

INSPECTION REPORT				Page 1 of 6
EVO Job No: 68931-5	Report No: IR-02	Date of Report: 01 May, 2020	Customer : BHP Olympic Dam	

CUSTOMER DATA				PDT DATA	
Name:	<b>BHP Olympic Dam</b>			Project – Assignment No.	68931-5
Address:	Olympic Dam SA 5725			Client P.O./I.O. to Omni-tuff:	4508631918
Attn:	Murray McC	Phone:	XXXX XXX XXX		
E-Mail :	<a href="mailto:admin@material.com">admin@material.com</a>			Requisition No:	NA
Copies to:				Date of Order:	20 April, 2020
				Inspection Contract Coordinator:	Martin Smith
SUPPLIER/SUB-SUPPLIER DATA				INSPECTION INFORMATION	
Inspection Performed: <input checked="" type="checkbox"/> With Customer <input type="checkbox"/> With Contractor				Date(s) of Visit(s):	01 May 2020
				Date of Previous Visit:	N/A
Relevant OEMs or Vendors	Rossi Gearmotors			Date of Next Scheduled Visit:	01 August 2020
				P. O. Status:	<input checked="" type="checkbox"/> Complete <input type="checkbox"/> Incomplete
				Project Name:	
				<b>OD Equipment Inspection A</b>	
Primary Contact:	Cornelius Castle			Materials/Items Inspected:	
Phone:		E-mail :	Rossi Gearbox (Drawing J1589-01-00)		
Sub-supplier:	NA				
Sub-Supplier Job No:	NA				
Location:	NA				
Primary Contact:	NA			Pre-Inspection Meeting Summary Attached:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Phone:	NA	E-mail :	NA	Summary Report Attached:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>INSPECTION DISPOSITION:</b> <input type="checkbox"/> Accept <input checked="" type="checkbox"/> Nonconformance(s) Identified <input type="checkbox"/> Placed on Hold <input type="checkbox"/> Other (Explain)					
<b>INSPECTION SUMMARY AND CONCLUSION:</b>					
<p><u>Inspection summary:</u></p> <p>The Inspector has carried out inspection on 01 May 2020 according to 4508631918 as below:</p> <p>Visual inspection to ensure not has damage on painted surface and base material.</p> <ul style="list-style-type: none"> <li>- Check color of surface coating in accordance with RAL specified by OEM.</li> <li>- Check integrity of bare metal surfaces</li> <li>- Check integrity of machined metal surfaces</li> <li>- Check data reflected on ID Plates</li> <li>- Completed Mag particle NDT on structural welds on transport frames</li> </ul> <p><b>For more details please refer to Item 6 – Inspection detail.</b></p> <p><u>Conclusion:</u></p> <p>Correction actions will be loaded to PDT for BHP's urgent attention.</p>					

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<b>RECOMMENDED ACTION:</b>					
- Advise vendors to re-machine critical metal surfaces on relevant equipment flagged in PDT.					
<b>INSPECTION TIME :</b>		<input checked="" type="checkbox"/> DAYS <input type="checkbox"/> HOURS	01	<b>TRAVEL HOURS :</b>	08
				<b>DISTANCE:</b> <input type="checkbox"/> MI <input checked="" type="checkbox"/> KM	460
Technical Specialist:	Dean Terry	Date:	05 May, 2020	Project Coordinator :	Martin Smith
<i>This report is made solely on the basis of the Client's instructions and/or information and materials supplied. It is not intended to be a recommendation for any particular course of action. Omni-tuff does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Omni-tuff's provision of services. Omni-tuff makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions.</i>					

## 1.0 ATTENDEES

NAME	COMPANY REPRESENTED	TITLE
Cornelius Castle	BHP	
Martin Smith	Omni-tuff	Inspection Coordinator
Ross Boyle	Omni-tuff	Preservation Specialist NACE Coating Inspector Level 3
Steve Sillitoe	Omni-tuff	Mechanical Inspector
Dean Terry	Omni-tuff	Technical Specialist AS2214 WTIA 17655, AU/IWS/00398

## 2.0 MATERIALS

### 2.1 GENERIC MATERIALS

TAG / EQPT NO.	DESCRIPTION
J1589-01-00	Rossi RC21 630 U01L sin / R57.2 / B6 MOUNT / Ø325xØ355 HOLLOW OUTPUT SHAFT SHRINK DISC, LABYRINTH SEALS, AIR SENTRY BREATHER, BMP, NAMEPLATE, PIPEWORK, MAG. SUMP PLUG, PT 100 TEMP PROBES, LOCATING SPIGOT, FAN COOLING

