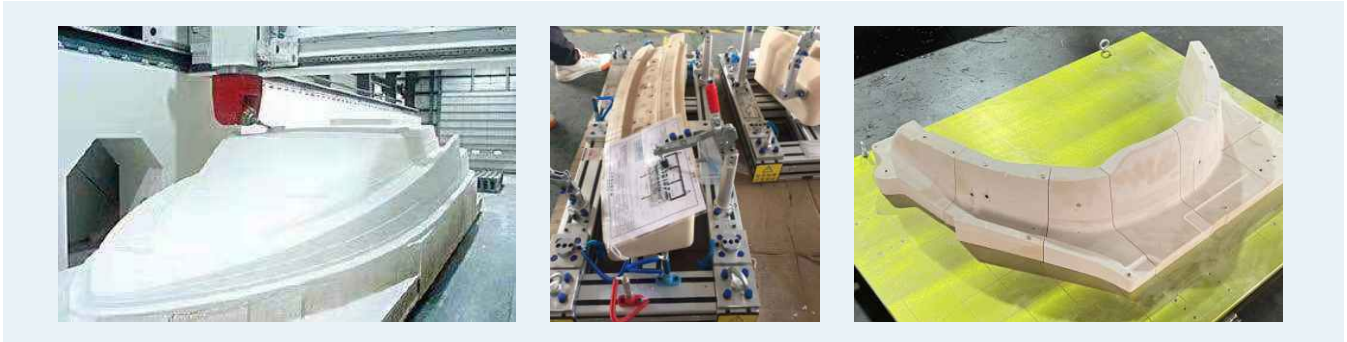
### DESCRIPTION:

- ◆ Easy to machine
- ◆ Dimensional stability
- ◆ High temperature resistance
- ◆ Excellent surface structure



### APPLICATION:

- ◆ Prepreg tooling
- ◆ Vacuum forming mould
- ◆ Data control models



### MECHANICAL PROPERTIES:

Type	DQ560
Color	Light Blue
Density(ISO 1183)	0.75g/cm <sup>3</sup> or 46 lb./ft. <sup>3</sup>
Hardness(ISO 868)	70-75 shore D
Coefficient of thermal expansion(ISO 11359)	40-45 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	100-130 °C
Flexural strength(ISO 178)	40-45 MPa
Compressive strength(ISO 604)	85-90MPa
Tensile strength	25-30 MPa
Specifications	750x500x(35/50/75/100)mm 1500x500x(30/50/75/100)mm Other dimensions on request

# DQ5100

## Medium Density PU Tooling Board



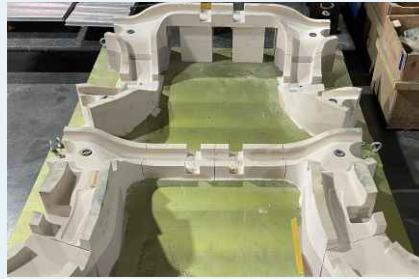
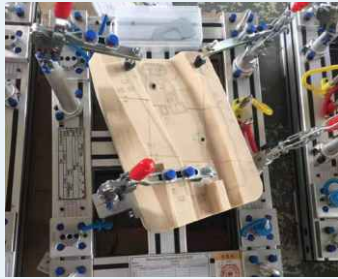
### DESCRIPTION:

- ◆ Easy to machine
- ◆ Excellent surface structure
- ◆ Less dust during processing
- ◆ Good compressive strength



### APPLICATION:

- ◆ Master model
- ◆ Checking fixtures
- ◆ Samples model
- ◆ Pattern plates



### MECHANICAL PROPERTIES:

Type	DQ5100
Color	Off-white/Gray
Density(ISO 1183)	1.0g/cm <sup>3</sup> or 62 lb./ft. <sup>3</sup>
Hardness(ISO 868)	75-80 shore D
Coefficient of thermal expansion(ISO 11359)	35-40 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	75-80 °C
Flexural strength(ISO 178)	40-45 MPa
Compressive strength(ISO 604)	80-85 MPa
Tensile strength	25-30 MPa
Specifications	1500x500x(30/50/75/100)mm 1000x500x(30/50/75/100)mm Other dimensions on request



