



Proserv and Trendsetter's HIPPS technology ©Proserv



Greater Shenzi field ©Woodside Energy.



Technician at a Proserv facility.

PROSERV

technology helps accelerate Woodside's Shenzi North first oil

HIPPS collaboration with Trendsetter supports expansion of deepwater Gulf of Mexico Shenzi field which came online in September via a two-well subsea tieback.

Global controls technology company Proserv and Trendsetter Engineering, a provider of specialised subsea solutions for the oil and gas sector, have engaged their respective expertise to successfully deliver their unique high integrity pressure protection system (HIPPS) to accelerate initial production at Woodside Energy's Shenzi extension multiple months ahead of targeted first oil in Q1 2024.

Proserv and Trendsetter first penned a Memorandum of Understanding in late 2021 which has seen the former combine its cutting-edge energy production control systems, and related services, alongside Trendsetter's state-of-the-art pressure protection systems, connection systems and manifolds, to engineer their BSEE approved offering.

Their technology brings together Trendsetter's HIPPS module and Proserv's field proven HIPPS subsea controls into a SIL 3 rated solution, enabling an operator to tie a new high pressure well, safely and flexibly, into existing lower pressure infrastructure, effectively addressing varying pressure regimes by supplying a high reliability, localised safety system that will shut in automatically in the event of a pressure spike.

The HIPPS innovation has been designed to adapt to greenfield, brownfield and infrastructure-led exploration, entirely able to co-exist with already installed networks. By delivering the required protection safeguards to prevent the need for time-intensive, and cost prohibitive, new high pressure rated infrastructure to be installed to tie in a new well, the HIPPS technology can be integrated as a "plug and play" concept.

Woodside's Shenzi North expansion project saw a final investment decision taken in July 2021, with first oil achieved from this deepwater asset only 26 months later. Start-up has been achieved five months ahead of the original target of Q1 2024.

The oil and gas field lies around 195 km off the coast of Louisiana in the Green Canyon protraction area with Woodside owning a 72% interest, and Repsol owning a 28% stake.

The Shenzi North extension consists of two single well tiebacks, each with a dedicated HIPPS module, connecting to the existing Shenzi infrastructure. Woodside has been able to use the current flowlines, risers and topside facilities, significantly enhancing the cost-effectiveness of the tieback to the Shenzi tension leg platform.

Proserv's sister company Gilmore, the Houston based flow control solutions specialists, supplied high reliability quick exhaust valves to its HIPPS technology innovation alongside Trendsetter.

More widely, Proserv's relationship with the Shenzi field first commenced several years ago as part of the on-going subsea upgrade work with its augmented controls technology, widely known as ACT, being engaged through numerous key phases to help drive production efficiencies.

Ron Downing, President, Trendsetter Engineering, commented: "We are thrilled to see the successful deployment of Trendsetter's advanced manifold, HIPPS and connector technology as part of the Shenzi North project. Trendsetter developed the critical HIPPS manifolds and supported the project through to start-up. Woodside is an outstanding operator, and we look forward to continuing our excellent working relationship with them on future projects."

Davis Larssen, Proserv's CEO, added: This is a landmark moment in our tie-up with Trendsetter as we seek to deliver best-in-class quality and advantage for customers. It has been hugely satisfying to work with Woodside and to play our part in its successful, and swift, journey to first production. Our HIPPS technology offers a highly reliable means of maximising and unlocking assets in deep waters, while taking advantage of the many gains and efficiencies from using existing infrastructure."

Proserv and Trendsetter's tie-up is based around combining their market-leading capabilities yet remaining entirely independent specialist providers in the market. Their HIPPS offering has already been taken up by further leading operators in the Gulf of Mexico as they seek to optimise deepwater projects and extend production capacity.