Cargo Monitoring for Bitumen Tankers
System Brief - Cargo Monitoring for Bitumen Tankers

If the scope of the solution includes a control or monitoring platform, then the solution will be covered in the Unit Level tools and not the Point Level tools.

Ensure Safe Cargo Operation
• It is of high importance that the tank radar gauges can perform under severe marine conditions and still give reliable data to ensure a safe cargo operation

Easy Cleaning and Maintenance
• With specific features for heated cargo in terms of easy cleaning and maintenance reduces the downtime

Redundancy for Continuous Operation
• With 3 radar measurement channels you will have a complete redundancy to ensure efficient and continuous operation

• New Rosemount TGU 68 Tank Radar Gauge with Rosemount TGS 68 Hinged Heat Protection introduced
• Integrated in the Rosemount Cargo Monitoring System
• Three radar measurement channels to cover needs of level gauging, high level and overfill alarm - no mechanical floats
• Compact with quick and easy cleaning for crew

The proper focus of a Point Solution Brief (PSB) is a single product or a group of products that provide a solution to our customers. If the scope of the solution includes a control or monitoring platform like DeltaV, AMS Asset Graphics, ROC, FlowBoss, etc., then the solution will be covered in the Unit Level tools and not the Point Level tools. An exception to this guideline is in the case of pre-packaged solutions that include multiple field devices working together with a control or monitoring platform (e.g. The Compact Remote Well Testing Solution that features field devices working with the Roxar Fieldwatch monitoring software).

The Rosemount Cargo Monitoring System has for a long time been a trusted solution and the preferred choice for bitumen and other heated cargoes.

The new Rosemount TGU 68 Tank Radar Gauge is a 26 GHz state of the art FMCW radar, with superior ability to perform accurately under the most severe marine conditions.

Up to three radar measurement channels can be installed in one radar unit. This allows the unit to fill the function of level gauging, high level alarm and overfill alarm. With no moving parts in the tank, the risk of floats getting stuck can be eliminated.

The innovative design, with a protective separation disk and hinged socket, allows safe and easy cleaning.
## COMPARISON | Rosemount Cargo Monitoring System versus Competitors

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>ROSEMOUNT CMS</th>
<th>COMPETITORS</th>
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<tbody>
<tr>
<td>Reliable and accurate tank radar that performs under all circumstances?</td>
<td>Yes</td>
<td>Some</td>
</tr>
<tr>
<td>Possible to integrate 3 measurement channels in one radar</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>No moving parts inside tank</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Deck penetrations needed for level, high level and overfill</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Hinged heat protection for fast cleaning</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Minimized heat transfer ensures long electronics life</td>
<td>Yes</td>
<td>No</td>
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