



Process monitoring and analytics for decision support



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Reduce Recall Risks

- Process monitoring
 - Safety
 - Quality
- Analytics
 - Trend
 - Alerts
- Continuous Process Improvement

Data Collection & Reporting

INSPECTION RESULTS

Test	Result
Ferrous Sample Size	3.0
Ferrous Metal Check	OK
Non-Ferrous Sample Size	3.5
Non-Ferrous Metal Check	OK
Stainless Steel Sample Size	3.5
Stainless Steel Metal Check	OK

SHIPMENT APPROVAL PAGE

Northwest Analytical, Inc., Portland, OR
HACCP Monitoring - Metal Detector Sheet
 Rev. 12 01405

Records Verified By: VJONAN203
 Date: 1/23/2008 12:00:00 AM SMT: FIRST
 Pre-shipment Review By: Sage Yost

Entry Time	QA Tech	Item Code	3.0 Ferrous Rejected	4.0 Non-Ferrous Rejected	4.0 Stainless Rejected	Deficiency Y/N	Observation Verba	Observation Time	Observation Tech
1/23/2008 11:50:00 AM	Gen	88701	4	0	0	NO	ACCEPTABLE	1/23/2008 11:50:00 AM	Emma K.

Sticky Note
 Administrator
 This document was signed with the following issues.....

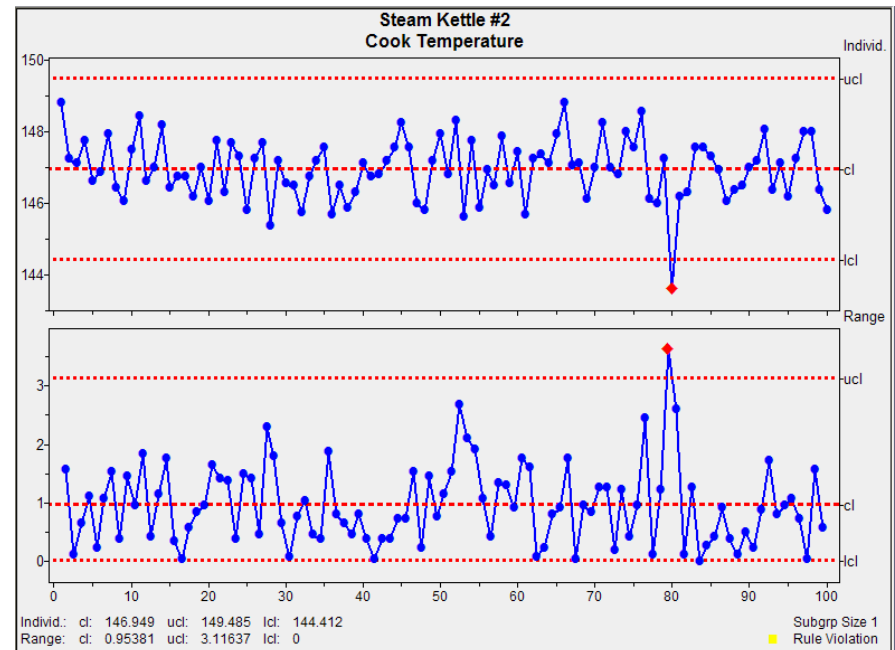
Notes: The HACCP process has following:
 1. The Operational status of metal detector, is non-operational, write you in Def Column and Write Corrective Action Form (CAPA, 2)
 Direct Observations to be recorded as either Acceptable or Unacceptable. If unacceptable then a Corrective Action form must be completed.
 Direct Observations to be recorded as either Acceptable or Unacceptable. If unacceptable then a Corrective Action form must be completed.
 All products from each pallet to be run for 100%. If no meter found at the moment, if meter is found, all products from pallet to be inspected 100%.
 Read always for instructions under 1.100. Item: 802.20.10. Not to be signed without permission. [Signature in HACCP Monitor]

Alerts & Alarms

Station	Violations			Actions	
Steam Kettle # 1	Specs	SPC	Rule	Chart	Summary
Steam Kettle # 2	Specs	SPC	Rule	Chart	Summary
Steam Kettle # 3	Specs	SPC	Rule	Chart	Summary
Steam Kettle # 4	Specs	SPC	Rule	Chart	Summary
Steam Kettle # 5	Specs	SPC	Rule	Chart	Summary
Steam Kettle # 6	Specs	SPC	Rule	Chart	Summary
Metal Detector #1	Specs	SPC	Rule	Chart	Summary
Metal Detector #2	Specs	SPC	Rule	Chart	Summary

Real-Time Operational Decision Support Analytics

- SPC is the appropriate technology and methodology to meet the current needs of manufacturing that call for data analysis to provide:
- Ability to measure ROI on systems investment
- Timely and effective analysis summaries and reporting
- Predictive capability
- Identifiable benefits (lower costs, higher yields)
- Support immediate actionable decision processes based upon results



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- Reduce Recall Risk
 - Process Monitoring – safety & quality
 - Analysis – trend/alerts
 - Feedback to system/awareness/response; refer to PRP talk
 - CAPA – management visibility
 - Talk to appropriate levels of company – role specific visualization
 - Risk & liability

Process Aware Enterprise



- Sometimes our production systems are not up to snuff.
- We need to know that and make the corrections and be able to document it.

ACCA / CAPA

- Record Error
- Correction
- Prevention
- Visibility to Management
- Support Continuous Improvement

Risk Reduction

- Know what is happening
- Make it better, keep ahead of entropy
- Know when it is going bad
- Know when you are at risk of shipping bad stuff
- Know that you have corrected the problem
- Know that you have prevented reoccurrence
- Demonstrate that you have done it – process transparency



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ANNUAL MEETING + FOOD EXPO



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