### 2.2 MATERIALS INSPECTED

PO ITEM NO.	TAG / SERIAL NO.	PRODUCT / MATERIAL / ITEM NAME	ORDERED QUANTITY	PRESENTED THIS VISIT	ACCEPTED THIS VISIT	QUANTITY ACCEPTED TO DATE
4508631918	J1589-01-00	Rossi Gearbox	2	2	0	0

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### 3.0 DOCUMENTS USED

DOCUMENT NO.	REVISION	TITLE	APPROVAL STATUS
J1589-01-00	A	Gearbox Drawing Config A	Approved
J1589-01-01	B	Gearbox Drawing Config B	Approved
19001805 OA	01	OEM Purchase Order and Conditioning Records	Approved
201911	01	Installation Guide	Approved

### 4.0 SCOPE OF INSPECTION

ITP LINE NO.	ITP ACTIVITY DESCRIPTION	ITEMS	RESULTS	CLAUSE
01	Dimension & ID Plate check	Rossi Gearbox	Accepted	6.0
02	Open and check condition of bare metal	Rossi Gearbox	Accepted	6.0
03	Open and check Nm of M56 bolts	Rossi Gearbox	Accepted	6.0
04	Open and check Nm of M20 bolts	Rossi Gearbox	Accepted	6.0
05	Visual inspection	Rossi Gearbox	Accepted	6.0
06	Document review	Rossi Gearbox	Accepted	6.0

### 5.0 EQUIPMENT AND INSTRUMENTATION USED

EQUIPMENT / INSTRUMENT DESCRIPTION	SERIAL NO	CALIBRATION CERT. NO.	EXPIRY DATE
Misalignment Gauge	MC-XTB-63-2130	CERT-SECEC-0012	31/12/2020
Caliper	TBD-TCCK-01	CERT-SECEC-0034	31/12/2020
Magnetic Particle NDT Assembly	TBD-TCCK-04	CERT-SECEC-0035	31/12/2020
Measuring Tape	TBD-TCCK-02	CERT-SECEC-0016	31/12/2020
Elcometer	TBD-TCCK-26	CERT-SECEC-0018	31/12/2020

### 6.0 INSPECTION EVIDENCE

### 7.0 NON-CONFORMANCES

NCR #	DESCRIPTION	DATE RAISED	DATE CLOSED
01	Mild corrosion grade 02 present on centre shaft	01/05/20	Pending
02	Pitting evident on fan	01/05/20	Pending
03	Mild damage to machined flange attachments	01/05/20	Pending

Title Inspection Report Form	Form Number MI-1220-01	Revision D	mm/dd/yyyy 01/05/2020	Instructions SOP-1220
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04	M56 loose and matting requiring replacement	01/05/20	Pending		

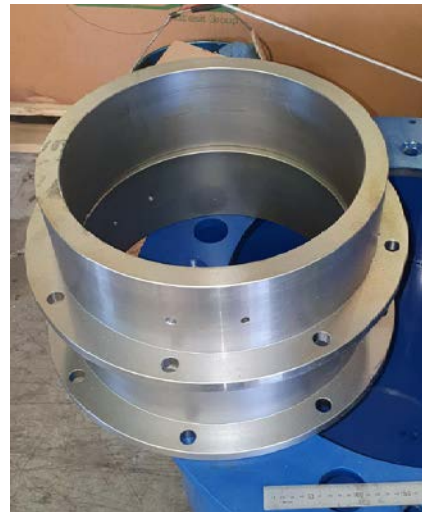
## 8.0 ATTACHMENTS TO THIS REPORT

- PO reviewed.
- Dimension reports.
- MT reports.
- NDT Technician Certificate.

## 9.0 PHOTOGRAPHS



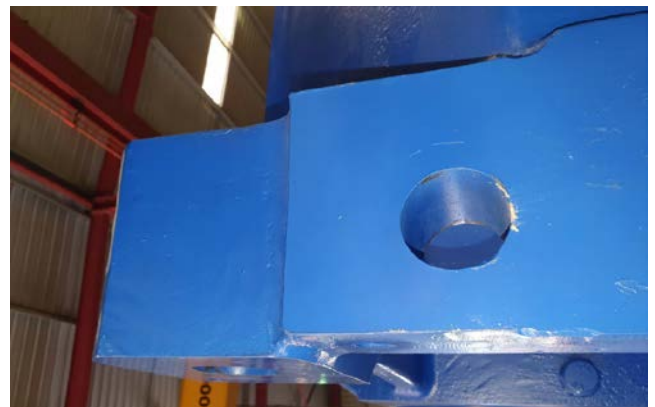
Exposed Gearbox once unwrapped









Exposed Flange assembly once unwrapped



Exposed with corrosion protection applied



Gearbox M60 bolt hole once unwrapped

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 <p>Gearbox while still wrapped</p>		 <p>Additional Flanges prior to unwrapping</p>		
 <p>M56 Bolts in place prior to de-assembly</p>		 <p>M60 hole after M56 bolts removal</p>		
 <p>M56 Bolts during inspection</p>		 <p>M20 Bolts during inspection</p>		



