

Subsea Pressure Testing System

FEATURE HIGHLIGHTS:

Sphinx Overview

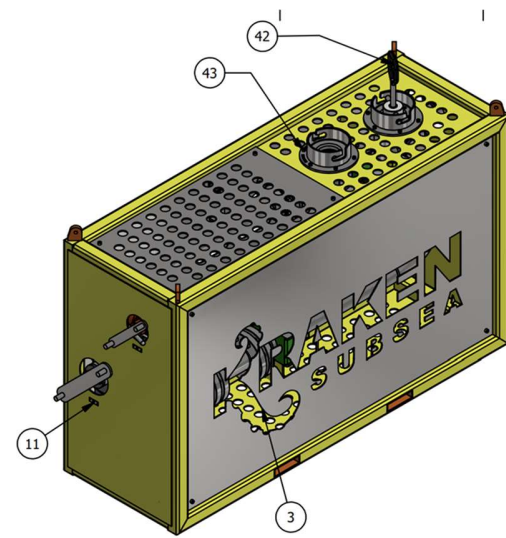
Kraken Subsea’s engineering team are specialists in subsea pre-commissioning system design. The Sphinx provides a step-change to traditional pressure testing operations by reducing mobilisation/demobilisation times, improving safety, reducing deployment and setup times along with reducing the carbon footprint usually associated with this operation from a traditional back deck spread. The subsea pressure testing skid allows pressure testing operations to be completed entirely on the seabed utilising the power available from an ROV to drive the onboard pressurisation pumps. A system of valves within the subsea pressure testing skid controls the pressurisation rate of the system under test.

Isolation and Logging System

Once the pipeline reaches its test pressure, the subsea pressure testing skid can be isolated and continue to monitor and record the pipeline data while the ROV may be disconnected and used for other activities such as visual leak detection or other construction activities. The system under test is continuously monitored by an onboard data logging system with the ability to monitor up to 4 separate tests at once.

Minimal Personnel

Only two personnel are required to support 24 hr operations on the subsea pressure testing skid. This can be reduced to 1 person operation depending.



Indicative sketch only

TECHNICAL SPECIFICATIONS:

Pressure Rating	Standard system a minimum of 10k rated On request 20k system can be supplied	
Flowrate	0.05 litres/min to 30 litres/min	
Pressure Sensor	Range: Accuracy, Error Band:	0.8 to 700 bar (abs./rel.) 0.8 to 1,360 bar (abs./rel.) On request 0.01 %FS (digital)
ROV Requirements	Dirty Workpack Communication	165 bar @ 60 litres/min* Ethernet connection required, processing commands are sent over a UDP connection
Depressurisation	System is equipped with both auto depressurisation facilities and ROV depressurisation facilities using orifice plates pre-sized in accordance with project requirements	
Depth Rating	3,000m as standard, on request 4,000m	
Logged Data	Pressure Flowrate Total volume added/released	Time Subsea temperature Additional information upon request