

Ingersoll Rand at a Glance

Our Company

Our Products

Our Value

Version 3.0

Updated and includes
Air Conditioning Systems
and Services





Since its inception more than a century ago, Ingersoll Rand has focused on results. Our people are uniquely qualified to make homes and businesses more secure, comfortable and efficient. We aim every day to have a positive impact on our customers' lives and help companies enhance their performance and profitability.

This brochure provides an overview of our broad range of market-leading products, systems, and services, which deliver cost-effective solutions, superior quality and high customer satisfaction. We're proud of our heritage of enabling progress through insight and innovation and look forward to continuing this tradition for the next 100 years.

Herbert L. Henkel

Chairman, President and
Chief Executive Officer

Contents

Overview	
<i>Who We Are</i>	ii
<i>Our Vision</i>	ii
<i>Our Commitment</i>	ii
<i>Our Businesses</i>	iii
<i>Our Well-Known Brands</i>	v
<i>Environmental Product and Service Innovation</i>	vi
1 Air Conditioning Systems and Services	
<i>Trane Commercial Systems</i>	1.3
<i>Residential Systems</i>	1.6
2 Climate Control Technologies	
<i>Retail Solutions</i>	2.5
<i>Transport Solutions</i>	2.7
<i>Industrial Refrigeration</i>	2.9
<i>Cold Chain Management Services</i>	2.11
3 Industrial Technologies	
<i>Air Business</i>	3.5
<i>Tools, Fluid, and Material Handling</i>	3.9
<i>Energy Systems</i>	3.12
<i>Club Car</i>	3.13
4 Security Technologies	
<i>Schlage</i>	4.2
<i>Security Technologies</i>	4.4



Overview

Who We Are

Ingersoll Rand is a \$17 billion company whose people and businesses around the world create progress for our customers in the global climate control, air conditioning, industrial and security markets. These markets continue to expand as they address growing needs in developed and developing economies alike. Our products, systems and solutions increase the efficiency and productivity of industrial and commercial operations and homes, and improve the security, safety, health and comfort of people around the world.

Our Vision

We are dedicated to inspiring progress for our Customers, Shareholders, Employees and Communities by achieving:

Dramatic Growth,

by focusing on innovative solutions for our customers

Operational Excellence,

by pursuing continuous improvement in all our operations

Dual Citizenship,

by bringing together the talents of all Ingersoll Rand people to leverage the capabilities of our global enterprise

Our Commitment

We inspire progress by unleashing the potential of people and technologies. Our people, products, systems and services make everyday living healthier, safer, more energy efficient, productive and comfortable—enabling our customers to achieve real progress and create a positive impact in their world.



Our Businesses

Our strong foundation includes businesses with powerful brands, solid reputations and market-leading positions. These businesses are aligned within four global operations; Air Conditioning Systems and Services, Climate Control Technologies, Industrial Technologies, and Security Technologies.

Our Businesses *Continued*



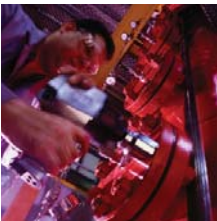
Air Conditioning Systems and Services

We provide heating, ventilation and air conditioning (HVAC) systems that enhance the quality and comfort of the air in homes and buildings around the world. Under our Trane® and American Standard® Heating & Air Conditioning brands, we offer energy-efficient systems, services, parts, advanced building controls and financing solutions.



Climate Control Technologies

Our Climate Control Technologies sector encompasses transport and stationary refrigeration solutions. Our product brands include Hussmann®, a manufacturer of refrigeration and food merchandising equipment and Thermo King®, a world leader in transport temperature control systems.



Industrial Technologies

Ingersoll Rand Industrial Technologies provides products, services and solutions that enhance our customers' energy efficiency, productivity and operations. Our diverse and innovative products include Ingersoll Rand® compressed-air systems, tools, pumps, and material and fluid handling systems. We also enhance productivity through solutions created by Club Car®, the global leader in golf and utility vehicles for businesses and individuals.



Security Technologies

Our Security Technologies sector is a global provider of products engineered to make buildings safe and secure. The sector's market-leading products include electronic and biometric access control systems, locks and locksets, door closers, exit devices, steel doors and frames, portable security devices, decorative hardware, cabinet hardware and time, attendance and personnel scheduling systems from well-known brands like Schlage®.

Our Well-Known Brands

Ingersoll Rand is composed of a diverse array of businesses and market-leading brands serving customers in global commercial and industrial markets. Our roster of brands includes well-known names, such as those listed here, and dozens of highly regarded regional brands serving a variety of market segments.



- ▶ Industry-leading golf cars and utility, transportation and rough-terrain vehicles

HUSSMANN®

- ▶ Refrigerated display merchandisers, refrigeration systems and related installation and service capabilities for the retail food industry



- ▶ Air compressors, compressed-air dryers and filters, and services
- ▶ Tools, air motors and material handling equipment
- ▶ Microturbines
- ▶ Integrated security systems and services
- ▶ Industrial refrigeration



- ▶ Residential and commercial mechanical locks, dead bolts, patented key systems, electronic offline and online locking systems, biometric and wireless access control systems, integrated security management systems, and biometric time and attendance terminals



- ▶ Transport temperature control units for trucks, trailers, small trucks and seagoing containers
- ▶ Heating, ventilation and air-conditioning systems for buses and passenger railcars
- ▶ Auxiliary idle reduction and temperature-management systems for sleeper compartments in tractor cabs




- ▶ Broad range of energy-efficient residential and commercial premium heating, ventilation and air conditioning (HVAC) systems, solutions, services and parts
- ▶ Global reputation for industry-leading professionals who deliver quality, reliability and innovation
- ▶ Accredited Energy Services Company (ESCO)

Environmental Product and Service Innovation

Through our products and services, Ingersoll Rand helps companies become more efficient, innovative and successful.

Ingersoll Rand offers products and services that enable businesses around the world to reduce energy consumption and costs and decrease harmful environmental emissions.

In this brochure, we highlight some of the dozens of innovative environmentally friendly technologies and services that Ingersoll Rand has pioneered in recent years. (Look for the symbol ) From microturbines that transform landfill methane gas into power to electric-powered golf cars with near-zero emissions, Ingersoll Rand provides technologies and services that benefit environmental efforts across a range of global markets.