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M20 bolt after removal



Pallet after Gearbox removal

END OF THIS REPORT

## **Section A:** Information of the returned steel transport frame







You can take most of the information from the decal on the steel transport frame:



Information of the steel transport frame returned	
<u>Date of return:</u>	<u>Serial number:</u>
<u>Location that returns good:</u>	WLL:
<u>Product code:</u>	<u>Date of manufacture:</u>


## Section B: Check list for goods inwards

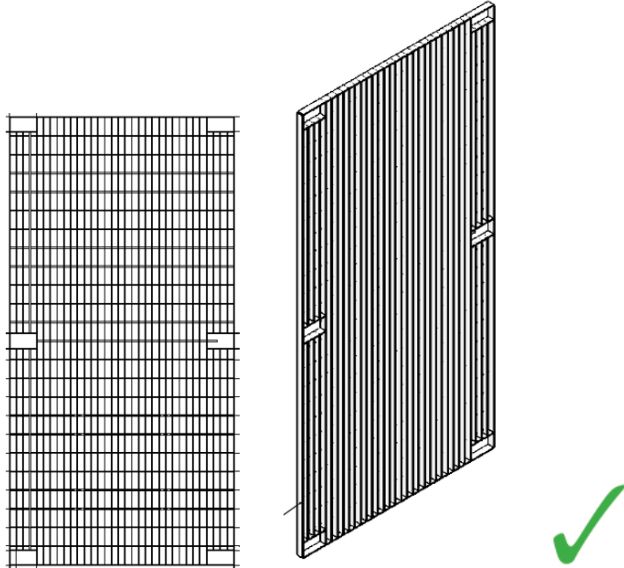



**⚠** If any of the following checks fail the steel transport frame need to be discarded for use as it does not comply with the original and rated design of the steel transport frame




Visual inspection		<ul style="list-style-type: none"> <li>Once the steel transport frame is received a simple visual inspection will be done by the goods inwards personnel to inspect the general appearance of the steel transport frame</li> <li>At this stage if any of the following check points fail, the pallet needs to be discarded for use as it does not comply with the original and rated design of the steel transport frame</li> </ul>	
B1	Is there any visual damage to the mesh of the steel transport frame?	 <p>No visual difference when comparing the mesh of the returned steel transport frame with original approved drawing</p>	 <p>The mesh of the returned steel frame presents missing parts or cuts</p>
B2	Is there any visual damage to the base of the steel transport frame?	 <p>No visual difference when comparing the base of the returned steel transport frame with original certified drawing</p>	 <p>The base of the returned steel frame presents some visual damage such as cuts or missing parts</p>
B3	Is there any visible modification/addition to the original design of the steel transport frame?	 <p>The returned steel frame presents clear modifications/ additions that where not included in the original certified drawing</p>	 <p>The returned steel frame presents clear modifications/ additions such as cuts, extra steel.</p>

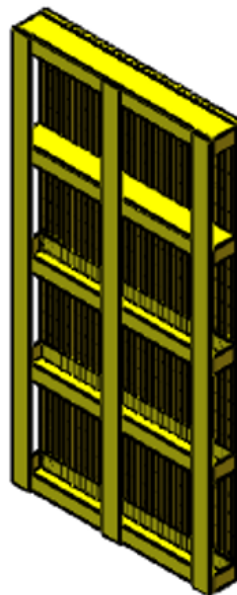
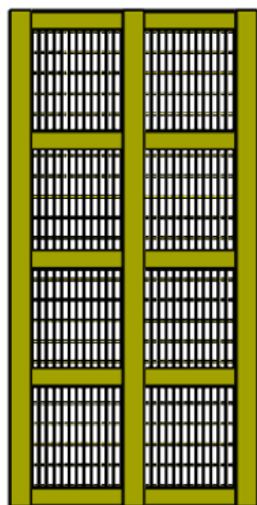
## Section C: Check list for Workshop



 If any of the following checks fail and is not just a protective coating issue the pallet needs to be discarded for use as it does not comply with the original and rated design of the pallet







