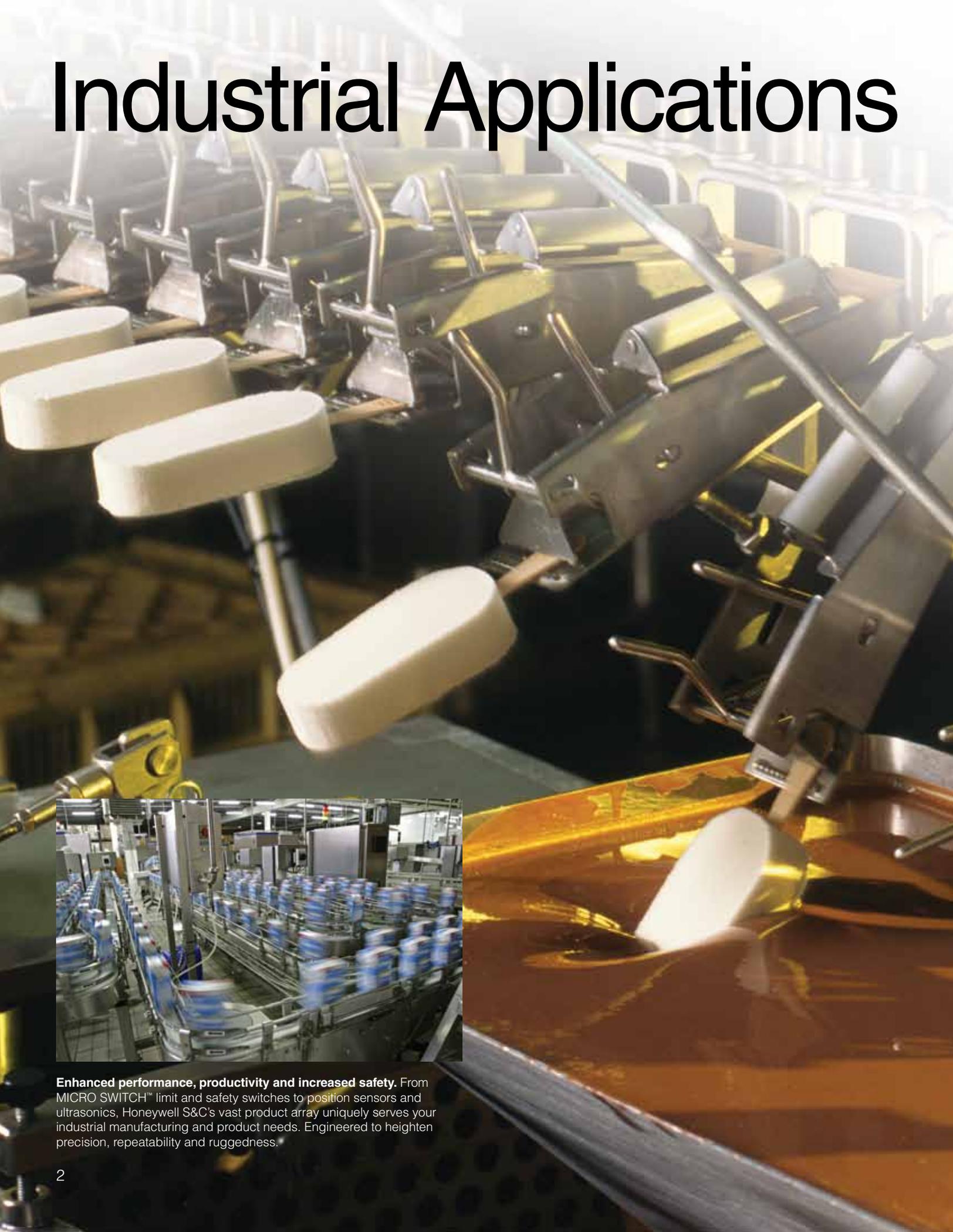




**SENSING AND CONTROL**

**Sensor and Switch Solutions**

# Industrial Applications



**Enhanced performance, productivity and increased safety.** From MICRO SWITCH™ limit and safety switches to position sensors and ultrasonics, Honeywell S&C's vast product array uniquely serves your industrial manufacturing and product needs. Engineered to heighten precision, repeatability and ruggedness.

