

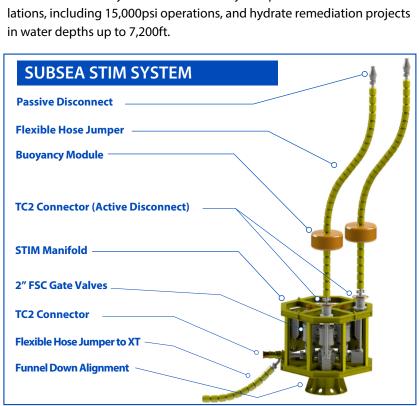
SUBSEA TREE INJECTION MANIFOLD (STIM)

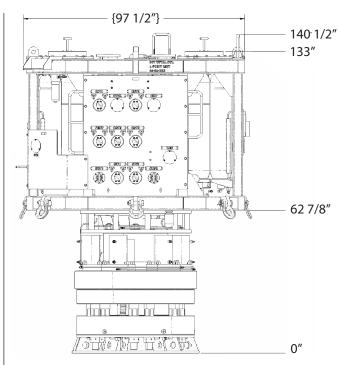
STIM - Meeting the demands for Subsea Hydraulic Interventions

Trendsetter Engineering continues to provide solutions to maximize production from subsea fields; this includes the development and delivery of an industry leading, high pressure, high flowrate hydraulic intervention system. The field proven,15K STIM System is the result of combining innovative engineering and high quality components.

The 15,000psi rate STIM system was designed with safe and efficient operations in mind. The compact system incorporates the recommendations of API 17G into an innovative package that offers a high level of flexibility to be deployed from a vessel of opportunity and interfaced with a variety of subsea trees, manifolds and jumpers. The STIM manifold incorporates Trendsetter's patented metal sealing connectors, high quality barrier valves and Trendsetter's Sentinel control system to provide the necessary safety systems, including passive and active disconnect capability, and system operability to respond to a variety field conditions.

Trendsetter's STIM system has successfully completed several acid stimuin water depths up to 7,200ft.





TYPICAL HYDRAULIC INTERVENTIONS

- **Acid Stimulation**
- **Chemical Injection** \checkmark
- Scale / Wax Inhibition
- **Asphaltene Treatment**
- Scale removal
- **Pipeline Hydrate remediation**
- **Flowline Cleanout** \checkmark
- **Water Injection Tests**
- Well Control/Kill & Bull heading



SPECIFICATIONS	
Design Code	API RP 17G
Water Depth	10,000 ft.
Pressure Rating	15,000 psi
Temperature Rating	U (0 deg F - 250 deg F)
Material Trim	EE
Flow Rate	~10 - 15 BPM
System Hydraulic Fluid	Pelagic 100M
Outlets	TC2 Inboard Hubs w/ TEX-2 Gasket Seal Prep
Flow Control	API 2-1/16" ATV Gate Valves
NACE Compliant	Yes
Lifting Interface	DNV 2.7-3 Padeyes

