

Subject: Cleveland Process Audit

Date: August 14, 2015

Completed By: Steve Busienki

On August 14, 2015, work order CLV 56779 was ran on the CLO for Shiloh. Tag 66831 was verified prior to loading and use of the coil. The material was measured for gauge with a micrometer at both edges and the crown before being fed through the arbors. The width was measured with a measuring tape when fed through and edge trimmed. The same steps were taken with the second coil and was also measured for gauge at the end of the coil with a micrometer. The gauge was measured at the beginning of the third coil prior to being fed through the arbors. The operator stated that he measured the width of the coil with a tape measure when fed through and edge trimmed. Based on the gauge report, 100.0% of the material was within specification for the customer.

Part Spec/PO Audit Form

[illegible]

Slit Size Inspection

Date: Aug 14, 2015

Work Order: CH56779

Size of Cuts	Beginning		(Paxson Only) Middle Mics	End	
	Width	Mics		Width	Mics
50.000	50. "	.0665		50. "	.066
		.067			.067
50.000	50. "	.0665		50. "	.065
		.067			.0655
50.000	50. "	.067		50. "	.066
		.0675			.067

DO ANY CUTS HAVE:

Rust/Stain

Burrs

Knife Marks

OK

Initials

SL

AGT400 Coil Summary Report

Jemison Metals -- 60 Inch Loopco Slitter

Work Order: CLV 56779 Coil Number: 66831

Customer Name: SHILOH Heat Number: AKS652254

Product: Cold-Rolled Steel Aug-14-15 8:32 AM to 8:45 AM (clock 13.3 min/ run 11.8 min) Shift: 1

Average Thickness and Tolerance Data

Target 0.0680 in Average 0.0683 in Average - Target 0.0003 in (0.46%)
Standard Deviation 0.0005 in (0.69%)

Length 3307 ft Above High Limit 0.0710 in 0 ft (0.0%)
Width 50.500 in In Tolerance 3307 ft (100.0%)
Weight 38883 lbs Below Low Limit 0.0650 in 0 ft (0.0%)

Max Thickness 0.0696 in at 229 ft Min Thickness 0.0668 in at 87 ft
Head Scrap 1 ft Tail Scrap 10 ft

Statistical Process Control Data

Upper Control Limit 0.0697 in Upper Tolerance Limit 0.0710 in
X Double Bar 0.0683 in R Bar 0.0014 in
Lower Control Limit 0.0669 in Lower Tolerance Limit 0.0650 in

CR 47.0% (Capability Ratio %, 100/CP)

CP 2.128 (Process Capability, HiLim-LoLim/6*Sigma)

CPK 1.908 (Capability vs Limits) TMW Ratio 0.952 (Low Limit/Avg)

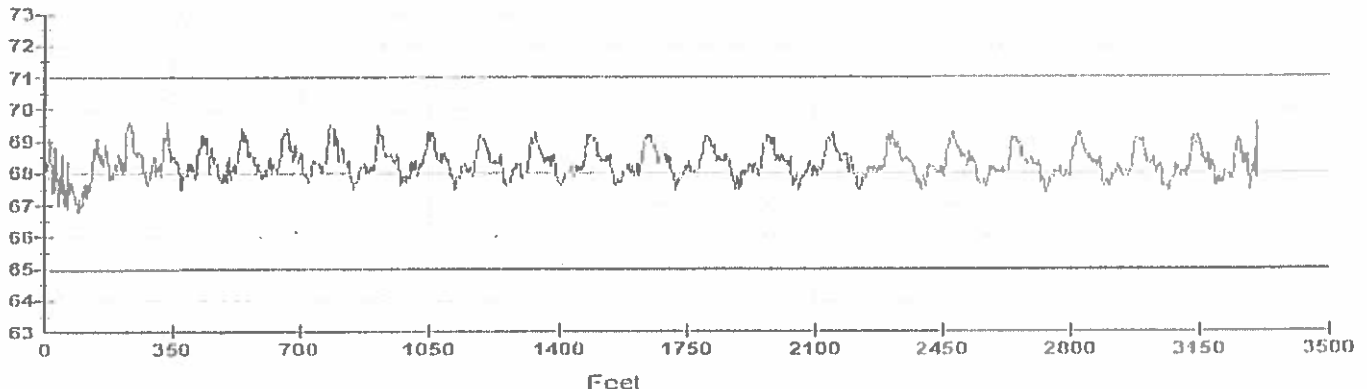
Thickness Distribution Relative to the Target

