PACKER TYPE GAS SEPARATOR™

The production of wells with high GOR is a huge challenge for the pumping systems used in the oil industry. This condition can lead to a greater volume of gas than liquid in the suction of the pump. When this happens, the volumetric efficiency of the pump is severely affected and in some cases, the downhole equipment could be damaged.

The Packer Type Gas Separator is an innovative tool that eliminates gas problems in lifting systems through the application of a separation section design according to well conditions.

The best advantage of this system is the possibility of customizing the isolating section, outlet and intake point and additionally the tool length using the concept that there is not a standard tool for all the wells.

- Mitigates the gas slugs.
- Reduces or Eliminates the Gas locking.
- Multiple stages of gas separation.
- Increases the pump efficiency by increasing the pump fillage.
- Reduces the shut downs caused by gas lock.
- Utilizes both, the casing and tubing as gas separators.
- Allows sand & gas separation. The sand is stored below the intake point.
Features

• Highly efficient Gas Separator design.
• New Dual Flow System™ technology, that directs the fluid inside the tool.
• Separate the free gas to the annular section.
• Customization of the system based on the well conditions
• The outlet section is selected between slots or mesh.
• The intake section can be located to different distance from the outlet section

How it works

The production fluid will enter through the tail pipe set up below the packer. After pass the packer, the fluid will be direct by the Dual Flow System™ to the annular section inside the tool and then it will pass through the outlet section where the coalescence of the gas bubble will allow to separate the light phase (gas) from the denser phase (liquid) by gravitational force. The intake point is located upon the amount of gas and the solid content. After separate the gas, the free gas fluid will enter in the intake points to the dip tube that will discharge the fluid directly to the pump.

<table>
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<tr>
<th>Size</th>
<th>Pipe (in)</th>
<th>Screen (in)</th>
<th>Collar (in)</th>
<th>Inner String</th>
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<td>ID</td>
<td>OD</td>
<td>ID</td>
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<td>3.668</td>
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</tbody>
</table>

*The type and dimension of the packer is selected based on the well conditions.

For productions higher than flow chart please use multiple screens assemblies or contact 432-580-7111 for more technical assistance.