

INFLATABLE CASING PACKER (TWICP)

PRODUCT 400

The **TechWest Inflatable Casing Packer (TWICP)** is a premium inflatable packer assembly designed to be run on existing casing string or liner and then inflated inside casing or openhole. The main function of this packer is to pack off the annulus between the casing or liner and the openhole or a previously set string of pipe.

The TWICP is built on a mandrel equivalent to the casing, enabling the packer to maintain burst, collapse, and tensile integrity throughout the casing section. The ICP is inflated using water, drilling mud or cement slurry. The packer has a robust valve system that locks the inflation pressure in place when inflated. The TWICP has a standard rubber elastomer suitable for temperatures up to 375 F. The differential pressure ratings for this tool varies depending on the size to hole ratio.

The TWICP is available with either a 5-foot or 10-foot element and can be manufactured on premium casing with premium threads.

FEATURES

- Elastomer suitable for normal and sour service
- Valve system senses hydrostatic pressure above the packer to enable reliable inflation
- Opening and Closing pressures can be adjusted easily on location
- The valve sleeve has a shoulder that prevents damage to the valves
- Multiple Packers can be installed on a single casing string or liner
- Expands to 2.5 times original diameter
- Long element runs through highly deviated wells

SPECIFICATIONS

400 SPECIFICATION GUIDE				
Casing		Tool OD		Product Number
in	mm	in	mm	
4 1/2	114.3	5.500	139.7	400-2450
5 1/2	139.7	7.000	177.8	400-2550
7	177.8	8.060	204.7	400-2700
9 5/8	244.5	11.250	285.8	400-2962



APPLICATIONS

MULTI-STAGE CEMENTING IN CONJUNCTION WITH A STAGE TOOL

For very deep wells, an Inflatable Casing Packer can be run in conjunction with a Stage Tool to stage cement the well to protect the lower zones from the high differential pressure of a long column of cement.

PLUG AND ABANDONMENT

The Inflatable Casing Packer is used to plug and abandon a section of the wellbore after hitting a fault or a water zone at the end of a deviated section. To perform this task, the ICP is run in conjunction with a Hydraulic Disconnect on drill pipe. The Disconnect is to enable disengaging the drill pipe from the ICP and leaving it downhole. If required a Cement Retainer may also be run along with the set-up in order to squeeze cement below the packer.

PREVENTION OF GAS MIGRATION IN THE ANNULUS

During cementation and in order to eliminate gas channeling, the Inflatable Casing Packer is placed across the formation directly above a high-pressure gas zone to isolate the gas while the cement sets. This ensures that the cement job comes out perfect.

SLOTTED LINERS

When slotted liners are used in completions to optimize production in a well, there is the difficulty to isolate some sections of the well during production as may be required when one section of the well produces an unwanted fluid, The Inflatable Casing Packer maybe installed between slotted liner sections, while running the liner in the well to achieve this isolation and they are inflated with cement to plug the annulus when required.

SINGLE AND MULTI-ZONE ISOLATION

The Inflatable Casing Packer seals the wellbore between zones either as a backup or the cement or as the seal to plug a zone or zones in a multi-zone injector or production well.

GOR REDUCTION

The Inflatable Casing Packer is used to reduce gas-oil ratio in order to slow gas coning in a producing zone of a wellbore in order to increase oil production. The ICP is simply positioned below or across from the gap.