

PRE-MEASUREMENT TOOL



The Pre-Measurement Tool (PMT) is a hydraulically operated, taut wire measurement system capable of replicating the subsea condition between an export or flowline jumper hub and a manifold or tree hub. Through a series of hydraulic functions via a Remotely Operated Vehicle (ROV), operators can take repeatable measurements of the distance, elevation, and azimuth between subsea hubs. Jumper fabrication follows with the measurements from the PMT and takes place on the vessel deck or at the fabrication yard.

Simple to operate and easy to maintain, the PMT is a cost-effective alternative to high-cost acoustic measurement systems. PMT packages have been utilized successfully on subsea developments in the Gulf of Mexico throughout the 1990's and are now also in use for numerous West African Developments.



PRE-MEASUREMENT TOOL SPECIFICATIONS

Dimensions

(Overall Including Pin and Azimuth Indicator -
Excluding Lifting Bale)

Length:	31.5 in
Width:	26.0 in
Height:	41.5 in
MT Pin:	23.75 in
MT:	6.75 in
Weight	
Air:	320 lb
Water:	40 lb

Performance Data

Depth Rating:	7,000 ft
Nominal Measurement Length:	0-150 ft
Maximum Measurement Length:	200 ft
Elevation Angle:	$\pm 26^\circ$
Azimuth Angle:	$\pm 360^\circ$
(Based on Skid-Mounted Protractor Scales)	

Measurement Repeatability

Distance, 10-100 ft:	± 0.1 ft
Distance, 100-200 ft:	± 0.2 ft
Elevation Angle:	$\pm 0.5^\circ$
Azimuth Angle:	$\pm 0.5^\circ$

Hydraulic Data

- Fluid: Hydraulic Fluid (Enviro-Rite) =>
Ocean Rite

Maximum Pressure

Operating:	1,500 psi
Minimum Operating Pressure:	1,400 psi
Maximum Operating Flow:	1.5 gpm
Minimum Operating Flow:	1.00 gpm

Materials

Aluminum 6061-T6
Stainless Steel
Syntactic Foam AM-28A

