

Subject: Cleveland Process Audit

Date: January 15, 2016

Completed By: Steve Busicnki

On January 15, 2016, work order CLV 58755 was ran on the PWC CLO for Jones/Cleveland Hardware. Tag ND68735 was verified prior to loading and use of the coil. The full width of the material was measured with tape measure 7. The coils thickness was measured at both edges and the crown with micrometer Paxson12. All cuts were then measured with calipers SH-1 when first fed through the arbors except the 48" cut where tape measure 7 was used. Thickness was measured again at the end of the job at both edges and the crown before being fed through the arbors using micrometer Paxson12. These procedural checks were completed per CLV-SL-001 procedure and recorded on forms JDM3 and JDM4. Based on the gauge report, 99.80% of the gauge was within the customer range, with 0.20% representing the edge drop off associated with the edge of the steel. Micrometer readings verified material to be within specification.

Measuring Tools:

Calipers – SH-1 last calibration 12/15 calibration due 03/16

Tape – 7 last calibration 09/15 calibration due 09/16

Micrometer – Paxson12 last calibration 12/15 calibration due 01/16

Controlled Documents:

CLV-SL-001 rev date 03/07/13

JDM3 rev date 11/30/15

JDM4 rev date 07/21/11

Part Spec/PO Audit Form

Cust #	6500		Customer	Jones / Cleveland Hardware		
Equip/Plant	PWC CLO		Work Order #	CLV 58755	Date	1/15/2016
Work Order Information			Material to be Used			
			Tag #1	ND68735	Tag #2	
			PO#	22504-001	PO#	
Gauge Range	0.0700 - 0.0800		Gauge Min	.0687 Min	Gauge Min	
Width Range	4.745 - 4.755		Width	60.0000"	Width	
Length Range	Coil					
Rockwell	0.00 - 55.00		Rockwell		Rockwell	
Tensile						
Yield			ND68735			
% Elongation			A1008 Cold Rolled			
Chem Rqmts			Coil CS-Type B			
Other Rqmts						
Olsen	530 Min		.0687Min X			
			60.0000"			
			1pcs 22,920lbs			
Summary						
Actions						
Final Status						

Part Spec/PO Audit Form

Grp/Sz/Grd/Wdth	CRC / 0.0700 / CSB / 4.7500		
Part No.	6500/G035C075JM12		
Actual			
Gauge #1	.071, .072	Gauge #2	
% Gauge In Spec	99.80%	% Gauge In Spec	
Low/High Gauge	0.0694/0.0729	Low/High Gauge	
Average	0.0713	Average	
Width	4.7520	Width	
Length	Coil	Length	
Rockwell	52	Rockwell	
Olsen	580		
Other			

Slit Size Inspection

Date: 1.15.16 Work Order: CU 58755

[illegible]

Yes*/No** (If Yes, Description)

Non-Conformance

Surface

Defects

no

Burrs

30

Shape

Defects

No

Initials

*Need Resolution, OK'd or Segragated

****No Non-Conformance Present**

T.R.

Slitting Order

Date: <i>1.15.16</i>	Customer: <i>JONES / CLEVE. HARDWARE</i>
Work Order #: <i>DLU 58755</i>	Date Run:

Incoming Inspection Checklist

Tag #	Gauge & Width	Type	Tag Wgt.	RB	Olsen	Actual Wgt.	Width	Mic
<i>ND 68735</i>	<i>1068.7 / 60.000</i>	<i>CRC</i>	<i>22.920</i>	<i>52</i>	<i>580</i>	<i>22.444</i>	<i>60 1/8</i>	<i>1071 / .072</i>

Cutting Instructions:

<i>1 cut @ 48.000</i>		<i>1 cut @ 1.500</i>		<i>2 cuts @ 4.750</i>	
Slit Tolerance: <i>+ - .005</i>	Max O.D: <i>STR THRU</i>	Max Skid Wgt: <i>4000</i>	I.D: <i>20"</i>		
Gauge Range: <i>.070 / .078,7</i>		Salesman:			

