



HONEYWELL BUILDING AUTOMATION

SEMICONDUCTOR FIRE & LIFE SAFETY EUROPE

OVERVIEW

Honeywell



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HONEYWELL

NASDAQ HON \$38 BILLION IN SALES 2023

100 Years
of
Innovation

AEROSPACE
TECHNOLOGIES



BUILDING
AUTOMATION



INDUSTRIAL
AUTOMATION



ENERGY &
SUSTAINABILITY
SOLUTIONS



Honeywell
Connected
Enterprise

Robust cybersecure and scalable software and SaaS platform

Innovation
Our DNA

Controls & Autonomy
Higher productivity,
efficiency, speed,
improved safety for more
profitable business

Digital Transformation
Connecting assets,
people and process to
power business digital
transformation

Sustainability
Broad Offerings that
span circularity, energy,
and environment

Honeywell

HONEYWELL BUILDING AUTOMATION

FIRE & LIFE SAFETY

ESSER
by Honeywell

NOTIFIER[®]
by Honeywell

Honeywell
GENT

xtralis[®]

Honeywell
MORLEY IAS
FIRE SYSTEMS

Honeywell
Eltek
Fire & Safety

SCAME
SISTEMI

SECURITY

Honeywell

LENEL·S2

Onity

BUILDING MANAGEMENT SYSTEM

TREND

sbc
SAIA BURGESS CONTROLS

Honeywell

CHALLENGES IN SEMICON FAB CONSTRUCTION

TRENDS

- 1 | BUSINESS OF SUSTAINABILITY**
Countries and companies are committing to sustainability goals at unprecedented funding
- 2 | REGULATIONS & GUIDELINES**
Countries and governing bodies are increasing cyber, ESG and safety reporting or guidelines
- 3 | COST OF DOWNTIME**
Downtime of critical building systems is increasingly costly, both financially and to reputation
- 4 | CHANGING & INCREASING THREATS**
Improve ability to detect and manage a rapid increase in physical and cyber threats to Semicon

HONEYWELL

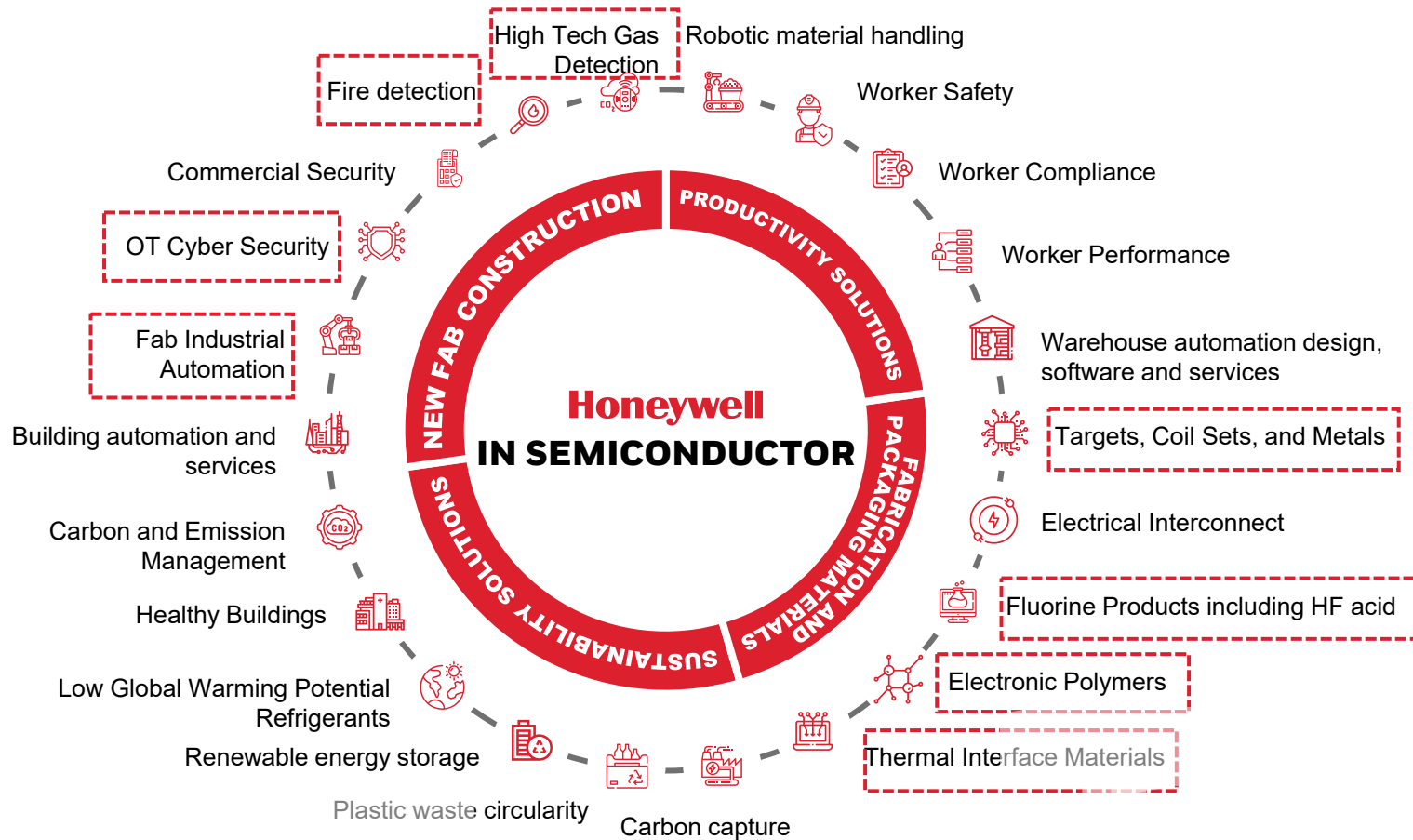
Predicts The Top Three
Building Trends Of 2024



