

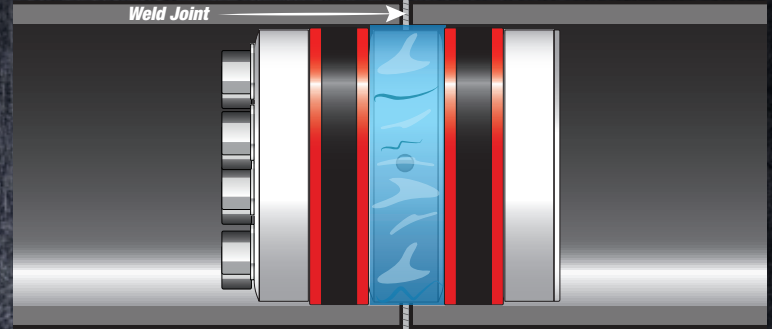
CASE STUDY:

Safer Pnuematic Testing for Cryogenic Pipelines

Shaw Group | Venture Global

THE CHALLENGE:

- Large diameter Invar insulated pipe known for ultra-low thermal expansion
- Pipe runs exceeding 350+ feet
- Significant safety risks due to large volume of stored energy, so only the weld seam could be tested — not the entire pipe
- Hydrotesting prohibited due to Invar's sensitivity to moisture
- 302 psi pneumatic testing required for 10 minutes
- The solution needed to be mobile, repeatable and compatible with existing internal pipe clamping equipment

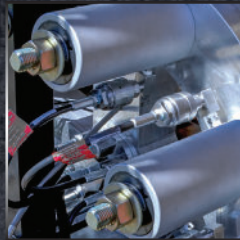


THE USA INDUSTRIES SOLUTION:

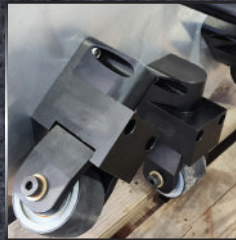
Rolling Double Block and Bleed Plug to Isolate & Test Only the Weld Seam



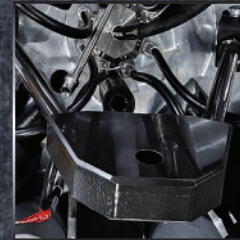
Custom Dual Seal Isolation



Hydraulic Actuation



Rolling Mobility



Serimax Clamp Compatibility



Camera for Seal Verification

WHY USA INDUSTRIES WAS SELECTED OVER COMPETITIVE SOLUTIONS:

- Original design concept developed in direct collaboration with customer
- USAI's Houston location enabled faster collaboration and support than competitors located out of state
- USAI's proven willingness to engineer first-of-its-kind solutions
- Strong technical engagement & responsiveness throughout

PROVEN RESULTS:

- Field validation was a success
- USA Industries was awarded supplier status
- Additional order was placed for 10 Rolling DBB plugs
- Project risk was reduced while maintaining schedule & safety requirements

