

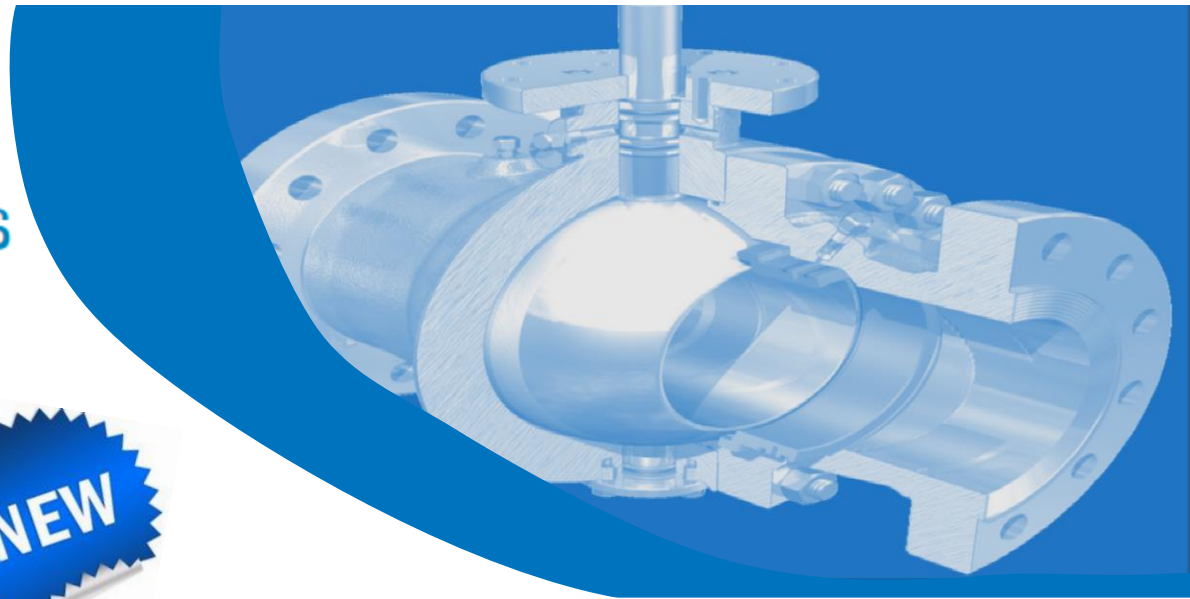


Kinetics Controls
& Innovation Ltd

www.kcilt.co.uk



Isolation Barrier System Plant Leak Sealing Solutions



“KCI were fundamental in obtaining isolations on the MOL pig launcher to allow for the loading and launch of a pig”

24" MOL Valve Isolations with IBS-SX

Background

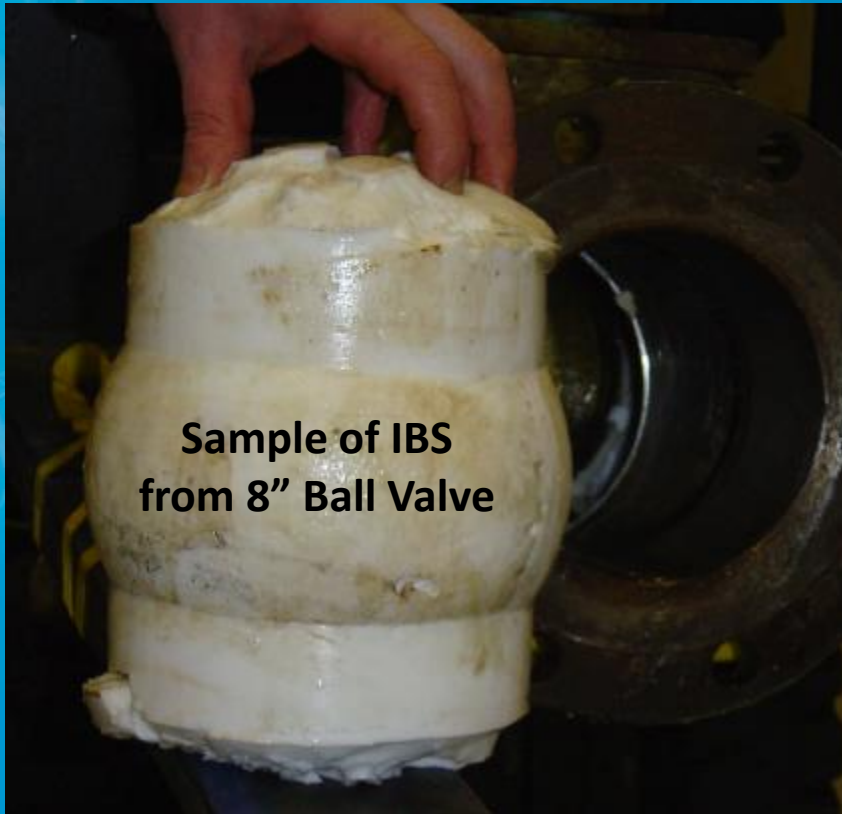


- ❑ Due to leaking valves on the Main Oil Line (MOL) it has not been possible to establish the isolations and barriers required to conduct essential pig launching operations.
- ❑ After a phase of PBU tests, both inboard & outboard valves failed to hold back production pressure of approximately 49 to 64 barg.
- ❑ KCI were requested to create an isolation solution to allow essential platform operations to continue.

