

Subject: Cleveland Process Audit

Date: October 09, 2015

Completed By: Steve Busicnki

On October 09, 2015, work order CLV 57699 was ran on the CR2 for CTB. Tag 216018 was verified prior to loading and use of the coil. One of the first pieces of finished material was measured for length, width, square, flatness and bow. The gauge was then measured with a micrometer at both edges and the crown. This inspection was also completed for the last piece of the first, third, fifth, eighth and ninth bundles. Based on the gauge report, 93.6% of the gauge was within the customer range, with 6.4% representing the edge drop off associated with the edge of the steel. Micrometer readings verified material to be within specification.

Some of the gauge readings along the edge of the material read .0465 with the work orders stated gauge minimum as .0470. The supervisor of the leveling lines approved this to ship to the customer. The sales person was also notified of the gauge.

Part Spec/PO Audit Form

Cust #	5258	Customer	CTB			Grp/Sz/Grd/Wdth	GVS / 0.0507 / FB90CD / 48.0000		
Equip/Plant	PWC CR2	Work Order #	CLV 57699	Date	10/9/2015	Part No.	RS18017		
Work Order Information		Material to be Used				Actual			
		Tag #1	216018	Tag #2		Gauge #1	.0465,.047,.0465	Gauge #2	
		PO#	21672-001	PO#		% Gauge In Spec	93.60%	% Gauge In Spec	
Gauge Range	0.0470 - 0.0570	Gauge Min	.0464 Min	Gauge Min		Low/High Gauge	0.0461,0.0489	Low/High Gauge	
Width Range	48.0000 - 48.1875	Width	48.0000"	Width		Average	0.0477	Average	
Length Range	120.0000 - 120.5000					Width	48.062,48.093	Width	
Rockwell		Rockwell		Rockwell		Length	120.1250	Length	
Tensile						Rockwell		Rockwell	
Yield		A653 Galvanized							
% Elongation		Coil FS-B							
Chem Rqmts		*90 CT Dry							
Other Rqmts		.0464 Min X							
Bow	0.00 - .12	48.0000"				Other			
Flatness	0.00 - .12	1pcs 37,530lbs							
Summary									
Actions									
Final Status									

Quality Checklist

Date: 10-21-05 Customer: CTS Work Order # 57695 Machine # CR2
 Master Tag # 216018 Tag Weight: 37,530 Type: GJC-18L-FB90 Ordered RB:

Skid Tag#	Gauge Tolerance			Width Tol:	Length Tol:	Square Tol:	Flatness Tol:	Inspected By	Date
	Edge	Crown	Edge	Width	Length	Square	Flatness		
64143	0465	047	0465	48.062	120.125	031	<120	James	10-09-2015
Last piece of 1st bundle	0465	047	0465	48.062	120.125	031	<120	James	

Skid Tag#	Edge	Crown	Edge	Width	Length	Square	Flatness	Inspected By	Date
64145	0465	047	0465	48.097	120.125	031	<120	James	10-9
64147	0465	047	0465	48.093	120.125	031	<120	James	
64150	047	048	047	48.093	120.125	031	<120	James	

Skid Tag#	Edge	Crown	Edge	Width	Length	Square	Flatness	Inspected By	Date
217057	047	048	047	48.061	120.125	031	<120	James	
Last piece of last bundle	047	048	047	48.061	120.125	031	<120	James	

AGT400 Coil Summary Report

Jemison Metals -- 75 Inch Red Bud CTL Line

Work Order: 57699 Coil Number: 216018

Customer Name: CTB Heat Number: SHCNLK1574021 Vendor: NLMK

Product: G90 Galvanized Oct-9-15 11:36 AM to 1:13 PM (clock 96.9 min/ run 29.6 min) Shift: 1

Average Thickness and Tolerance Data

Target	0.0520 in	Average*	0.0477 in	Average - Target	-0.0043 in (-8.31%)
				Standard Deviation*	0.0005 in (0.90%)
Length	4748 ft	Above High Limit	0.0570 in	0 ft (0.0%)	
Width	48.125 in	In Tolerance		4444 ft (93.6%)	
Weight	37128 lbs	Below Low Limit	0.0470 in	310 ft (6.4%)	
Max Thickness	0.0489 in at	4464 ft	Min Thickness	0.0461 in at	4083 ft
Head Scrap	0 ft		Tail Scrap	0 ft	

Statistical Process Control Data

CR	28.2%	(Capability Ratio %, 100/CP)		
CP	3.546	(Process Capability, HiLim-LoLim/6*Sigma)		
CPK	0.482	(Capability vs Limits)	TMW Ratio	0.986 (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	0.0%												
-0.0030	0.0%												
-0.0040	33.9%	*****>											
-0.0050	59.7%	*****>											
-0.0060	6.4%	-----											
-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	%

0.0% is within ± 0.0020 in of the target 93.6% 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 216018)