*For more information on how Ingersoll Rand is helping businesses contribute to economic, social and environmental progress, please refer to our Sustainability Report on our web site, www.ingersollrand.com. Progress is *greener* with Ingersoll Rand.*

*“All of us have a role to play in making our company, our communities,
and our planet as safe and environmentally sound as they can be.”*

— *Herbert L. Henkel*
Chairman, President and
Chief Executive Officer

Air Conditioning Systems & Services

Section 1





Overview

Air Conditioning Systems & Services

Trane Commercial Systems

Key Markets/Industries

Healthcare

Education

Commercial

Retail

Manufacturing

Data Centers

Pharmaceuticals

Biomedical Laboratories

Government

- ▶ *Industry's most extensive line of HVAC systems from the largest chillers to the smallest packaged rooftop units*
- ▶ *EarthWise sustainable systems deliver measurable, superior Heating, Ventilation and Air Conditioning (HVAC) performance such as high-energy efficiency, low emissions, better comfort, indoor air quality and acoustics*
- ▶ *Controls architecture that provides easy integration and compatibility for high performance buildings*
- ▶ *Performance contracting, turnkey installations, responsive engineers and LEED Accredited Professionals (AP) to help meet energy and environmental goals*
- ▶ *HVAC parts and supplies centers for the right parts at the right time*

trane.com

Continued

Overview *Continued*

Residential Systems

Key Markets/Industries

Residential Homes

Light Commercial Buildings

- ▶ *A leading provider of premium heating, cooling and indoor comfort systems for residential and light commercial environments in North America*
- ▶ *Marketed under two premium brands—Trane® and American Standard® Heating & Air Conditioning*
- ▶ *Full line of high-quality, energy-efficient air conditioners, heat pumps, furnaces, air handlers, thermostats, parts and service*
- ▶ *Distributed through an expert network of about 10,000 leading independent dealers, who assess specific needs, recommend solutions and install systems to optimize homeowners' lifestyle and comfort needs*
- ▶ *Demonstrated indoor air quality leadership—the breakthrough CleanEffects™ and AccuClean™ are the industry's most effective whole house air filtration systems, removing more allergens, pollutants and viruses (including more than 99 percent of the common flu virus) from filtered air than any other*
- ▶ *Award-winning product innovation year after year*

trane.com

americanstandardair.com

Trane Commercial Systems



Chillers

- Extensive line of chillers includes centrifugal, rotary, and scroll compressor ranging in nominal capacities from 10 to 3,950 tons
- CenTraVac – centrifugal chillers that embody the global standard of reliability, efficiency and durability for low operating cost over the life of a variety of different types of buildings and applications
- Water-cooled Series R (RTWD) – offers the optimum HVAC solution for building owners seeking an HVAC system with easy installation, application flexibility, high reliability and improved energy efficiency

Advanced design, low speed/direct drive compressor and proven Series R performance make the RTWD ideal for industrial and commercial facilities



Airside and Terminal Devices

- Catalog and Custom Air Handling – circulate conditioned air as part of heating, ventilation and air conditioning systems (HVAC) for hospitals, schools, offices and other types of facilities

Custom air handling is important to maintaining comfort and indoor air quality, which contribute to improved staff performance

- Cool, Dry Quiet (CDQ) – the latest in low-humidity technology, utilizing a desiccant that adsorbs moisture from the air
Ideal for healthcare facilities, which require low humidity and quiet air handling to support a healthful and healing environment for patients and caregivers



Unitary Systems

- Light to large commercial systems ranging from 3 to 162 tons
- IntelliPak II – combines heating, cooling and fan sections all in one package for simplified application and installation
Systems are used in most classes of buildings, from schools to offices to retail, particularly where simplified installation is important
- 15 SEER Precedent – a high-efficiency, packaged rooftop system that can help effectively control humidity while lowering in-room noise levels

Trane Commercial Systems *Continued*



Controls



- Controls that integrate building systems enabling better decision making, providing easy integration and compatibility, and offering sustainable performance

- *AdaptiView* – provides building engineers a virtual view into a chiller's inner workings

Added visibility helps keep building occupants cool and critical processes operational

- *Tracer Enterprise Solutions* – a web-based systems integration solution that gives facility managers an online, enterprise-wide view of all their buildings and systems, from any PC on the network

Fully customizable, easy to install and lets users perform daily operations such as online scheduling, alarm management, troubleshooting, status updates and data analysis

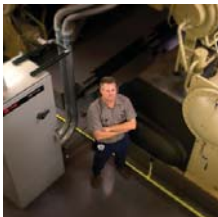
- *Wireless zone sensors* – ideal for building owners who want installation flexibility and comfort control

Flexible, easy-to-install, can be easily mounted anywhere in the building and readily relocated to meet the ever-changing space configurations of buildings

- *Critical hospital systems dashboard* – a computer-based tracking tool that allows hospital administrators and facility engineers to continuously view, monitor, track, trend and report environmental conditions in all critical areas from a single location

- Controls capability to continuously view, monitor, track, trend, and compare conditions across multiple buildings to identify best-in-class efficiencies

Trane Commercial Systems *Continued*



Building Services

- *In-warranty support – go above and beyond the standard one year, parts-only warranty and ensure the highest level of performance during the first year*
- *Extended warranty – provides extra protection on parts and labor, should the equipment ever fail*
Reliability-centered approach to maintenance predicts where issues will occur and addresses them in advance to keep your equipment running at peak performance
- *National service – delivers comprehensive maintenance, repair, and building performance monitoring to businesses with multiple locations across North America*
- *R'newal services – comprehensive services that restore the performance of existing HVAC equipment, bringing your existing units to the same level of reliability and current technology as offered by a new Trane chiller or building control unit*
- *Energy retrofit services – helps improve infrastructure systems on buildings built or upgraded before 2000, through targeted retrofit improvements that reduce costs over time*
- *Turn-key contracting – offers Trane's building systems expertise to building owners and facilities managers to provide a start-to-finish, all-encompassing approach to optimizing building infrastructure and equipment*
- *Performance contracting – a comprehensive program designed to create "self-funded" solutions for building owners by installing highly efficient savings systems that provide high-performance environments and significantly reduce energy and operating costs*
- *Rental services – provides short- and long-term temporary cooling, heating, or power solutions for emergency and planned situations for manufacturing facilities, hospitals, universities and special events*



HVAC Parts and Supplies

- *Stores carry a wide range of items from a variety of manufacturers*
- *HVAC system expertise*
- *With approximately 200 stores nationwide there is a Trane parts center located within 20 minutes of any major construction site*



High Performance Buildings

- *With more than 160 LEED Accredited Professionals, Trane can help you achieve your green building goals*
- *Trace™ 700 design tool, EarthWise chillers and systems, Tracer Summit controls and Performance Agreements for Comfort from Trane (PACT™) are just some of the ways Trane is helping buildings go green and attain LEED certification*

Residential Systems



Air Cleaners



- Trane and American Standard air cleaners breakthrough whole house air filtration system is 100 times more effective than a standard 1 inch filter, delivering cleaner air and more of it with performance verified by professors from the Harvard School of Public Health
- Removes up to 99.98% of airborne allergens and over 99% of the common flu, or influenza A virus from the filtered air