**Only one company offers more than a century of experience, solving thousands of specific industrial needs.**

Only Honeywell.

Our expertise in aerospace and defense, transportation, medical, test and measurement — and especially industrial industries — means we offer products and solutions for the widest range of applications.

Need the most extensive product line? Need unprecedented engineering and value-added service capabilities? Want a supplier working with you, rather than someone telling you what to do? Honeywell S&C offers the domain knowledge and technology resources, and a close working relationship, to develop and deliver cost-effective, individually-tailored solutions — like custom assemblies, including adding wire, sheathing or connectors to a sensor or switch. Our global footprint and channels help provide the best price for your application, along with immediate technical support.

**Year after year, a breath of fresh air for your industrial needs.** With a 75-year legacy in the switch and sensor business, Honeywell S&C has earned every bit of our reputation for reliability and excellence. Our uniquely strong product designs, Six Sigma Plus manufacturing environment and rigorous testing facilities help provide quality right out of the box, as well as enhanced, sustainable performance right down the line.

Global service, sourcing and manufacturing. Industry-leading engineers. Value-added assemblies and solutions. Construction to your needs. All you need in a one-stop, full-service, globally competitive collaborator. So whether you've known us as Honeywell MICRO SWITCH™ or Honeywell S&C, for a half-century you've known us as a strong leader of industry — unparalleled as the gold standard and unquestioned as your best value.

# Need industrial streng



# th? Meet Honeywell S&C.

Honeywell S&C offers insight and innovation unavailable with our competitors:

**Comprehensive Portfolio:** Want all you need, and more? S&C brings you one of the broadest switching and sensing portfolios on the planet. No compromises. No concessions. Just an amazing breadth of solutions from Honeywell's array of technology platforms — which eliminates the need for multiple suppliers. It's the convenience of one contact, along with the peace of mind delivered by the industry leader.

**Knowledge and Expertise:** It might be modifications to an existing design, or it might be what you need doesn't exist — no problem either way. Honeywell S&C can engineer custom solutions to meet your specific needs, demands

and dreamed-up designs. Even better, our products are backed by continual engineering innovation, technology advancement and solutions development. All designed to be able to meet and beat the most demanding environments. It's been that way for more than 75 years.

**Global Distribution Channel:** Honeywell not only delivers products designed to specific and essential necessities, integrating switching and sensing technologies into application-specific packaging — but wherever you do business, we're already there doing it. Our global workforce offers sales, application and service support to more than 70 locations worldwide.



MICRO SWITCH Corporation (the inventors of the original MICRO SWITCH™ product) became Honeywell Sensing and Control in 1999. But after three-quarters of a century of service, the durability and efficiency of the Honeywell MICRO SWITCH™ technology is still astonishing by any standard — and Honeywell now manufactures over 120 million MICRO SWITCH™ products each year. Simple, superior, irreplaceable — the MICRO SWITCH™ product cycles on. And on.

# Product reliability. Industry knowledge. Business tenure. Expertise. Standard with every order.

Honeywell S&C brings added value by stocking on-site materials at OEM — through points of use or distribution and through global distribution. What's more, you also have the option of 'configurations by order,' as well as our 24/7 AOG support:

## PRODUCTS AND TECHNOLOGIES

*Best-in-class engineering ...*

**Flexible Heaters:** Resistive devices that provide heat output used in potential applications including airborne valves, appliances and telecommunication base stations. Can be bonded to other system parts or with thermostats, thermistors, thermocouples, temperature sensors and thermal fuses to form custom-engineered heating systems.

**Humidity Sensors:** Configured with integrated circuitry to provide on-chip signal conditioning, with interchangeability of  $\pm 3\%$  accuracy. Standardized and platform-based potential applications include air compressors, food and beverage packaging and processing, HVAC, printing presses and office equipment.

**MICRO SWITCH™ Hazardous Location Switches:** The standard in potential applications such as grain elevators, offshore drilling, petrochemical and waste treatment plants, paint booths and hazardous waste handling facilities. The flame path within the housing is designed to contain and cool the escaping hot gases that otherwise could cause an explosion outside the switch. MICRO SWITCH™ EX, BX, CX and LSX series Explosion-Proof Switches.

