

Conversion of Bare Lip Bucket to BP2 Lip

Title: Welding lip onto ejector bucket
Applicable Parts: Lip and ejector bucket
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Date: 10.09.2013
Revised By: R. Lauchlan
Date: 11/10/2023

1. SUMMARY

This report visually details the recommended procedure to be followed when welding BP2 lip into ejector bucket.

2. PREHEAT & INTER PASS TEMPERATURE

The following information is a recommendation for the application of the side wall corner guard:

- For all Pre-heat and Interpass Temperatures refer to Table 1 below.

Products	Target pre-heat temperature °C	Max inter-pass temperature °C
Q&T Castings/wear steel (350-500HB)	160-190	230
Lip plates (ASTM A514 Steels)	As per the manufacturer's recommendation	As per the manufacturer's recommendation

Table 1. Preheat, Inter pass temperatures

For Post-Heat Treatment, and Consumables please refer to the following document:

PWP0001 - Sandvik Shark General Welding Procedure

For further technical detailed information please refer to drawing:

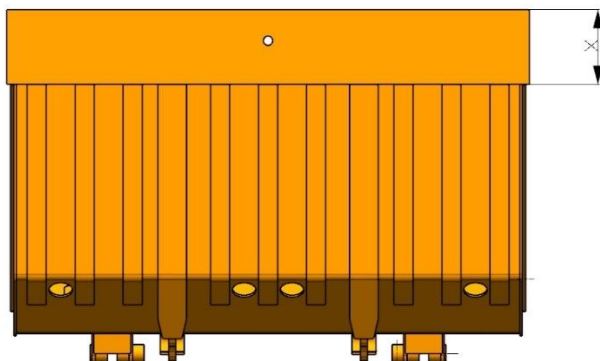
MD0037 – Recommended Sidewall Corner Guard Installation Details

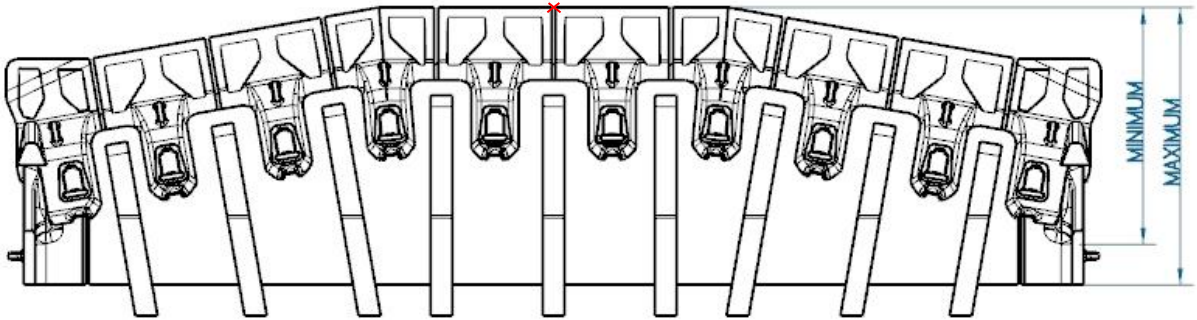
3. BUCKET SET UP

- **Measure lip depth on a bare lip bucket**

Ensure BP2 or HA lips front ends end up at the same point as the bare lip front edge.

- **BP2 lip depth**



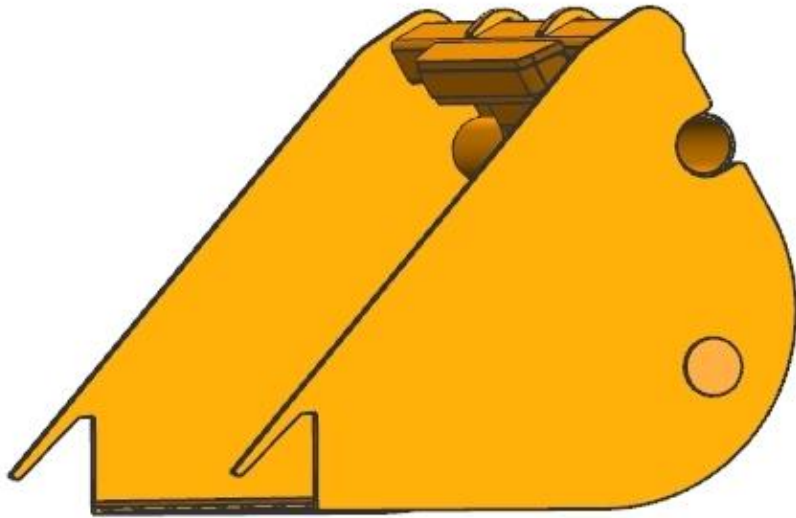


- **Adjusting lip and bucket**

- Dimension X is between minimum and maximum of BP2 lip depth – Cut Lip according to dimension X, the BP2 assembly replacement lip front ends up in the same point as bare lips front edge.
- Dimension X is shorter than minimum of BP2 lip – Cut BP2 lip to minimum depth and then cut ejector bucket lip to ensure BP2 lip front edge ends up at the same depth as the bare lip.
- Dimension X is longer than maximum of BP2 lip – Cut ejector bucket lip according to BP2 lip depth.