Air Conditioners

- Trane and American Standard air conditioners range in efficiency from 13 to 20.00 SEER and are designed to meet rigid specifications, tested to assure excellent performance over the life of the system, and designed with state-of-the-art technology and innovation
- Highest efficiency units feature self-charging technology to assure maximum performance and reliability



Air Exchangers

- Trane and American Standard Energy Recovery Ventilators replace stale indoor air with fresh outdoor air for a healthier home environment
- Retain heat and moisture from exchanged air in winter, and pre-condition and dehumidify incoming air in the summer for enhanced comfort and year round efficiency



Air Handlers

- Trane and American Standard air handlers represent the ultimate in comfort, while quietly distributing air evenly in every room. Also provides for further fine tuning with humidity control in the cooling season
- ComfortLink™ II and AccuLink™ communicating technology on select models connects all key components so the system automatically charges, configures and calibrates for optimal long term performance, efficiency, comfort and reliability



Boilers

- Trane and American Standard energy efficient boilers feature durable cast iron heat exchangers that quietly maximize fuel efficiency with up to 86.7 % AFUE
- Both oil and gas models offer attractive appearance with encased controls and durable powder-paint

Residential Systems *Continued*



Furnaces

- Trane and American Standard furnaces are available in highly efficient gas and oil models, including one of the most efficient furnaces enabling up to 96.7% AFUE
- The first furnaces with three stages of heat, the Trane XC95 and American Standard Freedom 95, deliver up to 95% AFUE, with ComfortLink™ II and AccuLink™ communicating technology connecting all of the key system components for enhanced performance, efficiency, comfort and reliability



Heat Pumps

- Trane and American Standard heat pumps are designed to deliver reliable, energy efficient heating and cooling for all season comfort with up to 19.00 SEER and 9.0 HSPF
- ComfortLink™ II and AccuLink™ communicating technology on select models connects all of the key components so the system automatically charges, configures and calibrates for optimal performance, efficiency, comfort and reliability



Humidifiers

- Trane and American Standard humidifiers help alleviate dry conditions which may aggravate asthma and allergy symptoms while enhancing your comfort by adding just the right amount of moisture into the conditioned indoor air



Packaged Heating & Cooling Systems

- Trane and American Standard packaged products deliver superior design leading to measurable energy efficiency, and are considerably quieter than other packaged products on the market.
- Gas/electric and heat pump models offer the highest efficiency on the market today
- The variable speed blower motor operates more quietly and efficiently than conventional blowers



Thermostats/Controls

- Trane and American Standard 7- day programmable and non-programmable digital controls offer precise temperature control, ease of use, flexibility, energy savings, and an attractive streamlined design
- ComfortLink™ II and AccuLink™ communicating technology enables an optional Telephone Access Module accessory to adjust temperature settings and receive system updates and alerts by remote telephone

Climate Control Technologies

2 Climate Control Technologies

Section 2





Ingersoll Rand
Inspiring Progress™

Overview

Climate Control Technologies

Retail Solutions

Key Markets/Industries

Supermarkets

Warehouse Clubs

Convenience Stores

Drug Stores

Retail Food Stores

Food Service

General Merchandisers

Mass Merchants

- ▶ *Global leader in refrigeration products to the retail food industry*
- ▶ *Solid installation and service infrastructure*
- ▶ *Equipment designed by professionals with a proven track record*
- ▶ *Best team in the business to meet your refrigeration needs*
- ▶ *High quality, energy efficient products*
- ▶ *High productivity equipment, lowest maintenance cost*

hussmann.com

koxka.com

Continued

Overview *Continued*

Transport Solutions

Key Markets/Industries

Refrigerated Transportation of Temperature-sensitive Products

Mass Transit and Public Transportation Climate Control

Local and Long-haul Temperature-controlled Transport

Long-Haul Ground Transportation

Refrigerated Ocean Transportation

Idle Reduction Systems for Tractor Cabs

- ▶ *Providing climate control solutions for transportation industries worldwide*
- ▶ *The global leader in refrigerated transport since 1938*
- ▶ *Cutting-edge technologies for increased efficiency and reliable results*
- ▶ *Industry-leading product quality and reliability*
- ▶ *Innovative product designs and service solution packages*
- ▶ *Providing the ultimate in performance and flexibility*
- ▶ *Quality-engineered products backed by a worldwide team of factory-trained experts*

thermoking.com

Continued

Overview *Continued*

Industrial Refrigeration

Key Markets/Industries

Distribution Centers and Storage

Food Processing

Blast Freezers

Process Cooling

Pharmaceutical

Design and Build Refrigeration

- ▶ *Single-source provider for all critical temperature projects*
- ▶ *Industry-leading refrigeration products and services*
- ▶ *Over 40 years experience with commercial and industrial projects*
- ▶ *Extensive sales and service support*

industrialrefrigeration.ingersollrand.com

Continued

Overview *Continued*

Cold Chain Management Services

Key Markets/Industries

Retail Food Stores

Food Service

Fresh Produce & Flower Storage

Food Processing

Perishable Transportation

Grower/Packers

- ▶ *Operationalizing cold chain knowledge and innovation for improved quality, reduced shrink, and reduced risk*
- ▶ *Providing business intelligence to perishable supply chain management participants for enhanced customer satisfaction and increased profitability*

Retail Solutions



Display Merchandisers



- Extremely wide range of refrigerated/non-refrigerated, remote, self-contained, custom or beverage cooler displays available
- Superior merchandising features to help food retailers increase sales
- Greater merchandiser flexibility, custom designs allowing for layout considerations
- Excellent energy efficiency
- Excellent temperature control/shelf life



Refrigeration Systems



- Designed to specific customer requirements
- High efficiency systems reduce overall energy costs
- Solid reliability helps reduce total cost of ownership
- Protocol refrigeration system protects the environment through reduction of HFCs and better energy efficiency



Port-a-Pak Refrigeration and Electrical Houses

- Outdoor machine room simplifies refrigeration, electrical and HVAC installation
- Cuts construction time and cost
- Saves floor space
- Simplifies remodels



Specialty Display Merchandisers

- Upscale case designs to help retailers increase sales in high margin departments
- Beautiful styling with excellent merchandising effectiveness
- Highly reliable refrigeration performance in all refrigerated models
- Extremely wide range of merchandising options
- Custom design flexibility



Coils and Condensers



- Heat transfer and refrigeration products including evaporators and condensers
- High efficiency
- Easy to clean and maintain
- Model variations to precisely meet any need

Retail Solutions *Continued*



Service and Maintenance

- Refrigeration, HVAC, contracting and more
 - Experienced, well-trained technicians on 24/7 basis
 - Wireless dispatching to service technicians
 - Network of service locations
 - Preventive maintenance increases uptime
 - Helps keep equipment operating at peak efficiency
 - Reduces total cost of ownership
 - Professionally trained and staffed call center
-