**MICRO SWITCH™ Limit Switches:** The industry-defining name, and the broadest and deepest limit switch portfolios — with rugged, dependable position detection solutions for industrial equipment, process, material handling and surface and transportation applications. MICRO SWITCH™ Heavy-Duty Limit Switches (HDLS) and Global Limit Switches. Hermetically- and environmentally-sealed.

**MICRO SWITCH™ Safety Switches:** Solutions for potential machine guarding applications, including operator point-of-operation protection, access detection, presence sensing, gate monitoring and electrical interfacing to the machine circuitry. High-quality, dependable and cost-effective solutions for safety hard guarding and perimeter emergency stop applications

**MICRO SWITCH™ Basic Switches:** The industry-defining name in basic precision switches. The original MICRO SWITCH™ product is compact and light weight, designed for repeatability and enhanced life in potential applications like vending machines, communications equipment, HVAC, appliances and gaming machinery. MICRO SWITCH™ Premium and Standard Basic Series.

**Position Sensors:** For presence and absence sensing. Linear position and rotary position measures mechanical motion and linear or rotary position.

**Pressure Sensors:** A full line of industrial-grade sensors, featuring media-isolated design, multiple ports and outlets, and electrical configurations.

**Temperature Sensors:** Thermistor temperature may be changed by the surrounding temperature or by self-heating with a pass current. Potential applications for temperature probe assemblies include industrial grade appliances, HVAC and compressor equipment. Monitors the temperature of fluids for hydraulic systems, and used in power generation and within vending machines. Honeywell also provides thermistors, RTDs and packaged probe assemblies.

**Thermostats:** Custom-packaged thermostats offer application flexibility, with precision-grade thermostats operating in extreme conditions ranging from vehicle fire suppression systems to satellite potential applications. Commercial thermostats are used in a wide array of small and major appliances, automotive potential applications, office copy machines, heat and smoke detectors and HVAC equipment.

**Ultrasonic Sensors:** Offer precision distance sensing, with non-contact based sensor measuring space between objects and sensor. Measures packing output and liquid level — with color and shape not a factor.



## **POTENTIAL INDUSTRIAL APPLICATIONS**

*Honeywell S&C is ready to work with you to deliver cost-effective, custom solutions for a wide array of basic and complex industrial applications, each engineered for enhanced precision, repeatability, and ruggedness. Our flexible designs enable quick customization for most potential applications:*

### **• HVAC**

- Bulk refrigeration
- Temperature control systems

### **• Industrial Equipment**

- Air compression
- Bending, grinding, shaping, moving, cutting, mixing or batching equipment
- Humidity control systems
- Industrial grade appliances
- Material handling
- Power generation
- Printing presses
- Temperature control systems
- Water heaters and boiler controls

### **• Manufacturing Equipment**

- Conveying
- Food processing and packaging
- Machining
- Milling
- Palletizing
- Paper production
- Sorting
- Steel fabrication

**From the factory floor to the furthest distribution center, who keeps more global enterprises industrious?**

Honeywell. Our breadth of components, standard interfaces and made-to-order engineering offers unmatched value down the line — powerful solutions for most industrial needs. Enhanced accuracy, reliability, and durability are built into every part or construction, improving output and endurance. Honeywell solutions are also flexible, tailored to exact specifications — for enhanced performance, productivity and safety. It all adds up to reduced expenditures and operational costs.

**Part Innovation. Part Engineering. Total Solutions.**

**Products:**

*Patented designs include:*

- Flexible heaters
- Humidity sensors
- MICRO SWITCH™
  - Limit switches
  - Safety switches
  - Basic switches
- Position sensors
- Pressure sensors
- Temperature sensors
- Thermostats
- Ultrasonic sensors

**Potential Applications:**

- HVAC industry — air compressors, temperature control systems, bulk refrigeration
- Industrial equipment
- Manufacturing equipment — machining, conveying, sorting, steel fabrication, packaging, processing

**Find out more**

To learn more about Honeywell's sensing and control products, call **+1-815-235-6847**, email inquiries to **info.sc@honeywell.com**, or visit **www.honeywell.com/sensing**

**Honeywell Sensing and Control**

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**Warranty.** Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

