

Subject: Cleveland Process Audit

Date: November 4, 2015

Completed By: Steve Busicnki

On November 4, 2015, work order CLV 57995 was ran on the PWC CLO for Mansfield. Tag DU67587 was verified prior to loading and use of the coil. The operator measured the full width of the material at the beginning of the job. The operator then measured the thickness of the material at both edges and the crown using a micrometer. Once fed through, the operator measured the width of a select number of cuts from the run. The width of all cuts was measured when the coil was split. The thickness was measured again at the end of the master coil using a micrometer at both edges and the crown. Based on the gauge report, 100.0% of the gauge was within the customer range. Micrometer readings verified material to be within specification.

On 11/11/15, the operator was retrained on measuring the width of all cuts at the beginning of the job. An OJT form was used to document this training.

Part Spec/PO Audit Form

Cust #	7054	Customer	Mansfield			Grp/Sz/Grd/Wdth	GVC / 0.0550 / QH30CO / 3.0000		
Equip/Plant	PWC CLO	Work Order #	CLV 57995	Date	11/4/2015	Part No.	1003-005		
Work Order Information		Material to be Used				Actual			
		Tag #1	DU67587	Tag #2		Gauge #1	.0555, .0565	Gauge #2	
		PO#	21779-001	PO#		% Gauge In Spec	100.00%	% Gauge In Spec	
Gauge Range	0.0550 - 0.0610	Gauge Min	.0550 Min	Gauge Min		Low/High Gauge	0.0550 / 0.0588	Low/High Gauge	
Width Range	2.9950 - 3.0050	Width	48.3750"	Width		Average	0.0573	Average	
Length Range	Coil					Width	3.001, 3.002, 3.003	Width	
Rockwell	60.00 - 75.00	Rockwell		Rockwell		Length	Coil	Length	
Tensile						Rockwell	62, 64.5, 64	Rockwell	
Yield		A653							
% Elongation		Galvanized Coil							
Chem Rqmts		A109/A-08109M							
Other Rqmts		G30							
		.0550 Min X				Other			
		48.3750"							
		1pcs 44,530lbs							
Summary									
Actions									
Final Status									

# Slitting Order

Date: 11/4/15	Customer: Mansfield
Work Order #: CLV57995	Date Run: Nov. 4, 2015

## Incoming Inspection Checklist

Tag #	Gauge & Width	Type	Tag Wgt.	RB	Olsen	Actual Wgt.	Width	Mic
D167587	.055 x 48.375	GVC	44,530	H62 464.5 T64		44,530	48 5/8	.055.5
								.056.5

Cutting Instructions: 16 cuts 3.000

Slit Tolerance: $\pm .005$	Max O.D: Spld in half	Max Skid Wgt: 5,500	I.D: 20"
Gauge Range: .055 / .061	Salesman:		

Special Instructions:

1 Cuts with some defect but okay to ship

\_\_\_\_\_ Cut Size  
 \_\_\_\_\_ Cut Weight  
 \_\_\_\_\_ Defect  
 \_\_\_\_\_ Approved By

N/A

2 Cuts Rejected

\_\_\_\_\_ Cut Size  
 \_\_\_\_\_ Cut Weight  
 \_\_\_\_\_ Tag No. or No.'s  
 \_\_\_\_\_ Reason for Reject

N/A

3 Ok to move material for shipment or to Stock

\_\_\_\_\_ Name  
 \_\_\_\_\_ Date

Problem 207  
 11-4-15

# Slit Size Inspection

Date: Nov. 4, 2015

Work Order: QW57995

Size of Cuts	Beginning Width	Beginning Mics	(Paxson Only) Middle Mics	End Width	End Mics
3.000	3.003 3.002		Sold @ 14 1/16	3.003 3.002	
	3.003			3.003	
	3.002			3.002	
	3.002			3.002	
	3.003			3.003	
	3.003			3.003	
	3.003			3.003	
	3.003	.055.5		3.003	.055.5
	3.002			3.002	
	3.001	.056.5		3.001	.057
	3.003			3.003	
	3.003			3.003	
	3.002			3.002	
	3.003			3.003	
	3.001			3.001	
	3.002			3.002	

DO ANY CUTS HAVE:

Rust/Stain

Burrs

Knife Marks

OK

Initials

J.P.