Transport Solutions



Trailer, Truck and Rail Diesel-Powered Temperature Control Systems



- Whisper-quiet operation
- Lower fuel consumption for reduced operating costs
- Low-maintenance units save time and money
- Flexible system solutions provide single and multi-temperature capabilities allowing mixed load transportation
- Technologically advanced microprocessors self-monitor and self-troubleshoot to ensure unmatched temperature precision with fewer breakdowns
- Engines meet all EPA requirements for emissions



Cryogenic Temperature Control Systems for Trailers and Trucks



- Ideal for distribution services requiring rapid pull-down and temperature recovery
- Cryogenic powered cooling and heating unit; uses recycled LCO₂
- No emissions, no noise, and very few moving parts
- Truck diesel hybrid systems also available
- Low-maintenance units save time and money
- Powered by recycled fuel with no global warming effect



Vehicle-Powered Truck Refrigeration Systems



- Temperature control solutions for delivery trucks and vans
- Flexible systems to fit any application, from frozen to fresh
- Fast pull-down and accurate temperature control
- Environmentally friendly units with fewer emissions and lower fuel consumption
- Low cost of operation
- Start-stop on engine operation with electric standby option
- Compatible with hybrid vehicles



Containers and Gensets



- Industry's lowest energy consumption, highest capacity and fastest pulldown
- Only unit in the market that maintains a -35°C set point
- Available AFAM+ atmosphere management option provides for extended product shelf life
- Generator sets meet Tier II emissions requirements with reduced CO₂ emissions

Transport Solutions *Continued*



Bus and Rail HVAC

- Environmental control systems allow for total control of temperature, humidity, ventilation and circulation
- Low-profile design enhances vehicle appearance
- Lightweight, one-piece design allows easier installation and maintenance
- Control temperature year-round with heating and cooling systems unmatched in quality and performance
- Zero-emission, all-electric HVAC systems available



Hybrid Auxiliary Idle Reduction and Temperature Management Systems

- Eliminates truck engine idling, thereby reducing fuel consumption and saving money
- California Air Resources Board compliant diesel particulate filter further reduces emissions
- Provides sleep cab heating, air conditioning, auxiliary power, battery charging and truck engine preheating
- Helps drivers comply with increasing number of anti-idle laws
- Environmental benefits include reduced emissions, less noise and less waste from oil and filter changes on tractor engines



Aftermarket Parts and Service

- 24/7 parts shipments and mobile service to maximize uptime and convenience
- A complete selection of parts, options and accessories for optimal performance
- Centralized billing and guaranteed maintenance plans to save time and money
- Fixed-rate maintenance and service terms simplify budget and cost control
- Environmental solutions to help meet CARB requirements as well as accessories that help reduce fuel usage and emissions

Industrial Refrigeration



Insulated Thermal Panels

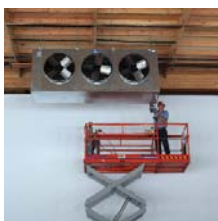
- High quality expanded polystyrene (EPS) materials used to create internal or external temperature-controlled space
- Materials constructed based on project design specs
- Ensures product integrity for temperature sensitive products



Refrigeration Systems



- High-efficiency systems reduce overall energy costs
- Products designed for specific needs from small condensing units to large capacity systems
- Freon and ammonia applications



Coils and Condensers



- Heat transfer and refrigeration products, including evaporators and condensers
- Industry-leading design and reliability
- Product selection from low velocity for walk-ins to high capacity evaporators for large food processing facilities



Evaporative Condensers

- Preferred heat of rejection method for large refrigeration systems combining superior water delivery and coil technology
- Patented spray nozzle technology providing clog-free operation



Integrity Audits

- Expertise in analysis and inspection of equipment performance and reliability
- State-of-the-art detection and monitoring equipment
- Knowledge of current Environmental, Safety and Health and Environmental Protection Agency standards and guidelines
- Refrigeration and air compressor rebuilds

Industrial Refrigeration *Continued*



Installation, Service and Maintenance

- Highly trained team of professionals
- 24/7 call center to monitor and dispatch emergency response
- Reduces operating costs by maintaining equipment at peak operating performance



Design Engineering/Consulting

- Trained to understand the full scope of project requirements
- Turnkey responsibility for project specific engineering, refrigeration design, architectural engineering and permitting
- Project Management to ensure on-time schedules and deliveries to reduce unforeseen project costs



Facility Health Check (FHC)

- Comprehensive, predictive diagnostic service for your entire facility
- Extends the life of investment in refrigeration equipment and maximizes operating efficiency
- Focus areas: compressors and motors, mechanical integrity, air and surface sanitation, energy analysis

Cold Chain Management Services



Professional Services and Technology Integration

- World class cold chain knowledge across a wide variety of perishables
- Consulting and education services for proper and effective perishable supply chain management
- Global experts link all critical components of the cold chain for successful management of perishables from inception to consumption



Environment Management System (EMS)

- Patented surface and air sanitation technology* that destroys various bacteria, fungi, and viruses in the air and on surfaces
- System components include: environmental testing/sampling, food safety consulting/education, equipment, design & installation, and after sale support/performance management
- Benefits vary across each step of the supply chain and include: reduced food safety risk, increased shelf life of fresh fruits and vegetables, reduced shrink, and continuous operation with no human intervention as a supplement to existing HACCP programs

* Licensed under protection of one or more US patents

Industrial Technologies

Section 3

3 Industrial Technologies





Overview

Industrial Technologies

Air Business

Key Markets/Industries

Energy

Petrochemical

Textiles

Iron and Steel

Food and Beverage

Pulp and Paper

General Industry

Air Separation

Utilities

Electronics

Mining

Industrial Machinery

Automotive

Pharmaceutical

Chemicals

- ▶ *For more than 135 years, Ingersoll Rand has inspired progress by driving innovation through revolutionary technology and talented people. It's a legacy of creating new standards for how the world gets work done. We're the technology leader in compressed air not only because we develop world-class products, but also because we stand behind our customers in all aspects of what we do. No matter what your product, process or location, Ingersoll Rand has the expertise, the technology, and the unmatched service to meet your needs.*
- ▶ *Solution and service provider of design, equipment, project management, maintenance and operations for compressed air systems*
- ▶ *Market leader in providing customers with air solutions tailored to their productivity needs*
- ▶ *Advanced technology, highest reliability, lowest maintenance, environmentally friendly and compliant, highest quality air, best energy efficiency*

air.irco.com

Continued

Overview *Continued*

Tools, Fluid, and Material Handling

Key Markets/Industries

<i>Aerospace</i>	<i>Printing and Paper Production</i>
<i>Food and Beverage</i>	<i>Textile</i>
<i>Furniture and Fixtures</i>	<i>Computers</i>
<i>Pharmaceutical</i>	<i>Appliances</i>
<i>Warehousing</i>	<i>Special Machine</i>
<i>Wastewater Treatment</i>	<i>Woodworking</i>
<i>Chemical Processing</i>	<i>Transportation</i>
<i>Packaging</i>	<i>Vehicle Service</i>
<i>Medical Systems</i>	<i>Rental</i>
<i>Government</i>	<i>Utilities</i>
<i>Electronics</i>	<i>Motor Vehicle Manufacturing</i>
<i>Mining</i>	<i>Offshore/Onshore Oil and Gas Drilling</i>
<i>Shipbuilding and Repair</i>	

