

SWATEX™ Swellable Bonded-to-Pipe Packer

Application

The SWATEX™ Swellable packer is a tool used in the oil and gas industry to isolate different zones in a wellbore. It uses elastomeric polymer sealing elements that react with oil or water to swell and seal the annulus between the liner/casing and the open hole. The packer can be used in both open or cased holes, without the need for cement, special trips, running tools, or specialized rigsite personnel.

When the SWATEX™ Swellable packer is run in the well and comes into contact with oil or water, the elastomeric polymer sealing elements begin to swell. As the packers continue to swell, they seal off the annulus between the liner/casing and the open hole, providing isolation between zones with different pressures. This can help prevent fluid migration between zones and maintain well integrity. The SWATEX™ Swellable packer is particularly useful in wells where traditional methods of zonal isolation, such as cementing, are not practical or efficient. By eliminating the need for cementing, the SWATEX™ Swellable packer can save time and reduce costs associated with well construction.

The SWATEX™ Swellable packer is available in two types: bonded-to-pipe and slip-on. The bonded-to-pipe packer is bonded directly to the casing or liner, providing a permanent seal. The slip-on packer is designed to slip onto the casing or liner and can be easily removed if needed.

The SWATEX™ Swellable Bonded-to-Pipe Packer is a type of swellable packer that uses an elastomeric polymer sealing element bonded directly onto the basepipe. This packer has no moving parts and can be installed in a single trip, without the need for specialized personnel or equipment. It is suitable for use in both openhole and cased hole wells, and it offers several advantages over traditional zonal isolation methods:

Advantages

- Single-trip installation: The SWATEX™ Swellable Bonded-to-Pipe Packer can be installed in a single trip, which minimizes rig time and reduces installation risks and costs.
- Delayed swelling feature: The packer has a delayed swelling feature, which reduces the risk of premature setting.
- Enhanced well integrity: The bonding of the elastomer to the pipe and the shorter element length enhance well integrity.
- Increased pressure rating: The packer has an increased pressure rating per foot, which is the highest psi/ft rating in the industry, making it suitable for use in high-pressure wells.
- Durable construction: The packer has a durable, self-healing, and self-sealing construction that can withstand harsh well conditions.
- Tuned curing process: The packer has a tuned curing process for balanced swell kinetics, which maximizes its swelling capability.
- Predictor software: The packer comes with associated predictor software for product selection and job planning.

Sizes and ratings

The SWATEX™ Swellable Bonded-to-Pipe Packer is available in a wide range of sizes, from 2⁷/₈ in to 13⁷/₈ in, making it suitable for use in a variety of wellbore sizes. It also has a wide temperature range, from 100 to 365 °F [37 to 185 °C], which allows it to be used in a variety of temperature conditions. In addition, the packer has a differential pressure rating of up to 15,000 psi [103 MPa], which is the highest psi/ft rating in the industry. This high pressure rating makes the packer suitable for use in high-pressure wells and provides increased reliability and well integrity.

Overall, the SWATEX™ Swellable Bonded-to-Pipe Packer offers a range of sizes, wide temperature range, and high pressure rating, making it a versatile and reliable solution for zonal isolation in a variety of wellbore conditions.



SWATEX™ Swellable Slip-on Packer

The SWATEX™ Swellable Slip-on Packer is designed to be slipped onto the completion tubular and anchored with locking gauge rings. Like the bonded-to-pipe packer, it has no moving parts and is installed in a single trip, which minimizes rig time, installation risks, and costs. The slip-on packer is available in two configurations: a single element for applications requiring inflow control devices and a spaced element configuration for increased wellbore contact.

One of the main advantages of the SWATEX™ Swellable Slip-on Packer is its modular design, which reduces and simplifies the required inventory of metal and thread types, thereby saving costs. The packer also features an engineered delay mechanism, eliminating the need for external delay coatings.

In terms of size and ratings, the SWATEX™ Swellable Slip-on Packer is available in sizes ranging from $\frac{2}{3}$ to 7 in [88.9 to 177.8 mm]. It has a wide temperature range, from 100 to 365 °F [37 to 185 °C], and a differential pressure rating of up to 3,000 psi [20.7 MPa].

Overall, the SWATEX™ Swellable Slip-on Packer offers a simple and cost-effective solution for zonal isolation in a range of wellbore sizes and conditions, with the added benefits of modular design and an engineered delay mechanism.

