

## Submersible Pump Packer

### Submersible Pump Packer:

The Submersible Pump Packer is developed to allow the casing to be used as the pump column or riser for the electric submersible pump. Inflatable Packer provides a hydraulic seal and a means of suspending the pump in the casing. The Submersible Pump Packer has multiple feed-throughs to accommodate pump control and vent lines. Inflation and deflation are achieved through separate control lines from the surface.

### Applications:

- ◆ Producing from the Casing instead of the pump column or riser
- ◆ Offers retrofitting solutions for cost and operational savings
- ◆ Isolating a deeper production zone from the rest of the borehole

### Benefits:

- ◆ **Lower well completion cost** – The Submersible Pump Packer eliminates the need for a pump column or riser, eliminating the need for a larger casing to accommodate the pump column. The smaller casing size and the lack of a production column or riser reduce the overall cost.
- ◆ **Low frictional head loss** – Pumping through the casing instead of a smaller ID column will reduce the frictional head loss, reducing the pump power consumption.
- ◆ **Protects pump assembly** - The inflatable packer rigidly couples and centralizes the pump/motor assembly, preventing movement that could damage the equipment or casing, especially in delicate fiberglass or plastic casing.
- ◆ **Less corrosion** – The Submersible Pump Packer keeps the casing water-filled, eliminating the corrosive "splash zone" caused by fluctuating water levels due to drawdown and seasonal variations.
- ◆ **Excludes polluted water** – The casing leaks above the pump may cause water loss but maintain clean water production (pressurised casing), unlike pump and column or riser systems, where leaks can introduce contamination into the produced water.
- ◆ **Reduced biofouling** – The Submersible Pump Packer keeps the casing water-filled, preventing oxygen entrainment that can promote biological growth and mineral deposition, which reduce well production and require intervention.
- ◆ **Suitable for wells with severe dog legs** - The Submersible Pump Packer with its lightweight and flexible hanger pipe, is ideal for wells with severe dog legs where rigid riser pipes cannot be used.

