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2014 Honeywell Users Group Europe, Middle East and Africa

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

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### Challenges in Today's Control Rooms









## Honeywell Control Room of the Future Program

#### **Innovation in Control Room Solutions**





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#### **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 55" ultra hi definition (4K) monitors
- 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



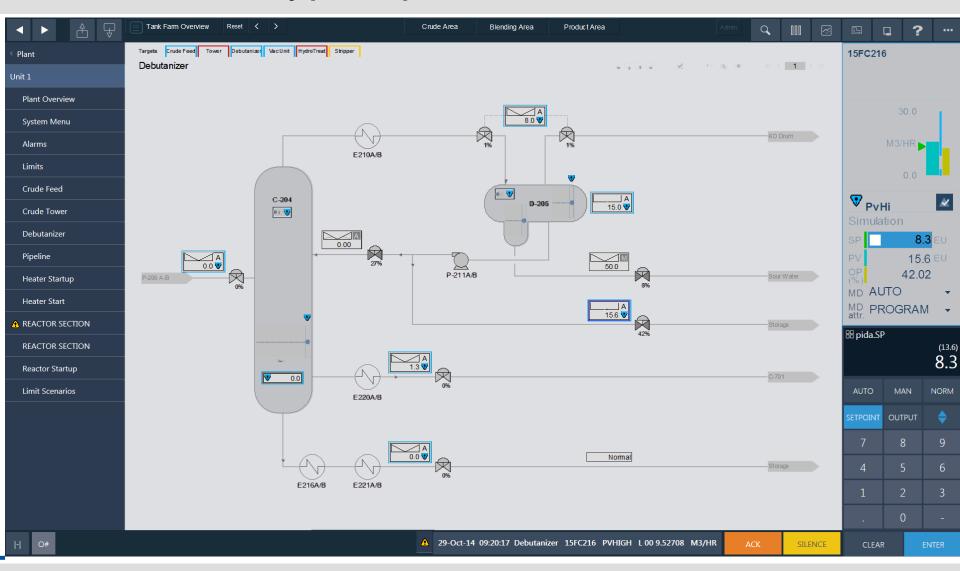
## **Advanced Operator Touchpanel**

- 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





## Prototype Operator Touch Panel





## 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



## Orion Console Three Operating Positions



- Modular design allows for the connection of base consoles
- Power and data cable connections between equipment tray and cable raceway
- Single work surface with sit stand operation



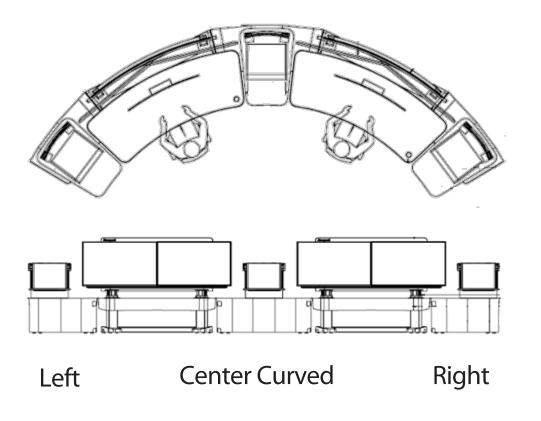
## **Auxiliary Equipment Panel**

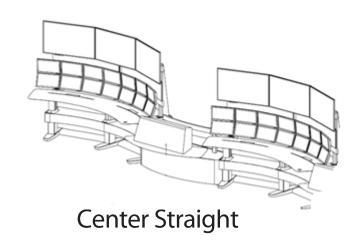


- Panel mount equipment hardwired switches, communications
- Computers, network switches in panel below worksurface



## **Auxiliary Equipment Panel Options**







#### 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

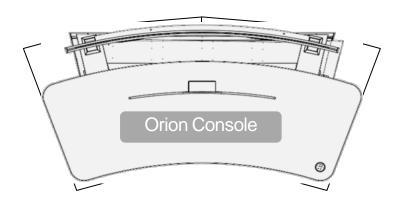


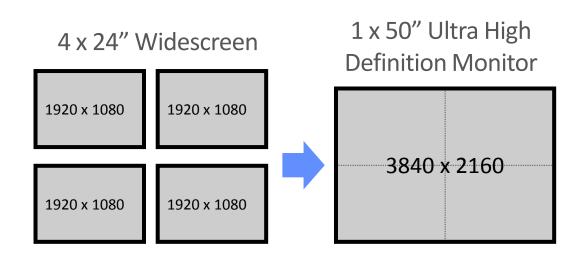


## **Upgrade Legacy Consoles**

- 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





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#### **Experion Collaboration Station**



## **Experion Collaboration Station**

#### Unleash your team's knowledge – wherever they are

- Fewer people on site drive the need to address problems differently
- Increased specialization of expertise sees experts located anywhere on the plant and the world, not just in the control room
- Operate as a single entity instead of as a fragmented organization

