

DTI Presents M-Bubble

THE FIRST UNFOLDING METAL PLUG
AND PACKER – A NEW ERA IN ISOLATION!



Inspired by origami-engineered deployable structures from medical devices and space exploration, we are proud to unveil a groundbreaking solution for thru-tubing isolation.

Why Choose the M-Bubble from DTI?

Traditional expandable and inflatable isolation methods are often unreliable. The M-Bubble revolutionises thru-tubing isolation by offering a new level of reliability that operators can trust.

Key Features

- **Innovative Design:** Utilising DTI's industry-leading expertise in additive manufacturing and our standard use of Inconel for the element ensures exceptional performance without the need for additional investment. This approach maximises efficiency by minimising waste, making it ideal for all downhole environments.
- **Unmatched Performance:** Achieve an industry-leading isolation solution across significant ID deltas of up to 300%.
- **Unique Fluted Design:** Our fluted structure transitions from a compressed state to a robust 3D form through unfolding. The geometric extension follows a precise pattern determined by the initial folding configuration.
- **Robust Structure:** M-Bubble utilises internal hydraulic pressure to facilitate mechanical transformation. The hydraulic pressure efficiently drives the flutes into a stable spherical form without metal yielding to ensure material integrity. The M-Bubble can incorporate either a metal-to-metal seal or a labyrinth seal design to address potential tubing integrity issues.



Ideal for Water Shut-Off Applications

The M-Bubble is ideal for water shutoff and effectively eliminates unwanted water production, offering a step change in consistency and reliability. By extending well life, significantly reducing water processing costs and optimising production, this solution empowers operators with a reliable way to shut off water in mature wells.

Ideal for P&A Applications

The deployment of M-Bubble as an abandonment plug is via wireline or coil tubing significantly reducing ABEX associated with workover rig use, enabling a smaller equipment footprint, reducing POB, and potentially eliminating the need to pull tubing.

Running OD	Setting ID	Pressure Rating	Temp. Rating
Other sizes and product variants are available			
1.750"	3.826" (4 ½" 13.5 lb/ft)	1,000 psi/ 2,600 psi	150°C
2.125"	2.992" (3 ½" 9.2 lb/ft)	5,000 psi	150°C
2.125"	3.476" (4" 11 lb/ft)	4,500 psi	150°C
2.125"	3.958" (4 ½" 12.6 lb/ft)	4,500 psi	150°C
2.125"	4.408" (5" 15 lb/ft)	3,500 psi	150°C
2.125"	4.892" (5 ½" 17 lb/ft)	3,500 psi	150°C
2.125"	5.920" (6 ⅝" 24 lb/ft)	500 psi	150°C
2.625"	6.366" (7" 23 lb/ft)	2,000 psi	150°C
2.625"	6.276" (7" 26 lb/ft)	2,000 psi	150°C
2.625"	6.276" (7" 26 lb/ft)	2,000 psi	150°C
2.625"	6.184" (7" 29 lb/ft)	2,000 psi	150°C
2.125"	4.892" (5 ½" 17 lb/ft)	3,500 psi	150°C
2.500"	5.920" (6 ⅝" 24 lb/ft)	2,000 psi	150°C

We offer optional equipment, alternative sizes, pressure ratings, materials and thread connections. **Please contact us for more information.**