A more detailed inspection is performed at this stage		<ul style="list-style-type: none"><li>Once the steel pallet is received from Goods inwards, a more detailed inspection of welds and structural members by a qualified person will be followed.</li><li>At this stage if any of the following check points fail and is not just a protective coating issue, the pallet needs to be discarded for use as it does not comply with the original and rated design of the pallet</li></ul>	
Checking the mesh			
C1	Is there any visible mechanical discrepancy against the drawing of the mesh of the steel transport frame?		 <p>The mesh of the returned steel frame presents missing parts or cuts</p>
C2	Is the mesh bent or smashed?		 <p>The mesh of the returned steel frame presents some visual damage such as mesh bent or smashed</p>
C3	Is there paint or protective coating missing?	<p>The original certified mesh of the steel frame has complete welds between flat bars and twisted wire, outside mesh is not damaged or pushed on an angle, coating is covering the whole mesh area and mesh does not present cut outs</p>	 <p>The mesh of the returned steel frame presents areas with missing coating or some areas presenting rust</p>

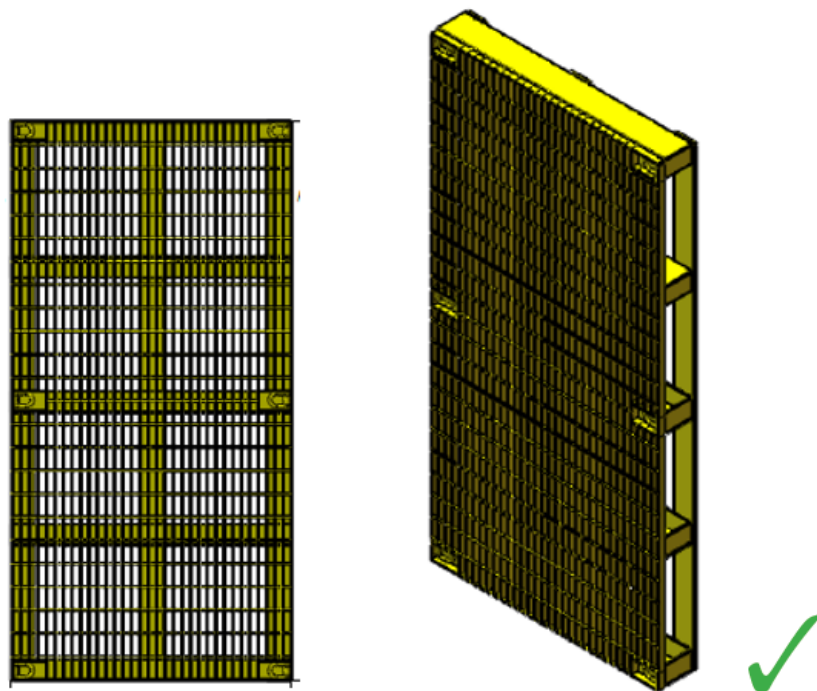
Checking the Base		
C4	It there any visible mechanical discrepancy against the drawing of the Base of the steel transport frame? Does the pallet lie flat on the ground?	 <p>The base of the returned steel frame lies flat on the ground</p>
C5	Is the base bent or smashed?	 <p>The base of the returned steel frame is bent or smashed</p>
C6	Is the paint or protective coating missing?	 <p>The base of the returned steel frame presents areas with missing coating or some areas presenting rust</p>



The original certified base of the steel frame has complete welds between the C-channels, also there are not gaps between the C-channel and the top frame, there are no weld gaps between the C-channel and the base plate, no weld gap between the mesh and C-Channel.

The base sits flat on the floor and it presents squareness.

Checking any other visible welding issue or any other defect		
C7	Are there any visible sharp edges?	 <p>The returned steel frame presents visible sharp edges</p>
C8	Are there any visible gaps in the weld	 <p>The returned steel frame presents visible gaps in the weld</p>
C9	Is there any visible gap in the weld	 <p>The returned steel frame presents visible gaps in the weld</p>
C10	Are there any visible cuts in the mesh	 <p>The returned steel frame presents cuts in the mesh</p>
C11	Are there any weld undercuts or MiG wire remnants	 <p>The returned steel frame presents well undercuts of MiG remnants</p>
C12	Is there extensive corrosion that may compromise the structural integrity?	 <p>The returned steel frame presents visible corrosion</p>



The original certified steel frame has complete welds, presents squareness, it is levelled, it has not sharp edges, it does not present cuts not weld undercuts or MiG wire remmants and it has a coating protection all over the steel frame

## Comments:

⚠ Please be mindful that if at this stage of the check points we are facing only a protective coating issue and not a mechanical or structural issue we can put the pallet back on inventory and keep using it after solving the issue found