

## **BIG AREAS OF CHANGE**

Whether you're looking to address a skilled labor shortage, modernize systems, optimize performance, mitigate safety or cybersecurity risks, or take full advantage of remote connectivity.

HONEYWELL WILL HELP YOU PROTECT AND SHAPE YOUR FUTURE



# HPS | LIFECYCLE SOLUTIONS AND SERVICES

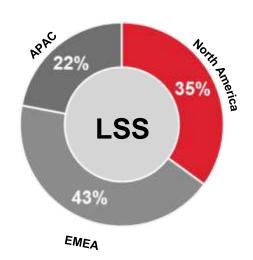
1 Business Overview

2 Portfolio of Solutions

Case Studies: Future Proofing Your Business



# HONEYWELL LSS BUSINESS OVERVIEW



- 18 major support centers | 3,100+ customers served
- 63+ countries served
- 4,000 sites
- Houston, TX, U.S.A. Headquarters
- Experts / Support and Service Centers Across the Globe:
- 3 Managed Security Service Centers in Houston, Bucharest and Singapore
- 2 Premium Support Centers in Houston and Bangalore
- 3 Migration CoE in India, Romania and Mexico along with experts spread around 7 locations
- 3 QCS Support Centers in France, Finland and USA



## **PORTFOLIO OF SOLUTIONS**



#### SYSTEM SUPPORT

- Technical support
- System / Software updates – upgrades
- Extended warranty
- Parts Management



## SYSTEM MODERNIZATION

- •Renew infrastructure and upgrade on process
- •Retain intellectual property
- Expand system capabilities
- Enhanced cyber security capabilities
- Modernization solutions to eliminate hardware obsolescence



## PERFORMANCE OPTIMIZATION

Solutions delivering business outcomes

- •Inventory & Lifecycle mgt & planning
- •Condition Based Maintenance
- •Best Practice (Compliance)
  Checks
- and Recommendations
- Performance Monitoring
- Configuration (Documentati on and Change)
   Management



## WORKFORCE EXCELLENCE

- Training
- Remote expert guidance and troubleshooting
- Virtual and mixedreality-based training tools
- Skills matrix development, monitori ng, reporting, continuous improvement



#### **RISK MITIGATION**

## Cybersecurity Risk Reduction

- Asset risk monitoring
- Endpoint protection
- · Secure remote access
- · USB threat protection

## Plant and Personnel Safety

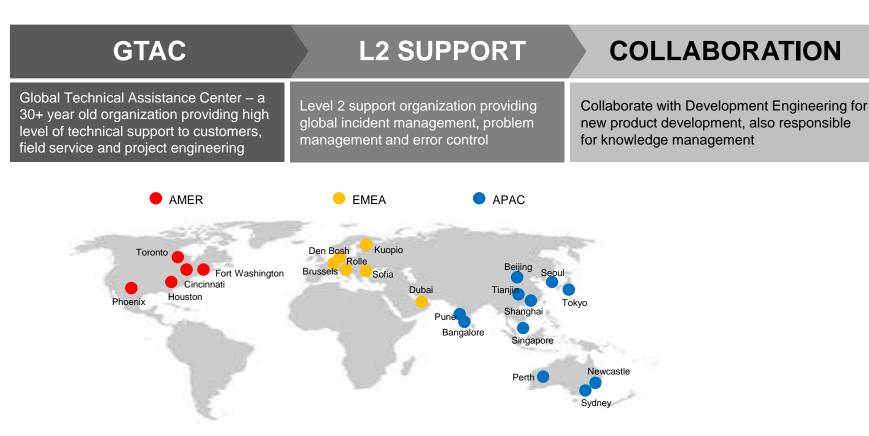
- · Gas Leak Detection
- Video surveillance
- · Smart flare monitoring
- Visibility of workforce location

## **SYSTEM SUPPORT**

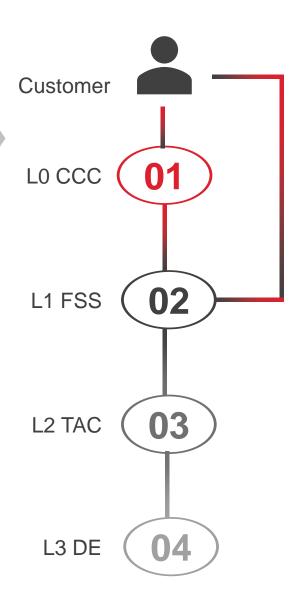
ESSENTIAL SUPPORT SERVICES TO MAINTAIN AND SUSTAIN YOUR AUTOMATION CONTROL SYSTEMS



