SECC Oil and Gas.
Introduction to QC/DC and EQD Technology
Hot Make Hot Break
Current Product Portfolio, IP and TRL (Track Record)

- Strong and Young Patent Portfolio
- Innovative Technology – TRL >7
- Core Products –
  - Hot Make Hot Break (HMHB)
  - Mid Line Weak Link (MLWL)
  - Max Flow Stabs
Hot Make Hot Break

The SECC HMHB is a pressure balanced full bore QCDC and EQD system that provides a “plug and play” capability both subsea and topsides. The system is currently 10Ksi rated and can operate in water depths of 3000 metres. The system can be uprated to 15Ksi.
Current HMHB Applications

• Well Intervention
  • Acid Stimulation
  • Enhanced Oil Recovery
  • Scale Treatment
  • Well Controls
  • Plug & Abandonment

• EOR/IOR

• Topside Transfer – Platform to vessel, vessel to platform or vessel to subsea
Helix – Well Enhancer & Skandi Construction

HMHB/MLWL connected to riserless intervention unit. Applications are varied – subsea well interventions. Similar systems are employed by Cameron OneSubsea, ProServ (BP), Tech Flow Marine (Chevron), Cross Group, Wild Well and others.
Subsea Intervention Manifolds
Ithaca Greater Stella Development – Costain
Topside Transfer Applications

Platform to vessel
Live Fluids Transfer

Vessel to subsea
Water injection - Snorre
Applications – Small Pools

- Direct QC/DC and EQD from Dynamic Riser to XT
- QC/DC and EQD from subsea storage system to topside vessel(s)
- QC/DC and EQD from topside vessel(s) to subsea systems
- QC/DC and EQD from topside storage vessel(s) to shuttle tanker
Midline Weak Link Connectors (MLWL)

The SECC MLWL Breakaway connectors are full-bore pressure balanced and designed to automatically disconnect when a pre-determined load level is reached.

The unique design features a tension pin, which when broken, allows both bores to seal and the connection to automatically break. This makes it possible for all fluid types to be transferred safely offshore via a fully unobstructed bore at high pressure and at depths of up to 10,000ft.
Max Flow Hot Stabs

The Max Flow Hot Stab is the world’s first straight through, pressure balance, stab connector. It has been designed using SECC’s patented zero head loss technology.

Full bore straight through pressure balanced design
Max Flow Hot Stabs

The straight-through, full bore design enables operators to employ smaller diameter bores to achieve very high flow rates throughout the rest of the system.
About Secc Oil and Gas

Vision
To lead through innovation and ground-breaking connector technology

Promise
To challenge convention with intelligent solutions that respond to our clients’ needs

Values
Commitment: our promise
Passion: believing we can do it
Leadership: is everyone’s responsibility
Adaptability: we embrace change
Integrity: we do what is right
SECC Connectors – The Safety Case

• Improve the safety levels of subsea and topside interventions and fluid transfer operations
• Remove the need for guillotine type mechanisms
• Provide protection to personnel, vessels, subsea infrastructures, and other material assets
• Eliminates the risk of fluid loss during disconnection, and therefore are an environmental safeguard
• Enable reliable and quick connection and controlled or emergency disconnection at full working pressure
SECC Connectors – The Commercial Case

- Enhance operational flexibility
- Reduce the impact of vessel availability
- Lower the cost of operations and improve cost effectiveness
- Reduce deferred oil revenues
- Contribute to increased production
- Enable operations to increase oil recovery, revenues, and profitability