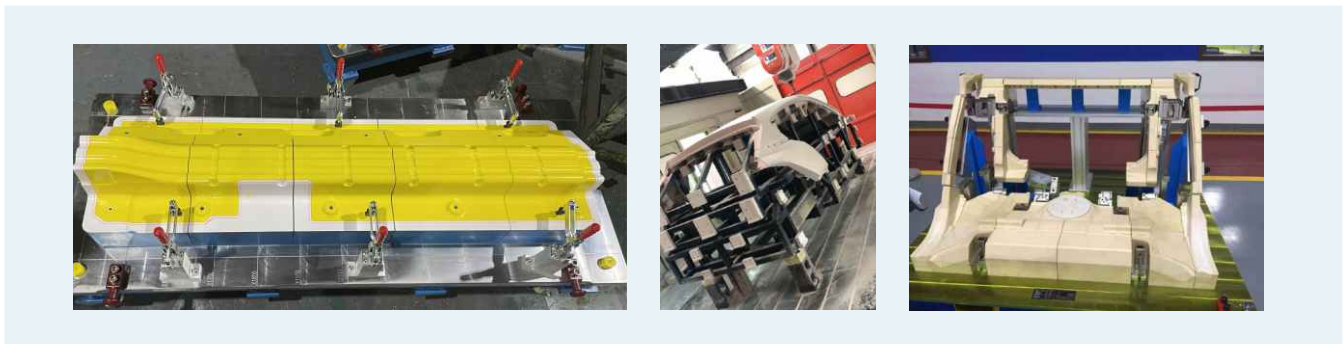
### DESCRIPTION:

- ◆ Easy to machine
- ◆ Dense fine surface
- ◆ Excellent dimensional stability
- ◆ Good compressive strength



### APPLICATION:

- ◆ Foundry models
- ◆ Pressing tools
- ◆ Checking fixtures
- ◆ Pattern plates



### MECHANICAL PROPERTIES:

Type	DQ5120
Color	Gray/Off-white
Density(ISO 1183)	1.35g/cm <sup>3</sup> or 84 lb./ft. <sup>3</sup>
Hardness(ISO 868)	80-85 shore D
Coefficient of thermal expansion(ISO 11359)	35-40 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	70-75 °C
Flexural strength(ISO 178)	50-55 MPa
Compressive strength(ISO 604)	75-80 MPa
Tensile strength	30-35 MPa
Specifications	1000x500x(35/50/75/100)mm 1500x500x(30/50/75/100)mm Other dimensions on request

# DQ1200

## High Density Polyurethane Tooling Board



### DESCRIPTION:

- ◆ Dense fine surface
- ◆ Good compressive strength
- ◆ Excellent dimensional stability
- ◆ Extremely durable and wear-resistant



### APPLICATION:

- ◆ Pattern plate
- ◆ Foundry models
- ◆ Core boxes
- ◆ Master models



### CURED PARAMETER:

Type	DQ1200
Color	Green/Blue
Density(ISO 1183)	1.35g/cm <sup>3</sup> or 84 lb./ft. <sup>3</sup>
Hardness(ISO 868)	75-80 shore D
Coefficient of thermal expansion(ISO 11359)	50-55 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	75-80 °C
Flexural strength(ISO 178)	68-73 MPa
Flexural Modulus(ISO 178)	4150 MPa
Compressive strength(ISO 604)	110-115 MPa
Specifications	1000x500x(30/50/75/100)mm Other dimensions on request

### DESCRIPTION:

- ◆ Excellent surface
- ◆ Good compressive strength
- ◆ Excellent impact resistant
- ◆ Extremely durable and wear-resistant



### APPLICATION:

- ◆ Patterns
- ◆ Cores boxes
- ◆ Foundry models
- ◆ Hammer tools



### CURED PARAMETER:

Type	DQ1250
Color	Red/Blue
Density(ISO 1183)	1.25g/cm <sup>3</sup> or 78 lb./ft. <sup>3</sup>
Hardness(ISO 868)	75-80 shore D
Coefficient of thermal expansion(ISO 11359)	60-65 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	70-75 °C
Flexural strength(ISO 178)	85-90 MPa
Flexural Modulus(ISO 178)	3290 MPa
Compressive strength(ISO 604)	160-165 MPa
Specifications	995x500x(30/50/75/100)mm Other dimensions on request



# DQ5160

## High Density PU Tooling Board



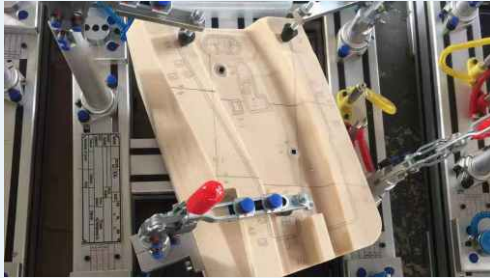
### DESCRIPTION:

- ◆ Dense fine surface
- ◆ Good compressive strength
- ◆ Easy to machine
- ◆ Excellent wear resistance



### APPLICATION:

- ◆ Metal forming tools
- ◆ Pressing tools
- ◆ Fixture tools
- ◆ Thermoforming tools



### MECHANICAL PROPERTIES:

Type	DQ5160
Color	Black
Density(ISO 1183)	1.67g/cm <sup>3</sup> or 104 lb./ft. <sup>3</sup>
Hardness(ISO 868)	85-90 shore D
Coefficient of thermal expansion(ISO 11359)	35-40 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	75-80 °C
Flexural strength(ISO 178)	60-65 MPa
Compressive strength(ISO 604)	100-105 MPa
Tensile strength	35-40 MPa
Specifications	750x500x(35/50/75/100)mm 1000x500x(50/75/100)mm Other dimensions on request

### DESCRIPTION:

- ◆ Dense fine surface
- ◆ Good compressive strength
- ◆ Easy to machine
- ◆ Excellent wear resistance



### APPLICATION:

- ◆ Metal forming tools
- ◆ Fixture tools
- ◆ Pressing tools
- ◆ Thermoforming tools



### MECHANICAL PROPERTIES:

Type	DQ5166
Color	Off-white
Density(ISO 1183)	1.67g/cm <sup>3</sup> or 104 lb./ft. <sup>3</sup>
Hardness(ISO 868)	85-90 shore D
Coefficient of thermal expansion(ISO 11359)	35-40 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	75-80 °C
Flexural strength(ISO 178)	60-65 MPa
Compressive strength(ISO 604)	100-105 MPa
Tensile strength	35-40 MPa
Specifications	750x500x(35/50/75/100)mm 1500x500x(50/75/100)mm Other dimensions on request

# DQ5180

## High Density PU Tooling Board



### DESCRIPTION:

- ◆ Good dimensional stability
- ◆ High compressive strength
- ◆ Metal filler can be added
- ◆ Dense fine surface

### APPLICATION:

- ◆ Metalforming tools
- ◆ Pressing tools
- ◆ Jigs
- ◆ Foundry patterns



### MECHANICAL PROPERTIES:

Type	DQ5180
Color	Gray
Density(ISO 1183)	1.9g/cm <sup>3</sup> or 118 lb./ft. <sup>3</sup>
Hardness(ISO 868)	85-90 shore D
Coefficient of thermal expansion(ISO 11359)	40-45 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	80-85 °C
Flexural strength(ISO 178)	60-65 MPa
Compressive strength(ISO 604)	100-110 MPa
Tensile strength	40-45 MPa
Specifications	750x500x(35/50/75/100)mm 1000x500x(50/75/100)mm Other dimensions on request



### DESCRIPTION:

- ◆ Quick to process
- ◆ Fine cell structure
- ◆ Homogeneous surface
- ◆ Easy to process by hand



### APPLICATION:

- ◆ Design study
- ◆ Styling models
- ◆ Master model
- ◆ Data models



### MECHANICAL PROPERTIES:

Type	DQ500
Color	Brown
Density(ISO 1183)	0.5g/cm <sup>3</sup> or 31 lb./ft. <sup>3</sup>
Hardness(ISO 868)	52-57 shore D
Coefficient of thermal expansion(ISO 11359)	50-55 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	65-70 °C
Flexural strength(ISO 178)	10-15 MPa
Compressive strength(ISO 604)	10-15 MPa
Tensile strength	-
Specifications	1490x500x(50/75/100/150)mm Other dimensions on request

# DQ0500A/B

## Epoxy Modeling Paste



### DESCRIPTION:

- ◆ Easy to use
- ◆ Easy to form
- ◆ Mixes easily
- ◆ Low specific gravity



### APPLICATION:

- ◆ Manufacturing sample
- ◆ Master model
- ◆ Automotive design modeling



### PHYSICAL PROPERTIES:

Type	Color	Mix ratio	Pot life	Gel time	Cured time
DQ0500A (resin)	Light Brown	1	10-20Min	40Min	24Hour
DQ0500B (hardener)	White	1			

