

Process Audit Summary:

9/30/15 Sumter Slitter Job# 58387

Performed by: Beverly Clem

Slitter job to produce 12.5000" width coils for Amsted Rail from master tag NB47720.

All procedural coil identification checks followed.

Four coils produced at 12.5000". All coils produced within max lifts and packaged and identified correctly per W/O instructions.

All procedural dimensional checks (Gauge-width-Rockwell ect.) were done in excess of required intervals. Gauge in spec for 96.1% with spikes to 0.765, (.076" max requirement) ok per Patrick Macias. Low gauge readings for 0.9% due to a Gamma malfunction (readings off edge of sheet due to speed adjustment). Gamma speed adjustment made after run to correct gamma info for future runs.

No follow up required.

Part Spec/PO Audit Form

Cust #	1761	Customer	AMSTED RAIL			Grp/Sz/Grd/Wdth	POC/0.0720/DSB/12.5000		
Equip/Plant	SSL	Work Order #	58387	Date	9/30/2015	Part No.	PART 742		
Work Order Information						Actual			
		Tag #1	NB47720	Tag #2		Gauge #1	.072 .074 .074	Gauge #2	
		PO#	017225-001	PO#		% Gauge In Spec	96%	% Gauge In Spec	
Gauge Range	0.0720 - 0.0760	Gauge Min	0.0750	Gauge Min		Low/High Gauge	.0703/.0765	Low/High Gauge	
Width Range	12.47 - 12.53	Width	54.5000"	Width		Average	0.0747	Average	
Length Range	N/A					Width	12.4950	Width	
Rockwell	30.00 - 85.00	Rockwell	65	Rockwell		Length	N/A	Length	
Tensile	46000	TENS	56.5			Rockwell	59/60	Rockwell	
Yield	35000.00 - 45000.00	YIELD	43.5						
% Elongation	33	ELONG	35						
Chem Rqmts	N/A								
Other Rqmts	N/A								
						Other			
Summary									
Actions									
Final Status									

AGT400 Coil Summary Report

Jemison Metals -- 60 Inch Pro-Eco Slitter

Work Order: SMT58387 Coil Number: NB47720

Customer Name: AMSTED Heat Number: NUB2510045 Vendor: NB

Product: H.R.P.O. Steel Sep-30-15 13:12 to 13:51 (clock 38.9 min/ run 38.9 min) Shift: 1

Average Thickness and Tolerance Data

Target	0.0740 in	Average^	0.0747 in	Average - Target	0.0007 in (0.91%)
				Standard Deviation^	0.0010 in (1.30%)
Length*	17598 ft	Above High Limit	0.0760 in	529 ft (3.0%)	
Width	55.250 in	In Tolerance		16911 ft (96.1%)	
Weight	247417 lbs	Below Low Limit	0.0720 in	158 ft (0.9%)	

Max Thickness	0.0765 in at	2848 ft	Min Thickness	0.0703 in at	10772 ft
Head Scrap	0 ft		Tail Scrap	0 ft	

Statistical Process Control Data

Upper Control Limit	0.0776 in	Upper Tolerance Limit	0.0760 in
X Double Bar	0.0747 in	R Bar	0.0029 in
Lower Control Limit	0.0718 in	Lower Tolerance Limit	0.0720 in

CR 144.0% (Capability Ratio %, 100/CP)

CP 0.694 (Process Capability, HiLim-LoLim/6*Sigma)

CPK 0.462 (Capability vs Limits) TMW Ratio 0.964 (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	4.8% *****
+0.0010	40.5% *****>
+0.0000	29.7% *****
-0.0010	21.0% *****
-0.0020	3.0% *****
-0.0030	0.5% -
-0.0040	0.3% -
-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 %

99.2% 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 NB47720)