24" MOL Valve Isolations with IBS-SX

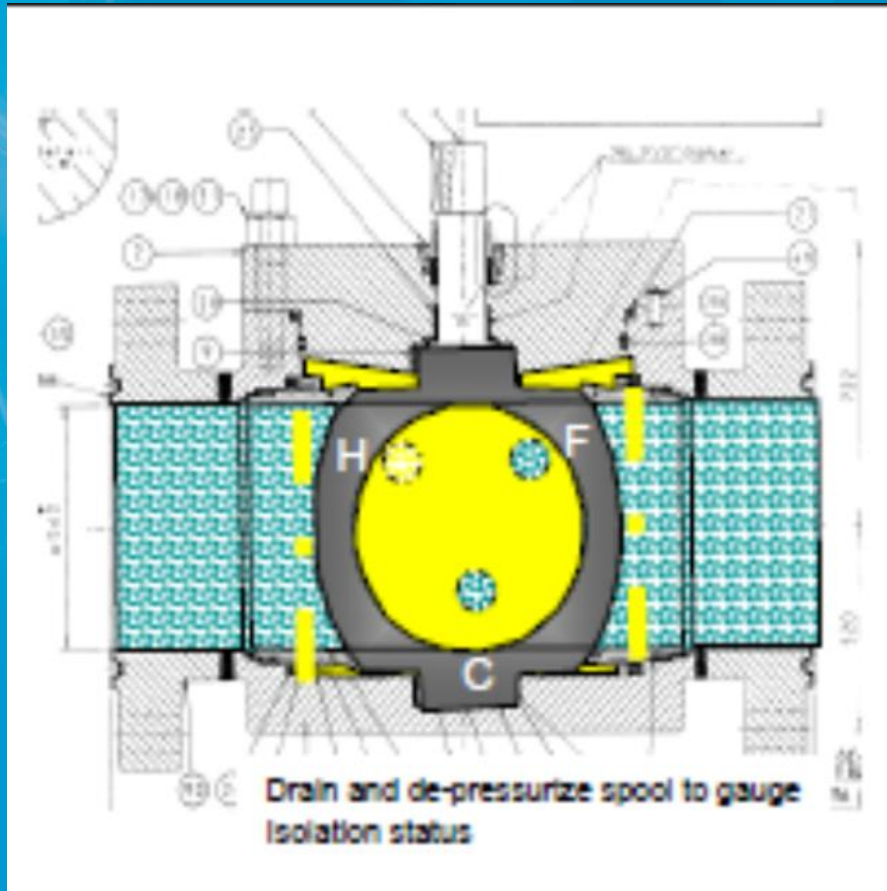
Background (continued)

- ❑ Plant operations needed to remain online when isolation operations were conducted.
- ❑ IBS-SX was selected as it is formulated to float on top of oil.
- ❑ IBS-SX was injected as a liquid and turned into a flexible solid. Once the plant pig operations were concluded, the IBS-SX was turned back into a liquid by using breaker and drained out.



