#### SYNERGY METROLOGICAL JIG SET



Fig1. Master Jig

Fig2. Slave Jig

# Synergy Metrological Jig Set - Precision Tooling for Subsea Alignment

**Product Code: SIDET-MJ-001** 

The **Synergy Metrological Jig Set** is a high-precision subsea measurement tool designed to support offshore pipeline and structural installations.

This advanced system enables engineers and subsea teams to accurately determine the required spool length, angle, and alignment path for connecting critical pipeline segments.

Featuring a **master** and **slave unit**, the Synergy jig set utilizes a taut wire mechanism combined with **opposing protractors** to measure **deviation and elevation** between two flange faces.

This precision measurement is essential for ensuring system integrity, reducing installation errors, and minimizing the need for rework.











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### **Key Features:**

- **Dual Jig Setup:** Includes a master unit with a wire winch and a slave unit with a receiving arm.
- **Taut Wire Measurement:** A calibrated wire is tensioned between the two jigs, typically to the consistency of a tuned guitar string. For accuracy, a tension gauge or load cell can be used to standardize wire tension across multiple measurements.
- Multi-Spool Geometry Compatibility: Suitable for calculating spool lengths and angles for a range of geometries including straight, 'L', and barred 'T' configurations.
- **Field-Proven Accuracy:** Delivers repeatable, reliable data in subsea environments, critical for the installation of spools, manifolds, and tie-in connections.
- **Durable & Diver-Friendly Design:** Engineered for ease of use by divers and ROV teams, even in low-visibility or high-current subsea conditions.

The **Synergy Metrological Jig** plays a vital role in the **alignment and positioning** of subsea infrastructure, enhancing installation efficiency and ensuring precise fit-up between pipeline segments.

By providing accurate measurement data before fabrication of closing spools, it significantly reduces offshore construction time and cost.

Specifications	Details
Material:	Powder-coated aluminium, grade 1100
Weight:	14 kilograms each unit (approx)
Dimensions:	500mm X 500mm (approx)
Horizontal Protector:	90° - 0° - 90°
Vertical Protector:	75° - 0° - 30°
Horizontal & Vertical:	4" spirit level indicator
Mounting Frame:	Aluminium, grade 1100









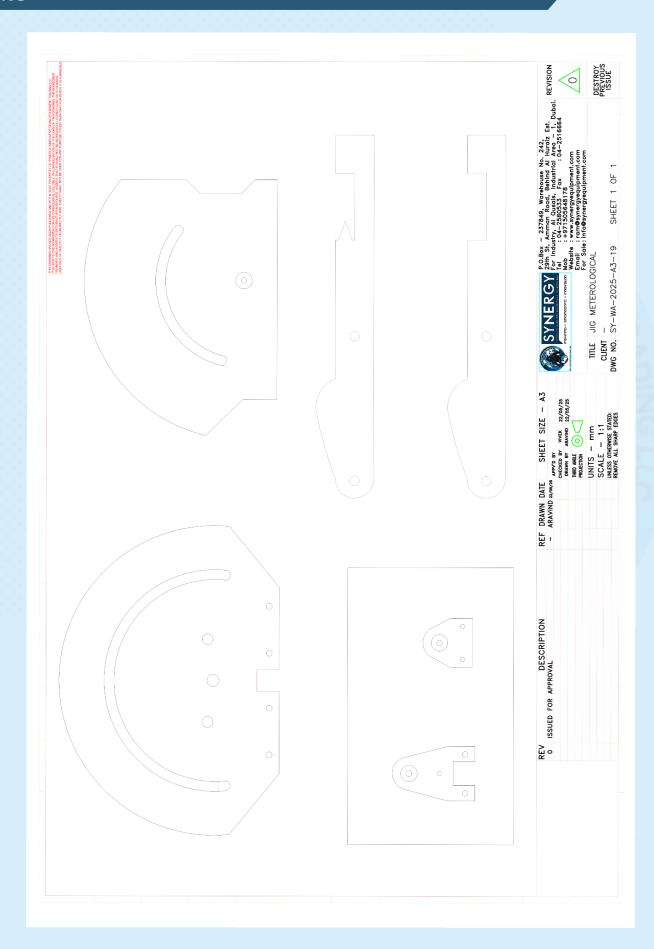






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# **DRAWING**





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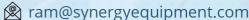
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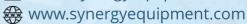


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