

# Product Welding Procedure

**Title:** Recommended Welding Procedure for Sandvik Pre-fabricated lip  
**Applicable Parts:** All Sandvik Shark Half Arrow Parts  
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**Date:** 13 June, 2010 **Date:** 30 January, 2012

## 1. SUMMARY

This report visually details the recommended procedure to be followed when welding Sandvik Prefabricated lip components.

A Strong back supporting the lip not in the details shown, however refer to point 10 for removal.

## 2. WELDING TEMPERATURES

Material	Target Preheat Temperature °C	Max Inter-pass temperature °C
Shark Blue Pointer Cast Corners	160-190	230
Lip plate (ASTM A514 Steels)	As per the manufacturer's recommendation	As per the manufacturer's recommendation

Table 1 Preheat, Inter pass temperatures

Refer to Weld Procedure PWP0001 for more details.

## 3. PROCEDURE

1. Ensure flatness of bucket mating face is flat to back of pre-fabricated lip.

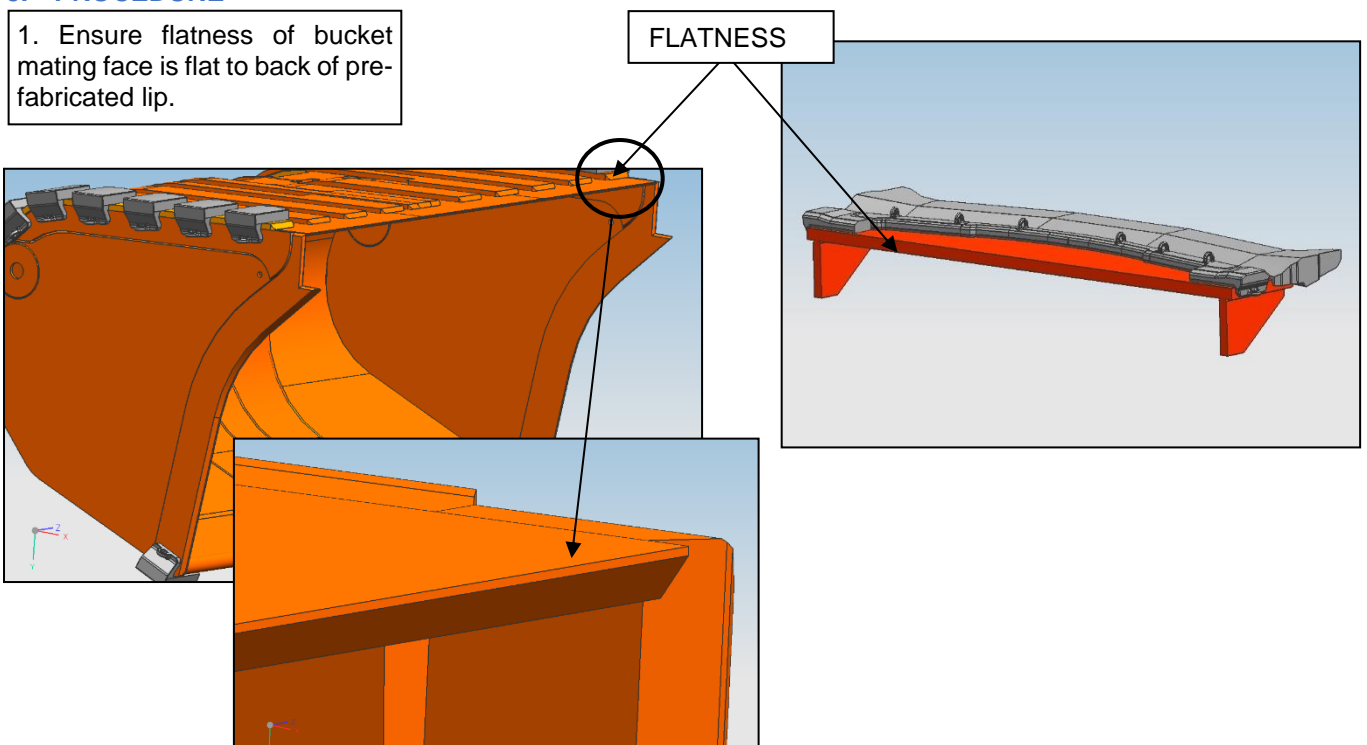