Special Instructions:

1 Cuts with some defect but okay to ship

NA _____ Cut Size
 _____ Cut Weight
 _____ Defect
 _____ Approved By

2 Cuts Rejected

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

3 Ok to move material for shipment or to Stock

DA _____ Name
1/16/16 _____ Date

AGT400 Coil Summary Report

Jemison Metals -- 60 Inch Loopco Slitter

Work Order: CLV 58755 Coil Number: ND68735

Customer Name: JONESCLEVE Heat Number: NUCNE6516

Product: Cold-Rolled Steel Jan-15-16 11:49 AM to 11:58 AM (clock 8.1 min/ run 7.6 min) Shift: 1

Average Thickness and Tolerance Data

Target	0.0744 in	Average^	0.0713 in	Average - Target	-0.0031 in (-4.14%)
				Standard Deviation^	0.0006 in (0.77%)
Length	1540 ft	Above High Limit	0.0787 in	0 ft (0.0%)	
Width	60.000 in	In Tolerance		1536 ft (99.8%)	
Weight	22444 lbs	Below Low Limit	0.0700 in	4 ft (0.2%)	
Max Thickness	0.0729 in at	953 ft	Min Thickness	0.0694 in at	785 ft
Head Scrap	0 ft		Tail Scrap	0 ft	

Statistical Process Control Data

Upper Control Limit	0.0730 in	Upper Tolerance Limit	0.0787 in
X Double Bar	0.0713 in	R Bar	0.0017 in
Lower Control Limit	0.0696 in	Lower Tolerance Limit	0.0700 in
CR	39.3% (Capability Ratio %, 100/CP)		
CP	2.544 (Process Capability, HiLim-LoLim/6*Sigma)		
CPK	0.743 (Capability vs Limits)	TMW Ratio	0.982 (Low Limit/Avg)

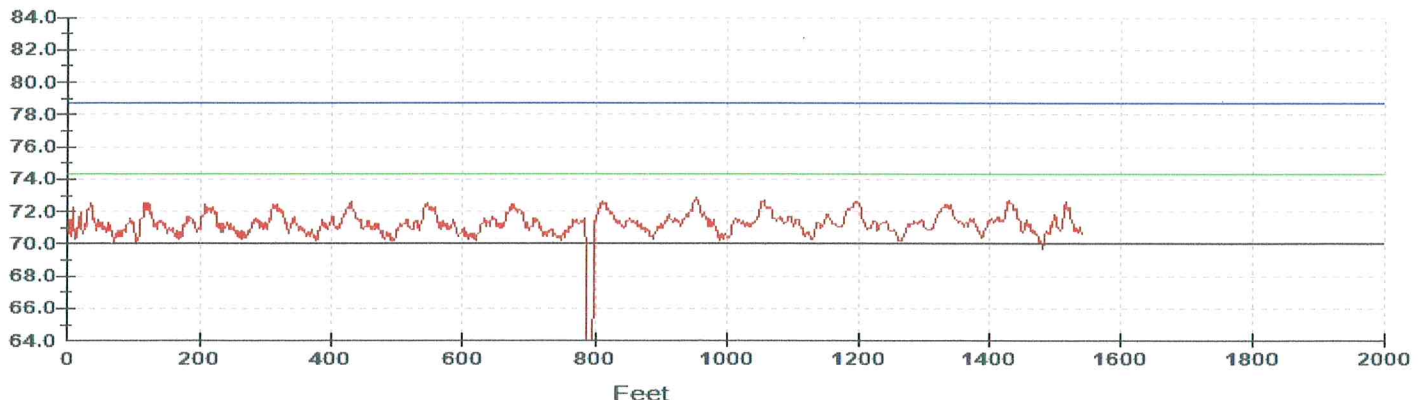
Thickness Distribution Relative to the Target

+++	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	0.0%
-0.0010	0.0%
-0.0020	7.3% *****
-0.0030	40.1% *****>
-0.0040	50.6% *****>
-0.0050	2.0% ----
-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 %

7.3% 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 ND68735)



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