Agenda

- Alarm Standards and Basics
- PCS Landscape
- MES Basics and Document Management
- The Glue that Binds – ARP
Alarm Standards and Basics

- Engineering Equipment and Materials User Association
- Alarm Rationalization
Alarm Standards and Basics

• Alarm rationalization includes:
  – Alarm settings
  – Alarm priority
  – Time required for operator to perform action
  – Operator action required
  – Consequence of inaction
  – Evaluation of alarm priority distribution for all configured alarms
  – Elimination of alarms with no known operator action
PCS Landscape

• Alarm Summaries
• Alarm and Event Logs/Databases
• Alarm Analysis
PCS Landscape

<table>
<thead>
<tr>
<th>Alarm Priority</th>
<th>Recommended</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Priority</td>
<td>&lt; 5%</td>
<td>10.61%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>89.39%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Unacceptable 0 or more alarms/hr* per operator.
PCS Landscape

• Single Click Access
• Alarm Wiki’s
PCS Landscape

• Tribal knowledge, while valuable, may not be acceptable in regulated industries

• Critical Alarms should have Standard Operating Procedures for Responses
PCS Landscape

• But do I have the right one?
MES Basics and Document Management

Level 4
Business Planning & Logistics
- Plant Production Scheduling,
  Operational Management, etc

Level 3
Manufacturing Operations Management
- Dispatching Production,
  Detailed Production Scheduling,
  Reliability Assurance, ...

Level 2
- Discrete Control
- Continuous Control
- Batch Control

Level 0,1
- Process Control
  Time Frame – Real Time
  Minutes, seconds, fractions
- Field Instrumentation / Devices
  Time Frame
  Fractions of seconds

Enterprise Management
- Time Frame - Transactional
  Months, weeks, days, shifts

Production Execution
- Time Frame - Transactional
  Shifts, hours, minutes, seconds

Setting the Standard for Automation™
$1.3 Billion =
MES Basics and Document Management

Kiosk Mode

- Zero Footprint (IE)
- No Login Required
- Deliver Only the Current and Effective Version
The Glue that Binds – ARP

- Store URL Buildup Within Control Module
- Use a Subroutine or Linked Composite to Allow for Multiple Buildups (LOLO, LO, HI, HIHI, etc) in a Single Module
- Use HMI to Deliver URL to IE (VBA, Scripting)
The Glue that Binds – ARP

Securing IE

- Group Policy Object Editor – Menu Bar
The Glue that Binds – ARP

Securing IE

• Group Policy Object Editor – Toolbars
The Glue that Binds – ARP

Securing IE

• Registry Change – Address Bar
  – Add NoNavBar DWORD
The Glue that Binds – ARP

Securing IE
More Information...

http://www.youtube.com/acmebiotech
More Information…

http://acmebiotech.blogspot.com