HONEYWELL PORTFOLIO

SEMICONDUCTOR/FAB MANUFACTURING

Focus areas 2025



Future Collaboration & Co-Innovation Opportunities

- Solutions available today which cover over 20 areas across fab manufacturing and semiconductor processes
- Near term focus is on 8 targeted opportunity areas to drive immediate cost savings for Semicon customers and expand upon areas of existing collaboration
- This Honeywell eco-system creates opportunity for further co-innovation and collaboration to create long-term value for the Semicon industry

SEMICON VERTICAL EUROPE LIFE SAFETY SOLUTIONS **KEY PRODUCTS**



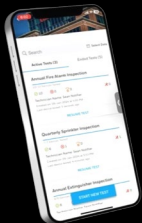
SELF – TEST FIRST TO MARKET

Fully automates the compliance test , game changing in the market , 100% detectors tested in accordance with local fire code of practice. Peak operational efficiency, 70% faster time to test zero compromise on system availability.



NOTIFIER INSPIRE

Scalable architecture for easy system extension & upgrade with a modular and robust concept. Flexible backwards compatibility to ensure an integration in an existing system. Fully connected to Honeywell CLSS for Improved efficiency both on-site or remote



CLSS

Multi site availability, cloud monitoring to visualize the live performance. Ability to respond promptly, even from off-site location and enable increase technician first time fix rates, Built on robust cybersecurity suite for critical infrastructure with comprehensive compliance and reporting capabilities



VESDA

VESDA is the most installed aspirating smoke detection technology and is Europe market leader. 50% more sensitive and six times better at handling dust application. First gas detection to help prevent lithium-ion battery thermal runaway events.



