

# Avoiding Escapes

*The information in this presentation is related to BNC F 021, Project Set-up form & the Best Practice Library*

**WE MUST ACCEPT HUMAN  
ERROR AS INEVITABLE -  
AND DESIGN AROUND  
THAT FACT**

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# Visual Inspection Challenges

- ▶ Visual inspection requires the inspector to do two things:
  1. Understand the instructions given
  2. Determine if the product is good or bad based on those instructions



- ▶ Inspectors that do not have the instructions in front of them have to remember what the standard is and then compare against that mental picture....all with many distractions

# Visual Inspection Challenges

- ▶ Watch for highly repetitive & rhythmic sorts
  - Become numbed/hypnotized by the monotony
  - Often “simple” sorts
- Remedies
  - Break up the rhythm with pauses
  - Job rotation
  - Increase noticeability of defects

# Visual Inspection Challenges

- ▶ Watch for criteria that drift over time
  - Products rejected at one time are accepted at another
  - Experiencing exceptionally high-quality parts leads inspector to raise standards
  - Experiencing exceptionally low-quality parts leads inspector to lower standards
- Remedies
  - Clear limit samples
  - Calibration of inspectors after each change using samples and quizzing comprehension
  - More auditing

# Visual Inspection Challenges

- ▶ Be aware of individual abilities
  - Visual ability
  - Intelligence and comprehension
  - Ability to physically perform tasks
- ▶ Consider known hurdles to good performance
  - Defect rate (accuracy improves as defect rate goes up)
  - Defect type
  - Number of defects occurring simultaneously
  - Time allowed for inspection
  - Frequency of rest
  - Objectivity of conformance standards

# And, Finally...

- ▶ If we set up a job with best practices in mind, we can reduce the potential for escapes
- ▶ Use comparison or limit samples/photos at the workstation
- ▶ Use audible or tactile cues
- ▶ Add lighting or magnification
- ▶ Standardize inspection methods, including viewing angle, distance, background
- ▶ Design process to fight fatigue and environmental issues

Click on the button below to take the quiz for this session.

**QUIZ**