Changes the way organizations access plant information and solve problems







## Honeywell's Integrated approach to Collaboration

#### **Experion PKS Collaboration Station**

- Powerful tool that greatly expands visibility of enterprise information, applications and all Experion Orion content, with a common view for all those collaborating
- Fits any Control Room, Meeting Room and Central Location
- Quick to deploy, easy to use Integral to Experion PKS Infrastructure

Improving Production Costs by delivering information to management and staff in real time, to respond quicker to routine and emergency situations





#### Collaboration Station – a look inside

#### Customizable Large Workspace

- Easy to configure with the HMIWeb Display Builder
- Html format, completely customizable
- Includes alarm information
- Support for integrated web objects
- Easy to navigate using Touch, Pan and Zoom

#### Radial Menus – configure as you go

- Intuitive to use
- Associates documents, links and people with locations on the workspace
- Enables users to add new content on the fly

#### Enterprise communication

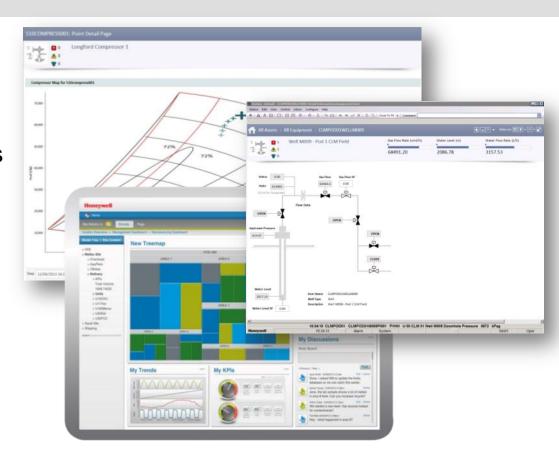
Integrated with Lync for Instant communication





## Collaboration Station – what does it display

- Process automation displays
  - Live process data
  - Alarms
  - Engineering/Diagnostic Tools
  - Rich graphics an trends
  - Video (DVM)
- Business information
  - Intuition
  - Work Orders
  - Documentation
  - etc
- Enterprise communication
  - Audio, Video
  - Desktop sharing, Contacts

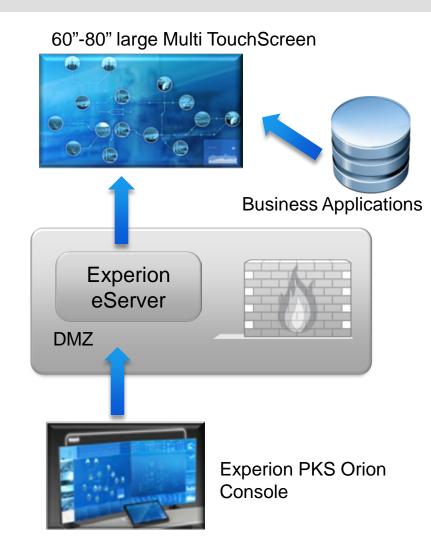




## Collaboration Station – how to apply

#### 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

#### key locations:

- 1. Inside the control room
- 2. Outside control room, typically on or near the plant
- 3. Central Engineering

#### **Activities**

- Daily Plant Meeting
- Shift handover
- Response to Safety and Production Issues
- Troubleshooting
- Training
- Commissioning
- Remote Support

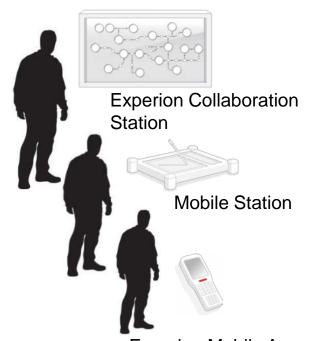




## Bringing it all together: Experion Solutions

## From Mobile to Large Screen Solutions:

- Seamless integration with Experion PKS Orion
- Integrated Security
- No learning curve in deployment established Experion PKS Orion knowledge is sufficient
- Fast to deploy, easy to maintain: no duplication of databases or graphics
- Field expertise to execute & support
- Reduced risk and assured delivery of benefits



**Experion Mobile Access** 

#### **Experion PKS Orion**

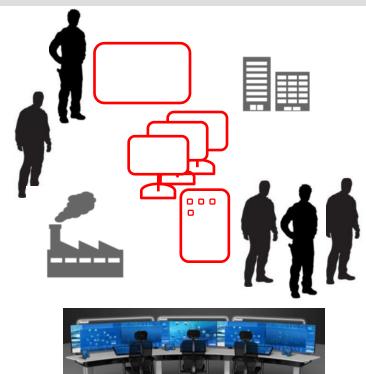
Seamless Wall, Tablet, Desktop and Mobile Solutions – Broadest Portfolio of Out of the Box Solutions



## Experion PKS Orion: HMI of the future

#### **Experion Collaboration Station** and Experion Orion Console

Great Technology, even better in real-life!





## Come and see them both in the demo room!



# Questions?

## **Thank You!**