## **LSS GLOBAL TECHNICAL SUPPORT**



- 21 cities across 12 countries
- Follow the Sun 365 coverage
- Support via Remote Connectivity, Telephone and the online Support Portal



### **Experts at your Service**

## **SOLUTION ENHANCEMENT SUPPORT PROGRAM**

**CUSTOMIZE TO FIT YOUR UNIQUE SITE NEEDS** 

Comprehensive Software support service that offers flexibility to choose the "right" program bundle to help manage and support your systems.



"Since adding the online connection to our SESP contract, we have cut the time to identify and resolve system-related issues in half when the tool is used."

Jeff Kesterson Research Associate. DuPont

"Online support has saved us time in repairing system issues which in turn reduces the time the system is not at its full redundant capability, reducing the risk of plant shutdown due to loss of view or control."

Tony Appleyard, Senior Tech Officer Control Systems, OneSteel

#### WHY SESP?

Reduce Operating Costs

Software Support & Availability

Enhance System Availability & Reliability

Adhere to Cyber Compliances

- Software Upgrades (Enhancements)
- Software Updates (Patches)
- Telephone Technical Support (GTAC)
- Kits & Enhancement Preferred pricing
- Remote Technical Support (Optional)
- Remote Patch Delivery (Optional)
- Remote Virus Protection Delivery (Optional)

Align Automation Technology Support Needs With Your Business Strategies

## **ADVANTAGES OF SESP**

### **SESP Provides a Better System**

#### Reliability

Technical expertise augments internal staff versus having to hire

- 30% reduction in maintenance labor costs
- 20% reduction in overall support costs

20-30% reduce operating labor cost and 50% faster resolution

#### **Lifecycle Planning**

System evolution planning

Avoid rip and replace situation (preserve assets and intellectual property)

 Estimated savings (30%) stems from comparing IP protection, business continuity, and asset protection of a continuous evolution approach versus rip and replace

30% savings on lifecycle goods

#### **Optimization**

Leverage technology advantages

- Improved performance
- Latest security

Enhance system capabilities on an on-going basis

 Save 80% on receiving software upgrades as compared to purchasing on demand

Most effective means of staying current

Lifecycle Planning For Enhanced Reliability and Optimized Operation

### PARTS MANAGEMENT

The Parts Management program is aimed minimizing at system downtime from parts failures as well as lowering the customer's cost to support and maintain the spare parts required.



Increased availability and uptime

**Predictable Cost** 

50% Reduction In Cost

Improved
Productivity & Asset
Support



- Reliability
  - Faster repair time
  - Eliminate unnecessary downtime
- Capital Efficiency
  - Eliminate large capital outlays
  - Reduce inventory carrying costs
  - Keep annual expenses under tighter control
- Risk Planning
  - Increase plant availability
  - Manage spare parts
  - Establish benchmark for parts stocking

### **Reduce Costs and Minimize Risk to Your Operation**

## SYSTEM MODERNIZATION

REDUCE THE TOTAL LIFECYCLE COSTS
OF YOUR AUTOMATION SYSTEMS WHILE
CONTINUOUSLY IMPROVING SAFETY,
RELIABLY AND OPERATIONAL EFFICIENCY



## **GLOBAL MIGRATION SUPPORT CENTER**

Highest Quality Migrations

Alleviate Resource
Constraints

**Consistent Use** of Standards

End to End Solution to globally advance best practices for flawless migration execution.





- Pole Based Hubs
- Global Resources
  - Pole Migration Champion
  - Regional Migration Principals
  - Area Migration Leads
- Migration Advisory Board (MAB)
  - Forum of Cross Functional Migration Experts

## **Comprehensive Solution for Migrations**

## REMOTE MIGRATION SERVICES

Remote Migration Services enables Essential Experion® PKS Upgrades and transforms the way industrial automation modernizations are implemented.



#### WHY RMS FOR EXPERION MIGRATION?

**IP Retention** 

Improved Cybersecurity

Leverage Latest Technology

Install Base lifecycle management

**Reduced TCO** 

#### How to Migrate?

Experion Migrations via Remote Migration Services

Our Remote Migration Services solution can now address the risks and issues of technology obsolescence remotely. Our Migration Center of Excellence (CoE) experts perform control and safety system upgrades on a 24x7 schedule.