24" MOL Valve Isolation with IBS-SX

Deployment Detail

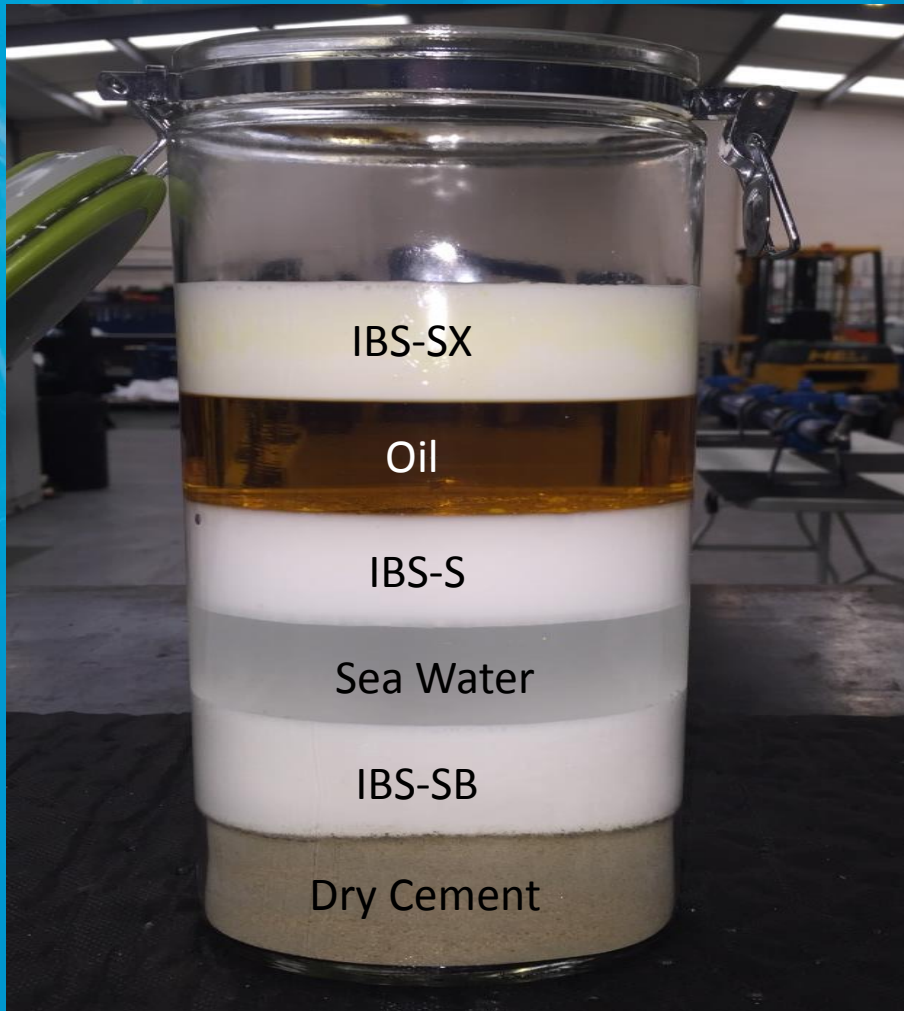


- ❑ Full Isolations were obtained with the plant online, negating the need to take a plant shut-down to load the pig.
- ❑ 525 litres of IBS-SX were used for Isolations & 1200 litres of IBS Breaker used to reverse the process.
- ❑ The IBS-SX was Injected within 7-8 hours per 24" valve. Checked samples over 24 hour curing phase.
- ❑ Client tested each isolation by dropping pressure from 55 barg to 0 barg.
- ❑ No leaks were detected.

24" MOL Valve Isolation with IBS-SX

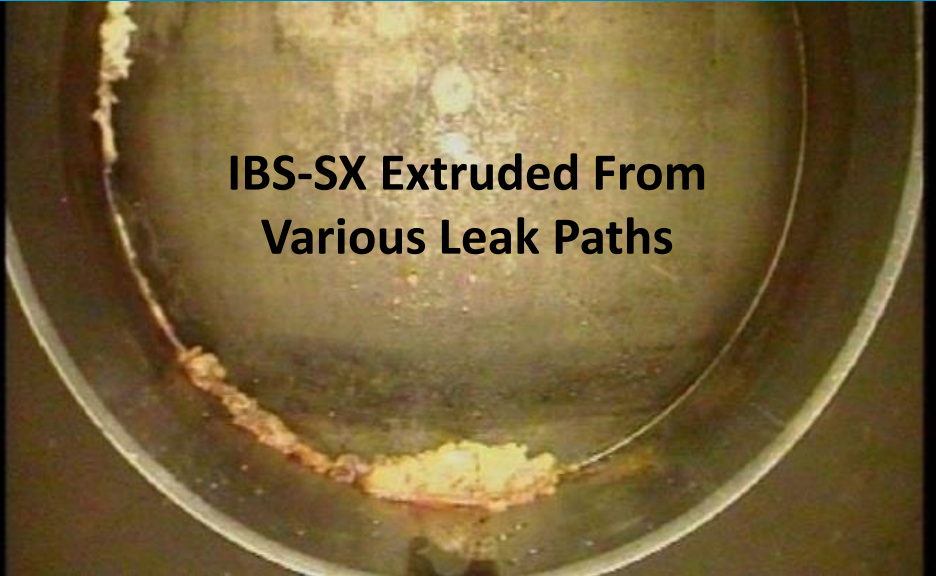
Product Details

- IBS-SX starts off as a liquid gel.
- IBS-SX is formulated to float on oil.
- It is injected into the ball valve and it “pushes” the hydrocarbons through the leak paths.
- Once cured to a flexible solid, it provides a barrier at either side of the 24” ball valve.
- The isolation held back 64 barg at one side with 0 barg at other side.
- Once pig operations were concluded, IBS Breaker was injected and turned the cured IBS-SX back into a thin liquid, which was drained off.



Client Quotes

- ❑ KCI were very accommodating with supporting schedule requirements.
- ❑ KCI team were helpful and worked well with the Offshore Core team to obtain isolations.
- ❑ KCI remains an important part of the Rig Isolation 'toolkit'



**IBS-SX Extruded From
Various Leak Paths**