- ▶ *Global leader in providing air, electric, and cordless power tools, material handling equipment, and fluid handling products*
- ▶ *Services focused on reducing downtime and increasing return on investment by extending the life of equipment and improving productivity, while providing customers peace of mind through the support of our Service Network*
- ▶ *Solution services include: installation, preventive maintenance, system monitoring, repair service and aftermarket parts/service*
- ▶ *Fluid Products provides the industry-leading ARO brand air operated diaphragm and piston pumps for a broad spectrum of fluid transfer applications; also offered are pneumatic valves, cylinders, motion control components, and filter regulator lubricators*
- ▶ *Material Handling Products provides a full spectrum of lifting solutions including manual hoists, air and electric hoists, workstation cranes, custom handling devices, balancers, and winches*
- ▶ *Tool Products provide a broad array of production fastening tools, vehicle service tools and industrial tools to provide productivity enhancing solutions in our target markets*

irtools.com

fluids.ingersollrand.com

Continued

Overview *Continued*

Energy Systems

Key Markets/Industries

Biomass Pyrolysis

Food Processing

Manufacturing Processes

Biomedical Laboratories

Pharmaceuticals

Universities

Large Residential

Landfills

Wastewater Treatment

Agricultural Biogas

Coal Bed and Coal Mine Methane

Oil and Gas Independents

Oil and Gas Processing

Offshore/Onshore Gas Recovery

- ▶ *Provider of efficient and environmentally friendly distributed-generation (DG) energy and environmental solutions for a broad range of applications*
- ▶ *250 kW microturbines for clean, reliable, onsite power and useful heat that is efficient, cost-effective, reliable and safe for the environment*

energy.ingersollrand.com

Continued

Overview *Continued*

Club Car®

Key Markets/Industries

Golf Courses

Education

Farms/Ranches

Government/Municipalities

Multi-family Housing

Resorts and Hotels

Homeowners with Acreage

Airports

Hunters

Hobby Farmers

- ▶ *Global leader of golf, utility and transportation vehicles*
- ▶ *Industry-leading Custom Solutions Department designs custom vehicles for specific applications*
- ▶ *Innovative technology including the Precedent golf car, IntelliTrak™ automatic 4-wheel drive, IntelliTach tool attachment system and the IQ System for programmable electric vehicles*
- ▶ *Unique aluminum vehicle construction guarantees higher return on investment, longer life and better efficiency*

clubcar.com

Air Business



Small Reciprocating Air Compressors

- Wide range of portable and stationary models to accommodate any light industrial application
- Engine and Electric models
- High-pressure models available
- Cleaner delivered air supply extending the life of the customer's pneumatic equipment
- Cast iron construction and extended pump life beats competitors for durability and reliability, reducing operating costs
- Design allows for easy access for simple, quick maintenance and repair



Small Rotary Air Compressors



- More air for your money – industry-leading performance delivers more air for less horsepower, and savings on energy year round
- Smart, energy-efficient controls – eliminates wasteful unloaded running by cycling the compressor on/off
- Compact footprint design – small footprint frees up valuable floor space and reduces install costs
- Installation close to point-of-use – whisper-quiet operation allows for installation closer to point-of-use, reducing costs and ensuring a better and safer work environment
- Dry and clean compressed air – the right air quality to do the job

All total air system packages come fully equipped with an integral, energy saving air treatment center including high-performance air dryer and filtration pack to remove water, oil and particles from the air stream

All components are perfectly matched to deliver the right air quality to increase air powered tool and system equipment life



Rotary Screw Air Compressors

- Oil-free or lubricated, enclosed rotary screw compressor options to meet varied customer demands
- Time proven, airend(s) provides trouble-free operation, minimal maintenance and consistently high performance
- Leak-free designs and industry-tested rugged components give unparalleled reliability, reducing operational costs
- Digital controls and variable frequency drives match system demand, reducing maintenance requirements
- Patented sound-dampening enclosures allow installation near the job, reducing installation costs

Air Business *Continued*



Variable Speed Drive Rotary Air Compressors



- Pay only for the air you use with the world's first true Variable-Speed Drive (VSD) oil-free or lubricated compressor providing the maximum efficiency at virtually any load
- Oil-free or lubricated, enclosed rotary screw compressor options to meet varied customer demands
- Fewer moving parts and on-site component replacement capability, reducing costs associated with downtime
- Most air, most range and highest efficiency compared to any competing product
- Same field-proven technology as the other line of Ingersoll Rand rotary screw compressors



Centrifugal Oil-Free Air Compressors



- We introduced our first oil-free compressor in 1912, and over the decades we've continued to develop rugged, reliable, industry-leading compressor technologies.
- Our centrifugal compressors are not only the most efficient and reliable units on the market, their packaged design makes them easy to install wherever needed. Every component of the compressors is mounted, piped and wired for convenient, single-point air, electric and water connection.
- Delivering the highest quality air and reliability at the lowest possible operating cost
- Most advanced, flexible and reliable control system, with full remote communication capabilities



High Pressure Oil Free Air Compressors



- Centrifugal and reciprocating models and options to meet varied customer demands
- Specifically designed for the requirements of the PET blow molding industry for food and beverage containers
- Stainless steel and composite materials used for extended life



Low Pressure Blowers

- Flows ranging from 20 to 20,000 CFM and pressures to 18 PSIG
- Positive displacement and centrifugal technologies offered
- Applications range from wastewater treatment to pneumatic conveying
- Provides the market with the most diverse technology portfolio in the industry

Air Business *Continued*



Rotary Screw OEM Solutions

- Oil-free and oil injected airends and components for OEM packagers of industrial, portable and specialized air compressors
- High pressure applications up to 500 psi
- Aftermarket and component solutions
- Discharge equipment for bulk tanker trucks



Air Treatment Solutions

- Solutions reduce maintenance and equipment costs and product damage due to oil, water or other contaminants in compressed air
- Desiccant, refrigerated and heat compression dryers remove moisture from compressed air systems
- Filters remove contaminants from the compressed air line



Air System Assessment and Design

- Optimization of supply, distribution and demand side system performance to ensure the most efficient use of your capital investment
- Addresses the largest part of the air system cost operation, typically saving an estimated 25%-50% in energy costs
- Full system assessments optimize return on your capital



