

AUXILIARY HYDRAULIC POWER UNIT (AHPU) INTERVENTION SKID

Technical Data / Specificataions

Dimensions (overall)

Length	92 in
Width	60 in
Height	26 in
Weight in Air	1250 pounds dry, 1380 lbs. with fluids (approx.)

Performance Data

Hydraulic Supply (from WROV)	2850 psi @ gpm (nominal)
Glycol/TransAqua HT Circuit	15 Gallon Storage Reservoir with Volume Indication Discharge and Return Flowmeters 5000 psi Pump / 3.5 gpm 15,000 psi Pump / 0.5 gpm Manifold with 3 Bi-directional Outputs (5000 psi) Digital Pressure Transducers
Corrosion Inhibitor Circuit	15 Gallon Storage Reservoir with Volume Indication 200 psi Output Pressure /2 gpm
Hydraulic Tooling Functions	4 Bi-Directional Functions 3000 psi @ up to 10 gpm each Each with Proportional Pressure and Flow Each with Differential Digital Pressure Transducers



Overview

The Auxiliary Hydraulic Power Unit (AHPU) skid is designed to complete fluid intervention between the ROV system and subsea equipment via multiple client specified hot stabs. The neutrally buoyant skid will be mounted under the host ROV, from which Hydraulic and Electrical Power will be supplied, along with control information via an Industry Standard RS232 Communications link.

Functional Features :

Glycol / Transaqua HT circuit with a 15 Gallon Reservoir for Medium Pressure (5000 psi) Intervention and High Pressure (15,000 psi) Seal-testing, complete with Safety Interlocks Corrosion Inhibitor circuit with a 15 Gallon Reservoir for Low Pressure (200 psi) Corrosion Inhibitor Intervention 4 'spare' fully Proportional Pressure and Flow Bi-directional Hydraulic Functions to allow interfacing of ROV Intervention Tooling Intelligent Pressure, Flow and Displacement Sensors to provide all the necessary system feedback information to the user.

OIE incorporates significant safety devices into the design to meet all HSE guidelines regarding high pressures. OIE will propose a safety plan and safety interlock design to the Customer for approval prior to delivery of the system.

All system hydraulic components are rated to the maximum working pressure of the individual circuit. Each system contains all necessary over-pressure relief valves for ensuring safe operating practice.

The Skid is operated from a Topside Computer, mounted in the ROV Control Room. An 18 in Touch screen monitor with user-friendly graphics allows simple but powerful system operations.

The Custom Software provides the user with real-time information of Pressures, Flows and available reservoir volumes, along with critical system information such as Water Ingress Alarms.

The Custom Software allows the user to record and plot pressure data during Seal-test operations. A Diagnostics page within the software provides the more advanced user with system health information, including Calibration Values, Voltages, Currents and Communications information.

A separate Laptop computer is provided as system backup.