#### Highlights of Experion Enhancements

- Experion Batch Enhancements updates
- All Experion LCN nodes / Unified Engineering tools
- CAB, HART & Profinet on UOC
- Experion System Enhancements OPC U/A, EHPM HART, ELMM on UOC
- Experion I/O HIVE, Control HIVE, IT HIVE (with R520)

## Optimize Your Process Control System With the Latest Experion

## **C200 MIGRATION**

Honeywell offers multiple solutions to upgrade C200 install base to preserve the intellectual property, Retain Control Strategy, HMI History & Trends. Reliable migration procedure ensures minimum disruption to Process and Physical infrastructure.

#### **WHY C200 MIGRATION?**

I/O & field wiring can be retained

Control strategies can be migrated with minimum or no changes

Graphics remain the same

Manage C200 obsolescence



#### **NEW ENHANCEMENTS**

- Internal Configuration Conversion tool services
- Series A I/Os, Profibus, Ethernet Protocol (EIP) supported
- Unit Operation Controller (UOC) supports ControlNET retention with Series A I/Os, Rail A I/O

### Retain I/O, Graphics and Control Strategies

## **TDC/TPS MIGRATION**

Unique continuous evolution approach for TDC/TPS systems allows customers to retain and extend their current investment in hardware, intellectual property and operating knowledge while modernizing at best cost and lower risk.

#### WHY TDC/TPS MIGRATION?

Lower TCO = 59% Savings

Protect IP, Tribal Knowledge

Safe, On-process Migration

No Downtime

Infinite System Life



#### **NEW ENHANCEMENTS**

- Unified Engineering Tool; One tool, Control Builder, for all Experion controllers: C300, EPHM, AM, ControlEdge UOC
- EHPM HART; direct pass through of HART data through EHPM
- EHPM and ELCN performance enhancements

TDC3000 Seamlessly into Experion on Process – a New System!

## THIRD PARTY PLC MIGRATION

Honeywell's standardized, connected strategy for controls migration is intended for customers with legacy PLCs connected to Honeywell TotalPlant™ Solution (TPS)/TDC3000 systems,. Our approach provides an integrated DCS and PLC migration solution that is sustainable and secure.



#### WHY HONEYWELL PLC MIGRATION?

Seamless Honeywell DCS integration

Greater engineering flexibility for reduced project overhead

Proven cyber-security capabilities

Built-In connectivity options for easy integration of HON and non-HON assets

- Single contract to manage DCS and PLC
- Unified configuration software (UOC)
- Unified HMI at control room or plant floor
- Unified network infrastructure

Lower TCO by 25%, reduce integration cost by 80% and decrease maintenance effort by 50 %

## **HMI DISPLAYS CONVERSIONS & UPGRADES**

Honeywell's HMI (Human Machine Interface) upgrade solutions enable users to migrate to the latest technology benefits in phases, without having to replace a number of installed equipment at one time.

HMI Upgrade solutions are aimed at addressing the operator interface level without requiring the controller infrastructure to be touched.



#### **WHY HMI UPGRADES?**

Superior Operator Effectiveness

**Protect Investment** 

No Shutdown during upgrade process

HMI Displays conversion and upgrade services provides:

- Displays Conversion Analysis and design
- US/GUS displays conversion
- HMIWeb displays upgrades

Upto 20% display conversion scope optimization and lifecycle support cost reduction

## **QCS SOFTWARE MODERNIZATION**

**READY TO MEET FUTURE DEMANDS** 

Fast-cycle, cloud-based QCS software migrations. Enables the latest advanced control packages to squeeze more profits, enhances reliability and cybersecurity, and provides a smooth path to comprehensive modernization.

