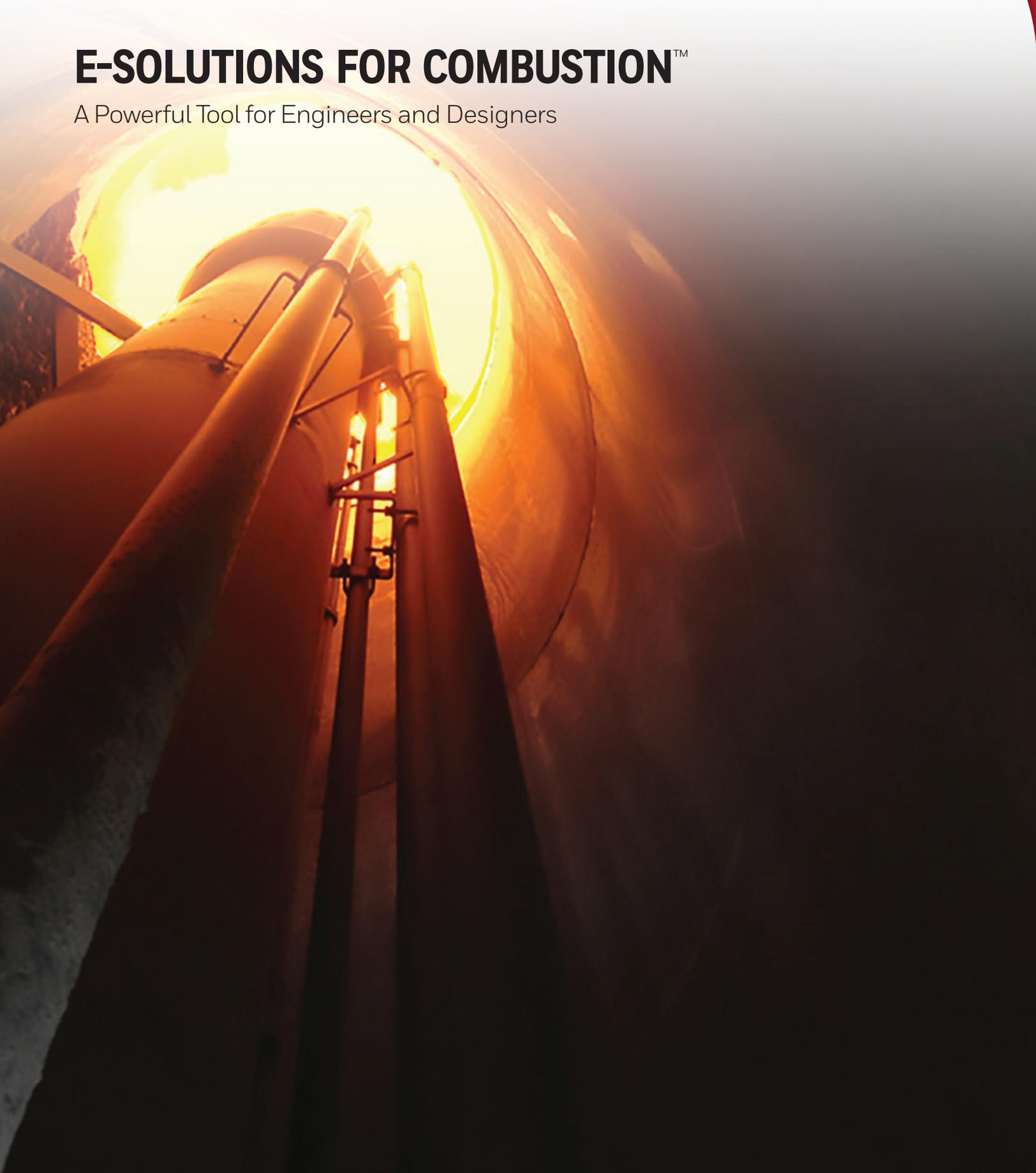


**Honeywell**  
THE POWER OF **CONNECTED**

| Connected Industrial

# **E-SOLUTIONS FOR COMBUSTION™**

A Powerful Tool for Engineers and Designers



# Industrial Heating—Put the Right Equipment to Work for You

Many industrial processes use various combustion systems to generate heat and improving these operations along with related emissions control and efficiency gains are continual challenges.



*Engineering and design personnel need a practical tool for solving combustion and heat transfer challenges. Through its diverse global experience, Honeywell has gained an unparalleled knowledge in combustion processes and technology.*

## Optimize Your Combustion System

Honeywell's e-Solutions for Combustion is a free, interactive calculation software tool, which provides comprehensive, user-friendly solutions for resolving industrial combustion and heat transfer challenges. In addition to empirical data, the software utilizes scientific concepts from diverse disciplines. The Microsoft® Windows®-based program incorporates these concepts into a complete combustion-engineering package.

