Subject: Cleveland Process Audit

Date: September 11, 2015

Completed By: Steve Busicnki

On September 11, 2015, work order CLV 57342 was ran on the CLO for Arrow Tru-Line. Tag 67032 was verified prior to loading and use of the coil. The operator measured the full coil width and measured the gauge with a micrometer at both edges and the crown. The widths of each cut were measured when fed through the arbors. The coil was split at the customers requested point. The coils gauge was measured again with a micrometer at both edges and the crown. This gauge measurement was taken again at the end of the coil. The widths of select cuts were taken at the end as well. Based on the gauge report, 99.4% of the material was within specification for the customer.

Part Spec/PO Audit Form

Cust #	9509		Customer	Arrow Tru-Line				Grp/Sz/Grd/Wdth	TGVC / .0510 / S50G40 / 7.969	
Equip/Plant	PWC CLO		Work Order #	CLE 57342	Date	9/11/2015		Part No.	HM .0510 X 7.969 WL	
Work Order Information			Material to be Used					Actual		
			Tag #1	67032	Tag #2			Gauge #1	.053 / .0545	Gauge #2
			PO#		PO#			% Gauge In Spec	99.40%	% Gauge In Spec
Gauge Range	0.0510 - 0.0560		Gauge Min	.0510 Min	Gauge Min			Low/High Gauge	0.0504 / 0.0539	Low/High Gauge
Width Range	7.964 - 7.974		Width	48.1560"	Width			Average	0.0524	Average
Length Range	Coil							Width	7.970 , 7.971	Width
Rockwell			Rockwell		Rockwell			Length	Coil	Length
Tensile								Rockwell		Rockwell
Yield			Toll Processed							
% Elongation			GVC SS							
Chem Rqmts			GR50 G40							
Other Rqmts			.0510 Min X							
			48.1560"					Other		
			1pcs 41,210lbs							
Summary										
Actions										
Final Status										

Slitting Order

Date: 9/11/15	Customer: Allied Tru-Line
Work Order #: CLV57342	Date Run: Sept. 11, 2015

Incoming Inspection Checklist

Tag #	Gauge & Width	Type	Tag Wgt.	RB	Olsen	Actual Wgt.	Width	Mic
C01032	.051 X 48.156	C/C	41,210		✓	41,210	48 5/16	.053 / .0545

Cutting Instructions: Coil 13 7/8 ID

Slit Tolerance: +-.005	Max O.D: Split in half	Max Skid Wgt: 5,000	I.D: 20
Gauge Range: .051 / .054		Salesman:	

Special Instructions:

1 Cuts with some defect but okay to ship

N/A — Cut Size / Cut Weight / Defect / Approved By

2 Cuts Rejected

N/A — Cut Size / Cut Weight / Tag No. or No.'s / Reason for Reject

3 Ok to move material for shipment or to Stock

Damon Ramey — Name

9-11-15 — Date

Slit Size Inspection

Date: Sept. 11, 2015 Work Order: QLV57342

Size of Cuts	Beginning Width	Beginning Mics	(Paxson Only) Middle Mics	End Width	End Mics
7.909	7.971		Split @ 13 7/8	7.971	
	7.910			7.910	
	7.910	.053 / .051.5	.051.5 / .053 @ Split	7.910	.051 / .052.5
	7.971			7.971	
	7.971			7.971	
	7.970			7.972	
	7.9				

DO ANY CUTS HAVE:

Rust/Stain
Burrs
Knife Marks

O K.

Initials

J.P.

AGT400 Coil Summary Report

Jemison Metals -- 60 Inch Loopco Slitter

Work Order: CLV 57342 Coil Number: 67032

Customer Name: ARROW Heat Number: METR04177

Product: G30 Galvanized Sep-11-15 12:47 PM to 1:13 PM (clock 25.9 min/ run 13.1 min) Shift: 1

Average Thickness and Tolerance Data

Target	0.0535 in	Average^	0.0524 in	Average - Target	-0.0011 in (-2.11%)
				Standard Deviation^	0.0006 in (1.18%)
Length	4791 ft			Above High Limit 0.0560 in	0 ft (0.0%)
Width	48.250 in			In Tolerance	4760 ft (99.4%)
Weight	41258 lbs			Below Low Limit 0.0510 in	31 ft (0.6%)

