

# Technical News Bulletin

Cham, March 2012

## Advanced Take Out Tong Holder and Insert



### 1. Introduction

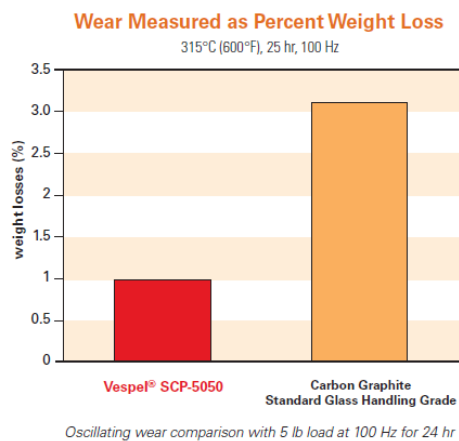
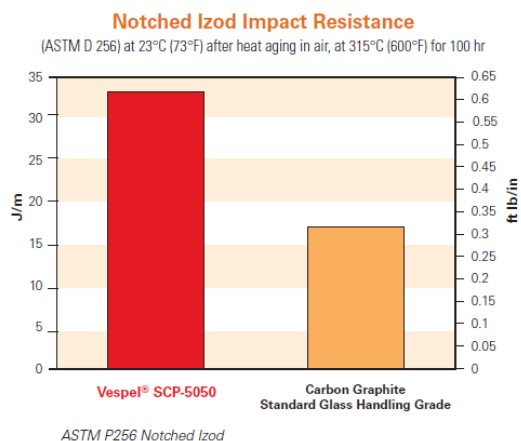
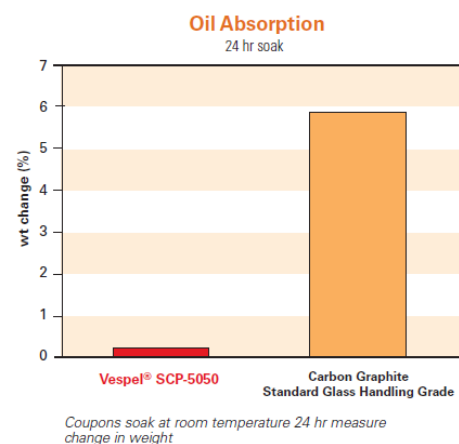
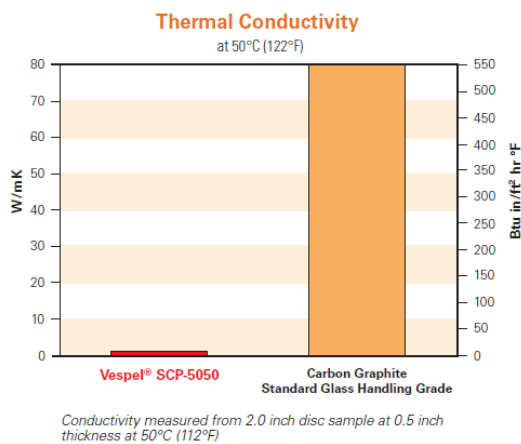
Emhart Glass expands its range of ware handling accessories with the introduction of a new Take Out Tong Holder with an improved insert material, designed to reduce checks and to minimize operating costs and production disturbances.

Where contact with sensitive glass containers is necessary, materials with specific characteristics are required. The glass contact material DuPont™ Vespel® SCP5050 is such a special product. First used as a Pusher Finger Liner in 2011, this material quickly confirmed its specific characteristics and advantages. The operating life of the new Vespel® insert can extend 3 or 4 times as long as that for traditional carbon graphite inserts. This is mainly due to the superior physical strength and thermal conductivity characteristics of this material.

## 2. Benefits and Material Properties

As part of the Emhart Glass policy of sustaining improvements, the new inserts are designed to provide a superior alternative to the traditional carbon graphite Take Out inserts. They are designed to satisfy high performance demands and to reliably maximize uptime. Initial cost and time-consuming maintenance work can be reduced to a minimum, given that fast installation and changes are possible. The Take Out Holder fits to existing equipment, whilst the inserts can be changed without use of tools.

Vespel® inserts are suited ideally for handling hot glass after the forming process, as they feature an exceptional chemical and high temperature performance as well as an extended wear resistance. Low thermal conductivity and minimal oil absorption are further characteristics as shown below.