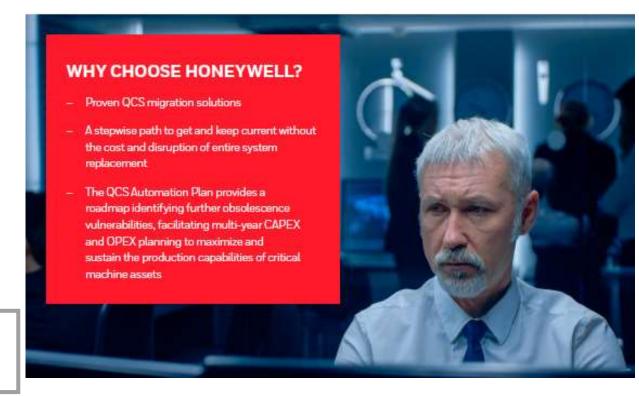
#### WHY QCS MODERNIZATION?

**Improved Quality** 

**Greater Usability** 

**Enhanced Support** 

**Lower Costs** 



Proven Migration Approach-Reduce Risk, Eliminate Downtime, Increase Yield

## PERFORMANCE OPTIMIZATION

COMPREHENSIVE, PROACTIVE SERVICE PROGRAMS TO IMPROVE SYSTEM PERFORMANCE, RELIABILITY AND COMPLIANCE



## **ASSURANCE 360 PROGRAM**

SERVICE DELIVERY FOR GUARANTEED OUTCOMES

Outcome-based, comprehensive service solution designed to guarantee the performance of the automation system, increase the overall stability, reliability and significantly reduce operating costs.



**Guarantees Results** 

Predictable OPEX and CAPEX

Increase Overall Equipment Effectiveness

Greater System Stability



- Premium Support Center care
- Performance Monitoring
- Proactive system management
- System modernization/refresh
- Knowledge retention
- Identification and management to improve key customer business KPIs

Leverage Automation to Improve System and Business Performance

## PREMIUM SUPPORT CENTER (PSC)

#### **PSC Setup**

#### **Premium Support**

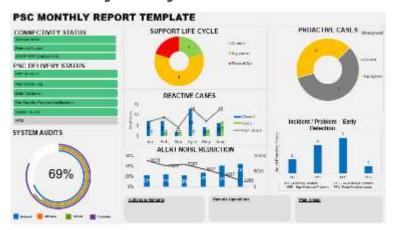
#### **Partnership**

- Augment local and site engineering for proactive monitoring and support
- Aligned under GTAC organization
- Secure Remote Access for remote troubleshooting & support
- Lifecycle Planning support
- Site Compliance (audits and validation)
- Condition Based Maintenance
- Predictive & Proactive Performance Monitoring

Partnership model collaborating with customer to provide premium support to maximize control system performance and availability



Premium Support Center provides Performance Optimization, remote monitoring & proactive Analysis technologies to ensure & improve efficiency and reliability of systems.



**Augmented Support with Proactive Engagement for A360 Contracts** 

### HONEYWELL TRACETM

"Fresh & Easy" Doc Solution for HON Systems
Automated data collection with patented approach
provides daily 'fresh' data for full end-end documentation
of control logic, hardware, network, spares mgt, change
detection, queries, reports and system performance
monitoring

#### **WHY TRACE?**

Automated data collection eliminates hours of manual effort

Data collection 20x Faster

Collects from running system no engineering database

Best-in-class support for Experion/HON systems



#### **Trace Pillars**

#### **Productivity**

- Automated data collection
- Control Strategy Documentation
- Tag reference management
- Parameter querying
- Channel spare capacity management

#### Transparency

- Daily snapshots for 'fresh' data
- View operational data not just configuration data
- Global search / where-used
- HW/network hierarchy
- Universal notes/attachments

#### Reliability

- · Smart change analysis
- Engineering anomaly detection
- System health and performance reporting

Accurate control system configuration awareness for optimal decision making

## **ENABLED SERVICES**

A subscription-based solution that enables faster and more comprehensive deployment of services across maintenance, compliance, migration and lifecycle. Continuous data collection of system data, visualized in a dashboard for collaboration across functions.



#### WHY ENABLED SERVICES?

No surprises! Visibility of control system health and insight of asset performance and compliance

Analytics identify prescriptive recommendations to improve system health and performance

Improve Staff Productivity by reducing unplanned incidents

Reduce manual labor, by instantly understand what is wrong, why and action to remediate

- System Health and Performance Monitoring
- Best Practice (Compliance) Checks
- FORGE dashboard providing Guided recommendations for continuous improvement and compliance
- Inventory & Lifecycle mgt & planning
- Condition Based Maintenance

## **QCS 4.0**

#### MAKE EVERY DAY YOUR BEST DAY OF QUALITY PRODUCTION

A purpose-built Cloud solution for sheet manufacturing industries with powerful analytics to improve reliability, sensor accuracy, control performance and product quality.

