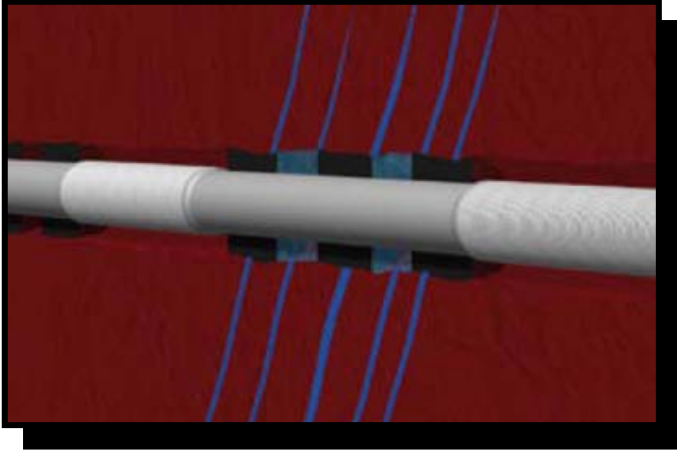


B-ZIP

External Zonal Inflow Profiler



Overview

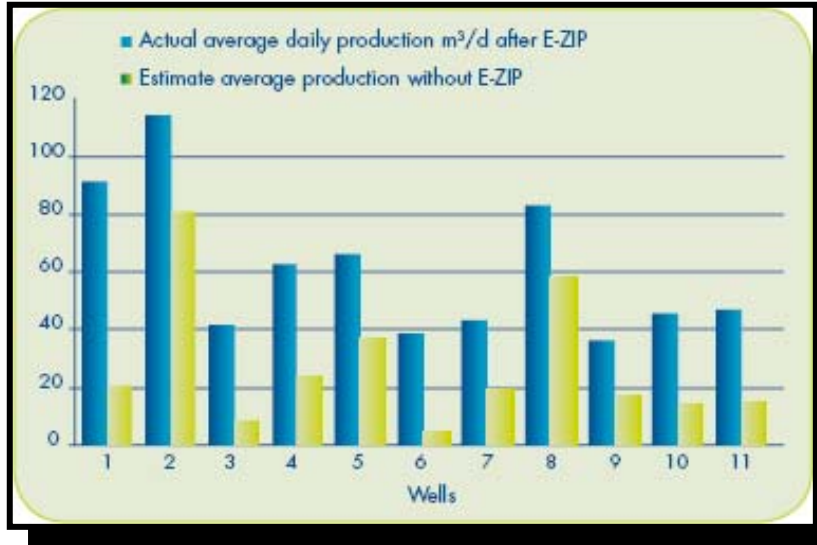
Equipped with a bull plug and a deployment device, it can be utilized as a bridge plug to seal off water ingress at the toe of the well.

Zonal Profiling provided by B-Zip

Water swellable B-Zip packers successfully isolated water producing zones and increased oil production according

B-Zip increased oil production for PDO in Oman

- Swellable rubber is bonded to the outside of the casing
- The use of B-Zip packers significantly reduced water production for PDO in Oman
- The B-Zip is optimized for open hole applications
- The rubber reacts to oil/water and swells, ensuring a positive seal across the formation.
- Swells into out of gauge sections ensuring a compliant seal. Zonal Profiling provided by B-Zip Overview



Features and benefits

- Reduces water production
- Provides significant cost savings
- Strong and durable packer
- Simple - there are no moving parts
- No additional running tools or site crew
- Long life span
- Enables planning of zonal isolation
- Prevents annular flow

