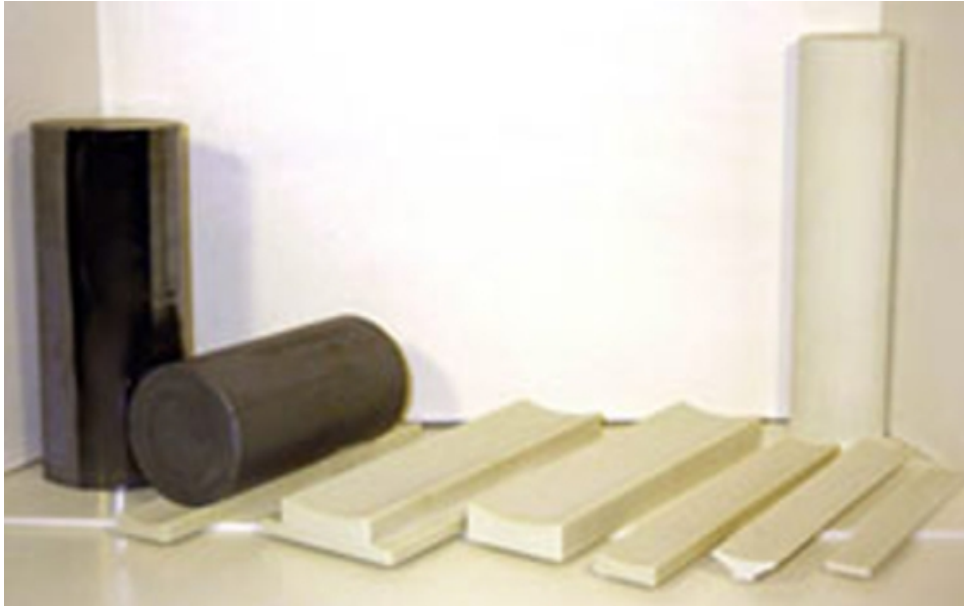


**VALTRON® - Clean Beam****INGOT MOUNTING SUBSTRATE FOR WIRE SAW SLICING****Features in general**

- ⇒ Unique surface characteristics promote required adhesion with epoxy
- ⇒ Available in various sizes
- ⇒ Electrically insulating
- ⇒ Improved dimensional stability compared to conventional extruded substrates
- ⇒ Clean handling characteristics

**Features of “threaded” version**

- ⇒ Eliminating two step mounting process, because beam can be mounted directly to saw fixture
- ⇒ Saves one layer of epoxy
- ⇒ Can be easily removed from saw fixture
- ⇒ Has not to be burned off from saw fixture, like glass

**Description**

The **VALTRON® Clean Beam** is a unique composite material that has proven very effective in wire slicing equipment for the semiconductor and photovoltaic industries.

The Clean Beam is inherently electrically insulating. The “threaded” version can be mounted directly onto the wire saw fixture by screws, eliminating the need for an insulating material and saving one layer of epoxy, because the “threaded” version replaces both glass and metallic adapter.

The abrasive blasted surface of this product provides excellent adhesion to the VALTRON ingot mounting adhesive systems and allows an even layer of epoxy adhesive between the beam and the ingot.

**note:** before use the beam has to be cleaned by using Isopropanol or a similar cleaning agent in order to get all contamination removed from beam surface and to provide a sufficient bond strength

**VALTRON® - Clean Beam**
**INGOT MOUNTING SUBSTRATE FOR WIRE SAW SLICING**
**Typical Physical Properties**

Material Designation	Density (g/cc)	Hardness (Shore "D")	C.T.E (x10 <sup>-6</sup> /°C)	Comments
150	1.12	75	78.4	Thermoset Plastic Material, Mineral Filled Standard Wire Saw Process Material
<b>253*</b>	<b>1.61</b>	<b>90 +</b>	<b>67.0</b>	<b>Thermoset Plastic Material, Mineral Filled. High Density / Increased Hardness</b>
253K	1.04	75	69.6	Thermoset Plastic Material, Mineral Filled High Density/Increased Hardness
253Y	1.58	90	69.0	Thermoset Plastic Material, Mineral Filled Improved process of 150 material
254	1.50	85	66.4	Thermoset Plastic Material, Fibreglass reinforced
<b>255**</b>	<b>1.56</b>	<b>90 +</b>	<b>70.4</b>	<b>Thermoset Plastic Material, Solid Glass Sphere Filled</b>
<b>258***</b>	<b>1.62</b>	<b>90 +</b>	<b>68.7</b>	<b>Thermoset Plastic Material, High Density Contains Aluminum Oxide (ID Slicing Application)</b>

- \* **Formulation #253:** Standard product for the future for electronic Silicon or other Semiconductor Materials, like GaAs
- \*\* **Formulation #255:** Standard product for the future and the replacement for #150 formulation for Photovoltaic -Silicon, if a Standard De-Mounting Process is used
- \*\*\* **Formulation #258:** Standard product for the future and the replacement for #138 formulation for ID Slicing

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