# AGT400 Coil Summary Report

## Jemison Metals -- 60 Inch Loopco Slitter

Work Order: CLV 57995 Coil Number: DU67587

Customer Name: MANSFIELD Heat Number: DUFNLK1559477

Product: G30 Galvanized Nov-4-15 11:17 AM to 11:57 AM (clock 40.2 min/ run 19.0 min) Shift: 1

### Average Thickness and Tolerance Data

Target 0.0580 in Average^ 0.0573 in Average - Target -0.0007 in (-1.26%)  
Standard Deviation^ 0.0006 in (1.03%)

Length 4665 ft Above High Limit 0.0610 in 0 ft (0.0%)  
Width 48.562 in In Tolerance 4665 ft (100.0%)  
Weight 44215 lbs Below Low Limit 0.0550 in 2 ft (0.0%)

Max Thickness 0.0588 in at 213 ft Min Thickness 0.0550 in at 3 ft  
Head Scrap 0 ft Tail Scrap 0 ft

### Statistical Process Control Data

Upper Control Limit 0.0591 in Upper Tolerance Limit 0.0610 in  
X Double Bar 0.0573 in R Bar 0.0018 in  
Lower Control Limit 0.0555 in Lower Tolerance Limit 0.0550 in

CR 60.0% (Capability Ratio %, 100/CP)

CP 1.667 (Process Capability, HiLim-LoLim/6\*Sigma)

CPK 1.261 (Capability vs Limits) TMW Ratio 0.960 (Low Limit/Avg)

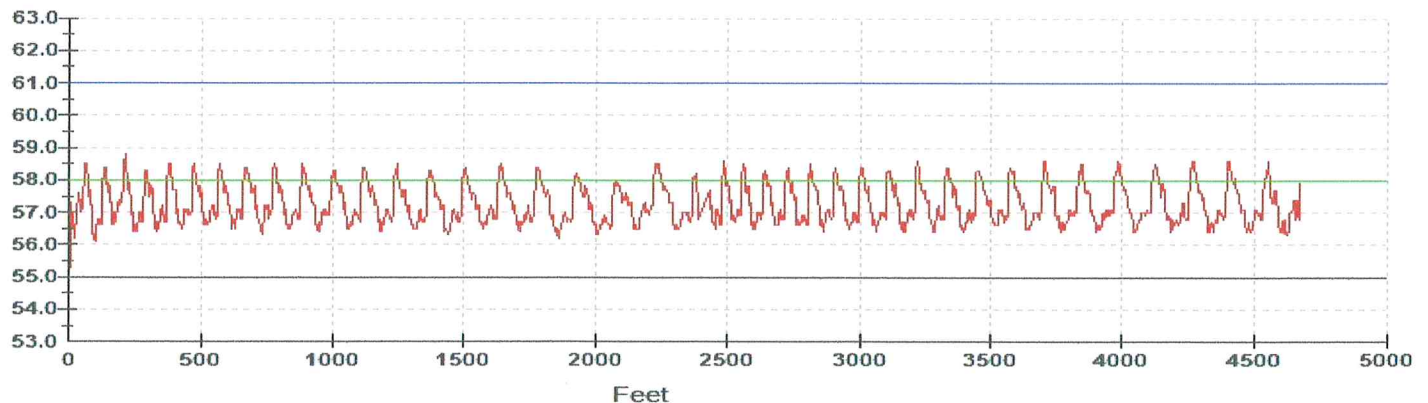
### Thickness Distribution Relative to the Target

```
+++ 0.0%
+0.0100 0.0%
+0.0090 0.0%
+0.0080 0.0%
+0.0070 0.0%
+0.0060 0.0%
+0.0050 0.0%
+0.0040 0.0%
+0.0030 0.0%
+0.0020 0.0%
+0.0010 0.0%
+0.0000 17.5% *****
-0.0010 43.8% *****>
-0.0020 38.5% *****>
-0.0030 0.1%
-0.0040 0.0%
-0.0050 0.0%
-0.0060 0.0%
-0.0070 0.0%
-0.0080 0.0%
-0.0090 0.0%
-0.0100 0.0%
--- 0.0%
```

0 3 6 9 12 15 18 21 24 27 30 33 %

99.9% is within  $\pm 0.0020$  in of the target 100.0% is within  $\pm 0.0050$  in of the target  
100.0% is within  $\pm 0.0100$  in of the target 100.0% is within  $\pm 0.0200$  in of the target

Thickness vs Length (Coil Number DU67587)



## Jemison Metals On-The-Job (OJT) Group Training Form

EMAIL completed form to HR for filing. Maintain original on location.

Continual Learning is key to Continual Improvement in the JM QMS. This Form recognizes that:

### (Attendees):

Print Name	Initial	Print Name	Initial
Tom Rodriguez	TR	Samuel Ponce	SP

have successfully completed OJT for:

Department: Loopco Slitter

Subject: 11/04/15 Process Audit - Measuring width of all cuts at the beginning of the job.

Training Start Date: 11/11/15

Training Completion Date: 11/11/15

Signature of Trainer: 

According to this document, the OJT for these individuals have been trained and have demonstrated sufficient competence to conduct the documented function/task without further instructions. Continued performance evaluation and observation could result in additional training being specified.