COMPREHENSIVE SOLUTIONS

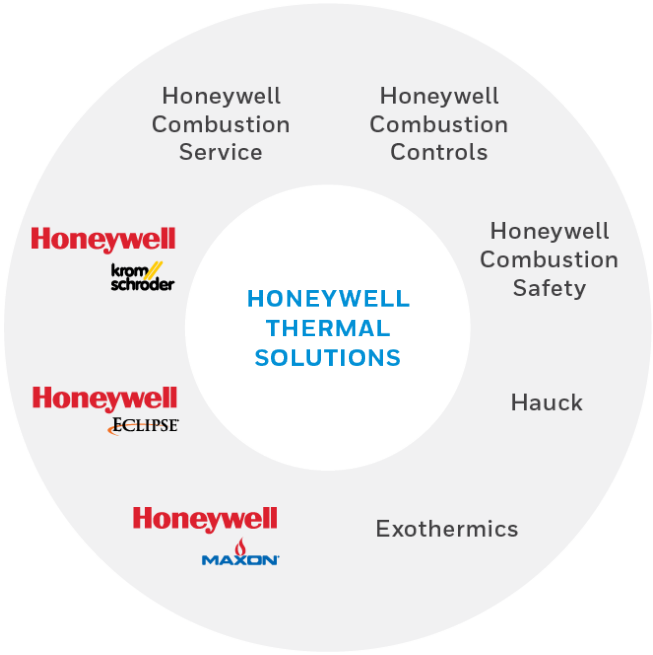
For the most complex thermal process applications

Honeywell

THE GLOBAL LEADER IN COMMERCIAL AND INDUSTRIAL THERMAL PROCESS SOLUTIONS

At Honeywell, we help customers maximize the productivity and efficiency of their thermal processes by providing safer, more reliable, more energy efficient solutions for commercial to heavy industrial applications. With a strong track record of high-quality performance and proven application success, Honeywell Thermal Solutions helps ensure maximum productivity and uptime while reducing installation and maintenance costs.

Our portfolio is more robust than ever, and includes an extensive, versatile and innovative range of solutions based on decades of industry leadership and R&D investment. Honeywell Thermal Solutions united the combustion industry's leading brands to provide the most extensive range of thermal solutions globally: Honeywell Combustion Controls, Honeywell Combustion Safety, Honeywell Combustion Service, Eclipse, Exothermics, Hauck, Kromschröder and Maxon.



INCREASE PRODUCTIVITY

The need for low-cost production across a variety of industries is requiring companies to be more competitive, which means using people and processes more efficiently. Honeywell Thermal Solutions provides high-quality, highly reliable solutions that perform in the most demanding environments, plus smart systems that speed troubleshooting — helping to increase uptime and enhance output.

OPTIMIZE CONNECTIVITY

Getting the right data to the right place is one challenge. Learning how to monitor, diagnose and act on that data is entirely another. Honeywell Thermal Solutions offers cyber-secure solutions that transform transform thermal process data into real-time information regarding performance, equipment health, energy consumption and emissions monitoring.

REDUCE EMISSIONS

Environmental regulations and corporate governance requirements continue to drive emissions reductions, requiring companies to reduce pollutants while also finding ways to stay competitive. Honeywell Thermal Solutions provides controls and burners that optimize fuel and air to produce the most energy with the least waste — helping you meet emissions standards without sacrificing productivity.

ENHANCE SAFETY

Protecting people and equipment is a top priority for every company in every industry. Honeywell Thermal Solutions not only offers a variety of safety integrity level 3 solutions (SIL 3), but we also provide a full suite of safety services that include testing and inspections, gas hazards management, field services, customized training and more — providing enhanced safety and efficiency.

ONE GLOBAL PARTNER FOR ANY THERMAL PROCESS APPLICATION

Featuring the industry's most comprehensive portfolio of proven thermal process solutions, Honeywell Thermal Solutions helps customers all over the world deliver heat efficiently, accurately and safely. We provide everything from products and engineered-to-order systems to post-install training and service for applications ranging from commercial to heavy industrial and everything in between — virtually anywhere you do business.

GLOBAL FOOTPRINT. LOCAL FOCUS.

Honeywell Thermal Solutions has the largest installed base of burners, valves, sensors and controls in the world. With more than 100 years of industry-leading innovation and on-the-ground experience, we provide global solutions aligned to specific regional requirements. Whatever you need, wherever you need it — we're the partner you can trust.

