Pneumatic Safety

Ross Controls
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Global Safety Manager
Lockout Standards

Requirements (OSHA)

- A manually operated valve
- Not used for any other function
- Located outside of hazardous areas
- Easily identified and operated
- Tamper resistant
Lockout Standards

Best Practice (ANSI, PMMI, CSA)

- Only lockable in off position
- Easy to operate
  - eg. a simple push/pull action
- Visible pressure indication

- Full size exhaust

Pop up pressure indicator
Pneumatic Lockout

Best Practice (ANSI B11.0)
- Full diameter exhaust
  - Rapid release of stored energy
Pneumatic Lockout

- Best Practice (ANSI B11.0)
  - Full diameter exhaust (rapid release of stored energy)
    - 8 Cubic feet (60 gallons) at 100 psi
      - Full exhaust = 35 seconds
      - Bleed port > 11 minutes
Lockout Standards

Valves should be:
• Accessible
• Suitable for environment
  • 316 SS available
• Easily identified

Available with ¼” – 2” ports
Alternative Measures

- Production related
- Improve safety & productivity
- “Monitored Power Systems” ok’d by OSHA
  ◦ Requires control reliable systems
Alternative Measures

- Control reliable system
  - Equivalent to category 3 - 4 systems
    - Redundant
    - Monitored
    - Fail to a safe conditions
  - Safety does not end with the wire
Pneumatic Safety

- Ross valves meet all global requirements
- Safety and productivity improvements