Fully harness information from on-premises QCS system, leveraging the Honeywell Cloud, to deliver fast production optimization with local resources and remote experts.



#### **WHY QCS 4.0?**

Observe/Observe+
Define & Measure KPI

**Optimize**Close the Loop

Analyze

Quality & Performance Issues

Drive High Performance and Customer Profits

- Deliver higher quality, yield, efficiency and profits
- Overcome rapid skills departure in Operations,
   Control Engineering and Maintenance
- Provide 24x7 performance/health analytics,
   Call to Action alerts, predictive maintenance,
   proactive optimization
- Deliver Performance KPI-driven remote value services

## **QCS SUPPORT CENTER**

#### **QCS SUPPORT CENTER**

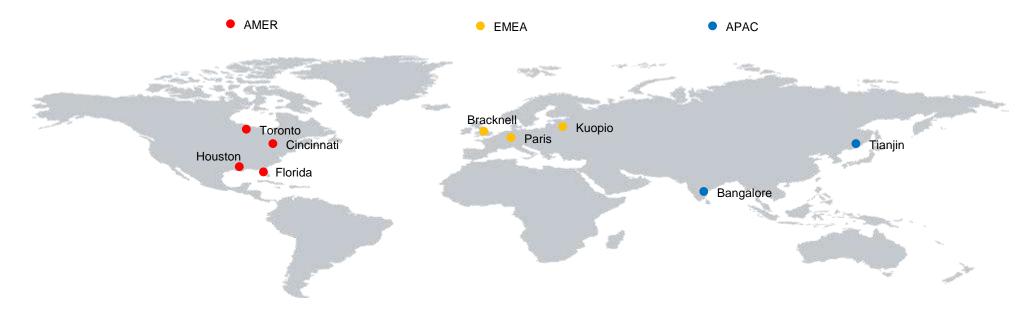
#### CUSTOMER

#### **COLLOBRATION**

QCS Support center providing high level of 24/7 remote service/support for Sheet Manufacturing customers

Sheet Manufacturing customers can contact the experts globally to resolve the incident and errors.

Collaborate with FSS/GTAC to identify root cause and corrective actions



- 9 cities across 7 Countries
- Follow the sun-365 coverage
- Support via remote connectivity, phone & IW

## **Experts at your Service**

# WORKFORCE EXCELLENCE

SOFTWARE-DRIVEN SERVICES DESIGNED TO IMPROVE INDUSTRIAL WORKFORCE PRODUCTIVITY & COMPETENCY – EMPOWER EACH WORKER WITH INSIGHTS AND ADVISORIES TO MAKE BETTER DECISIONS FASTER – ENHANCE WORKER EFFECTIVENESS.



## **WORKFORCE EXCELLENCE PROGRAM**

A software-driven Service Program designed to improve industrial workforce productivity & competency – empower each worker with insights and advisories to make better decisions faster – enhance worker effectiveness.

## WHY TRUST HONEYWELL WITH YOUR WORKFORCE DEVELOPMENT?

#### **ALL IN ONE**

A virtuous cycle made of theoretical, technical, practical training with on and off the job

## NO MORE SUBJECTIVITY:

Data driven analytics to identify skills gaps

#### **TAILORED TO NEEDS:**

Targeted role-based training with hands on task practice to reduce upskill / reskill time

#### **ON-THE-JOB SUPPORT**

Real-time data driven, just in time insights and collaboration with remote experts

#### NO MORE HEADACHE

Keep skills up to date continuously without having to think of it

## KNOW YOUR RESOURCES

Real-time visibility of available skills at all times



- Training Needs Assessment
- Skills Development Plan
- Simulator based hands on learning
- Realtime On-the Job Assistance
- Result tracking
- Link human performance to plant performance
- End-to-end program management and reporting

## Ramp Up Twice As Fast – Improve Individual Productivity By Up To 10%

## **IMMERSIVE FIELD SIMULATOR**

Honeywell's Immersive Field Simulator is a virtual and mixed-reality-based training tool which provides a virtual replica of the physical plant —creating an opportunity for targeted, on-demand skill-based training. It provides virtual replica of the physical plant integrated with digital twin of the process (Honeywell OTS) to allow field and panel operator to practice different plant operations and safety scenarios in virtual and safe simulated environment.