+++	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	17.1%
+0.0000	65.0%
-0.0010	21.8%
-0.0020	0.0%
-0.0030	0.0%
-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 %

100.0% 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 66831)



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

AGT400 Coil Summary Report

Jemison Metals -- 60 Inch Loopco Slitter

Work Order: CLV 56779 Coil Number: 66875

Customer Name: SHILOH Heat Number: MTC4166452

Product: Cold-Rolled Steel Aug-14-15 9:17 AM to 9:31 AM (clock 13.4 min/ run 11.7 min) Shift: 1

Average Thickness and Tolerance Data

Target 0.0680 in Average^ 0.0684 in Average - Target 0.0004 in (0.53%)
Standard Deviation^ 0.0005 in (0.77%)

Length 3254 ft Above High Limit 0.0710 in 0 ft (0.0%)
Width 50.500 in In Tolerance 3254 ft (100.0%)
Weight 38288 lbs Below Low Limit 0.0650 in 0 ft (0.0%)

Max Thickness 0.0700 in at 64 ft Min Thickness 0.0670 in at 175 ft
Head Scrap 1 ft Tail Scrap 13 ft

Statistical Process Control Data

Upper Control Limit 0.0699 in Upper Tolerance Limit 0.0710 in
X Double Bar 0.0684 in R Bar 0.0016 in
Lower Control Limit 0.0668 in Lower Tolerance Limit 0.0650 in

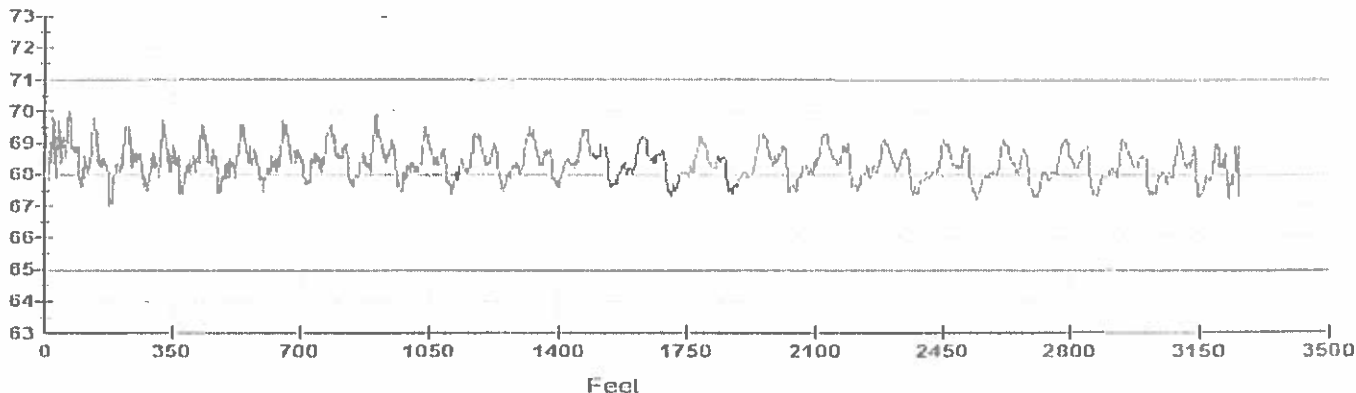
CR 52.0% (Capability Ratio %, 100/CP)
CP 1.923 (Process Capability, HiLim-LoLim/6*Sigma)
CPK 1.692 (Capability vs Limits) TMW Ratio 0.951(Low Limit/Avg)

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	23.0
0.0000	64.2
-0.0010	21.4
-0.0020	0.0%
-0.0030	0.0%
-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%

100.0% 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 66875)



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

AGT400 Coil Summary Report

Jemison Metals -- 60 Inch Loopco Slitter

Work Order: CLV 56779 Coil Number: 66903

Customer Name: SHILOH Heat Number: AKS152975

Product: Cold-Rolled Steel Aug-14-15 9:57 AM to 10:31 AM (clock 34.8 min/ run 11.8 min) Shift: 1