With e-Solutions for Combustion, engineers, designers, technicians and operators can develop effective thermal process solutions across a wide range of applications. The program guides users through product selection or combustion system design for Eclipse, HAUCK and Kromschröder burners, valves, regulators and components. It employs a collection of programs and reference data for designing, maintaining and enhancing industrial combustion equipment.

e-Solutions for Combustion eliminates the need for bulky catalogs, handbooks, calculators, note pads and other complicated methods to solve problems and find answers related to thermal processes. The program contains a complete model for sizing combustion systems for both gas and oil systems.



## A Powerful Tool for Engineers and Designers

Honeywell's e-Solutions for Combustion program offers an unparalleled depth of combustion performance know-how. It includes programs for:

- Air Heating
- Air/Fuel Piping Design
- Blowers
- Eductor
- Emissions Calculations
- Energy Saving
- Fan Laws
- Flue Sizing
- Fluid Mechanics
- Forced Convection
- Fuel Combustion
- Fuel Data
- Furnace Heat Losses
- HAUCK Blowers
- Eclipse Blowers
- Low Temperature Aggregate Drying
- Natural Convection
- Orifice Meter Calculations
- Physical Properties of Gases, Liquids and Solids
- Radiation
- Sound
- System Design
- Unit Conversion
- Wobbe Index

# Comprehensive Program for Thermal Processes

Honeywell e-Solutions is made up of 33 interactive modules ranging from an index of industry terms and definitions, and basic geometry calculations, to more complex heat transfer and system sizing calculations. Throughout the program, the operating units can be switched between US standard and SI for global use. The e-Solutions tool consists of three main sections: Reference Data, Applications, and System Design.



## Reference Programs

The Reference Programs can be used to determine general technical data related to combustion, properties of solids/gases, fluid mechanics and thermodynamics. Information encapsulated in reference modules simplifies everyday engineering and combustion calculations—thus making it easier to determine combustion system-related technical data such as:

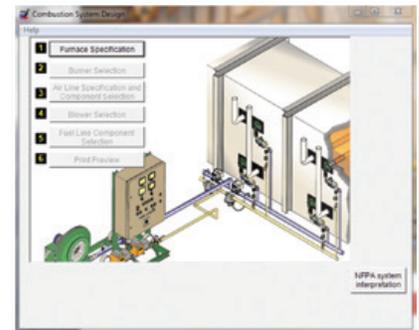
- Unit conversions
- Emissions calculations and conversions
- Heat Transfer Modules
- Fluid mechanics
- Energy savings comparisons between fuel types, emission values, and flow parameters
- Orifice meter calculations



## Application Programs

The Applications Programs focus on calculations and guiding design decisions for specific types of combustion systems. Some of the functionality in the Applications Section includes:

- Air Heating
- Combustion air blower selection
- Air and fuel piping design
- Burner and valves at altitude and temperature
- Aggregate drying



## System Design

The system design portion of the program can be used to build a user-defined combustion system starting with furnace and load specification, then burner selection, air and fuel piping, control component design, and finally combustion air blower selection.

Additionally, this section includes a NFPA System Interpretation which includes information to help users design their combustion system in compliance with the 2015 NFPA 86 Standard for Ovens and Furnaces.



# How Honeywell Can Help You

Whatever your industry, we have the expertise and resources to make your combustion system work smarter for you. At Honeywell, we're dedicated to improving your industrial operation and we know that the best performance requires calculation, planning and execution—starting with proper hardware selection, followed by installation and tuning—resulting in efficient operation of the combustion system. In addition to designing and providing you with our design optimizing software, we work with our customers to ensure plans for new or retrofit systems are well developed and executed, and offer startup and lifecycle support.

In addition to the e-Solutions for Combustion program, Honeywell delivers the most comprehensive line of industrial and commercial thermal solutions on the market. Our extensive product portfolio spans from burners and controls, to valves and complete combustion solutions.



The Honeywell Thermal Solutions family of products includes Honeywell Combustion Safety, Honeywell Combustion Service, Eclipse, EXOTHERMICS, HAUCK, Kromschröder and MAXON. Learn more about e-Solutions for Combustion today. Visit [www.thermalsolutions.honeywell.com/e-solutions](http://www.thermalsolutions.honeywell.com/e-solutions) to download the free tool.

## For more information

To learn more about our products, visit [ThermalSolutions.honeywell.com](http://ThermalSolutions.honeywell.com) or contact your Honeywell Sales Engineer.

## Honeywell Process Solutions

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