#### WHY IFS?

Effective responses to unplanned events

Customized training modules-based plant needs

Collaborative learning for effective operations



- Familiarization with layout and location of main pieces of equipment
- Line tracing and location of instrumentation, control and relief valves, etc.
- Start-up, shutdown, malfunctions, and normal operations learning in collaboration between field and panel operators
- Rounds and sampling procedures
- Standard operating procedure (SOP) execution
- Assessment to evaluate competency
- Lesson editor to create new SOPs
- Multi-user sharing for team/group learning
- On-premise/cloud-hosted solution

## 4x faster training than in the classroom

## RISK MITIGATION

REDUCE THE RISK OF CYBER-ATTACKS,
GET ACCESS TO CYBER
EXPERTS, INCREASE CYBERSECURITY
RESILIENCE AND IMPROVE THREAT
DETECTION & RESPONSE

IMPROVE POLICY COMPLIANCE,
PRODUCTIVITY, SECURITY AND SAFETY
BY REDUCING THE RISK OF INCIDENTS,
QUICKLY AND EFFECTIVELY WITH BETTER
INFORMATION.



# CYBERSECURITY RISK MONITORING

Honeywell Forge Cybersecurity Site is on-premise software that provides greater visibility to assets that need to be protected and enables faster responses to potential threats and vulnerabilities. Continuously monitor assets for risk with the help of automated active and passive asset discovery



#### WHY FORGE CYBERSECURITY SITE?

Plan better cyber defenses with up-to-date, automatically captured asset inventory

Easily identify newly added assets in the network, even if unauthorized

Always be current on the active cyber risks impacting the site and address them on priority

Make it easier for non-experts to help improve your cybersecurity posture

- Automated, non-intrusive asset discovery
- Comprehensive, live asset inventory
- Continuous cyber risk monitoring and prioritization
- Actionable guidance to reduce active cyber risks

Better Visibility + Faster Response → Reduced Risk of \$\$\$ Cyber Incidents

## **ENDPOINT PROTECTION**

Honeywell offers unmatched ICS/OT expertise and services to increase the cybersecurity compliance of assets connected to your networks. Various services can help you stay up-to-date, identify & mitigate vulnerabilities, achieve compliance, and increase resilience to cyber attack.



Mitigate vulnerabilities and reduce your cyber attack surface before they are exploited

Protect the ROI of your digital investments and increase resilience to attack

Manage malicious software better, and uncertainty of the future threat landscape

Significant productivity savings and compliance with Patch & AV automation



Multiple offerings to choose from:

- Patch & Antivirus Automation Honeywell-qualified updates delivered and ready for on-site installation
- PCN Hardening security hardening of Servers and Networks to industry benchmarks
- Application Whitelisting allow only trusted applications to run and mitigate malicious software
- Cybersecurity Vulnerability Assessment identify and prioritize vulnerabilities across your infrastructure

Reduce Vulnerabilities + Stronger Safeguards → Increase Compliance & Resilience to Attack

## **SECURE REMOTE ACCESS**

Maintain business continuity, enable remote workforce, respond faster and improve incident response with our Industrial Grade Security Remote Access. Forge Cybersecurity Enterprise Core enables remote access, and scales into an ICS/OT security management platform when you're ready!

## WHY HONEYWELL SECURE REMOTE ACCESS?

Reduce your attack surface with industrial strength technology & site-controlled authorization

Built for complex ICS/OT environments and multi-tier network zones

Centralize and standardize access at 100s of sites. Full traceability, recording, auditing

Enhanced with enterprise threat detection to block malicious file transfers



- Safer and more secure than corporate VPN and Remote Desktop – fulfills NIST, CISA, NERC, and 62443 remote access requirements
- Allow staff, contractor, and 3<sup>rd</sup>-party remote access
- Currently used by our Managed Security Services for over 500 HPS customer sites worldwide
- Currently used at 1000's of OEM customer sites worldwide

Safer and More Secure Industrial Grade Secure Remote Access

## **ADVANCED MONITORING & INCIDENT RESPONSE**

Honeywell Forge Managed Security Services with Advanced Monitoring & Incident Response (AMIR) delivers 24/7 cybersecurity event monitoring, threat detection and incident response for today's demanding ICS and Operational Technology (OT) environment.