Figure 1

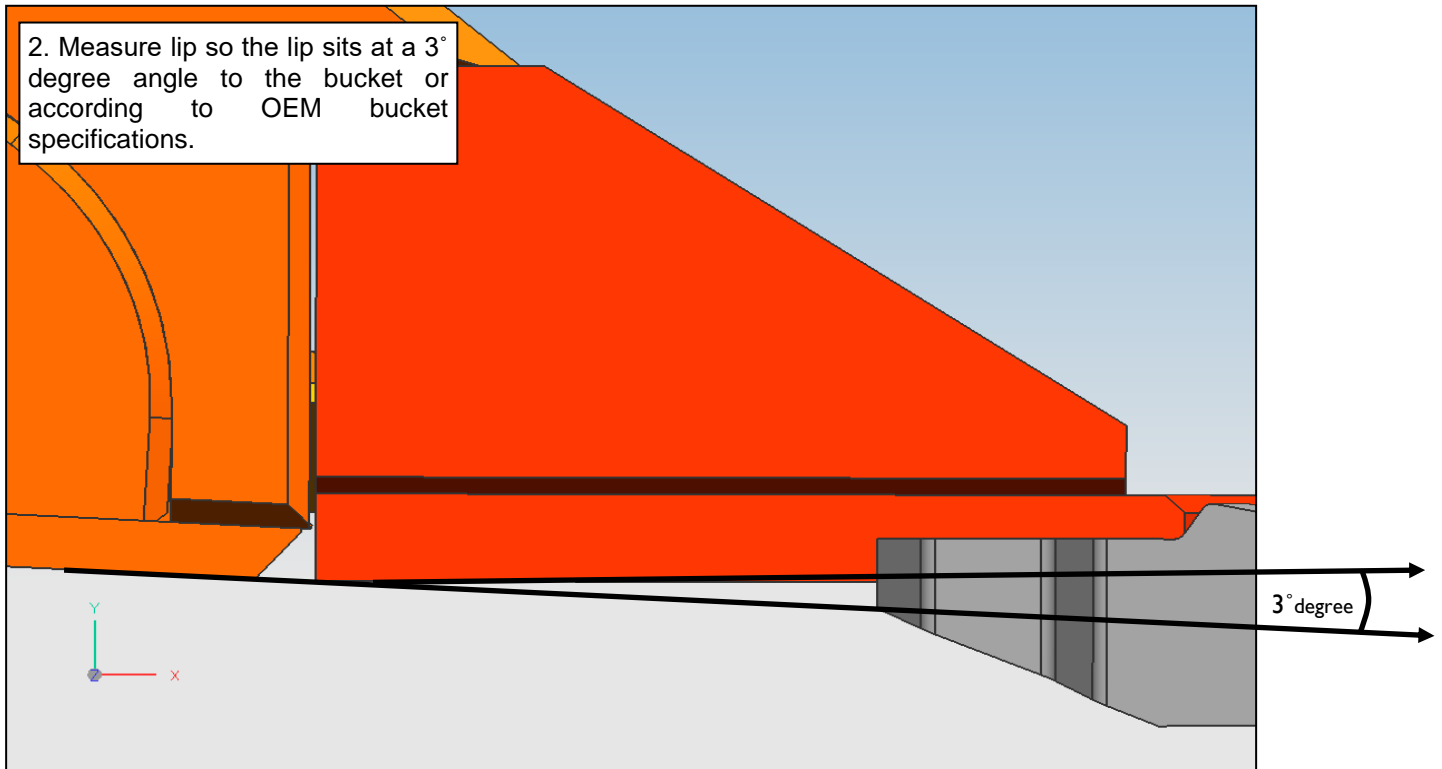


Figure 2

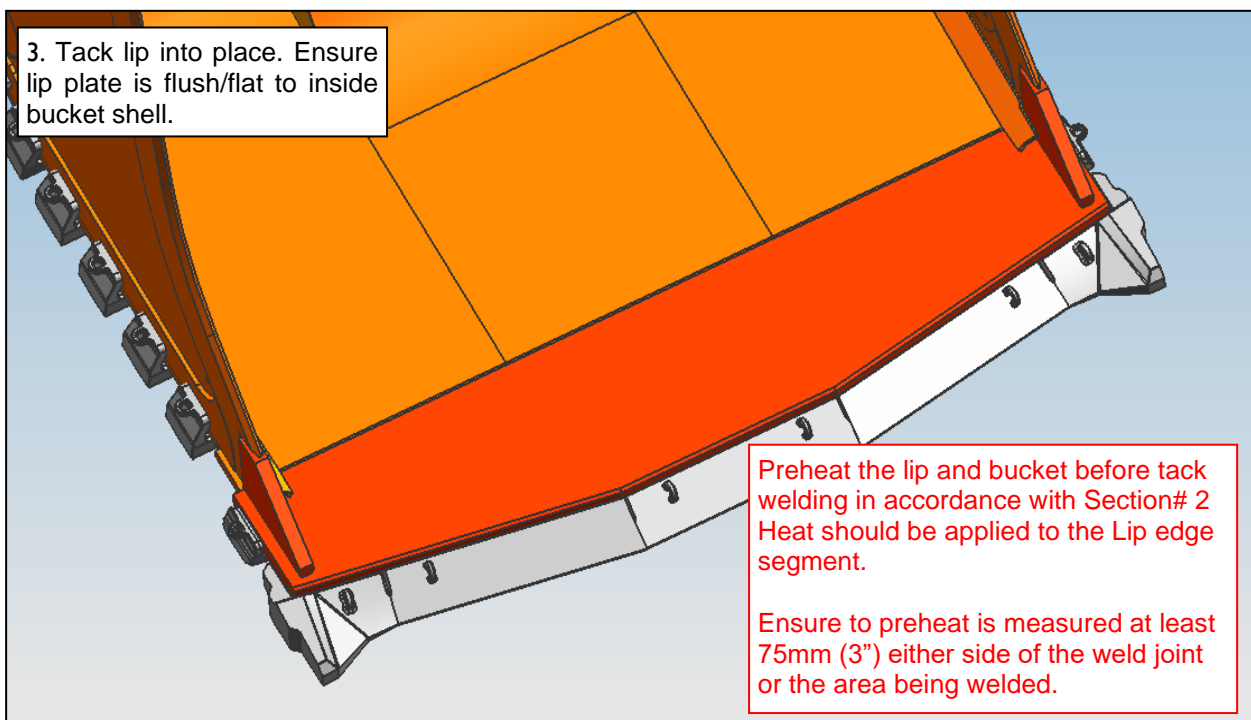


Figure 3

4. Pre heat lip in accordance to Section# 2. Heat should be applied to the prefabricated lip from underneath the lip. This is indicated by the areas in red in the second image below. The metal temperature reading should be taken on the top surface of the lip as indicated.

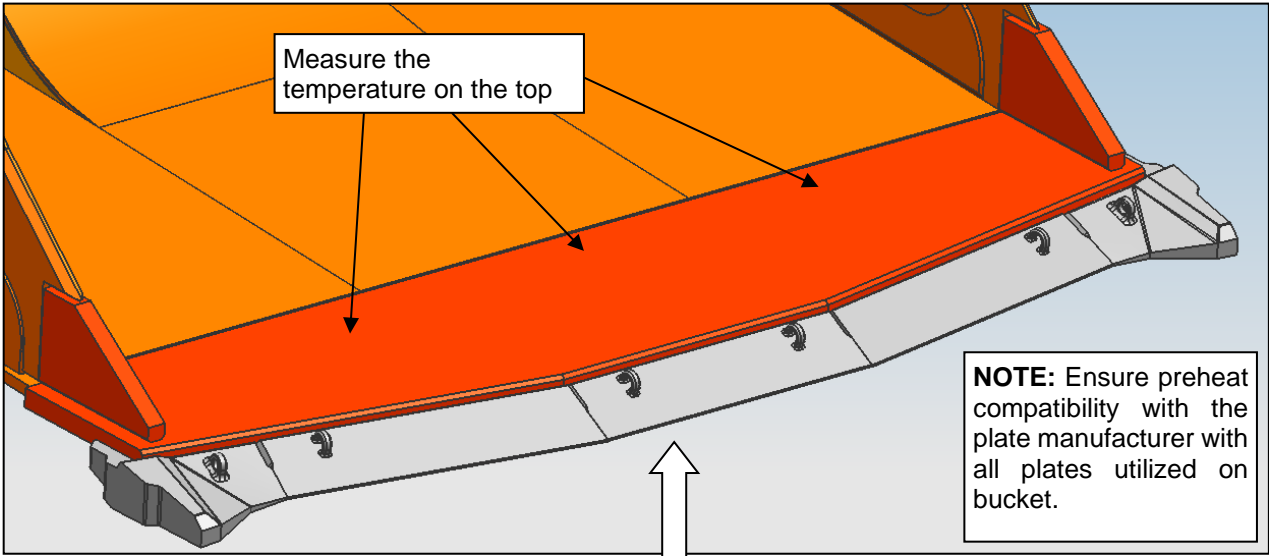
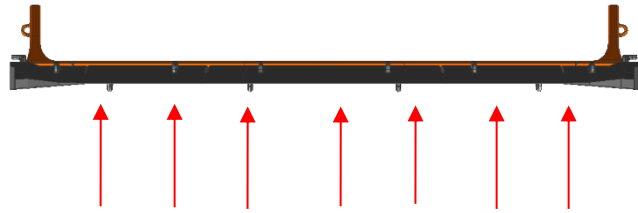


