

EH Control System & POD



Description

The SST EH Control System & POD allows for 15 second rapid response of the MODUTree® LSA both in deep water and with dynamically positioned vessel applications. Suitable for use in water depths up to 12,000 ft, the SST EH Control System & POD incorporates three primary modules.

The Accumulator Module houses an array of patented hydrostatically balanced subsea accumulators capable of cycling the entire landing string multiple times. The Accumulator Pod is continuously charged from surface through the control umbilical.

The EH Control Module is comprised of a Subsea Control system that drives the landing string components. The EH Control Module houses electronic solenoid valves that allow the EH ESD system to override the the direct hydraulic control from the surface unit and affect a remote Electro-Hydraulically controlled Shut-in & Unlatch sequence in less than 15 seconds.

The SST EH Control Panel interfaces with the EH Control Module and provides EH control of the ESD functions while allowing full direct hydraulic control of the non ESD related functions of the the MODUTree. This approach has allowed a simplified control architecture utilizing only solid state electronics while eliminating the use of computers, PLC's or mutilplexing systems from the control system. This has allowed for inclusion of full redundancy in the system while offering substantially improved reliability. Remote two button ESD Panels are included for location on the Drill Floor and at the DP Operators station.

In the event of control logic failure, the EH Control Systems defaults back to Direct Hydraulic mode, ensuring full control over the system at all times. Real time monitoring of subsea conditions, MODUTree functions and subsea accumulator pressure is available as an option.

Operating Specification

MIN ID	3.06 in.
MAX OD	16.5 in.
WORKING PRESSURE	15,000 psi
TEST PRESSURE	22,500 psi
TENSILE RATING	675,000 lbs.
SERVICE	H2S & CO2
TEMPERATURE RATING	-20°F to 350°F

The SST DP Subsea Control POD is designed and certified to ISO 13628-7, API 6A, DNV OS-E101, NACE MR 01-75 and is qualification tested to API 14A class 3S.

