**TECASINT 6032 for the glass container industry: Increase in productivity and lifetime**

In comparison with conventional carbon graphite, the use of grippers made from TECASINT 6032 can increase productivity in the production of glass containers for the beverage, pharmaceutical and cosmetics industries.

During hot glass handling low thermal conductivity and high wear resistance result in significantly improved lifetime versus carbon graphite. The number of rejections can simultaneously be reduced, and the quality of the bottles can be improved.

The direct forming process allows cost efficient production of glass handling parts made of TECASINT 6032.

**Properties TECASINT 6032**

- High thermal stability
- Avoids micro-cracks
- No thermal shock due to low thermal conductivity
- Gentle glass handling
- Low oil absorption (avoids lubrication marks)
- Outstanding wear resistance
- High impact strength, strong and light
- Easy machinable, no dust formation

**Thermal conductivity**

The very low thermal conductivity of TS6032 prevents thermal shock and avoids micro cracks. In comparison with carbon graphite the rejection rate can be reduced.

→ *Increase of productivity and cost reduction.*

**Thermal conductivity [W/mK]**

<table>
<thead>
<tr>
<th>Material</th>
<th>Thermal Conductivity</th>
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<tbody>
<tr>
<td>TECASINT 6032</td>
<td></td>
</tr>
<tr>
<td>Carbon graphite</td>
<td></td>
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<tr>
<td>Brass</td>
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</table>

0 50 100 150
**Thermal resistance**

The non-meltable TECASINT 6032 features outstanding long-term thermal resistance. TECASINT 6032 does not melt or soften even if it is briefly exposed to temperatures above 500 °C. The resistance to wear & tear and dimensional stability remain at a high level even during continuous operations. Consequently, the service life is 2-3 times longer than that of graphite.

**Direct forming process**

Fast-running vertical automatic presses compress the powder in the cavity. Subsequently, the blanks are sintered for a number of hours at high temperatures.

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**Applications**

- Take-out Inserts
- Dead Plates
- Pusher Fingers
- Stacker Pads

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**Weight loss at 400 °C / 752°F in air after 1000 min [%]**

<table>
<thead>
<tr>
<th>Previous grade</th>
<th>TECASINT 6032</th>
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<tbody>
<tr>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>0.5</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
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<td>1.5</td>
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<td>2.5</td>
<td>2</td>
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</tbody>
</table>

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**Take-out-Inserts**

TECASINT 6032:
- Low thermal conductivity
- Good impact resistance

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**Filling**

- Powder is filled into the cavity, parallel ejection of pressed part.

**Pressing**

- Pressing between the top and bottom punch.

**Ejection**

- Ejection of pressed part.

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**2-3 times longer service life in comparison with graphite**

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**Take-out-Inserts**

TECASINT 6032:
- Temperature-resistant up to more than 500°C. High strength.