



ANALYTICAL SYSTEMS AND INTEGRATION SERVICES

Honeywell offers a comprehensive range of safety systems solutions and integration services for the semiconductor and process sectors. From cabinets to sampling systems to duct-mount appliances, our engineered solutions provide a critical link between off-theshelf equipment and desired function. System integration projects are managed through a team of highly-trained and certified experts to ensure successful delivery on time and on budget.

Industries Served

- Oil and gas extraction
- Chemicals and allied products
- Gas production and distribution
- Petroleum refining
- Paper and allied products
- Semiconductors and related devices
- Electric services

Fixed Gas Detection Systems

- Fire and gas systems
- Gas imaging systems
- SCADA packages
- Auxiliary instrumentation
- Free standing and wall mounted panels
- Fire and gas mapping
- Virtual FAT
- New application development
- Commissioning, field service, and technical support
- Training
- · Customized adaptations of existing products
- Virtual prototypes of proposed solutions
- Custom CAD in 2D and 3D applications
- Device configurations



Example: Virtual FAT

Portable or Transportable **Gas Detection Systems**

- Device management
- Configuration
- · Site assessment
- Full commissioning support
- Fault identification and resolution
- Rapid diagnostics and maintenance
- Field application engineering



Example: Virtual Prototype of custom retrofit duct detection solution

Large Projects

- Project management and logistics
- Integration of Honeywell and third-party products
- Custom engineering
- Documentation packages
- Factory acceptance testing (FAT), including virtual FAT
- Site acceptance testing (SAT)
- Custom packaging and labeling

Software

- Configuration of Safety Suite Device Manager and Real Time
- Visualization software programming
- PLC and HMI programming
- Remote maintenance services

SYSTEMS AND INTEGRATION CAPABILITIES

Fire and gas system projects are often complex, costly, and have several stakeholders throughout the system lifecycle. Moreover, they often involve customized applications and coordination with other tasks in the execution of capital projects. With so much at stake, it is beneficial for you to partner with an organization with project management and system integration expertise - one who has the experience and capability to deliver packages for a handful of sensors to complete systems of several thousand points.

With a comprehensive approach, Honeywell offers solutions that suit requirements from preliminary estimation to long-term support including:

- Project management execution
- · System design, manufacturing, and integration
- Procurement
- Factory acceptance
- Global logistics
- Site acceptance
- · Startup and commissioning
- Training
- Lifecycle services support

Project Management

End users depend on Honeywell for total engineered solutions to fire protection. A singular component of such support is project management that begins at the early stage of projects. Engaging in prefront end engineering design (pre-FEED) allows the organization to understand project requirements, fire and gas system philosophy, and to obtain agreement on a plan for collaboration with the extended team. This approach simplifies the complexities of project scope and helps identify risks and opportunities for efficiency.

Document Management

Honeywell supports your systems and protocols for templates, transmittals, and uploads, and manages review and approval cycles. Using a structured phase-gate approach, we are in coordination with your team during each phase of the project to ensure documentation delivery is aligned with project requirements and schedule.

APPLICATIONS

- Integrated circuit manufacturing
- Chemical, solvent, and paint
- Wastewater treatment plants
- Gas turbines
- Pipeline compressor and drive packages
- Petroleum and petrochemical refineries

ENGINEERING DESIGN PROCESS

PRE-FEED	FEED		EXECUTION		OPERATE	SUPPORT
DISCOVERY	PROPOSAL	INITIATE	PLAN	EXECUTE	CLOSEOUT	SERVICES
Early Engagement	Align Project Teams	Confirm Requirements	Factory Alignment	Fabrication	Evaluation	Startup and Commissioning
Understand project philosophy, scope, and preliminary technical requirements	Develop and deliver project proposal	Complete engineering and system calculations based on preliminary data	Complete engineering and system calculations based on final data	Purchase materials and build order	Supply documentation	Conduct training
Develop communication process and project plans	Confirm technical, commercial, and material specifications	Complete utility loading and P&ID's	Complete material and production schedules	Conform to charge order management	Deliver drawings package	Provide spare parts support
Conduct site survey	Reach agreement on international standards, terms and conditions			Support factory acceptances and certifications	Review projects and lessons learned	Provide maintenance and repair services

For more information

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Americas

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THE FUTURE IS WHAT WE MAKE IT