### CURED PARAMETER:

Type	DQ0500 A/B
Color	Brown
Density(ISO 1183)	0.5-0.55g/cm <sup>3</sup> or 32 lb./ft. <sup>3</sup>
Cured Hardness (ISO 868)	55-60 shore D
Coefficient of thermal expansion(ISO 11359)	55-60 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	50-60 °C
Compressive strength ( ISO 604 )	45-50 MPa
Specifications	10kg/barrel

@Room temperature at 25°C during testing

### DESCRIPTION:

- ◆ Easy to use
- ◆ Mixes easily
- ◆ Easy to form
- ◆ Low specific gravity



### APPLICATION:

- ◆ Manufacturing sample
- ◆ Automotive design modeling
- ◆ Master model



### PHYSICAL PROPERTIES

Type	Color	Mix ratio	Pot life	Gel time	Cured time
DQ0750A (resin)	Light Brown	1	10-20Min	40Min	24Hour
DQ0750B (hardener)	White	1			

### CURED PARAMETER

Type	DQ0750 A/B
Color	Brown
Density(ISO 1183)	0.75-0.8g/cm <sup>3</sup> or 47 lb./ft. <sup>3</sup>
Cured Hardness (ISO 868)	65-70 shore D
Coefficient of thermal expansion(ISO 11359)	55-60 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	60-65°C
Compressive strength ( ISO 604 )	55-60 MPa
Specifications	10kg/barrel

@Room temperature at 25°C during testing

# DQ1000A/B

## Epoxy Modeling Paste



### DESCRIPTION:

- ◆ Easy to use
- ◆ Easy to form
- ◆ Mixes easily
- ◆ Low specific gravity



### APPLICATION:

- ◆ Manufacturing sample
- ◆ Master model
- ◆ Automotive design modeling



### PHYSICAL PROPERTIES:

Type	Color	Mix ratio	Pot life	Gel time	Cured time
DQ1000A (resin)	Light Brown	1	10-20Min	40Min	24Hour
DQ1000B (hardener)	White	1			

### CURED PARAMETER:

Type	DQ1000 A/B
Color	Brown
Density(ISO 1183)	1.0-1.05g/cm <sup>3</sup> or 62 lb./ft. <sup>3</sup>
Cured Hardness (ISO 868)	70-75 shore D
Coefficient of thermal expansion(ISO 11359)	55-60 x 10 <sup>-6</sup> K <sup>-1</sup>
Hot deformation temperature(ISO 75)	60-65 °C
Compressive strength ( ISO 604 )	60-65 MPa
Specifications	10kg/barrel

@Room temperature at 25°C during testing



### DESCRIPTION:

- ◆ Easy to use
- ◆ Good temperature resistance
- ◆ High strength, impact resistance



### APPLICATION:

- ◆ Used to bond one or more tooling board together, easy to use, with reliable bonding and matching processing characteristics.

### MECHANICAL PROPERTIES:

Type	Color	Viscosity (CPS) (25°C)	M i x ratio	Pot life (25°C)	Cure Time (25°C)	Shelf life (25°C)
Quick drying adhesive	Adhesive A : translucent	A: 40000-6000	100	5Mins	24Hours	6 Months
	Adhesive B : translucent	A: 40000-6000	100			

### PACKAGING:

Quick drying adhesiv	Adhesive A	1KG
	Adhesive B	1KG

# DQ302

## Slow Drying Adhesive



### DESCRIPTION:

- ◆ Easy to use
- ◆ Good temperature resistance
- ◆ High strength, impact resistance



### APPLICATION:

- ◆ Used to bond one or more tooling board together, easy to use, with reliable bonding and matching processing characteristics.

### MECHANICAL PROPERTIES:

Type	Color	Viscosity (CPS) (25°C)	M i x ratio	Pot life (25°C)	Cure Time (25°C)	Shelf life (25°C)
Slow drying adhesive	Adhesive A : translucent	A: 40000-6000	100	1Hour	24Hours	6 Months
	Adhesive B : translucent	A: 40000-6000	80			

### PACKAGING:

Slow drying adhesive	Adhesive A	1KG
	Adhesive B	0.8KG



Dongguan Dongquan Mould Material Co., Ltd.  
Address: Room105, No.10 Yihuan Road,Chiling Industrial,  
Dongguan City,Guangdong Province,China  
Tel: +86 0769-85878968  
Mobile/Wechat: +86 13265122244  
Email: [info@dqtoolingboard.com](mailto:info@dqtoolingboard.com)  
Web: [www.dqtoolingboard.com](http://www.dqtoolingboard.com)