Air System Controls and Automation

- Solutions that coordinate and monitor the operation of multiple air compressors and compressed air equipment to provide increased efficiency and lower energy use
- Advanced control algorithms that ensure the most efficient set or combination of compressors are operating to best match process demand, regardless of compressor technology, size or local control
- Connectivity and control solutions for most all compressor technology regardless of manufacturer or year of manufacture



Air Piping Systems

- High performance modular piping for compressed air systems that is easy to install, extend or modify
- Design ensures no leakage at any stage in the air system's life, reducing energy costs

Air Business *Continued*



Compressed Air System Services

- No matter where your facility is located, Ingersoll Rand is committed to serving you 24 hours a day, seven days a week. Our worldwide network of certified, factory-trained technicians and engineers are a phone call away. They are ready to support you with innovative and cost-effective service solutions that will keep you running at peak performance.
- AirCare Advantage – we understand that uptime is critical to your operation. That’s why we offer AirCare Advantage — a responsive, flexible contract maintenance program custom-designed to provide factory-authorized scheduled maintenance that ensures increased system reliability. AirCare Advantage helps eliminate unscheduled downtime and relieves you of costly investments in monitoring equipment and ongoing training. The program also provides a thorough knowledge of compressor technology.



Package Care

- Control costs and keep your equipment running at peak efficiency
- Protect yourself from all repair and replacement expenses over the life of the agreement
- Maintain or improve the operational efficiency of any compressor, regardless of age, make or model
- Ensure long-term value and total satisfaction from your system

Tools, Fluid, and Material Handling



Vehicle Service Tools and Systems

- Complete line of impacttools™, ratchets, drills/drivers, and surface preparation tools
- Air compressors and lubrication equipment, plus installation and service programs for shop owners/managers
- Complete offering of professional-grade cordless tools and kits, including impact wrenches (assorted sizes/torque ranges), drills-drivers, ratchets, grinders and more
- IQ^V Cordless battery technology significantly prolongs battery life while reducing replacement and disposal costs



Assembly Tools

- Air and electric screwdrivers, nutrunners, drills and accessories
- Delivering the best torque accuracy in the industry, with award-winning ergonomic design
- Full range of torque verification and asset management systems



Industrial Tools

- Wide range of assembly, surface finishing, impact and percussion tools for production and maintenance applications
- Ergonomically designed for increased productivity and safety
- Most advanced tools of their type in the world for size, weight and power output



Precision Fastening

- Precision air and electric assembly equipment and fastening control systems
- Superior user-oriented ergonomics and process control
- Custom configurations and engineering to meet unique needs



Engine Starting

- Leading provider of air starting systems for oil and gas, marine, power generation, and transportation
- Flexible and efficient alternative to electric starters



Tools, Fluid, and Material Handling *Continued*



ARO Diaphragm Pumps



- Process-grade EXP Series diaphragm pumps offer best-in-class energy efficiency and reliability based on patented technology. The full line includes 1 inch to 3 inch port sizes in a variety of metallic and non-metallic configurations
- Industrial-grade Pro-Series pumps provide exceptional value in port sizes from one inch to 3 inch for flow rates to 240 gallons per minute
- Compact Series pumps with 1/4 inch to 3/4 inch port sizes provide proven solutions for OEM and other applications
- Special designs include drum packages, flap valve pumps, powder transfer pumps, high pressure pumps, sanitary transfer pumps, natural gas operated pumps, dewatering pumps, and fuel pumps



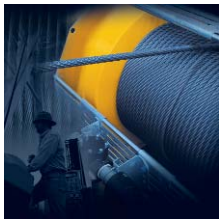
ARO Piston Pumps

- Air operated pumps and packages for transferring, extruding, spraying, and applying a wide range of fluid and semi-fluid materials
- Two-ball, four-ball, and chop-check designs provide options for many applications
- Genuine ARO accessories and replacement parts ensure reliable performance and equipment life



Ergonomic Handling

- Leading provider of workstation cranes, balancers, and handling devices
- Application consultation for custom solutions
- Designed to optimize productivity by providing safe, fast, and accurate lifting



Winch and Hoist

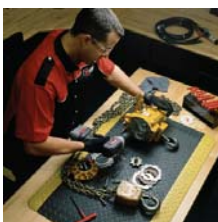
- Broadest range of air and electric winches in the world
- Recognized for innovative, engineered solutions for specific customer applications in the harshest of conditions
- Manual, air and electric hoists have a long, industry-proven reputation for durability, reliability and enhanced safety
- Compliant with the toughest industry standards

Tools, Fluid, and Material Handling *Continued*



ARO Pneumatic Components and Filter Regulator Lubricators

- ARO Cylinders are available in composite, round line repairable and disposable, and NFPA square interchangeable configurations
- A wide array of valves enables the precise management of pneumatic circuits in OEM and system applications
- An extensive line of air line filters, regulators, and lubricators (FRLs) including individual units, piggybacks, and combos, meet air preparation requirements and deliver peak performance



Services

- Comprehensive array of genuine parts, accessories and professional service
- Worldwide service/repair locations
- Startup and installation support
- Field service and repair
- Bench repair
- Product and user training
- Remanufacturing
- Calibration, certification, and testing services
- Product rentals

Energy Systems



Ingersoll Rand Microturbines



- Advanced technology for generating high quality, reliable and clean on-site energy, with or without the grid
- Integrated cogeneration capability to capture useful thermal energy for space heating or hot water requirements
- Clean, useful exhaust heat for integrating with existing thermal processes
- Extremely low emissions without post-combustion clean-up
- Option available for hazardous area locations
- Certified by the California Air Resource Board's emissions standards for distributed generation technologies
- Operates on natural gas or waste gases with wide range of energy content to generate economical electricity and useful thermal energy while offsetting greenhouse gas emissions
- Valuable resource for municipal landfills, wastewater treatment plants, biogas digesters, biomass pyrolysis plants, oil and gas recovery, refining and gas transmission



Microturbine Services

- Preventive Maintenance
- Total Care



Advanced Thermal Technologies



- High-temperature recuperators and heat exchangers
- State-of-the-art brazing capabilities
- Engineering services

Club Car



Golf Cars



- The ultimate in style, unique accessories, and with the exclusive IQ System, best-in-class range
- AlumiCore™ chassis provides an automotive ladder-style frame with twice the torsional rigidity for added durability and an unmatched ride
- Lightest vehicle in the industry provides superior efficiency and less turf damage



Turf Utility Vehicles



- Industry exclusive aluminum frame is rustproof, corrosion resistant and up to three times stronger than competitors' steel frames
- Available in efficient gas or electric models for flexibility
- Most maneuverable vehicle in the industry helps prevent costly turf damage
- IQ Plus System delivers best-in-class performance and simplified vehicle management to provide the most advanced electric utility vehicle solution on the market today