Figure 4

Preheat lip to target temperature (refer to Section# 2)

5. Once the lip and bucket is heated to target temperature (refer to Section 2.0) complete a root run on top of lip:

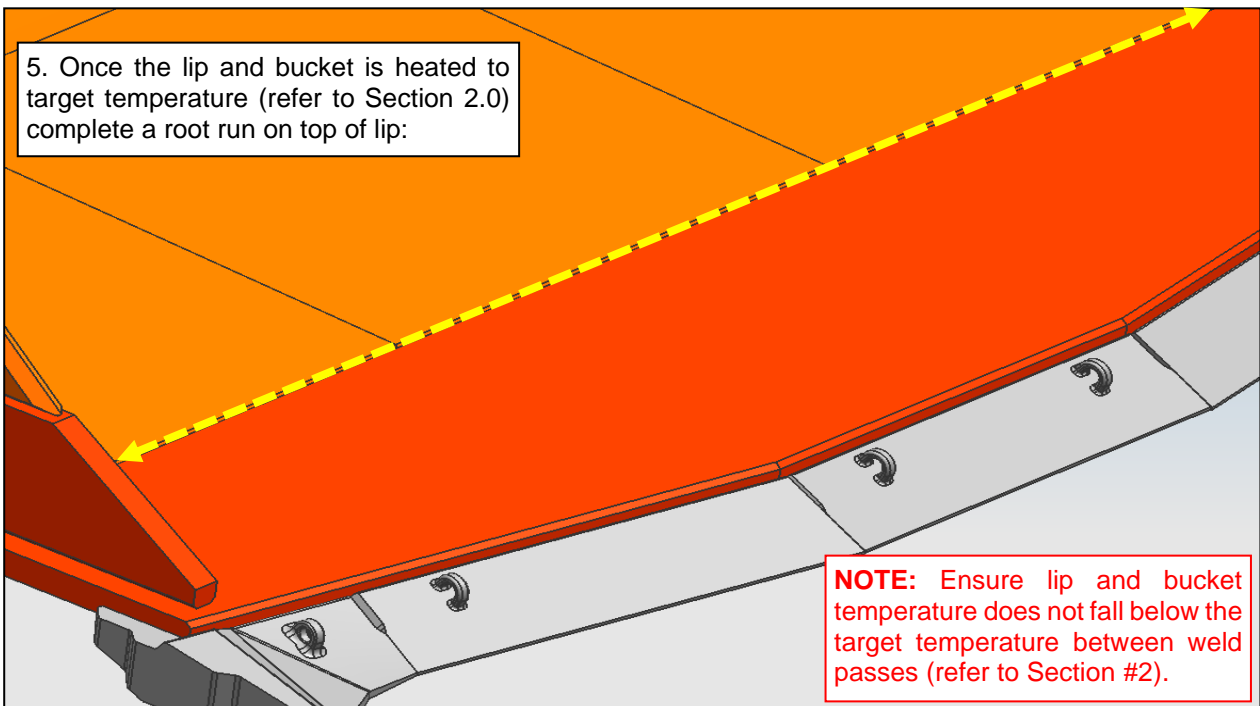


Figure 4

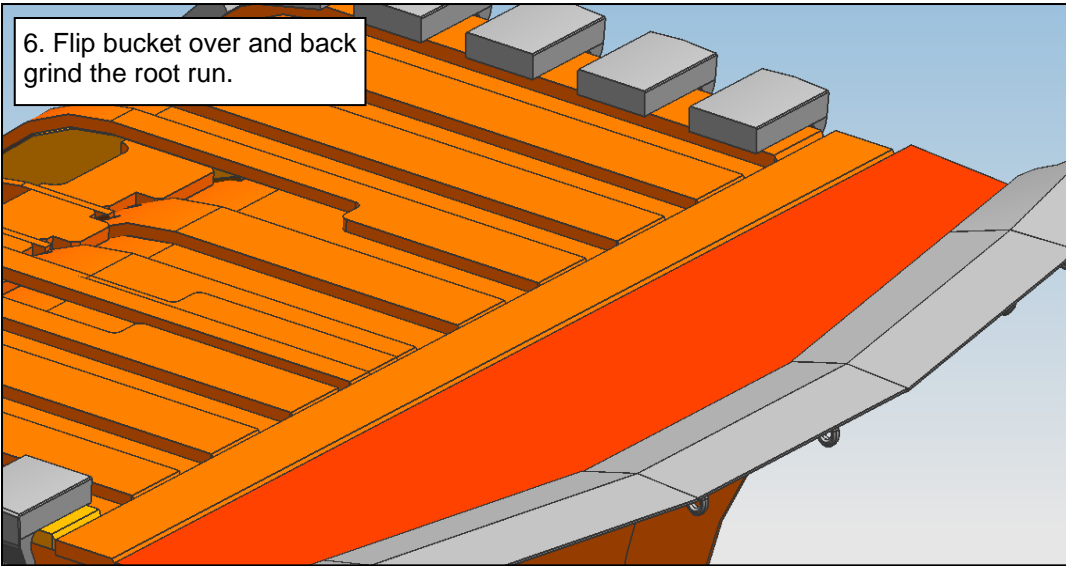


Figure 5

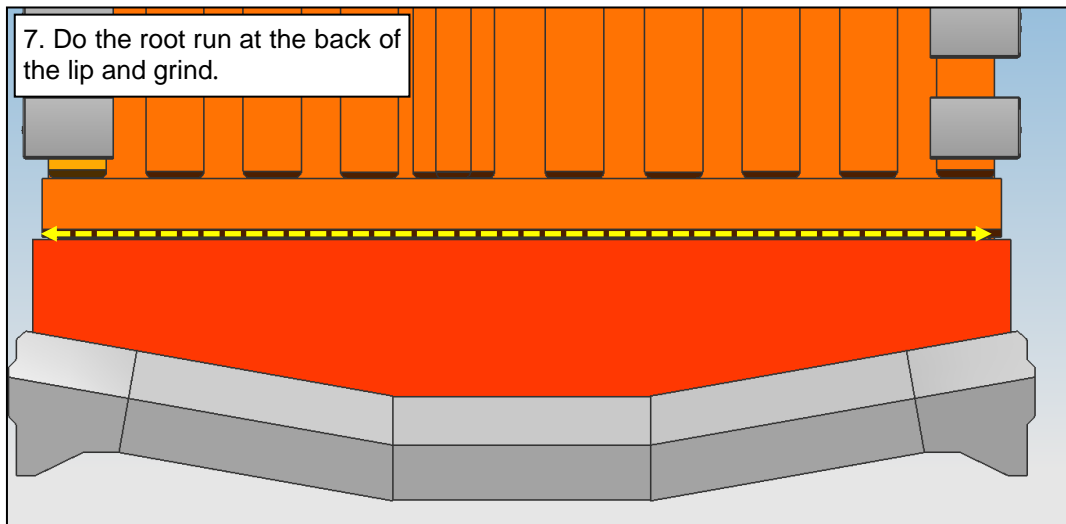


Figure 6

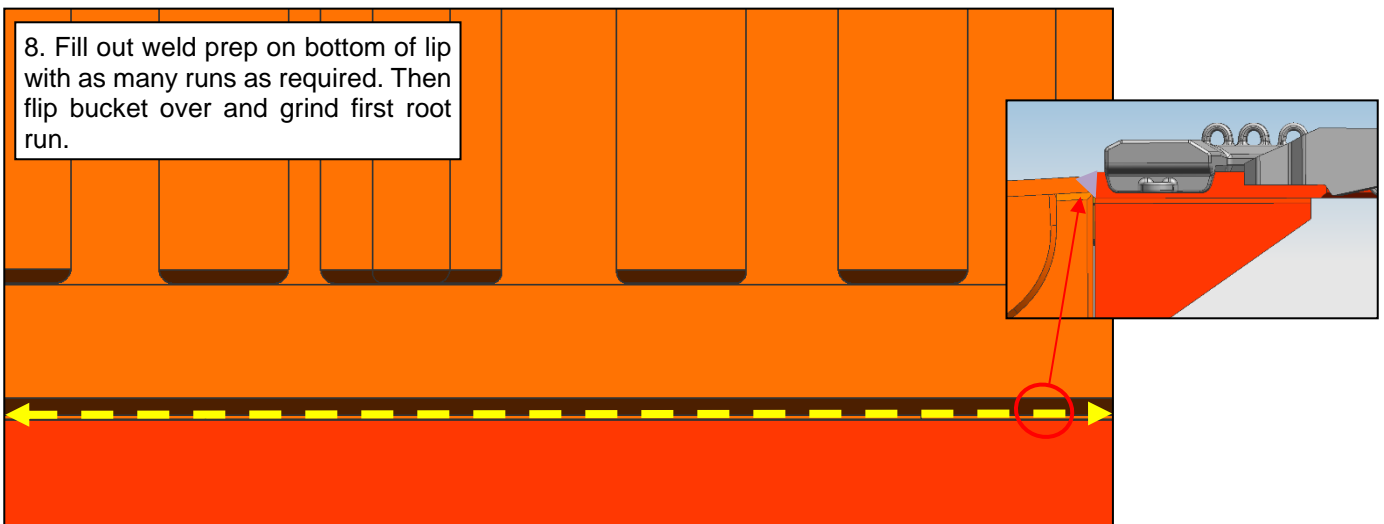