## WHY FORGE MANAGED SECURITY SERVICES WITH AMIR?

Strengthens your cyber defenses with increased threat visibility and effective threat management

Get access to expert analysis and investigation by certified ICS/OT cyber experts

Delivers outcome-driven, hybrid security solution with predictable cost model

Get an immediate response once a critical incident is identified



- 24/7 proactive identification, investigation and threat profiling by Honeywell cybersecurity experts
- Helps identify sophisticated attempted attacks and breaches
- Collects, correlates and prioritizes, security event data including from IDS/IPS, PLC's, SCADA & Firewalls

Threat Detection & Response at 1/5<sup>th</sup> the Cost of In-house Equivalent

# USB MANAGEMENT & THREAT PROTECTION

Honeywell Secure Media Exchange (SMX) is a complete system + subscription removable media security solution. SMX provides operators with unprecedented control & visibility into the secure use of USB devices with the latest in advanced threat detection.

#### WHY SMX?

No surprises! Enforceable scans and ability to manage USB devices across the company.

\*59% of threats found on USB in our study have the potential to cause a major disruption to ICS

Defend networks from hardware threats (cell phones, keyboard, etc.)

\*2X increase of threats targeting OT through removable media (28% from 16%)

https://discover.honeywell.com/USBThreatReport-8156-Registrationpage.html



- SMX System Fully managed rugged scanning station for any environment
- Enterprise Threat Management Portal Manage removeable media, logs and files remotely
- Enforcement Driver All storage media must be scanned before it can be used
- GARD Threat Engine Industry leading OT threat detection

Reduce Risk by Enforcing USB & Increase Efficiency with File Policies

## **DIGITAL VIDEO MANAGER**

DVM increases situational awareness and surveillance of Process areas and Process critical alarms. By Integrating EPKS with DVM to a single operator station for alarm monitoring improves response time of Operators and efficiency of operation. DVM also helps Safety & regulatory compliance with Flare monitoring

#### WHY DVM?

Assist compliance with Global & Local regulatory requirements

Improve Business Continuity by reducing unplanned incidents

Integration with EPKS allows quicker emergency response

Risk Mitigation & minimize disruptions



- Digital Video Management software including 4 camera license
- 2 Nos of zone certified cameras & 2Nos of safe area cameras
- Pre-configured server including storage for 7 days for all cameras

### **Increase Efficiency up to 30%**

## **REBELLION GCI**

#### INTELLIGENT, AUTOMATED VISUAL MONITORING SOLUTION

Rebellion Gas Cloud Imaging system uses proprietary hyperspectral imaging technology coupled with machine learning analytics to pinpoint the gas leak source, determine the shape of the gas plume, and measure the concentration of a leak.

#### WHY REBELLION?

Enhanced safety and emissions control

**CAPEX** reduction

Energy efficiency improvement

**Environmental protection** 



- Scalable solution (100 m to 1700 m)
   measuring range suitable for harsh
   temperature environmental conditions ( 40°C to +55°C)
- Broad spectrum of detectable gases (50)
  with the capability to detect up to 7
  different gases concurrently with one GCI
  system
- One system multiple solutions (under development – single camera for gas and flame)

Maximize safety, operational performance, emissions mitigation and compliance

## SMART FLARE MONITORING

Honeywell Experion Flare Watch Suite offers efficient flare monitoring and recording. By offering insights into flaring operations, this solution helps organizations manage flaring more efficiently and in compliance with local and corporate environmental regulations. Smart flare monitoring detects and alerts flare events like black smoke, steam, flame size etc



#### WHY RTLS?

Reduce Risk of Environmental Non-Compliance Incidents & Penalties

Flaring Operations Improvements with Data Support

Real Time Collaboration between stakeholders

Improve Flaring efficiency

- Smart flare monitoring software for single flare
- 1No Al built in hardware to capture the images from flare monitoring CCTV cameras
- Configuration

### Improve Operator Efficiency and Site Compliance

# REAL TIME LOCATION SOLUTION

Know when, who, where, and what. Honeywell Real-Time Location Solution helps you do more in the safest and most productive way possible. RTLS safeguards your most valuable assets and improves the overall effectiveness of your workforce. RTLS provides social distancing compliance visibility on site.