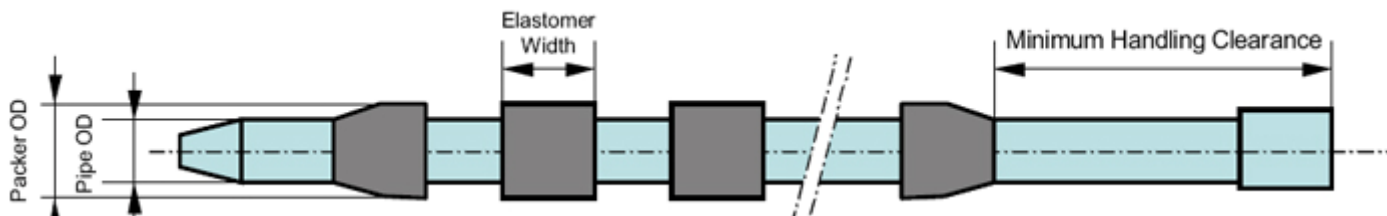


Installation Process

The B-Zip swellable elastomer is vulcanized directly onto the casing to creating a strong and durable packer. The B-Zip is shipped from our manufacturing plants to the well site or customer's warehouse in a ready to run condition. All that is required for installation is that the rig crew removes the protective covering prior to the B-Zip being made up to the casing string. No additional assembly, running tools, or personnel are required for the B-Zip.

Typical Installation Layout

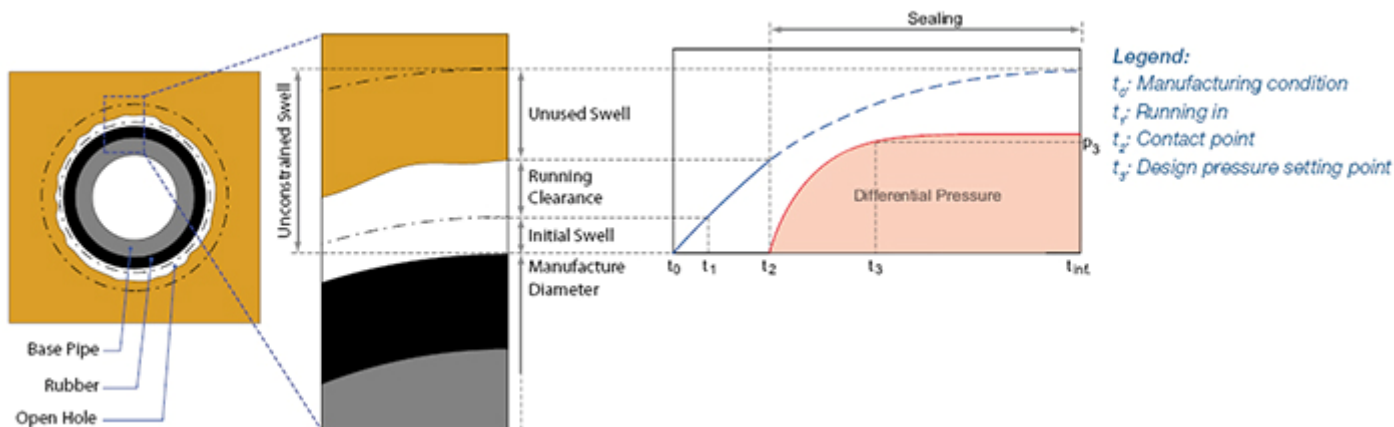
B-Zip's are a bespoke design integrated into the casing. Using our own modeling software they are designed to conform to the well size and conditions. This attention to detail ensures the optimal performance of the B-Zip and any subsequent Swell Straddle



Typical Operational Range

Base Pipe OD (in)	5 1/2" - 20"	Time to set	1 - 20 days
Temperature (oC)	40 - 150*	Operates in Oil	Yes
Salinity (ppm)	0 - 200,000**	Operates in Water	Yes
Elastomer Selection	Water and / or Oil	Base Pipe Material	Any, including most coatings
Sealing Pressure (psi)	200 - 6,000	Standard Lengths	R3(38') R2 (20')
Running Tools	None	Bespoke Lengths	yes
Additional Crew	None	Chemically Resistant	Yes
Handling Equipment	As base pipe	Life Span	Life of Well
Training Required	none		

Swell Design Parameters



The diagram above shows how the elastomers swelling characteristics are fitted to suit a particular design and meet running-in requirements and long term sealing performance.