SERVING MORE MARKETS IN MORE PLACES AROUND THE WORLD:

- Asphalt
- Automotive
- Ceramics
- Chemicals
- Commercial HVAC
- Construction Materials
- Food & Beverage
- Glass
- Minerals, Metals & Mining
- Oil & Gas
- Power Generation
- Printing & Coating
- Pulp & Paper
- Refining & Petrochemical
- Textiles

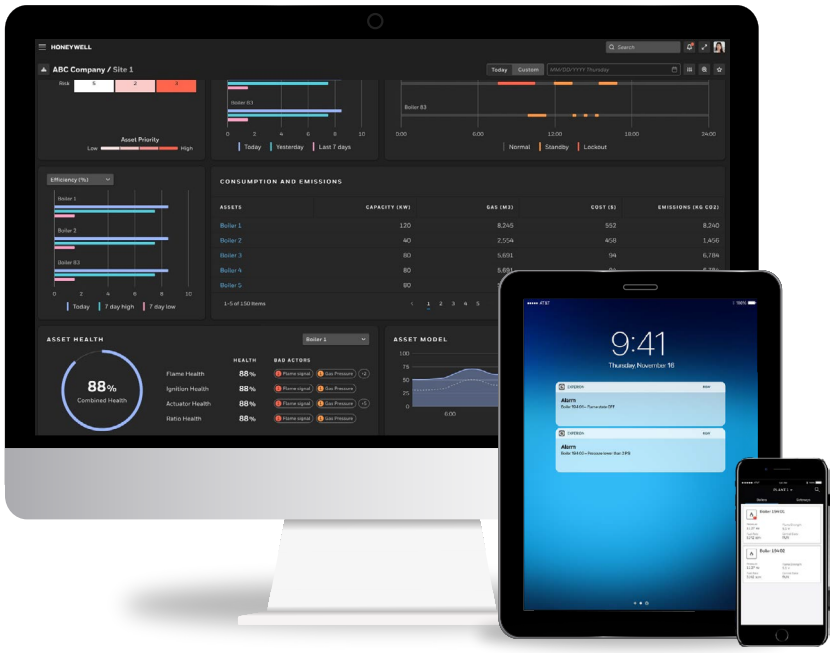
CONNECTIVITY IS KEY

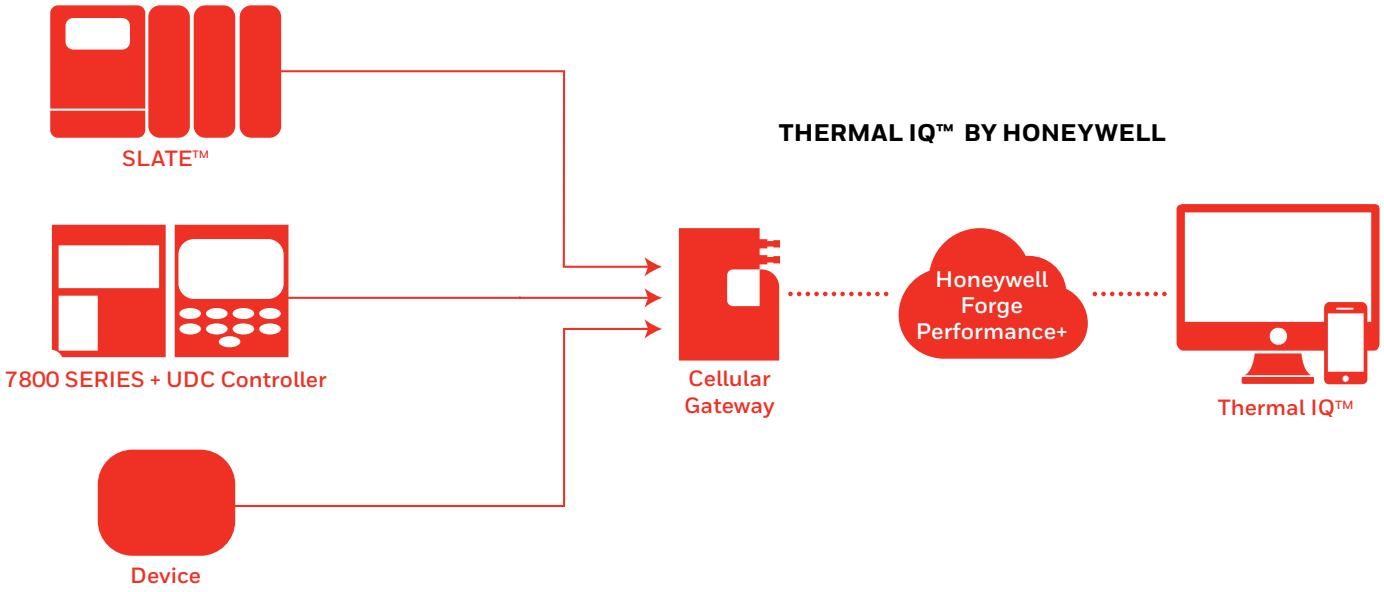
In a highly competitive global marketplace, industrial organizations increasingly seek digital intelligence to manage and operate hundreds or thousands of assets. Whether at a single site or across an enterprise, digitization puts more control in the hands of company leaders to meet critical operating demands. Honeywell has developed innovative connected solutions to address this development:

THERMAL IQ™ FOR REMOTE PROCESS AND EQUIPMENT MONITORING

Thermal IQ™ is a cyber-secure offering designed to connect thermal process equipment to the Honeywell cloud, making critical thermal process data available anytime, so users can optimize operations, predict plant failures and eliminate unplanned downtime.

With Thermal IQ, service incidents can be reduced significantly. This solution provides key performance analytics that help customers make their installations more efficient.





BURNER MANAGEMENT SYSTEMS

Burner management is the safe sequencing of burner fuel delivery, flame safety, fuel-air ratio and limit operation.

Honeywell Thermal Solutions offers an extensive range of process burner management control offerings and solutions — across commercial and industrial applications. With a proven history of safety, performance and reliability, we leverage the latest forward-thinking technologies to meet virtually any customer need.

COMBUSTION CONTROLS

SLATE™ Integrated Combustion Management

The Honeywell SLATE Combustion Equipment Management System combines configurable safety with programmable logic all in one platform. It's fewer components, for less complexity. And with SLATE's application flexibility, universal I/O, global safety certifications that include SIL 3, and universal power supply, you can serve more global industries with one platform.

7800 SERIES

The 7800 SERIES is a microprocessor-based integrated burner control platform for single-burner applications. This platform includes a family of relay modules that provide burner sequencing for a wide variety of burners, and is SIL 3 capable.

Burner Control Units (BCU)

The Kromschröder BCU is a control platform for single- and multi-burner solutions. It can be programmed for a wide variety of applications, simplifying engineering, installation and start-up while at the same time providing the highest level of safety capable of up to SIL 3.

SOLA

The SOLA boiler control platform is an integrated combustion platform providing burner control, flame supervision, circulation pump control, fan control, boiler control and electric ignition function. With up to 15 control functions in one compact device, SOLA helps reduce wiring, installation time and control count.

SLATE™ INTEGRATED COMBUSTION MANAGEMENT

7800 SERIES

BCU

SOLA

SMARTLINK® DS ACTUATORS

SMARTFIRE®, SMARTLINK® METER, SMARTLINK® MRV

SLATE™ F/A RATIO CONTROL

FUEL/AIR

SmartLink® DS Actuators
Recognized globally for precision and accuracy, the SmartLink® DS is a certified safety controller used to control the flow of air, gas and fluids with precision accuracy to 1/10 of a degree. It can be used with the SLATE system or with any PLC controlled system.

SmartFire®, SmartLink® Meter, SmartLink® MRV
The SmartLink® MRV is a parallel position fuel/air control system while the SmartFire® with the SmartLink® Meter is a turnkey, mass flow fuel/air ratio control system for use with natural gas or oxygen fired burners. Both systems provide precise electronic control of air/fuel flow helping to maximize efficiency and burner performance.

DG Smart Gauge Pressure Sensor
Our new sensor is designed to provide accurate and precise readings for low-pressure combustion air and fuel gases applications and is packed with advanced features and capabilities that make it the ultimate instrument to improve and optimize your combustion system. With its digital communication via MODBUS TCP and fail-safe 4-20mA NAMUR Analog output, our pressure transmitter is designed to work seamlessly with any control system. It provides accurate and reliable readings, making it perfect for use in a wide range of combustion systems.

SLATE™ Fuel/Air Ratio Control
The SLATE™ Integrated Combustion System incorporates an intelligent control solution for full modulation, semiautomatic and automatic single-burner applications. It replaces traditional, inefficient single-point modulation, and can result in energy savings of 2-6% — if not more.

FLAME DETECTION

Honeywell provides a wide range of flame detection solutions for commercial and industrial applications. This full line of flame rod, UV, IR and combined UV/IR solid-state detection scanners, including self-check options, are used with programmer and primary flame safeguard controls.

