

Process/Product Audit Checklist

Cust #: <u>8091</u> Customer: <u>Quaker</u> GRP/Size/GRD/Width: <u>CRS/0.0300/CSB/8.9000</u>				
PWC: <u>CR2</u> W/O#: <u>CLV 60032</u> Date: <u>04/26/16</u> Part #(s): <u>8091/3126R RM</u>				
Gauge Range: <u>0.0270-0.0330</u> Actual Gauge: <u>.0278/.028</u> Width Range: <u>8.87-8.93</u> Width Actual: <u>8.890-8.906</u>				
Length Range: <u>90.47-90.53</u> Length Actual: <u>90.50</u> Other: _____ Other Actual: _____				
Other: _____ Other Actual: _____ Other: _____ Other Actual: _____				
Item	YES	NO	N/A	Comments/Action Taken (Required for NO)
Process Inspection Sheets filled out according to <u>frequency</u> and <u>sampling</u> required?	X			
Correct raw material type and size?	X			Tag(s) to use: <u>219409</u> Tag(s) used: <u>219409</u>
Setup performed according to W/O?	X			
Product is acceptable according to customer-specific requirements? [Fab: Is the Part Print Present & the correct Revision? Are required measurements documented?]	X			[Fab: Print Rev: _____, W/O Rev: _____, Part Spec Rev: _____]
Packaging is acceptable according to customer-specific requirements?	X			
Visual Inspection performed and product meets requirements?	X			
Out of spec noted, with actions taken?			X	
Non-conforming material put into reject warehouse and physically put into non-conforming area?			X	
Required gages available & functional?	X			
All Gages Calibrated (List in Comments)	X			Gages Observed (list last calibration and when due) Mic: ASP016 Last Cal: 03/16 Due: 04/16 Calipers: 120 Last Cal: 03/16 Due: 06/16 Tape: 1 Last Cal: 09/15 Due: 09/16
Housekeeping: Machine/Floor clean? Loose tags & paperwork cleaned up?	X			
Required PPE being worn?	X			
Forms are the latest revision per Quality Intranet?	X			List Forms (Observed Rev vs Intranet Rev) Quality Checklist Observed: Level 6 11/30/12 JDM13 Intranet: Level 6 11/30/12
Hardcopy Controlled Documents are listed on Quality Intranet by location?	X			List Documents and their Location: Quality Policy Rev. 0 JDM 200 05/15/2010

Quality Checklist

Date: 4-26-16	Customer: Quaker	Work Order # 40032	Machine # 2
Master Tag # 219409	Tag Weight: 12,310	Type: CRC	Ordered RB: MS

Skid Tag#	Gauge Tolerance			Width Tol:	Length Tol:	Square Tol:	Flatness Tol:	Inspected By	Date
	Edge	Crown	Edge	Width	Length	Square	Flatness		
25789	0278	028	028	8.9 906 894 903	± 030 90.5 Length	me 062	me <120	Jmmc	4-26
Last piece of 1st bundle	0278	028	028	8.9 906 894 903	90.50	062	<120	Jmmc	4-26

Skid Tag#	Edge	Crown	Edge	Width	Length	Square	Flatness	Inspected By	Date

Skid Tag#	Edge	Crown	Edge	Width	Length	Square	Flatness	Inspected By	Date

AGT400 Coil Summary Report

Jemison Metals -- 75 Inch Red Bud CTL Line

Work Order: 60032 Coil Number: 219409

Customer Name: QUAKER Heat Number: MTC4138366 Vendor: MITTAL CLEVE

Product: Cold-Rolled Steel Apr-26-16 8:56 AM to 9:23 AM (clock 27.7 min/ run 7.0 min) Shift: 1

Average Thickness and Tolerance Data

Target 0.0300 in Average* 0.0280 in Average - Target -0.0020 in (-6.77%)
Standard Deviation* 0.0002 in (0.67%)

Length 720 ft Above High Limit 0.0330 in 0 ft (0.0%)
Width 55.500 in In Tolerance 720 ft (100.0%)
Weight 3808 lbs Below Low Limit 0.0270 in 0 ft (0.0%)

Max Thickness 0.0283 in at 76 ft Min Thickness 0.0274 in at 27 ft
Head Scrap 30 ft Tail Scrap 7 ft

Statistical Process Control Data

CR 20.0% (Capability Ratio %, 100/CP)
CP 5.000 (Process Capability, HiLim-LoLim/6*Sigma)
CPK 1.617 (Capability vs Limits) TMW Ratio 0.965 (Low Limit/Avg)

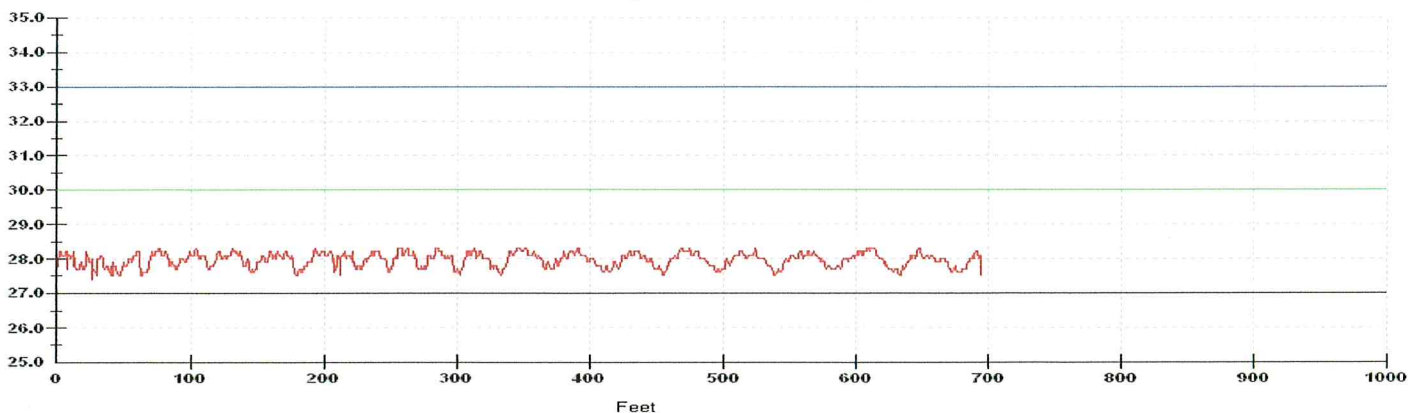
Thickness Distribution Relative to the Target

+++ 0.0%
+0.0050 0.0%
+0.0045 0.0%
+0.0040 0.0%
+0.0035 0.0%
+0.0030 0.0%
+0.0025 0.0%
+0.0020 0.0%
+0.0015 0.0%
+0.0010 0.0%
+0.0005 0.0%
+0.0000 0.0%
-0.0005 0.0%
-0.0010 0.0%
-0.0015 0.0%
-0.0020 60.3% *****>
-0.0025 39.7% *****>
-0.0030 0.0%
-0.0035 0.0%
-0.0040 0.0%
-0.0045 0.0%
-0.0050 0.0%
--- 0.0%

0 3 6 9 12 15 18 21 24 27 30 33 %

0.0% is within ± 0.0010 in of the target 100.0% is within ± 0.0025 in of the target
100.0% is within ± 0.0050 in of the target 100.0% is within ± 0.0100 in of the target

Thickness vs Length (Coil Number 219409)



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