Figure 7

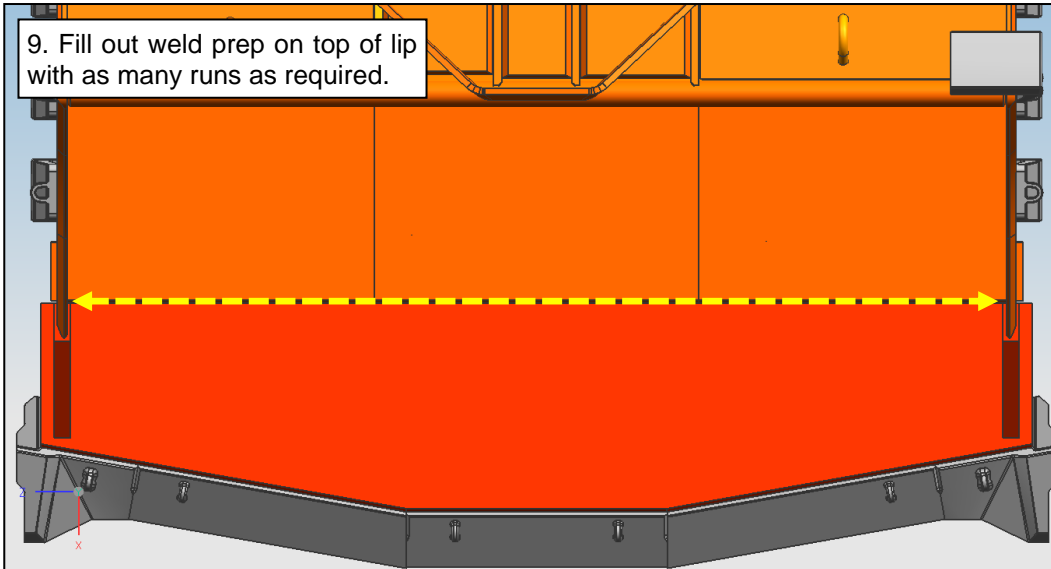


Figure 8

10. Removal of strong Back

Ensure that the strong back is not removed until all welding of the lip is completed.