Transportation Vehicles



- Available in efficient gas or electric models for flexibility
- Suspension design ensures a smooth quiet ride, maximizing customer satisfaction
- Models available for seating 4-8 people with and without cargo



Commercial and Industrial Utility Vehicles



- Industry exclusive aluminum frame is rustproof, corrosion resistant and up to three times stronger than competitors' steel frames
- Longest warranty in the industry minimizes your cost of ownership
- Adaptable for accessories, making almost any job possible

Club Car *Continued*



Rough Terrain Utility Vehicles

- Models available in 2-wheel drive, 4-wheel drive; 2-passenger and 4-passenger configurations; and choices of gasoline, electric and diesel power trains
- Rustproof, corrosion-resistant aluminum frame, chassis and cargo bed floor for maximum durability
- Built for extreme expectations
- The exclusive IntelliTrak™ drive system makes Club Car the easiest-to-use 4x4 you can buy, featuring automatic 4-wheel drive, automatic high/low gearing, and automatic front and rear differential lock
- The exclusive IntelliTach quick-change, fully hydraulic tool attachment system allows for quick and effortless attaching and detaching of a variety of tools, including: bucket, blade, push broom, pallet fork and mower



Custom Solutions

- Vehicle solutions limited only by the imagination of your customers
- Industry's only design and manufacturing center dedicated to building application-specific vehicles and accessories, backed by a full factory warranty
- From ambulance units and security vehicles to van boxes and customized work vehicles — if you imagine it, Club Car can build it



Private Golf and Community Vehicles



- Stylish, comfortable vehicles designed for golf and community use
- Available in a variety of models and packages offering the ultimate in comfort, style and affordability
- Available features include enclosures, light packages and lockable compartments for added comfort and luxury



Food and Beverage Vehicles

- Take highly profitable items directly to the customer by adding wheels to your food and beverage operations
- Easy to maintain and economical to operate
- Superior reliability combined with improved storage and merchandise displays mean maximum return on your investment

Security Technologies

Section 4





Overview

Security Technologies

Key Markets/Industries

Residential Home Builders

Healthcare

Hospitality

Grocery

Stadiums and Arenas

Amusement Parks

Education

Government/Military

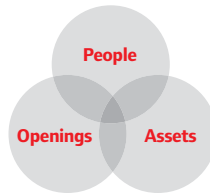
Office

Commercial, Retail, Manufacturing

Airports

Multi-family Housing

- ▶ *Creating and sustaining safe, secure and productive environments for our customers*
- ▶ *Access and egress for residential and commercial buildings*
- ▶ *Integrated solutions for people and asset protection*
- ▶ *Improving user productivity through credential management – time and attendance, personnel scheduling and visitor management*



securitytechnologies.ingersollrand.com
schlage.com

Schlage



Mechanical Security

- Commercial and residential locks and door hardware
- Industry-leading brand at retail
- Most preferred and used brand with residential builders and remodelers
- High quality, easy installation



Key Systems Management

- Patented key systems - cannot be copied without authorization
- Everest Primus™ provides the ability to tailor levels of security to meet exact needs and budgets of end users
- Proprietary system Sitemaster™ program optimizes flexibility and affordability of key control
- Interchangeable cylinder cores reduce replacement cost and extend security through controlled key distribution
- Key System Consultants help with formulating security strategy, policy and productivity



Keypad Locks and Deadbolts

- Convenient keyless access; no keys to hide, lose or forget
- No programming required; preset with two unique user codes
- Allows you to add, change or delete user codes in seconds
- Premium 9-volt battery included; low battery indicator alerts you to change the battery
- Fits most standard door preparations; no additional mounting holes required
- Can be installed with just a screwdriver in less than 30 minutes
- Illuminated, wear-resistant keypad provides easy visibility even at night
- Two keys included for use as needed



System Components

- Full range of open architecture systems components and services to help design the optimum electronic opening
- Electromagnetic Locks, Electric Strikes, Power Supplies, Access, Egress and Monitoring Components, Electrified Exit Devices, and Auto Operators, Keypads and Credential Readers

Schlage *Continued*



Programmable Electronic Locking Solutions

- Provides the benefits of an online access control system without the cost and complexity.
- A cost-effective solution where frequent re-keying, time controlled entry or audit trail tracking is required for additional security
- Convenient credential management at the door



Wireless Solutions

- Wireless Access Control enables real-time access control without the installation cost and disruption of a typical online door system.
- Open architecture design allows interoperability with most existing access control systems



Biometric Technologies

- Hand geometry and fingerprint readers
- Solutions for access control or time and attendance applications
- Biometric technology eliminates the need for card-based systems
- Efficient and easy to use for employers and staff



Access Control Systems

- Simple, yet robust web-based access control
- Facility management from anywhere
- Intelligent, cost-effective and easy to use



Security Management System

- Four levels of software allow for easy migration from simple offline needs through integrated enterprise solutions
- Designed for easy integration with other Schlage access control devices
- Includes digital video surveillance, photo ID badging and visitor management

Security Technologies



Briton Door Hardware

- European designed specification hardware including door closers, exit hardware, locks, cylinders and trim
- Proven performance, reliability and safety on which specifiers rely
- Conforms to European standards including CE marking



Bricard

- French market leader in locks, security and access control
- More than two centuries of experience as a locksmith
- Barrels and locks for all types of door, panic bars, safes, door closers, latches, artistic locks and access control systems
- More than 7,000 references, the widest range of solutions in protecting your property, meeting the most stringent standards [NF (French standards) - A2P - CE]
- Security systems for the home, industry and the tertiary sector



CISA

- European leader, as well as one of the chief operators worldwide, in the manufacture of systems for the closing and protection of access points
- Cylinders, locks for every type of door, panic exit devices, safes, door closers, padlocks, electronic locks and access control systems
- Offering a total of more than 30,000 articles, all of them certified according to European standards
- Proven experience in the sector of electronic locking systems for applications in community settings
- Technological applications involving cards with microprocessors, or smart cards



Dexter

- The best grade 3 security you can buy
- Best warranty in grade 3 class
- Can be keyed to Schlage lock products
- Long-lasting durability
- Rugged construction

Security Technologies *Continued*



Falcon

- Commercial locks with a sleek design engineered for value, functionality and proper aesthetics
- Offers a broad choice of configurations to meet the most demanding applications.
- Complete line of commercial door closers and reliable panic and exit door hardware
- Tradition of value, dependency and fast delivery



Glynn-Johnson Door Controls

- Providing quality overhead door holders and stops, and push / pull latches for over 75 years
- Consistent quality and performance, meeting the needs of the most demanding application
- Low profile, unique designs maintaining design aesthetics, ensuring optimum safety



