Tank Car Rupture Disks

The BS&B type TCTM rupture disk for railroad tank car service is designed to conform with ICC regulations. The highly accurate disk is adaptable to standard threaded or bolted type tank car fittings. If dimensions of tank car fittings are different from the ones shown, BS&B will design a special disk on request.

**Materials**
- Top section: Inconel® (alloy 600)
- Vacuum support: 316 stainless steel
- Tank car ring: 316 stainless steel
- Gasket: fluoropolymer
- Seal: fluoropolymer

*Special materials available on request*

*Inconel® is a trademark of Inco Alloys International, Inc*
The type SR-TC™ rupture disk is a surge-resistant rupture disk for railroad tank cars and over-the-road trailers. It is designed for direct installation on standard threaded or bolted type tank car fittings and is available in standard AAR burst ratings.

**Type SR-TC rupture disks**

**Performance**

The SR-TC rupture disk will resist overpressure surges* of 125% to 140% of the rated burst pressure for up to 0.5 seconds duration. Greater surge protection may be expected for shorter surge duration.

The SR-TC rupture disk offers extended disk service life where the disk may be subjected to “humping” action or when rapid deceleration of a tank car or an OTR trailer occurs.

*The value of the over pressure surge depends on the disk’s burst pressure rating.

**Construction**

The slotted top section is protected by a tank car ring which also ensures burst accuracy. A vacuum support prevents damage to the disk, should the disk be subjected to vacuum during unloading or while the tank car is in transit. A spacer ring is located above the FEP / PTFE seal and the top section.

**Installation**

The TC or SR-TC rupture disk may be installed directly on to standard threaded or bolted type tank car fittings.

### Standard Pressure Ranges of Rupture Disks

<table>
<thead>
<tr>
<th>psig</th>
<th>barg</th>
<th>Total burst pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>psig</td>
</tr>
<tr>
<td>30</td>
<td>2</td>
<td>26-30</td>
</tr>
<tr>
<td>45</td>
<td>3</td>
<td>38-45</td>
</tr>
<tr>
<td>52</td>
<td>3.6</td>
<td>44-52</td>
</tr>
<tr>
<td>60</td>
<td>4.1</td>
<td>51-60</td>
</tr>
<tr>
<td>75</td>
<td>5.2</td>
<td>64-75</td>
</tr>
<tr>
<td>100</td>
<td>6.9</td>
<td>85-100</td>
</tr>
<tr>
<td>165</td>
<td>11.4</td>
<td>140.25-165</td>
</tr>
</tbody>
</table>