

Casing Integrity Testing Tool (CITT)



Inflatable Technology:

An inflatable element is a hydro-mechanical sealing device to be conveyed into a wellbore on a wide range of tool chassis. IPI's unique design of composite element allows the versatility to set in an ID significantly larger (+/- 300%) than its run in OD and where applicable be released and retrieved. The IPI design offers a true wellbore seal in both directions and has proven itself in over 13,000 applications to be the most robust inflatable element while offering the industry's best in class recoverability. Open hole, through tubing, cased hole, oval pipe, scale, perforated, nonstandard etc. conditions make IPI inflatable elements your path to success.

CITT:

IPI's CITT is a live-well deployable, high expansion, multi-set inflatable testing packer. The CITT allows operators to pass through wellbore restrictions and set inside larger IDs, for testing the zone above the packer element. Conveyed by jointed or coiled tubing, the CITT takes advantage of IPI's robust and durable element design technology which provides the operator with best-in-class element retraction post-testing, lowering the chances of being hung up on wellbore restrictions or completions equipment, on the way out of the hole. In reservoir stimulation operations, the CITT provides a simple and quick method of temporarily isolating specific zones within the well, which allows the operator to place more accurate and precise treatment/stimulations.

Applications:

- ◆ Cased Hole Mechanical Integrity Testing
- ◆ Temporary Isolation for Zonal Stimulation
- ◆ Blowout Preventer (BOP) Stack Leak Testing
- ◆ High Expansion Retrievable Thru-Tubing Pressure Testing
- ◆ Open Hole Injection Testing
- ◆ Damaged Casing or Irregular Ids

Benefits:

- ◆ The CITT is a one-trip system offering multiple setting cycles, **eliminating unnecessary trips**
- ◆ Almost full post-inflation retraction which allows the tool to be **pulled back through restrictions and other sensitive completion equipment without causing damage**
- ◆ Hydraulic inflation with applied pressure, **eliminates the need for string movement or rotation**
- ◆ Can be deployed on both jointed tubulars and coiled tubing
- ◆ Simplifies the testing process with easy inflation and deflation, **optimizing time and resources**
- ◆ Full cover elastomeric sealing element allows for **bi-directional pressure integrity**
- ◆ DuraGRIP™ provides cased hole anchoring with **no slip point-loading eliminating the chance of damaging the host casing string**
- ◆ Allows the operator the ability to have **controlled injection testing, enabling informed decisions about well production and stimulation strategies to be made**

* inlet filter pipe not shown

** DuraGrip packer element shown



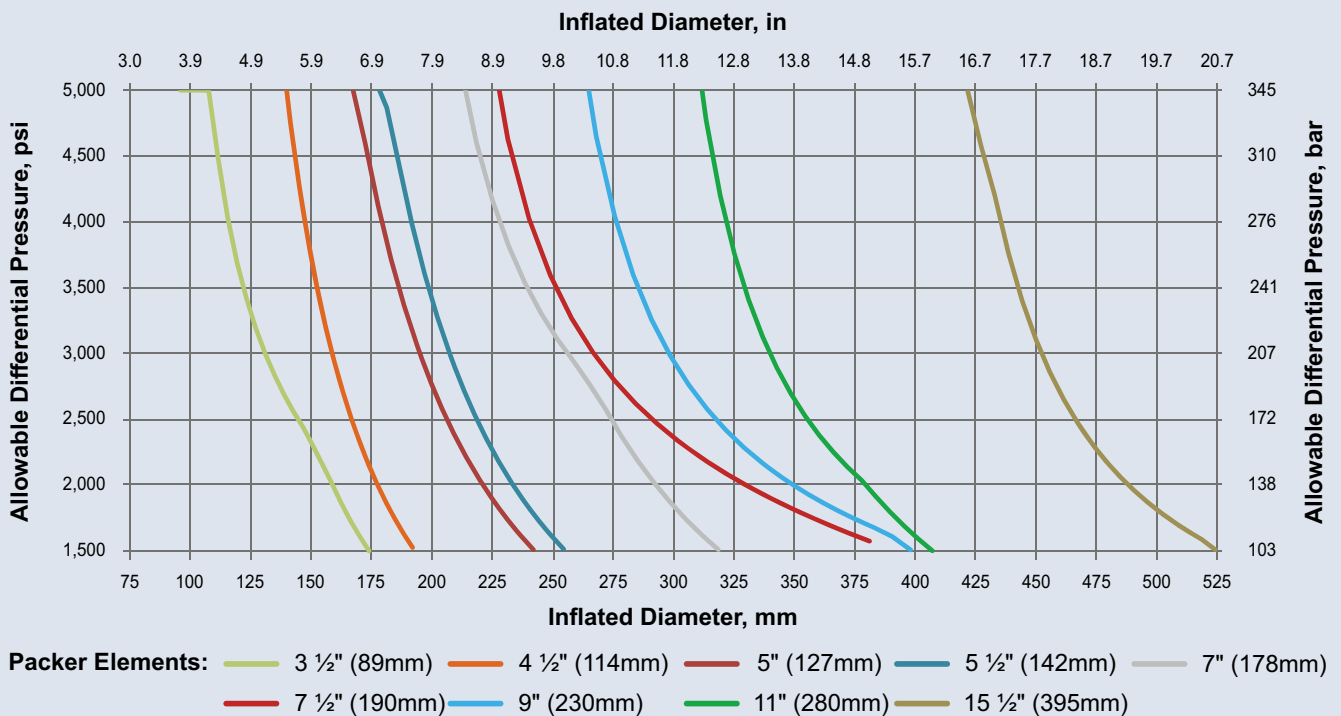
Casing Integrity Testing Tool (CITT)

Available Sizes:

CITT Chassis OD		Packer OD*		Max Inflation Diameter	
in	mm	in	mm	in	mm
3.5	89	3.5	89	7.0	178
		4.5	114	9.0	230
		5.0	127	10.0	254
		5.5	140	11.0	279
5.5	142	5.5	140	11.0	279
		7.0	178	14.0	356
		7.5	190	15.0	381
7.75	196	9.0	230	18.0	457
		11.0	280	22.0	559
		15.5	395	31.0	787

* different packer sizes are available upon custom request

Differential Pressure Rating vs. Hole Size:



** please contact IPI Packers for the latest pressure chart and custom sizes

The differential pressure ratings shown in the chart above are strictly based on the operational envelope of IPI's inflatable elements. The actual differential pressure rating for CITT applications should always take into account the effects of applying differential pressure above the CITT vs. the tensile limitations of the workstring.