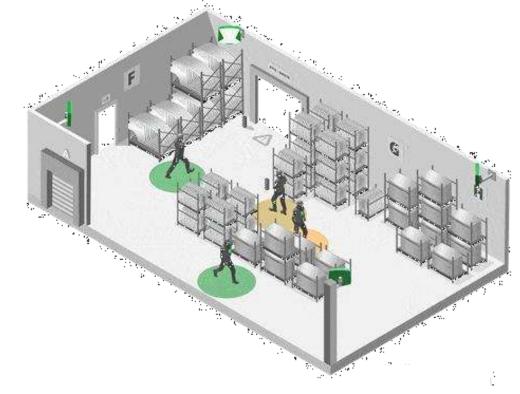
#### WHY RTLS?

Improve safety & reduce risk with real time visibility

Improve Business Continuity & response

Automate emergency response & mustering

Workforce automation capability improves accuracy & efficiency



- Real Time Location Solution software including 10 receiver license
- 4 Nos of location receivers & 10 RFID active tags
- Pre-configured server

### Improve Safety & Reduce Risk

## CUSTOMER CASE STUDIES



## REMOTE MIGRATION SERVICES IN ACTION

- <u>Richter Gedeon Plc.</u>, a Hungarian multinational pharmaceutical and biotechnology company updated <u>Experion® PKS</u> <u>R431.5</u> control system to the latest R511.3 release using Remote Migration.
- Honeywell's Migration CoE experts perform control and safety system upgrades on a 24/7 schedule.
- This type of migration is performed in-house on Honeywell's Virtual Data Center, which can be accessed remotely to enable the fastest migration possible.





Improve execution cycle time by as much as 50% and increase migration productivity by 60%



"As a manufacturer of innovation-driven specialty pharmaceutical products, we believe there are significant benefits... Honeywell's Remote Migration Services will help us reduce total cost of ownership"

Csaba Ódor – Deputy Head of Investment for Richter Gedeon

System modernization performed on the cloud – just like a simple update!

## **ENABLED SERVICES IN ACTION**

- Enabled Services software collected & analyzed control system health, performance and compliance data across 4 British Sugar sites
- Remote Honeywell staff leveraged the software to identify gaps in performance and provide prescriptive recommendations to British Sugar engineers



Because the insights for necessary maintenance are assessed for us remotely, our maintenance is completed perfectly and we've maximized system availability. \*\*J\*\*

- Jignesh Chauhan, Sr. Control System Engineer





Improved system health and performance with minimal onsite presence

## **ASSURANCE 360 IN ACTION**

- KIPIC needed to protect, maintain and optimize operations at the Al Zour refinery and liquefied natural gas import (LNGI) terminal in southern Kuwait
- Honeywell ensured automation assets are kept secure and reliable, while providing KIPIC with predictive maintenance and performance insights designed to help meet and exceed production goals and manage total cost of ownership.



20%

Reduction in total cost of ownership



KPI based, Outcome driven Service Program customized for your need!

## **EXPERT ON CALL IN ACTION**

- Braskem field support needed technology support and training
- Their minimal onsite presence is now supported by remote experts using intelligent wearables to complete predictive maintenance
- Lowered incident resolution times and total cost of support





Increased speed, safety and reliability of onsite operations

## **AUGMENTED REMOTE OPERATIONS IN ACTION**

- Anglo American needed to ensure continued operations of their Copper Smelting Plant in Chile, located in a high-risk COVID-19 region
- Within a few days, Experion Augmented Remote Operations solutions were set up in 3 remote locations away from the control room
- This enabled engineers to provide essential support without risk, and kept the plant operational throughout the pandemic









Ensured business continuity while keeping workers safe

## **CYBERSECURITY IN ACTION**

(COMPANY NAME WITHHELD TO HELP ENSURE CYBERSECURITY)

- Honeywell Managed Security Services (MSS) have helped a major US refiner based in Texas reduce the risk of cybersecurity breaches and better manage the security posture of the process control infrastructure
- Customer has 24/7 access to cyber expertise and support from Honeywell
- Honeywell Secure Remote Access allows employees and Honeywell experts to deliver remote support when needed (including all Patch and anti-virus automation updates)





Honeywell provides the cybersecurity knowledge and support required to protect our refinery's control system. We have 24/7 coverage regardless of what is happening in the plant.

Refinery Process Control Supervisor

**Enhanced Operating System Security, Stability & Reliability** 

# THANK YOU