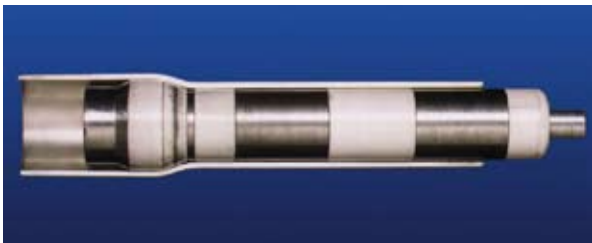


*Extensive research ensures swelling complements the properties of the expandable pipe*

## Overview

**Mounted on expandable pipe, the X-ZIP is expanded downhole with the pipe, to the nominal hole size. The swellable elastomer of the X-ZIP provides the extra capacity to create a compliant seal in sections where the hole is not in gauge.**

- Swellable rubber is bonded to the exterior of the expandable pipe
- The rubber safely expands during pipe expansion
- The rubber swells after pipe expansion, ensuring a positive seal across the formation
- Swells into out of gauge sections ensuring a compliant seal



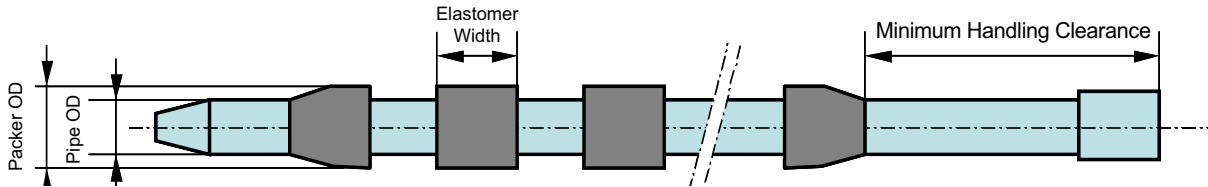
## Features and Benefits

- Provides significant cost savings
- Strong and durable packer
- Simple - there are no moving parts
- No additional running tools or site crew
- Long life span
- Seals automatically as flow begins in the micro annulus
- Prevents annular flow
- Available for water or oil activation

## Installation Process

The X-ZIP swellable elastomer is vulcanized directly onto the Expandable to creating a strong and durable packer. The X-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 or Expandable crew remove the protective covering prior to the X-ZIP being made up to the casing string. No additional assembly, running tools, or personnel are required for the X-ZIP.

## Typical Installation Layout



X-ZIP's are a bespoke design integrated into the expandable pipe. Using our own modelling software they are designed to conform to the well size and conditions. This attention to detail ensures the optimal performance of both the expandable pipe and the X-ZIP mounted upon it.

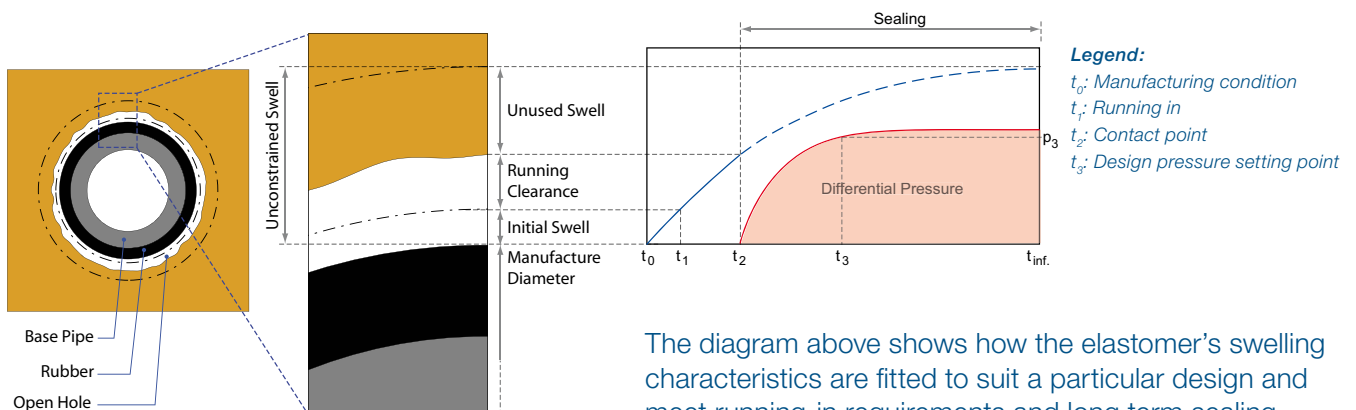
## Typical Sleeve Specification

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

\* not all combinations are available - ask for details

\*\* only water swellable elastomers - ask for further details

## Swell Design Parameters



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