



**Trelleborg TC760 is a medium temperature, low density syntactic epoxy tooling board** designed for the manufacture of accurate and stable master models and molds.

**Features & Benefits**

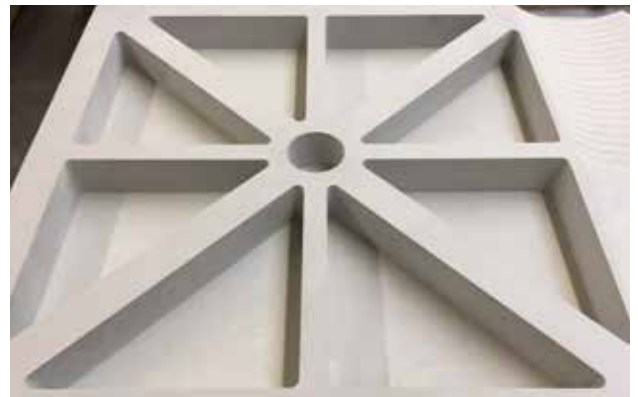
TC760 is a superior quality tooling board, offering premium performance, whilst maintaining an effective cost solution.

- **Excellent dimensional stability**  
Maintains its shape at elevated temperatures
- **Low coefficient of thermal expansion**  
Predictable performance
- **Inert surface**  
Chemically compatible with tooling prepregs
- **Suitable for use up to 145 °C**  
Can be directly used for the production of parts
- **Quick mold preparation**  
Exceptionally easy to mold
- **Seal**  
Outstanding high gloss finish with minimal coats

**Applications**

TC760 offers many benefits and it can be used for the following:

- Master models
- Lay-up tools for low and medium temperature curing epoxy prepregs
- Light weight coring materials



**Product Sizes**

TC760 is available in a standard board size of 24" x 60" at the following thickness: 2", 3", 4" and 6".

**Storage**

The board should be stored in a dry warehouse.

**Health & Safety**

Eye protection and a face mask should be worn when working with Trelleborg TC760.

Please refer to the Trelleborg MSDS.

	TYPICAL PROPERTIES	
Color	Grey	
Density	740 kg/m <sup>3</sup>	BS150 1183-3: 1999
Shore Hardness	75D	BS150868: 1998
Uniaxial Compressive Strength	60 MPa	ASTM D694-02a
HDT	145 °C	ASTM E 2092
Glass Transition Temperature	140 °C	BS EN ISO 11357-2
Coefficient of Thermal Expansion	34x10 <sup>6</sup> /°C	ASTM 228-95
Flexural Strength	30 MPa	BS 2782
Flexural Modulus	2,200 MPa	BS 2782

## Processing Guidelines

### Cutting

TC760 can be sawn using carbide or diamond coated saw blades or cutting wheels.

### Bonding

Large patterns can be constructed from boards using the appropriately selected epoxy adhesive system. Trelleborg adhesive system 551A/B is recommended. The adhesive system must offer adequate pot life and be capable of meeting the mechanical and thermal properties of the tooling board.

To ensure good bonding:

- The adhesive should be applied to both surfaces (dust free) using a notched spatula
- The surfaces should be brought together and a uniform clamping pressure applied by either mechanical or vacuum means
- Surplus adhesive should be witnessed extruding from all bond lines which after curing can be machined off without detriment
- Bonded joints should be left to cure for 24 hours at ambient temperature for best results

When utilizing the recommended adhesive no cupping should occur as the adhesive characteristics are matched to the TC760 material.

### Machining

In order to avoid board distortion it is recommended that stock removal should be taken equally from opposing faces. Where this is not possible, then the board should be supported by and bonded to additional layers.

To minimize distortion when machining large flat boards, it is advisable to rough cut one face, invert the board and machine the rear face, re-invert and complete the machining. The board can be finished by the use of successively finer grades of wet and dry abrasive paper.

## Machining Guidelines

The machining information provided is for guidance purposes only. It is advised that individual users should determine the appropriate speeds, feed, cutters and depths for their own specific application.

TYPICAL PROPERTIES	
Roughing Speed	500 rpm
Roughing Feed	9 m/min
Cutter Type	40 mm Ball Nose Cutter
Step Down	10 mm
Step Over	15 mm
Finishing Speed	7,500 rpm
Finishing Feed	9 m/min

### Gaps & Repair

It is recommended that Trelleborg EP patch and repair systems are used to fill gaps and repair rebuild areas if required.

### Contact Us

Trelleborg's Applied Technologies division is an industry expert in delivering innovative and reliable solutions that maximize performance for our customers. Our vast range of specialized, customizable materials ensure peace of mind at every stage of your project. With reliable and efficient project management and manufacturing we endeavor to take performance to new levels by achieving your goals safely, on time and within scope.

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