**Process Audit Summary:** 

3/12/15 Sumter Slitter PN 55324,

Performed by: Patrick Macias

Slit job to rewrap two 14.8" FG tags (887151, 887152) for Precision Tool to correct egg shape. Also to be viewed by Quality personnel due to recent rejection for camber.

All procedural identification checks followed.

All procedural dimensional checks (Gauge-width) were done manually on both coils all found to be within customer requirements.

Gamma was only set up on coil 887152 and 99.6% of coil to be found within gauge. Four foot of length found to be up to .0006" over gauge Okayed by quality.

Surface check showed no irregularities.

No camber requirements were on the job. Coil 887151 was found to have >.250" of camber and put into SRJ.

### Follow up:

- 1. Precision Tool part spec for this part and part PTS-1324 which also had a customer complaint for camber reviewed.
  - Follow up 1 completed: Camber spec of .12" added to both specs and verified by quality. Camber requirements also added to open jobs by quality (3/13/15 PVM).
- 2. Gamma was not set by operator on first coil as this was a rewrap of a previously ran coil for the same part. Quality requested it be used on second coil. Measurements were not recorded on FOP015 for same reason. Quality to follow up with Operational Management to discuss this practice.

**Process Audit Summary:** 

Follow up on:

3/12/15 Sumter Slitter PN 55324,

Performed by: Patrick Macias

# Follow up #2

Gamma was not set by operator on first coil as this was a rewrap of a previously ran coil for the same part. Quality requested it be used on second coil. Measurements were not recorded on FOP015 for same reason. Quality to follow up with Operational Management to discuss this practice.

Discussed with VP of Operations Randy Richards on 3/23/15;

As long as the respin is from a job that was cut to a part spec and is for the same spec and is not spinning to a different set of specs this is considered an acceptable practice.

# Part Spec/PO Audit Form

Cust #	2101	Customer	Precision Tool			Grp/Sz/Grd/wdth	Grp/Sz/Grd/Wdth POC/11A/DSB/14.8"		
Equip/Plant	SLITTER/SUMTER	Work Order #	55324	Date	3/12/2015	Part No.	PTS-1334		
							:		
Work 0	Work Order Information		Material to be Used	o be Used		The Control of the Co	Action of the second second second Act	Actual	the state of the same of the same
		Tag #1	887151	Tag #2	887152	Gauge #1	.119"	Gauge #2	.120"
		PO#	SMT-15824	PO#	SMT-15824	% Gauge in Spec	100%	% Gauge in Spec	99.6
Gauge Range	.115"121"	Gauge Min	.115"	Gauge Min	.115"	Low/High Gauge	.121"/.118"	Low/High Gauge	.1216"/.1179"
1700	14.795"-14.805"	Width	14.8"	Width	14.8"	Average	0.1195	Average	0.1198
Length Range	NA					Width	14.8000	Width	14.8000
Rockwell	02-09	Rockwell		Rockwell		Length	NA	Length	NA
Tensile	NA					Rockwell	61	Rockwell	61
Yield	NA								
% Elongation	NA								
Chem Rqmts	NA								
Other Rqmts	NA					3.3.24			
						Other			
Summary									
Section of the Control of the Contro									
Actions					!				
Final Status					!				
Constitution and the second								_	

# AGT400 Coil Summary Report

# Jemison Metals -- 60 Inch Pro-Eco Slitter

Work Order: SMT55324 Coil Number: 887152

### Customer Name: PTS Heat Number: M52324 Vendor: NB

Product: H.R.P.O. Steel Mar-12-15 14:21 to 14:28 (clock 7.6 min/ run 2.8 min) Shift: 1

```
Average Thickness and Tolerance Data
  Target 0.1180 in
                          Average<sup> 0.1198</sup> in
                                                    Average - Target
                                                                             0.0018 in (1.48%)
                                                                             0.0006 in ( 0.52%)
                                                    Standard Deviation^
                                                                0.1210 in
                                                                                   4 ft (
  Length
                1114 ft
                                         Above High Limit
                                                                                           0.48)
  Width
              14.800 in
                                         In Tolerance
                                                                               1109 ft ( 99.6%)
  Weight
                6726 lbs
                                         Below Low Limit
                                                                0.1150 in
                                                                                  0 ft ( 0.0%)
  Max Thickness 0.1213 in at
                                      206 ft
                                                     Min Thickness 0.1174 in at
                                                                                         686 ft
  Head Scrap
                                                     Tail Scrap
  Statistical Process Control Data
  Upper Control Limit
                            0.1216 in
                                           Upper Tolerance Limit
                                                                          0.1210 in
                                                                          0.0018 in
  X Double Bar
                            0.1198 in
                                           R Bar
  Lower Control Limit
                            0.1179 in
                                           Lower Tolerance Limit
                                                                          0.1150 in
         61.0% (Capability Ratio %, 100/CP)
  CP
         1.639
                 (Process Capability, HiLim-LoLim/6*Sigma)
  CPK
         0.683
                 (Capability vs Limits)
                                                     TMW Ratio
                                                                       0.960(Low Limit/Avg)
  Thickness Distribution Relative to the Target
         0.0%
+0.0100
         80.0
+0.0090
         0.0%
+0.0080
         0.0%
+0.0070
         0.0%
+0.0060
         80.0
+0.0050
         0.0%
+0.0040
         0.0%
+0.0030
         0.6%
40.0020
        39.2%
+0.0010
        51.1%
+0.0000
         0.4%
         0.7% *
-0.0010
-0.0020
         0.0%
-0.0030
         0.0%
         0.0%
-0.0040
-0.0050
         0.0%
-0.0060
         0.0%
         0.0%
-0.0070
         0.0%
-0.0080
-0.0090
         0.0%
-0.0100
         0.0%
         0.0%
                         6
                              9
                                         15
                                                   21
                                                         24
                                                              27
                                                                    30
                                                                         33
 99.4% 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 (Coll Number 887152)
123
122
121
120
119
116
117
110
115
113
            150
                     300
                                                           000
                               450
                                        600
                                                  760
                                                                              1200
                                                                                                 1500
                                                                     1050
                                                                                        1250
```

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