Li-ION Tamer

Designed to respond to volatile organic compounds emitted during a lithium-ion battery off-gas event before a thermal runaway event. Scalable deployment for cost effective protection of wide range of battery storage system installations. Can be easily installed in a wide range of integration points with calibration-free sensors

HONEYWELL FIRE & LIFE SAFETY SYSTEMS

EUROPE MARKET LEADER

FIRE SYSTEMS AND SENSORS

Protect people and assets with leading integrated and networked solutions including voice alarm and emergency lighting

ADVANCED DETECTION

Proactive early warning detection solutions to overcome specific challenges and keep mission critical fabs operating at full capacity

SOFTWARE

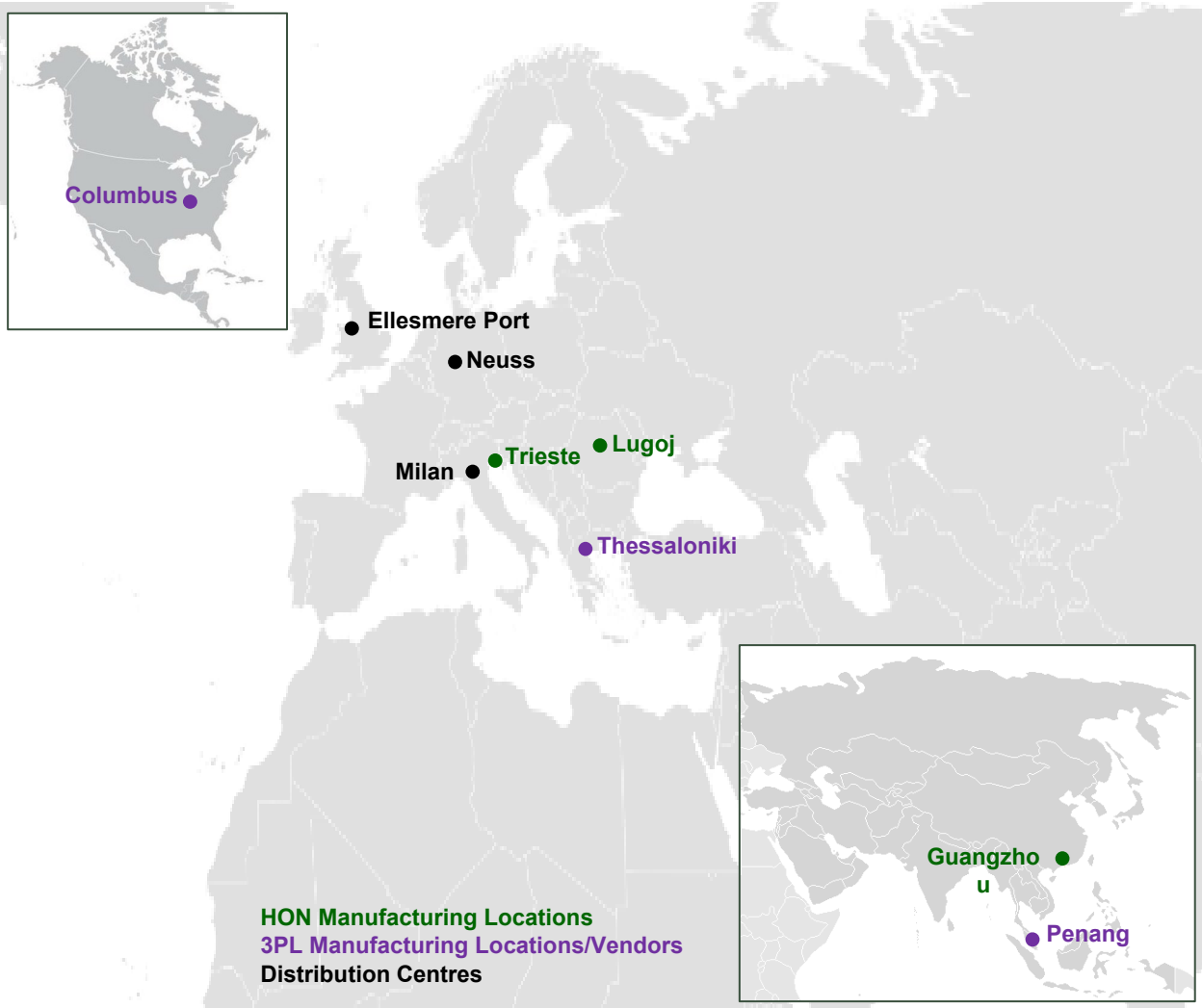
Provide software that supports remote-assisted inspection and maintenance, alarm transmission, site monitoring, digital compliance