FLAME ROD

INFRARED

INDUSTRIAL FLAME MONITORING (IFM)

C7027 FLAME SENSOR

KROMSCHRÖDER® FLAME DETECTOR UNIT

C7061A FLAME DETECTOR

UVC1 FLAME DETECTOR

PRESSURETROLS & SWITCHES

Pressure and limit controls provide operating control with automatic or manual reset limit protection for pressure systems, and are used with steam, air, oil, noncombustible gases or noncorrosive fluids.

DG SMART

L4079 HIGH-PRESSURE LIMIT SWITCH

DG/DL PRESSURE SWITCHES

THERMAL TRANSFER

Thermal transfer directs the application of heat in a variety of processes to facilitate the manufacturing of goods.

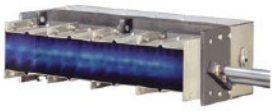
Honeywell Thermal Solutions offers the most comprehensive selection of burners and thermal process systems in the industry. Our unique, sophisticated solutions provide efficient heat delivery while also meeting stringent low-emissions requirements. Every one of our burners is backed by a global team of combustion engineers to ensure your success, making Honeywell Thermal Solutions a smart choice that delivers value, reliability and performance for your thermal transfer needs.

THERMJET

OVENPAK®

NOVASTAR

BRIGHTFIRE



CROSSFIRE

ECOMAX® LE

LINE BURNERS

Provide clean, reliable, uniform heat over a wide area to ensure the highest product quality and most efficient operation.

- AH-MA
- AirHeat V1
- AirHeat V2
- APX
- Combustifume
- FlueFire
- HC AIRFLO
- LV AIRFLO
- NP-LE AIRFLO
- NP-RG AIRFLO
- RadMax
- RatioStar

LINE BURNERS – LOW EMISSIONS

Provide clean, reliable, uniform heat over a wide area while helping you meet the most stringent emissions regulations.

- CROSSFIRE
- Linnox
- Minnox

SINGLE BURNERS

Designed for applications that typically require only one burner per chamber, while offering robust, reliable heat in a variety of heating applications.

- Incini-Cone
- Megafire HD
- OVENPAK 400 & 500
- RatioAir
- RatioMatic
- ThermAir
- ValuPak II
- Vortometric

SINGLE BURNERS – LOW EMISSIONS

Help you meet the most stringent emissions standards in a variety of industrial applications while maintaining robust, reliable performance.

- Kinedizer LE
- Kinedizer Staged LE
- M-Pakt
- Optima
- OVENPAK LE
- XPO
- Winnox

ASPHALT BURNERS

Designed specifically for the unique needs of the asphalt industry to ensure robust, reliable and clean operation in aggregate drying plants.

- MegaStar
- NovaStar
- StarJet

IMMERSION BURNERS

Designed to fire directly into tubes in immersion heating applications and deliver safe and reliable operation.

- ImmersoJet
- Tube-O-Flame
- Tube-O-Therm

GLASS/OXY BURNERS

Designed to fire at required capacities and temperatures while meeting the most challenging emissions requirements in a variety of glass melting furnace configurations.

- 04V
- BrightFire 200
- PrimeFire FH
- Oxy-Therm® 300, FHR, LE & Titan
- PrimeFire 100, 300 & 400
- WGD
- WTPU & WTPUG

MULTI BURNERS

Designed for use in applications where multiple burners are needed for one zone or chamber, and to provide robust performance, low emissions and efficient operation.

- Furnnox
- Beta Burner (BBC/BBG)
- BIC/BIO
- BICR
- ECOMAX
- ECOMAX LE
- KINEMAX®
- Single-Ended Radiant Tube (SER)
- ThermJet & ThermJet PCA
- TriOx
- Tube Firing Burner (TFB) with Bayonet Ultra Recuperator
- Uni-Rad
- Wall Hugger (WHG)
- Wall Hugger Invisiflame

BLOWERS/BOOSTERS

Provide the air pressure needed for optimal system performance while helping increase the pressure of any gas or air/gas mixture to meet application requirements.

- Hermetic Booster
- SMJ Blower
- TBA Blower

HEAT EXCHANGERS/INDIRECT HEATERS

Provide improved process efficiency and fuel savings by recovering heat from a variety of industrial applications and feeding it back into the process.

- Dimple Plate
- ER Heater
- RHT
- Sinusoidal Plate
- Tubular

FUEL DELIVERY

Fuel delivery is the accurate delivery of fuel at the optimal pressure, temperature and flow — within safe operating conditions.

Honeywell Thermal Solutions offers fuel delivery solutions for commercial and industrial applications, with a full valve portfolio that includes mechanical valves, safety shutoff valves and control valves, plus intelligent valves that deliver a distinctive competitive advantage. With a proven history of safety and performance, our comprehensive range of products and piping systems meet most global and regional requirements.