- **Cutting bucket**

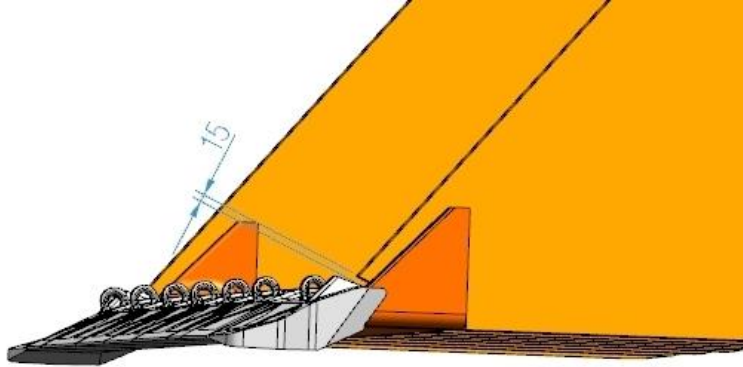
Cut bucket to suit shape of lip.



4. SET UP FOR LIP

- **Cut Bar to fit bucket**

When BP2 lip and ejector bucket is adjusted to suit it may be required to cut the side wall of bucket to encompass Cast Corner. During this process ensure the side wall leaves a 15mm gap to the Corner Shroud to change out, see picture below.



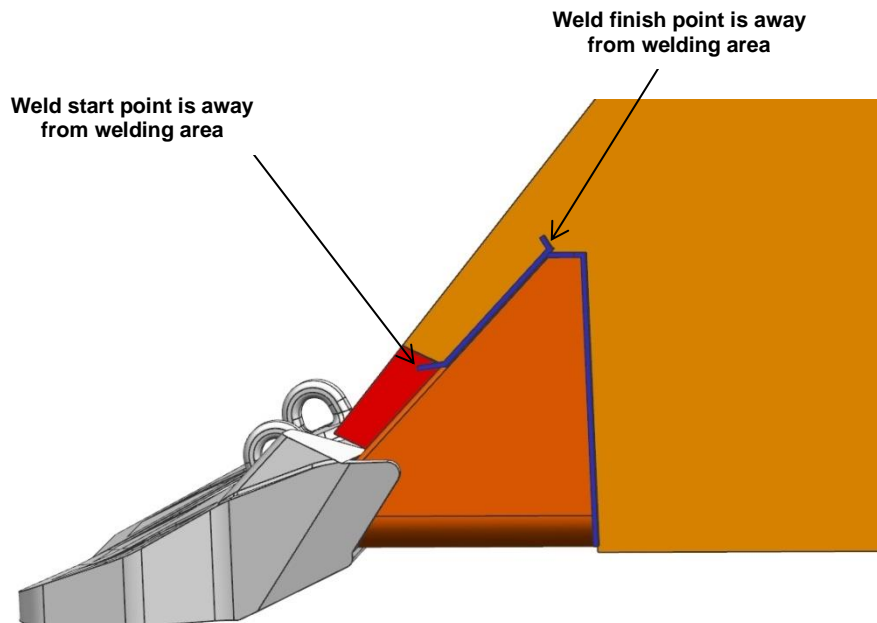
5. WELDING PREPARATION

Preheat parts to target weld temperature (refer to Section #2 Table 1).

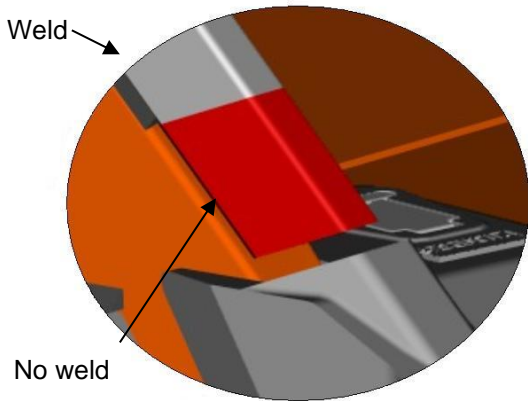
6. WELDING REQUIREMENTS

For more information regarding welding specifications please refer to PWP0001.

Note the following when welding Cast Corner into the bucket.



Welding start 100mm from end of the bar; refer to drawing MD0037, (as shown in red in the pictorial below).



This method is to ensure that the bar does not add internal stresses to the Cast Corner which may lead to fatigue cracking.

7. POST WELD COOLING & CLEANING

Let the weld area air cool before cleaning; do not quench. If the welded area requires cleaning (ie sharp edges or burrs), please do so after the weld has cooled.

8. REVISION HISTORY

Rev	Date	Changes	Revised By	Approved
0	10/09/2013		Justya Czekaj	
1			Justya Czekaj	
2	11/10/2023	Added temperatures and document change register	R. Lauchlan	M. Javadi