PROJECTS

Work directly with end-users, consultants and system integrators to support the standardization of fully-compliant, integrated fire systems

HONEYWELL FIRE | EU MANUFACTURING

EUROPEAN MANUFACTURING & DC LOCATIONS



Product Group	Mfg Location	LT (working days)*
VESDA E	Trieste (IT)	10
FAAST (Flex, LT)	Trieste (IT)	10
OSID DE	Penang (MLY)	10
Emergency Lighting	Thessaloniki (GR)	10/20
ESSER Controller Panels	Lugo (RO)	10
ESSER Detectors	Lugo (RO)	10
Lion-Tamer	Columbus (US)	30
Variodyn One	Guangzhou (CN)	10

* LT might increase if FCST is not provided

HONEYWELL SECURITY

AN INTRUSION EUROPE MARKET LEADER

COMPLETE ACCESS INTRUSION AND VIDEO SOLUTIONS

Delivering trusted and proven security solutions that protect and connect buildings, businesses, and people for a safer and interconnected world / LenelS2 is the global leader in advanced physical security solutions

INTEGRATED , CONNECTED AND CYBER SECURE PLATFORMS

Providing comprehensive, integrated, and cybersecure solutions for SMB and Enterprise, with cloud-based capabilities for scalability and connectivity

SOFTWARE

Provide software that supports remote-assisted inspection and maintenance, alarm transmission, video analytics, customized dashboards, regulation complaint

PROJECTS

Work directly with end-users, consultants and system integrators to support the standardization of fully-compliant, integrated security systems

HONEYWELL BUILDING MANAGEMENT SYSTEMS

THE EUROPEAN MARKET LEADER

END TO END OPEN PLATFORM SOFTWARE SOLUTION

Uptime, Operational Efficiency, through Open Platform to Manage Building and Power systems

GLOBAL PARTNER NETWORK

Data Centre Expertise, Agile Deployment, International Collaboration, Honeywell Technology and Support

CONTROLS

Best in class Honeywell DDC and PLC Controls, Uptime through reliable and accurate controls

CYBERSECURE BY DESIGN

Cyber Security Dashboard, Role-based access control, Compliance to

- CFR 21 Part 11
- ISA 62443 (SL3)
- BACnet / SC (TLS 1.3)

HIGH TECH GAS DETECTION (SPS)



HIGH TECH DETECTION FOR THE HIGHEST TECH

Semiconductor chips are critical for every part of the global economy. A single unplanned fabrication plant shutdown can cost upwards of \$300k per hour of missed production revenue.

Honeywell protects critical semiconductor manufacturing facilities with advanced gas detection equipment that measures gas levels down to parts per billion.

Honeywell is trusted by manufactures across the globe to protect these vital facilities and their workers from risks of fire, explosion, oxygen depletion, and toxin exposure.

Through our gas detection technology, we keep workers safe and protect critical infrastructure so that the economy continues to function.

HIGH TECH DETECTION

COMPLETE SOLUTION OFFERING

With over 50 years of gas detection experience, Honeywell provides semiconductor customers with turnkey system solutions from start to finish.

- Expertise in the industry
- Project team for implementation
- Project engineering experience
- Onsite service
- Packaged solutions

