



DOWNHOLE GAS SEPARATOR™

Unprecedented Productivity from Rod Pumped Wells



Minimize pump failures with simple, reliable gas separation

In all production, naturally occurring gases enter the wellbore and create pumping inefficiencies. If left untreated, these inefficiencies can severely diminish production. These gases can also interfere with rod pump performance, resulting in increased maintenance costs and unnecessary pump failures.

The revolutionary patented SPIRIT Downhole Gas Separator™ puts an end to the efficiency-robbing gas interference in rod pumped oil wells. It is a simple, set-and-forget downhole tool that sits between the packer and rod pump. Using a patented internal baffling system, the tool agitates and breaks apart high GLR emulsions for more effective separation of gas and fluids. The gas exits the tool and is produced up the casing, while pure production fluid is fed from the tool to the pump.

The SPIRIT Downhole Gas Separator virtually eliminates the problem of poor pump efficiency and gas-lock from gassy producing wells. The result for you is more effective gas separation, more reliable pump performance and increased productivity.

The SPIRIT Downhole Gas Separator is ideal for the following applications:

- **Production flows with higher GORs**
- **Horizontal completions**
- **Above the perforation completions**



INCREASED PRODUCTIVITY

By more effectively separating gas and liquids, you experience more reliable pump performance and decreased downtime.



MINIMAL INTERVENTION

The tool is completely self contained and has no moving mechanical parts, providing reliable, low-maintenance performance.



QUALITY CONSTRUCTION

The SPIRIT Downhole Separator tool is manufactured from durable, corrosion-resistant materials to be successful in even the harshest environments.

How It Works

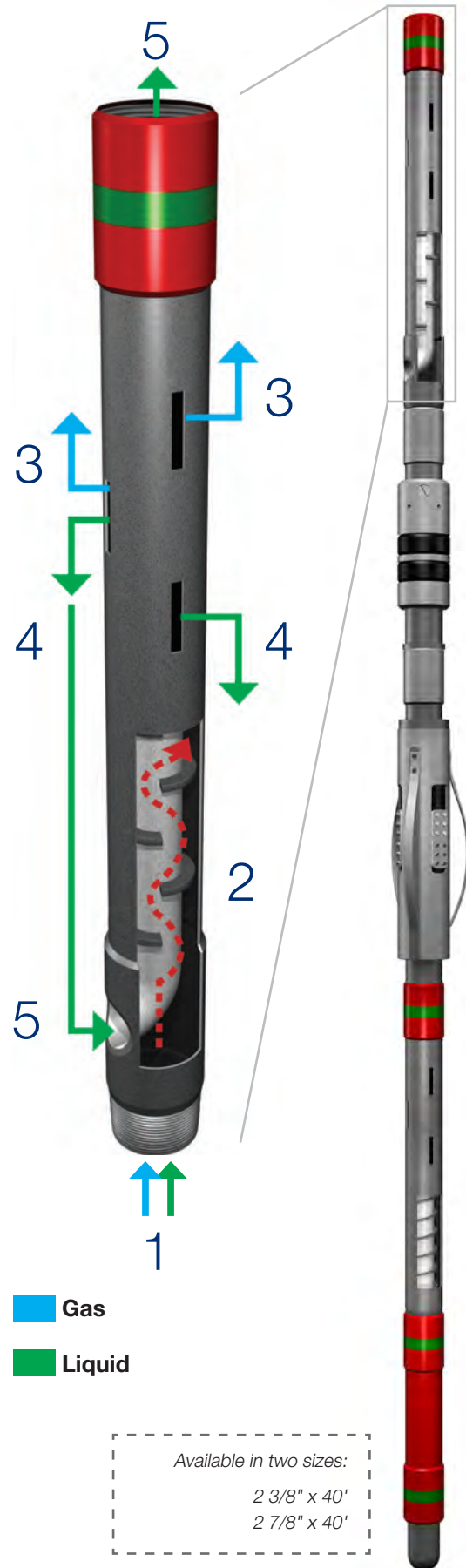
1. Fluids and gas enter at the bottom of the separator and travel up between the outer and inner tubing.
2. Baffles on the inner tubing create turbulence that aids in breaking apart emulsions. Then liquid and gas move upward and out the top portals.
3. The separated gas flows freely up the casing to the surface.
4. Fluids drop down inside of the casing creating an artificial sump.
5. Gas-free fluid then enters the pump intake tube and travels up the inner tube.

Sands and Solids

If you're experiencing excessive pump wear, fouling pumps or sticking plungers, we also offer the SPIRIT Downhole Sand and Solids Separator™. It can reduce the frequency of pulling a downhole pump for repair or replacement due to corrosion damage by as much as 300%.

Try the patented SPIRIT Sand and Solids Separator in your field and compare the frequency of maintenance and the cost savings. You'll experience the highest productivity and the lowest maintenance need of any of your producing fields.

- **Reduces destructive failures caused by sand, salt, scale, corrosion, asphaltthenes, and other solid contaminants**
- **Optimizes downhole pumping for efficiency and longer component life**
- **Placed below the rod pump**





doverals.com