INTERVENTION-LESS CCEMENT THROUGH VALVE (ILCTV)

Rated to 5,000 psi Differential Pressure.

Rated to 300 F Temperature.

OVERVIEW

The **ILCTV** is a hydraulically operated, multi-cycle valve designed to run in mono-bore completion strings. The primary purpose of the ILCTV is to enable controlled cement-through operations while allowing reverse circulation of excess cement from the annulus and any residual cement inside the tubing string. The ILCTV acts as a pressure facility, enabling multiple casing pressure tests during casing and completion running operations, without the need for slickline or other intervention methods.

THE CHALLENGE

Conventional cement-through tools rely on dropped balls to activate circulation paths. These systems often require multiple balls, which must later be milled out. In many cases, these tools are not qualified as pressure barriers, introducing potential leak paths within the completion string. The use of dropped balls, post-cement milling operations, and limited barrier integrity leads to increased operational time, higher costs, and elevated operational risks.

OUR INTERVENTION-LESS SOLUTION:

The ILCTV eliminates the need for dropped balls and post-cement milling operations. The valve is designed to operate hydraulically using controlled pressure cycles, delivering a fully intervention-less cement-through and reverse-circulation solution.

APPLICATIONS

- Automated cement-through operations in mono-bore completions.
- Reverse circulation of excess cement from the annulus and removal of residual cement from tubing strings.
- Multiple casing pressure tests while running casing or completion strings.
- Completion packer setting without intervention.
- Wells requiring high-integrity, non-elastomeric pressure barriers.

TECHNICAL SPECIFICATIONS

2-7/8, 3-1/2 and 4-1/2 (in) with full bore ID

EATURES

- Metal-to-metal sealing premium threaded connections.
- Non-elastomeric piston and communication seals.
- Spring-loaded seal technology to maintain pressure integrity, even at low pressures
- Automated cement-through and reverse circulation functionality
- Locked closed position providing a qualified pressure barrier

CORE BENEFITS

- Significant reduction in operational time compared to conventional cement-through systems
- Eliminates slickline operations, including rig-up, rig-down, and running balls for pressure testing or packer setting
- Removes the need for milling operations after cementing
- Enhances well integrity through non-elastomeric and metal-to-metal sealing design
- Improves safety by minimizing personnel exposure and operational complexity
- Delivers higher reliability and long-term pressure integrity for critical well barriers

CONCLUSION

The ILCTV represents a step-change in cementing and completion technology by combining automated cement-through capability, reverse circulation, and qualified pressure barrier performance in a single interventionless tool. The valve delivers faster operations, improved well integrity, and reduced operational risk, making it a robust solution for modern completion challenges.