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HMI of the Future with Experion Orion Console and Experion Collaboration Station

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Challenges in Today’s Control Rooms

- Operator Fatigue
- Inefficient Collaboration & Comms
- Poor Ergonomics, Lighting & Acoustics
- Inefficient Graphics
- Lagging Best Office Environment Technology
- Lack of Mobility
- Inefficient Wall Screens
- Access to Engineering & Business Information

Today’s Control Rooms
Honeywell Control Room of the Future Program

Innovation in Control Room Solutions
Experion Orion Console
Orion Console Benefits

Operators Can Do More

- Operators can do more – effectively handle a greater scope of responsibility
- Assess and respond faster to abnormal situations
- More alert, comfortable and reduced stress and fatigue

Reduced Cost of Ownership

- Savings in initial installation and ongoing support
Single Visual Workspace

- Single continuous workspace using 50” ultra hi definition (4K) monitors
- Mouse control spans across all monitors in workspace
- Flexible layouts of displays as well as related applications and video optimizing the operators situational awareness
- Orchestration single action invokes set of process and application
- Integration with alarm management, advance control, operating limits operation monitoring application data
Advanced Operator Touchpanel

- 24” multi-touch panel primary device for operator navigation and control
- Data entry, navigation, and monitoring
- Content can be customized
- Faster and more intuitive than mouse/keyboard
Sit -stand Functionality

- Actuators raise/lower work surface, screens, keyboard, mouse
- Address Health Safety and Environment (HSE) concerns around long periods of sitting
Ambient Alarm Light

- Ambient indicator aligned with audible annunciation
- Colours configurable default follow alarm colours
- Gradual transitions between states
- Redundant electronics
Ergonomic Design

- Design based on ergonomic best practices for screen viewing angle, location of interface devices (keyboard/mouse/touchpanel)
Extended Console

- Modular design allows for the connection of up to 3 base consoles
- Power and data cable connections between equipment tray and cable raceway
- Single work surface with sit stand operation
Lower Installation and Maintenance Costs

- Effective cable management
- Future proof designed to accommodate screen, keyboard and computer technology changes
Honeywell Single Supplier Packaged Solution

- Honeywell and EOM hardware and software fully tested - works out of the box
- Available long term to support future incremental console additions
- Lowest long term cost of ownership
Upgrade Legacy Consoles

• Footprint matches older Honeywell consoles in place upgrade supported

• Two fully redundant operating positions

• Re-use of existing displays supported – SafeView change only for transition to Single Visual Workspace

- 4 x 24” Widescreen
  - 1920 x 1080
  - 1920 x 1080

- 1 x 50” Ultra High Definition Monitor
  - 3840 x 2160
Experion Collaboration Station

Unleash your team's knowledge – wherever they are

- Secure access to both control system and business network information from the same screen
- Faster resolution of routine (daily, weekly, scheduled) and unplanned situations
- Rapid communication establishment
- Intuitive navigation, no training needed
- Fast site deployment

Big picture decision making. Fast.
Collaboration Station – what does it display

• Process automation displays
  – Live process data
  – Alarms
  – Engineering/Diagnostic Tools
  – Rich graphics and trends
  – Video (DVM)

• Business information
  – Intuition
  – Work Orders
  – Documentation
  – etc

• Enterprise communication
  – Audio, Video
  – Desktop sharing, Contacts
Collaboration Station – how to apply

- **Installation**
  - Collaboration Station is part of Experion & accesses HMIWeb displays via DSA
  - Provides a secure common workspace at Level 4 for Experion & Business Network Information
  - Shows the exact same graphics as the operator sees in the control room.
  - Uniquely, Collaboration Station requires no editing of graphics or data conversion
  - Supports Microsoft Lync for interaction with remote users
  - Remote users may be desktops or other Collaboration Stations
  - Easy to setup and maintain
Collaboration Station – Users and Locations

• Typical Implementation
  • One Collaboration Station in the Control room with 1 or more additional Stations in Meeting rooms, manager rooms or central locations

• Activities
  – Shift handover
  – Checking Safety Procedures before doing work using the right information
  – Response to Safety Issues
  – Daily and weekly meetings
  – General browsing
Bringing it all together: Experion Solutions

From Mobile Handheld to Large Screen Solutions:

• Seamless integration with Experion

• Fast to deploy, easy to maintain: no duplication of databases or graphics

• Integrated Video access for all solutions via DVM

• End to end support for system and networking design

• Lifecycle support of integration between systems

• Reduced risk and assured delivery of benefits