Interflex Time & Attendance and Personnel Scheduling Systems

- Single solution integrating time and attendance, personnel scheduling, production data, access control, alarm systems, muster reporting and more
- Eliminates "buddy-punching"
- Eliminates costly manual time-logging processes
- Integrates with an open network environment
- Turnkey services from design through to installation, training and maintenance optimize investment
- Modular design helps the system grow as your business grows

Security Technologies *Continued*



ITO Kilit

- Cylinders, locks, padlocks, door closers, panic exit devices
- Long-lasting durability
- Proven reliability, experience, safety, established in 1954
- Large sales and service organization in Turkey
- Master keyed solutions to customer's specific demands



Ives Commercial and Residential Accessory Hardware

- Providing a full line of quality decorative and security hardware including stops, flush bolts, coordinators, wall and floor stops, door knockers, house numbers, mail slots, hinges, kick plates and other accessories
- Delivering quality first, service always, for more than 120 years
- Undisputed leader in job site delivery



Kryptonite Security Products

- An industry leader in portable security
- Lifetime warranty
- Full line of security chains, locking cables and security hasps
- Padlocks that can be keyed to Schlage door locks for "one key" convenience
- Tested in the toughest of environments to ensure the best security for your investment



LCN Door Closers

- Providing quality door closers since 1926
- The ultimate in reliability
- Warranties guarantee long life and low cost of ownership
- Products include power operators and closers for the physically challenged to comply with ADA



Legge Door Hardware

- Range of U.K. residential security products and accessories
- Conforms to British and European Standards
- Suitable for a wide range of applications

Security Technologies *Continued*



Martin Roberts High Performance Doorsets

- Complete range of steel doorsets for commercial use
- Doorsets can be custom made to suit individual requirements, finished in a wide range of colors
- Specialists in fire, acoustic and cleanroom applications



Normbau Fixtures and Hardware

- Wide range of door hardware, letter boxes, balustrading and railing systems, together with bathroom fittings and accessories for the disabled and elderly
- Products are manufactured in nylon and stainless steel
- Unique combination of design and function to suit almost any building style
- Materials to resist corrosion and provide antibacterial protection, keeping hardware maintenance free



Randi Door and Bathroom Hardware

- Handles and bathroom fittings designed by Scandinavian architects for prestige commercial and residential constructions
- 125 years of experience
- Designed by architects for architects



Steelcraft Doors

- Providing quality steel doors and frames since 1942
- Widest selection available
- Fire, hurricane, tornado and positive pressure-rated doors
- Graintech stainable steel doors available to provide beauty of wood and durability of steel

Security Technologies *Continued*



Von Duprin Exit Devices

- Industry leader in exit devices
- Invented first exit device in 1908
- Unequaled durability
- Exit devices are documented to require significantly less maintenance over a 30-year period



LEED® Rated Products



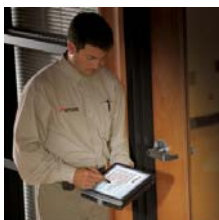
- Many Schlage, LCN, Von Duprin, Steelcraft and Ives products are manufactured with recycled materials
- These products, if specified in building design and construction, can contribute to Leadership in Energy and Environmental Design (LEED) credits

Ask your sales representative about Ingersoll Rand products that qualify for LEED credits

Security Technologies *Continued*

Service & Solutions

Ingersoll Rand provides global business solutions that help our customers maximize efficiency. We dynamically link project planning, state-of-the-art technology and world-class professional services with our ability to listen, identify customer challenges and create individualized solutions.



Site Surveys & Assessments Specific to Market Need

- Safe Schools programs for K-12 and universities
- HAS – Highest Access Security program for airports
- Scalable ADA solutions to meet security and compliance needs



Specworks™ Project Management Software

- Significant productivity tool for specification writers and distribution partners
- Reduces errors and helps ensure code compliance
- Unique to Ingersoll Rand and its partners in the industry
- Ensures that an opening is configured with optimal component compatibility



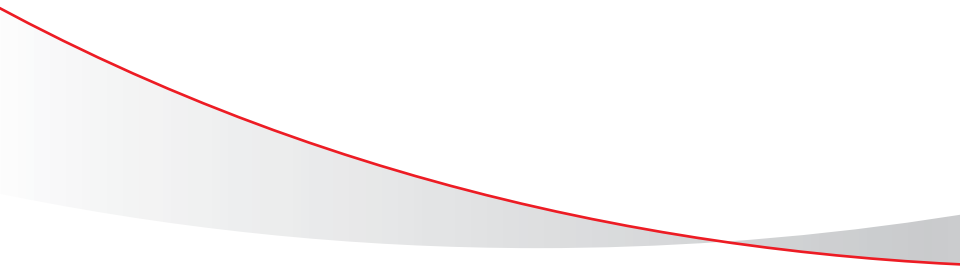
Project Planning Services

- Complete design/build projects
- In-depth security analysis
- Specification creation
- Risk-management consulting

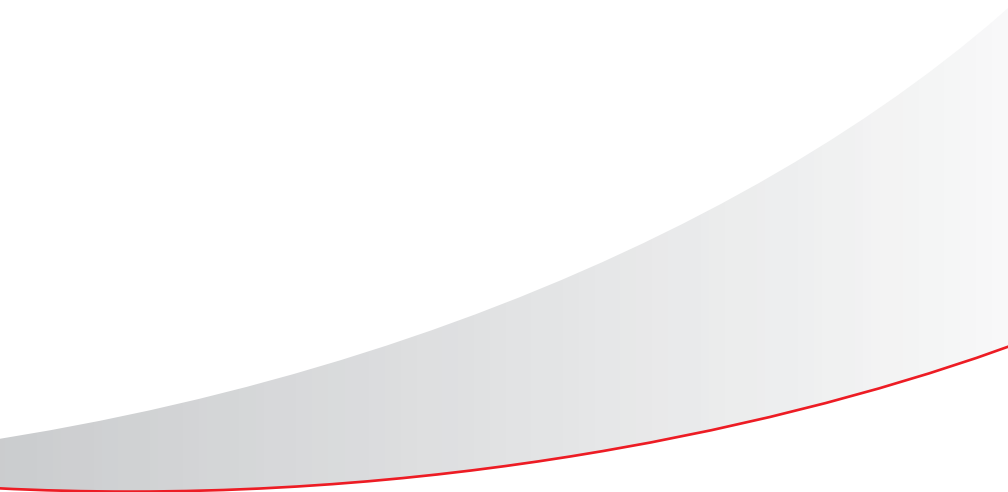


Integrated Systems

- Over 40 branches throughout North America offer the flexibility of a local provider, backed by the resources of a global corporation
- Dedicated to providing customers with best-in-class system design, engineering, installation and service of integrated security systems that are tailored to their needs



Business Card Placement





ingersollrand.com