



Inflation Cement Retainer

The Thru-Tubing Permanent Cement Retainer (TTPCR) allows for permanent isolation and cementation of a lower zone without the necessity of pulling the production tubing. The cement retainer seals with a high expansion inflatable element that can pass through the production jewelry and seal in the casing/liner below. The cement retainer is set with hydraulic pressure, and can be deployed on coiled tubing and threaded pipe. The inflatable element can be set in most IDs including blank pipe, perforations, slotted liners, sand screens and open hole. The tool is run with the retrievable spotting valve, which provides for a means of spotting the cement to the retainer after an injection test negating the requirement to pump unwanted fluids into the formation. The retainer incorporates two opposing flapper valves. The bottom flapper valve is held open by the ball seat and is free to close against pressure from below once the seat has been sheared. The top flapper closes against pressure from above when the spotting valve is disconnected from the retainer. Once closed, the flapper valves prevent any fluid movement across the set retainer.

Advantages

- Permanent isolation and cementation of lower zones can be achieved without the necessity of pulling the production tubing, reducing costs and operational downtime.
- Inflatable sealing element can pass through production jewelry and seal in casing/liner below, providing flexibility in well architecture.
- Deployable on coiled tubing and threaded pipe, providing application flexibility.
- Flapper valves prevent any fluid movement across the set retainer, ensuring reliable isolation.

Specification Guides					
Chassis OD	Element OD	Inside Diameter	Tool Length	Guide Ring OD	Min. Restriction to Pass Through
in.	in.	in.	in.	in.	in.
2.125	2.125	0.625	112.1	2.188	2.375
	2.500			2.563	2.750
	2.750			2.813	3.00
3.000	3.000	0.815	112.1	3.063	3.25
	3.375			3.438	3.625
4.25	4.25	1.7	114.5	4.313	4.5
	5.375			5.438	5.625
	6.5			6.563	6.75