**TECHNOLOGY
INNOVATION**



**TECHNICAL
SUPPORT**

**FIELD
SERVICE**

**SYSTEM
INTEGRATION**

Offering White Glove Service Throughout the Lifecycle

HIGH TECH | TOXIC GAS MONITORING SOLUTIONS

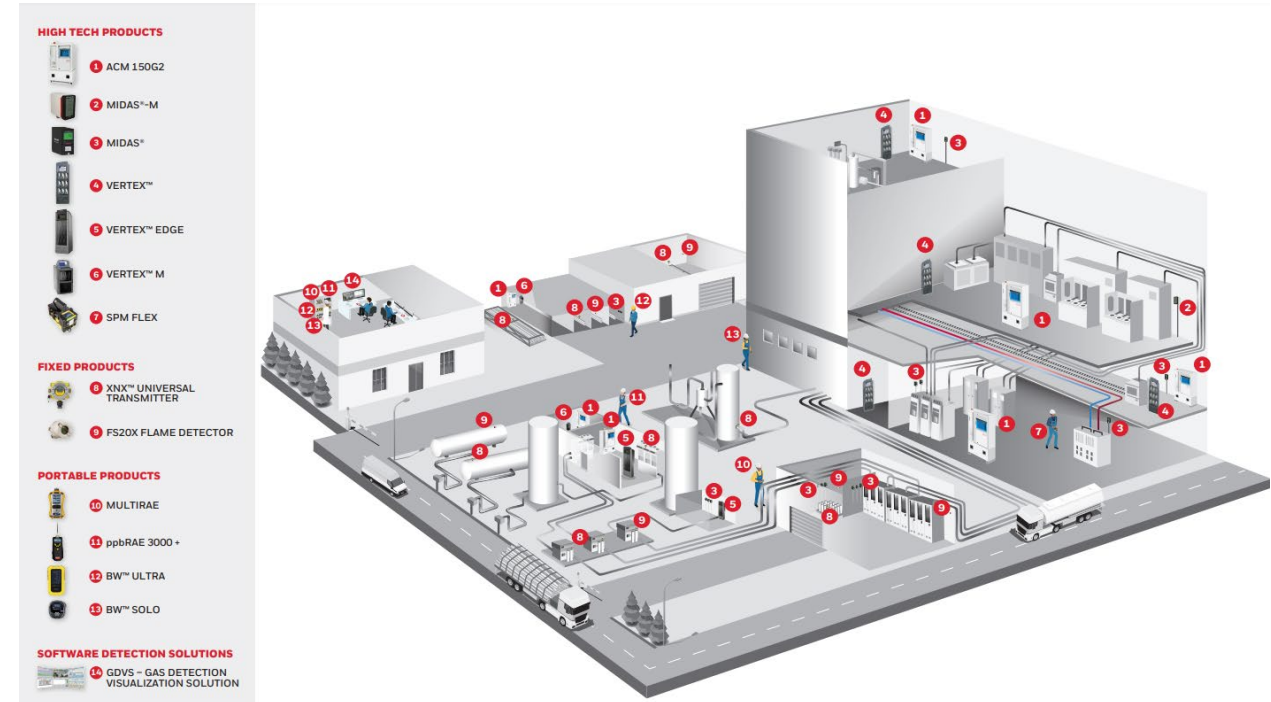
Honeywell's High Tech Total Gas Monitoring Solutions (TGMS) offer a comprehensive portfolio of toxic gas detection instrumentation, including:

Multi-point PPB: Colorimetric

Multi-point PPM: IR spectroscopy

Single-point PPM: Electrochemical cartridge

Applications include semiconductor processing, research laboratories, and emergency response.



Advanced Technologies for Advanced Detection

HIGH TECH | PORTFOLIO TECHNOLOGY MATRIX

Multi-Point

Chemcassette
Lower detection limits (PPB)

Electrochemical
Detection to PPM levels
Less expensive, flexibility

FTIR
Detection to PPM levels
Specificity of detection



Single-Point



Gas detection technologies and products with years of trusted performance

ENGAGE DOMAIN EXPERTISE

INTERACTIVE WORKSHOPS

DEEPDIVE ON FIRE & LIFE SAFETY

Challenges	Addressing your Unique Applications
Knowledge	Sharing industry Insights and Best Practices
Demo	Product and Software Awareness
Design	Collaboration on Standardization and Specification
Training	Eligible to Continuous Professional Development
Innovation	Ideation and Co-Creation
Technology	Engineering and Production Visit



**THE
FUTURE
IS
WHAT
WE
MAKE IT**

Honeywell