Source: DuPont de Nemours

In summary, compared with conventional carbon graphite, the Vespel® insert from Emhart Glass offers significant advantages for longer runs, such as:

- Expanded product life (3 to 4 times longer lifetime) → Lower operational costs and disturbances
- Low thermal conductivity and oil absorption → Fewer checks
- Reduced breakage (withstands a section jam) → Increased section uptime
- High wear-resistance and toughness → Less frequent exchange of wear parts

Property	Unit	Traditional carbon graphite	Vespel® SCP5050
Izod Impact (Notched heat aged at 315°C [600°F] / 100hr) ASTM D-256	J/m (ft-lb/in)	17 (0.3)	33 (0.6)
Oil Absorbtion (24 h soak)	% weight change	5.7	0.02
Wear (oscillating at 315°C [600°F] / 25 hr)	% weight loss	3.1	0.96
Thermal Conductivity (at 50°C [122°F])	W/mK (BTU-in/hr-ft <sup>2</sup> -°F)	80 (550)	2 (11)

DuPont™ and Vespel® are registered trademarks of E.I. du Pont de Nemours and Company or its affiliates  
Source: DuPont de Nemours

### 3. Availability

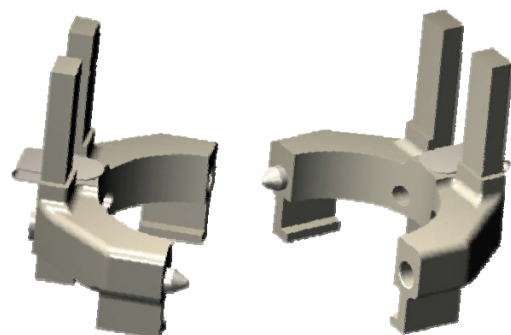
Emhart Glass provides basically two options and offers individual technical support at any time.

1. Take Out Tong Holder and custom finished insert



Custom finished Vespel® insert

TNB196  
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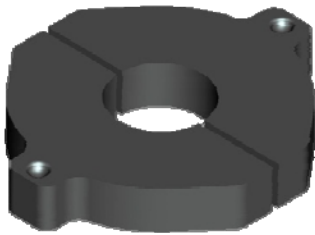
Tong Holder: 800-1000-1

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Postfach 2251  
CH-6330 Cham 2  
Switzerland  
[www.emhartglass.com](http://www.emhartglass.com)

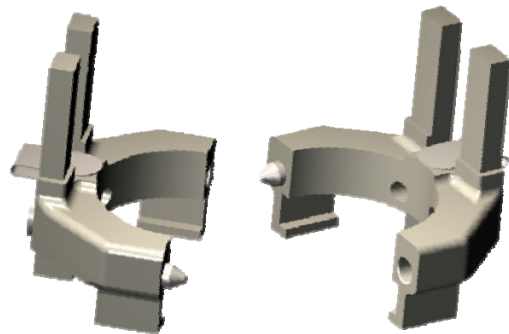
By providing us with drawings and specifications of current inserts and/or the desired container finish, Emhart Glass offers an Vespel® insert with a Tong Holder manufactured to fit the container. The shape of the inserts is specially designed to minimize the material required, and to use it as efficiently as possible.

2. Take Out Tong Holder and semi-finished Vespel® blank

A semi-finished Vespel® blank is now also available. This can be machined to fit the needed container design. No special tools or machines are necessary. Vespel® material can be finished using standard equipment which is used to shape carbon graphite or metal.



Vespel® blank insert: 800-10003



Tong Holder: 800-1000-1

I am interested in the Vespel® Tong Holder inserts and I experience myself the advantages of this product. To inform me and to clarify the specifications for the needed take out, I would like to be contacted.

**Contact Information**

Company: .....

Name: .....

Position: .....

Address: .....

Telephone: .....

E-Mail: .....

**Machine Information**

IS Machine type: .....

Number of sections: .....

Centre distance: .....

Number of cavities .....

**Container Information**

Ware type: .....

Weight: .....

Type of finish: .....

Please append the drawings and specifications of the present insert and/or the desired container finish and send the completed form to your local Emhart Glass customer contact.