Average Thickness and Tolerance Data

Target 0.0689 in Average 0.0686 in Average - Target 0.0006 in (0.88%)
Standard Deviation 0.0005 in (0.66%)

Length 3387 ft Above High Limit 0.0710 in 0 ft (0.0%)
Width 50.500 in In Tolerance 3387 ft (100.0%)
Weight 39985 lbs Below Low Limit 0.0650 in 0 ft (0.0%)

Max Thickness 0.0703 in at 3385 ft Min Thickness 0.0673 in at 97 ft
Head Scrap 1 ft Tail Scrap 10 ft

Statistical Process Control Data

Upper Control Limit 0.0700 in Upper Tolerance Limit 0.0710 in
X Double Bar 0.0686 in R Bar 0.0014 in
Lower Control Limit 0.0673 in Lower Tolerance Limit 0.0650 in

CR 45.0% (Capability Ratio %, 100/CP)

CP 2.222 (Process Capability, HiLim-LoLim/6*Sigma)

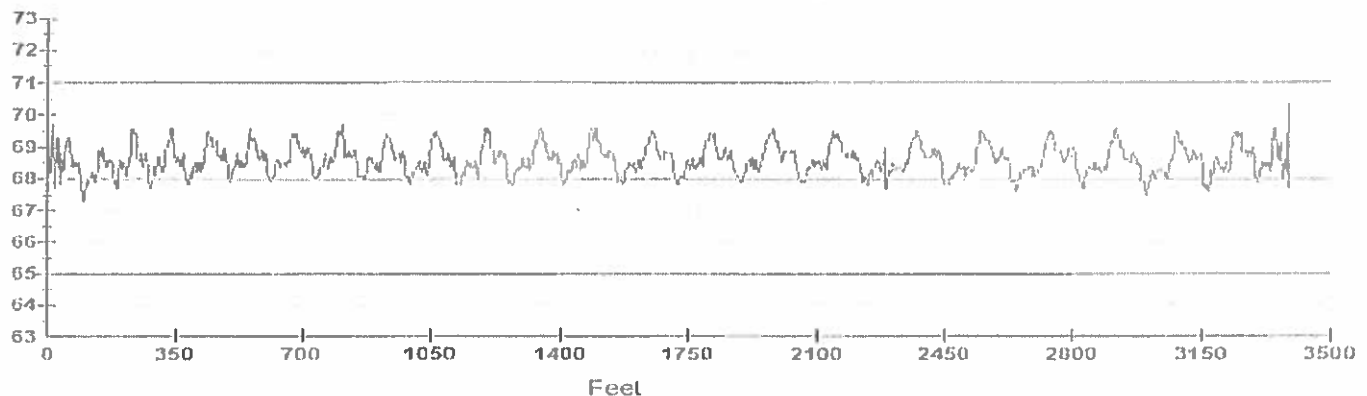
CPK 1.778 (Capability vs Limits) TMW Ratio 0.948 (Low Limit/Avg)

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 20.1%
+0.0000 12.1%
-0.0010 2.2%
-0.0020 0.9%
-0.0030 0.0%
-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%

100.0% 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 66903)



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

Slitting Order

Date: 8-14-15	Customer: Sh.loh
Work Order #: 06150779	Date Run: Aug. 14, 2015

Incoming Inspection Checklist

Tag #	Gauge & Width	Type	Tag Wgt.	RB	Olsen	Actual Wgt.	Width	Mic
06831	065X50.375	060	44,300			44,300	50 7/16	060.5
06875			45,000			45,000	50 7/16	060.5
06903			44,500			44,500	50 7/16	060.7
								060.5

Cutting Instructions: 1 cut 50.000

Slit Tolerance: 4.030-0	Max O.D: STY hel	Max Skid Wgt:	I.D: 24"
Gauge Range: 065 / 071	Salesman:		

Special Instructions:

1 Cuts with some defect but okay to ship

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

2 Cuts Rejected

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

3 Ok to move material for shipment or to Stock

(Signature) _____ Name
 8/14/15 _____ Date