

<b>Package Number</b>	SK-AIP-EI-002																												
<b>Package Name</b>	Cable Ladder – Stainless Steel																												
<b>Scope of Work</b>	<p><b>[Cable Ladder(Stainless Steel) Supply]</b></p> <p><b>1. MTO and Specifications</b></p> <table border="1"> <thead> <tr> <th>Item</th> <th>Classification</th> <th>UoM</th> <th>Total Qty</th> </tr> </thead> <tbody> <tr> <td rowspan="7">Cable Ladder - Stainless Steel</td> <td></td> <td></td> <td><b>7,748.40</b></td> </tr> <tr> <td>150mm Wide</td> <td>m</td> <td>2,889.70</td> </tr> <tr> <td>300mm Wide</td> <td>m</td> <td>134.20</td> </tr> <tr> <td>450mm Wide</td> <td>m</td> <td>353.10</td> </tr> <tr> <td>600mm Wide</td> <td>m</td> <td>766.70</td> </tr> <tr> <td>750mm Wide</td> <td>m</td> <td>-</td> </tr> <tr> <td>900mm Wide</td> <td>m</td> <td>3,604.70</td> </tr> </tbody> </table> <p><b>General specifications</b></p> <p>Cable trays / ladders straight sections shall be of standard 3 m length and shall include all installation accessories and hardware.</p> <p>Bends, risers, tees and reducers shall be included as per the cable tray / ladder system design.</p> <p>Cable ways with width of 300 mm and above shall be of Ladder Type, with maximum rung spacing of 300 mm (centre-to-centre). Cable tray height shall be 150 mm with clear 125 mm internal height for cable fill. Cable ladder rungs shall have a “C” profile for equipment attachment using proprietary “U” nuts and suitably slotted to allow for strapping of cables.</p> <p>Cable ways with width below 300 mm shall be ventilated trough / perforated Tray Type. Minimum side rail height shall be 40 mm (overall depth). Perforated cable tray shall be of heavy-duty return flange type.</p> <p>Where required, cable tray / ladders shall be provided with dividers throughout their length to segregate cables of different systems.</p> <p>Where required, removable cable tray / ladder covers (peaked type) including necessary hardware to secure them, i.e. nuts, bolts, lock washers etc. shall be supplied with the cable trays / ladders. The covers shall be suitable for an offshore marine environment; measures shall be taken to ensure that the covers are not blown off in strong winds, special hurricane clamps shall be used. The covers shall provide protection from UV radiation and dropped objects that may damage the cables. The covers shall be of same material as cable trays / ladders.</p> <p>Cable trays / ladders shall have the necessary flexibility and strength to allow the mounting of equipment such as light fixtures, speakers, junction boxes, etc. The SUPPLIER shall provide the required brackets for such mountings.</p> <p>SUPPLIER shall confirm whether or not earthing jumpers are required across cable tray / ladder joints to maintain earth continuity and provide a statement accordingly. Where flexible bonding jumpers are</p>			Item	Classification	UoM	Total Qty	Cable Ladder - Stainless Steel			<b>7,748.40</b>	150mm Wide	m	2,889.70	300mm Wide	m	134.20	450mm Wide	m	353.10	600mm Wide	m	766.70	750mm Wide	m	-	900mm Wide	m	3,604.70
Item	Classification	UoM	Total Qty																										
Cable Ladder - Stainless Steel			<b>7,748.40</b>																										
	150mm Wide	m	2,889.70																										
	300mm Wide	m	134.20																										
	450mm Wide	m	353.10																										
	600mm Wide	m	766.70																										
	750mm Wide	m	-																										
	900mm Wide	m	3,604.70																										

required, they shall be provided on one side of the tray / ladder at expansion joints. An oxide inhibiting and sealing compound shall be applied to the tray / ladder surface where the bonding connections are made.

SUPPLIER shall supply all hold-down clamps, connection plates, bolts, nuts and washers. In addition, earthing jumpers shall be provided if required. Connection plates shall be provided with M8SS bolts as minimum (bolts for installation inside tray / ladder shall be mushroom head type). Connection plates shall have eight (8) bolts.

### **Materials / Fabrication**

Material type is Stainless Steel 316L.

Cable trays / ladders shall be provided with a VCI anticorrosive transparent coating/varnish to protect them from damage or corrosion caused by welding, grinding or cutting during the construction phase.

The SS316L stainless steel cable tray / ladders shall be fabricated of a minimum of 1.5 mm SS316L stainless steel, using SS316L welding rod. All materials, including bolts, nuts and washers shall be SS316L.

Cable ladder fabrication shall incorporate proper welding procedures to ensure strong welds and no discolouration of welded material or welded splatters. SUPPLIER shall submit a welding procedure, which shall be reviewed and approved by the COMPANY.

SUPPLIER shall produce a sample section of the cable ladder and fittings for COMPANY's approval prior to beginning cable ladder manufacturing. COMPANY reserves the right to witness (optional) the performance of the tests to be conducted, prior to giving approval of manufacturer for the cable tray / ladders.

### **Supports**

Cable trays / ladders shall be supported at interval of 2 m (maximum) or as per manufacturer's recommendation.

Cable trays / ladders shall be supported using a flexible, lightweight, bolted support system, which utilises channels with either bolted or welded starter brackets. The system shall offer full flexibility in initial design as well as allowing site modifications to be easily performed.

Supports, fittings and accessories shall be heavy duty SS316L.

### **Testing and Certification**

CS test certificates and type test certificates for all tests that have been carried out in accordance with IEC 61537.

The proposed bolting solution shall be tested to the Junker transverse vibration test in accordance with DIN 65151 or equivalent.

## **2. Requirements**

- 1) Delivery to Korea Shipyard(Delivery Target : Q1.2022 )
- 2) Total quantity is based on preliminary MTO which may be changed later.

**Project Registration**

Santos is committed to ensuring Australian Industry the opportunity to participate in the Barossa Project. Expressions of Interest are invited from contractors and suppliers with the relevant capability and capacity to undertake the scope of work.

This is a request for specific expressions of interest. Contractors and suppliers will be considered for prequalification and tender if suitably qualified against this package.

**Scope level definition:**

**Full scope:** Able to produce / supply all the package.

All registrations are to be completed via ICN Gateway [BarossaOffshore.icn.org.au](http://BarossaOffshore.icn.org.au). Please contact the ICNNT if registration assistance is required. Contact details: (08) 8922 9422 or [Resources@icnnt.org.au](mailto:Resources@icnnt.org.au)

Project Website: [Santos Australia](http://Santos Australia)