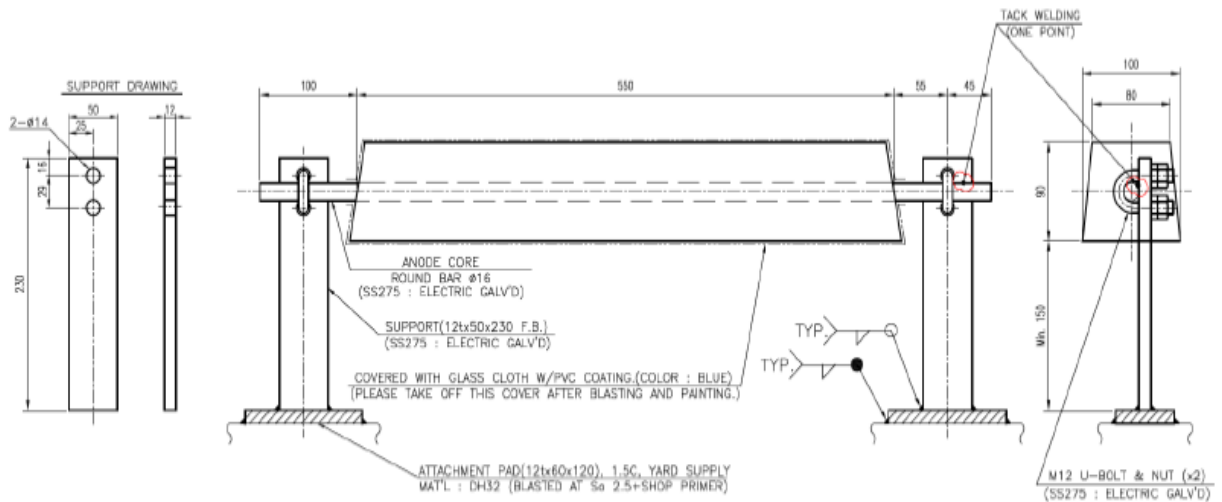


<b>Package Number</b>	SK-AIP-OB-003																																																																								
<b>Package Name</b>	Anode & Anode Seat																																																																								
<b>Scope of Work</b>	<p>[Anode &amp; Anode Seat Supply]</p> <p>1. MTO</p> <table border="1"> <thead> <tr> <th>Item</th> <th>Classification</th> <th>Total Weight (ton)</th> </tr> </thead> <tbody> <tr> <td>Anode &amp; anode seat</td> <td>Zn-ANODE (31kg), Temperature(60 degree)</td> <td>10.9</td> </tr> <tr> <td>Anode &amp; anode seat</td> <td>Zn-ANODE (31kg), Temperature(60 degree)</td> <td>20.1</td> </tr> <tr> <td>Anode &amp; anode seat</td> <td>Zn-ANODE (31kg), Temperature(60 degree)</td> <td>13.0</td> </tr> <tr> <td>Anode &amp; anode seat</td> <td>Zn-ANODE (31kg) in WB Tanks</td> <td>189.6</td> </tr> <tr> <td><b>Total</b></td> <td></td> <td><b>233.6</b></td> </tr> </tbody> </table> <p>Table 1 shall be used for the sacrificial anode design and calculation</p> <table border="1"> <thead> <tr> <th>Location</th> <th>Material</th> <th>Mean Current Density</th> <th>Design Lifetime</th> <th>Temperature</th> <th>Submerged Period</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>Water Ballast &amp; Peak Tanks (Lowest plating upto 0.5 metre height)</td> <td>Zinc</td> <td>10mA/m2**</td> <td>10 years</td> <td>20°C</td> <td>100%</td> <td>Bolting Type</td> </tr> <tr> <td>Water Ballast Tank (adjoining bulkheads to Slop and Cargo Tanks)</td> <td>Zinc</td> <td>10mA/m2**</td> <td>10 years</td> <td>40°C</td> <td>50%</td> <td>Bolting Type</td> </tr> <tr> <td>Water Ballast &amp; Peak Tanks (Remaining areas)</td> <td>Zinc</td> <td>10mA/m2**</td> <td>10 years</td> <td>20°C</td> <td>50%</td> <td>Bolting Type</td> </tr> <tr> <td>Cargo Tank Bottom upto 2 meters</td> <td>Zinc</td> <td>As per Ref /11/</td> <td>10 years</td> <td>60°C</td> <td>100%</td> <td>Bolting Type</td> </tr> <tr> <td>Slop Tanks</td> <td>Zinc</td> <td>As per Ref /11/</td> <td>10 years</td> <td>65°C</td> <td>100%</td> <td>Bolting Type</td> </tr> <tr> <td>Off-Spec Tanks</td> <td>Zinc</td> <td>As per Ref /11/</td> <td>10 years</td> <td>60°C</td> <td>100%</td> <td>Bolting Type</td> </tr> </tbody> </table>						Item	Classification	Total Weight (ton)	Anode & anode seat	Zn-ANODE (31kg), Temperature(60 degree)	10.9	Anode & anode seat	Zn-ANODE (31kg), Temperature(60 degree)	20.1	Anode & anode seat	Zn-ANODE (31kg), Temperature(60 degree)	13.0	Anode & anode seat	Zn-ANODE (31kg) in WB Tanks	189.6	<b>Total</b>		<b>233.6</b>	Location	