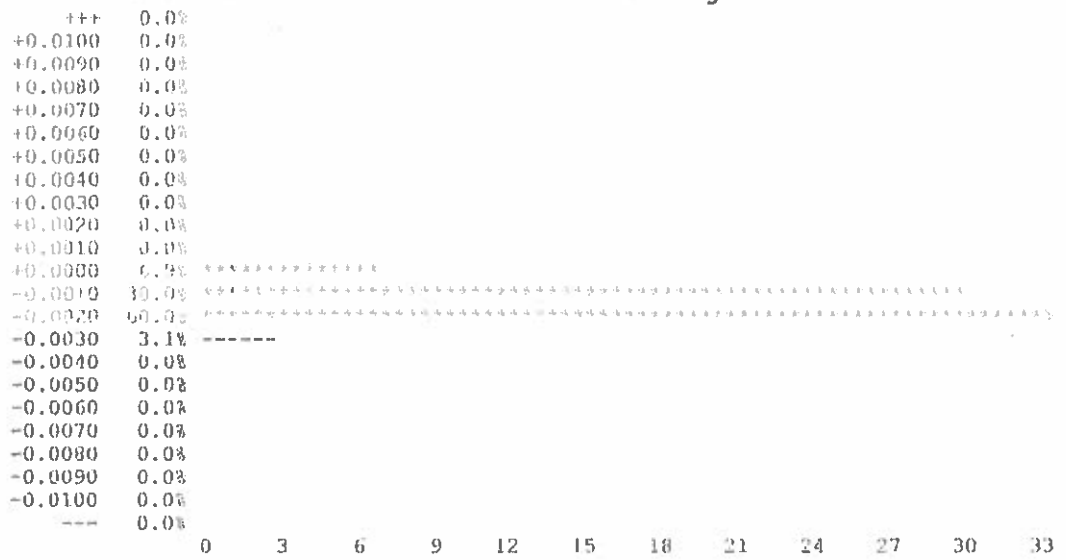
Max Thickness	0.0539 in at 27 ft	Min Thickness	0.0504 in at 2406 ft
Head Scrap	1 ft	Tail Scrap	10 ft

Statistical Process Control Data

Upper Control Limit	0.0543 in	Upper Tolerance Limit	0.0560 in
X Double Bar	0.0524 in	R Bar	0.0019 in
Lower Control Limit	0.0505 in	Lower Tolerance Limit	0.0510 in

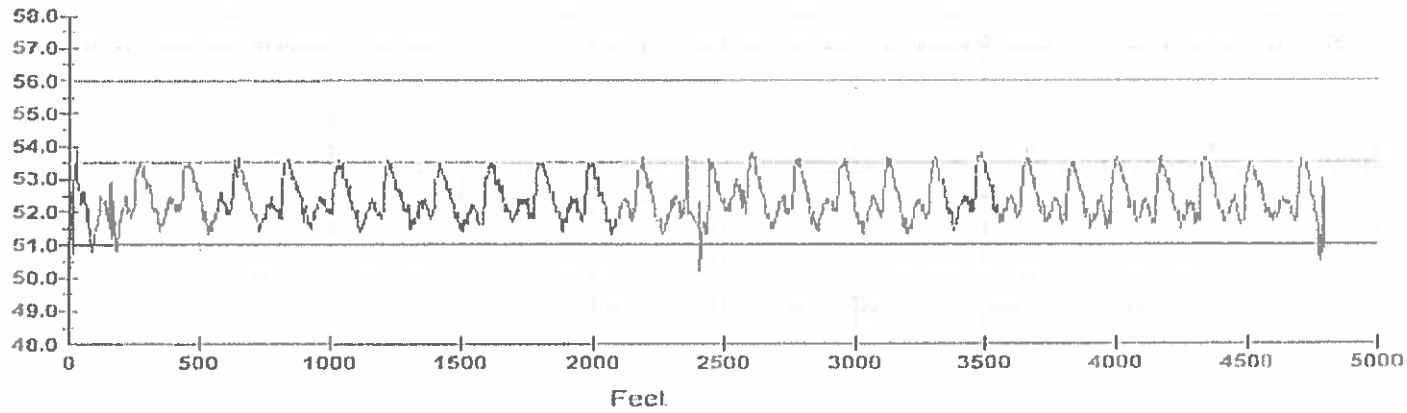
CR 75.6% (Capability Ratio %, 100/CP)
CP 1.323 (Process Capability, HiLim-LoLim/6*Sigma)
CPK 0.725 (Capability vs Limits) TMW Ratio 0.974 (Low Limit/Avg)

Thickness Distribution Relative to the Target



96.9% is within ± 0.0020 in of the target 100.0% is within ± 0.0050 in of the target
100.0% is within ± 0.0100 in of the target 100.0% is within ± 0.0200 in of the target

Thickness vs Length (Coil Number 67032)



Gauge readings provided by Advanced Gauging Technologies, L.L.C. Plain City, OH 43064 USA Tel:(614) 873-6691