DIAPHRAGM GAS VALVES

Include the valve and actuator in single-body construction for use on boilers, unit heaters, duct furnaces, make-up air and rooftop heaters.

GAS PRESSURE REGULATORS

Regulate gas and air inlet pressure for gas burners, including mixed and combined systems and in industrial distribution systems. For all gas consuming appliances.

FLUID POWERED ACTUATOR VALVES

Provide manual reset and safety shut-off functions to control gas supply to commercial and industrial burners.

LIGHT DUTY SAFETY SHUTOFF VALVES

Double block valves that are used to control gaseous fuels in gas-fired power burners, atmospheric gas boilers, ovens, furnaces, incinerators, roof-top units, make-up air units and other gas consuming appliances.

COMMERCIAL COMBUSTION GAS VALVES

Suitable for furnaces, ovens, atmospheric burners, commercial water heaters, roof-top make-up air units, power burners, and commercial and industrial boilers.

HEAVY DUTY SAFETY SHUTOFF VALVES

Designed for performance, reliability and durability, Maxon gas valves are the only fuel shutoff valves with metal-to-metal seats that wear in, not out. Plus, powerful closing springs provide assurance of safe fuel shutoff.

VALVARIO

Featuring a compact design that helps reduce equipment footprint and component costs, valVario valves safely control the gas pressure in gas inlet and burner lines for high/low air control and cool-air operation on industrial burners.

SERIES 8000 & PSCHECK™

The Series 8000 line of pneumatically actuated, linear-acting safety shutoff valves (SSOVs) stands up to the most demanding, hazardous-duty environments. When combined with the PSCHECK™ partial-stroke technology, Series 8000 valves can offer a SIL capable system, and can determine the status of a SSOV without shutting down or interrupting combustion operations.

Diaphragm Gas Valves

Gas Pressure Regulators

Fluid Powered Actuator Valves

Commercial Combustion Gas Valves

Light Duty Safety Shutoff Valves

Heavy Duty Safety Shutoff Valves

valVario

Series 8000 & PSCHECK

SOLUTIONS & SERVICES

Our solution and service offerings help improve facility operations through on-site audits, complete engineered-to-order systems, and service and maintenance.

In addition to best-in-class products and systems, Honeywell Thermal Solutions offers a full suite of services to help you and your customers create the best system solution for every combustion application need. Our engineers have deep technical know-how, enabling us to provide systems that are compliant with all codes and standards – so you can focus on your enterprise and confidently leave the rest to us.

HONEYWELL COMBUSTION SAFETY

Honeywell Combustion Safety is the largest independent fuel train safety testing company in the world. We offer the most comprehensive, consistent and disciplined combustion equipment inspection program in the industry. Our mission also includes helping clients increase the efficiency and reliability of combustion equipment.

Global Services:

- Code-based testing and inspections
- Engineering/system upgrades
- Customized training
- Gas hazards management
- Field services

HONEYWELL COMBUSTION SERVICE

Critical equipment like burners, gas boosters and combustion safety equipment must perform reliably in every application, every day. Honeywell Combustion Service is the partner you can depend on to keep your equipment running safely and efficiently. Our combustion specialists have both broad and deep expertise in a variety of industries, from metals, automotive, asphalt and glass, to food and beverage, pharmaceuticals and consumer products.

Single Source:

- HTS factory-trained field product support
- Proactive & preventative maintenance
- Burner setup & performance tuning
- Start-up & commissioning
- Combustion system troubleshooting
- General & customized combustion training
- Regulatory safety checks

ENGINEERED TO ORDER (ETO)

Our engineered-to-order offering includes thermal process systems and expert services, all incorporated in a complete turnkey solution, from start to commissioning and beyond, while ensuring compliance with local codes and standards. Each standard or custom-built system is designed for optimal thermal process control. This approach allows customers to focus on their core competency while saving valuable in-house resources.

LET'S TALK ABOUT HOW HONEYWELL THERMAL SOLUTIONS CAN HELP

Contact your Honeywell Thermal Solutions representative or email HoneywellThermalSolutions@Honeywell.com for help finding the right product, specifying a solution, or scheduling safety or service.

For more information

The Honeywell Thermal Solutions family of products includes Honeywell Combustion Controls, Honeywell Combustion Safety, Honeywell Combustion Service, Eclipse, Exothermics, Hauck, Kromschröder and Maxon.

To learn more about our solutions and services, visit https://automation.honeywell.com/us/en/solutions/thermal-solutions or contact your Honeywell representative.

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THE FUTURE IS WHAT WE MAKE IT

Honeywell