Material	Mean Current Density	Design Lifetime	Temperature	Submerged Period	Remarks	Water Ballast & Peak Tanks (Lowest plating upto 0.5 metre height)	Zinc	10mA/m2**	10 years	20°C	100%	Bolting Type	Water Ballast Tank (adjoining bulkheads to Slop and Cargo Tanks)	Zinc	10mA/m2**	10 years	40°C	50%	Bolting Type	Water Ballast & Peak Tanks (Remaining areas)	Zinc	10mA/m2**	10 years	20°C	50%	Bolting Type	Cargo Tank Bottom upto 2 meters	Zinc	As per Ref /11/	10 years	60°C	100%	Bolting Type	Slop Tanks	Zinc	As per Ref /11/	10 years	65°C	100%	Bolting Type	Off-Spec Tanks	Zinc	As per Ref /11/	10 years	60°C	100%	Bolting Type
Item	Classification	Total Weight (ton)																																																																							
Anode & anode seat	Zn-ANODE (31kg), Temperature(60 degree)	10.9																																																																							
Anode & anode seat	Zn-ANODE (31kg), Temperature(60 degree)	20.1																																																																							
Anode & anode seat	Zn-ANODE (31kg), Temperature(60 degree)	13.0																																																																							
Anode & anode seat	Zn-ANODE (31kg) in WB Tanks	189.6																																																																							
<b>Total</b>		<b>233.6</b>																																																																							
Location	Material	Mean Current Density	Design Lifetime	Temperature	Submerged Period	Remarks																																																																			
Water Ballast & Peak Tanks (Lowest plating upto 0.5 metre height)	Zinc	10mA/m2**	10 years	20°C	100%	Bolting Type																																																																			
Water Ballast Tank (adjoining bulkheads to Slop and Cargo Tanks)	Zinc	10mA/m2**	10 years	40°C	50%	Bolting Type																																																																			
Water Ballast & Peak Tanks (Remaining areas)	Zinc	10mA/m2**	10 years	20°C	50%	Bolting Type																																																																			
Cargo Tank Bottom upto 2 meters	Zinc	As per Ref /11/	10 years	60°C	100%	Bolting Type																																																																			
Slop Tanks	Zinc	As per Ref /11/	10 years	65°C	100%	Bolting Type																																																																			
Off-Spec Tanks	Zinc	As per Ref /11/	10 years	60°C	100%	Bolting Type																																																																			

**APPENDIX 1 Detail of Typical Zinc Anode in Tank**

**2. Requirement**

- 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)