The removal of the strong back should be completed through the means of a grinder. Please avoid using arc-air when cutting through the welds. However if it is the **ONLY** option please ensure that the lip and bucket preheat target temperature specified in Section 2 is adhered too.

11. Post heat treatment:

Refer to Welding procedure PWP001 for weld finishing, testing and Post weld Cooling requirements.

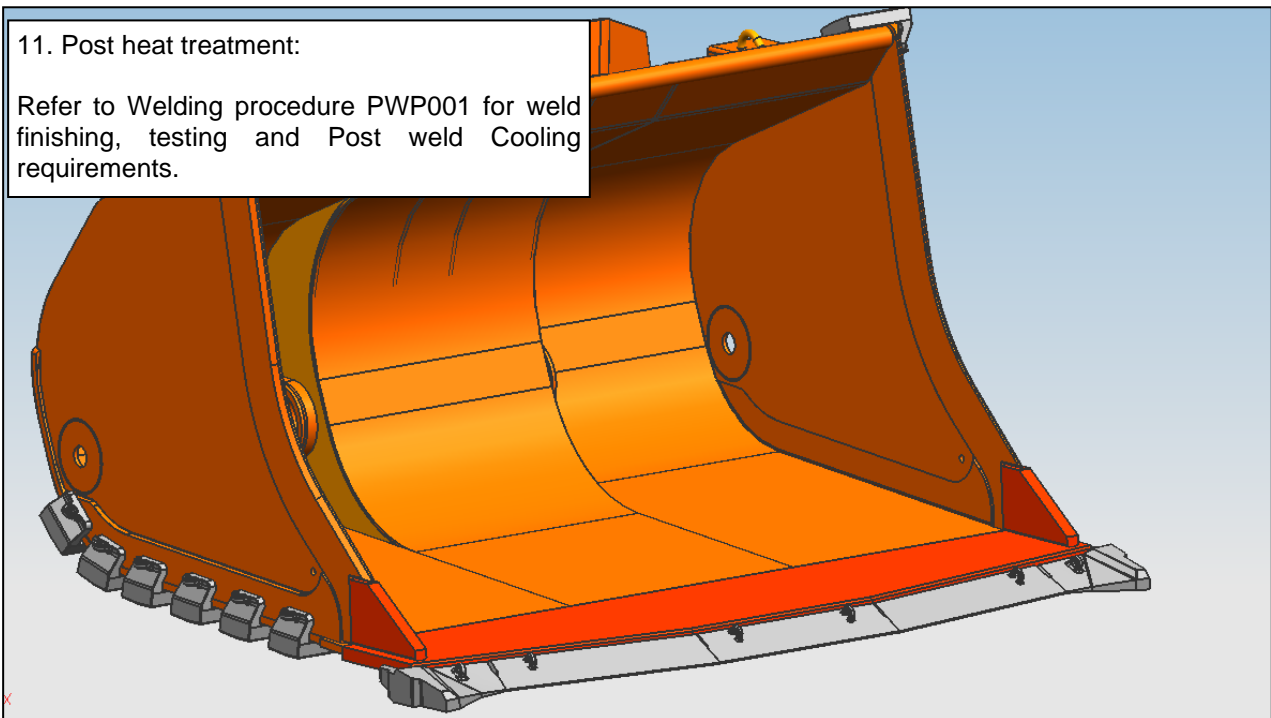


Figure 9



Procedure No. Rev.  
**PWVP0011** **2**

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#### 4. REVISION HISTORY

Rev	Date	Changes	Revised By	Checked by	Approved By
0	13/06/2010	Original release.	-		Todd Shaw
1	30/01/2012	-	-		Justya Czekaj
		Updated weld temps, add document change register.			
2	24/11/2023	Added preheat Table in section#2 Post weld cooling requirements in section#11.0 cross referenced to PWP0001.	Rob Lauchlan	J.Jose	Mehrdad Javadi