



DON'T JUST BUY COMPRESSORS & DRYERS, **BUILD SUCCESS**

ENGINEERED SYSTEMS AND SERVICES:
YOUR TRUSTED PARTNER FOR CUSTOM AIR & GAS SOLUTIONS WITH
EXPERT SUPPORT FOR PEAK PERFORMANCE GROWTH.



REQUEST A QUOTE

Engineered Systems and Services
www.ingersollrand.com

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Global Presence

Ingersoll Rand is a global market leader with a broad range of innovative and mission critical air, fluid, energy and medical technologies, providing Services and solutions to increase industrial productivity and efficiency.



>5 million installed assets²

= Lifecycle revenue opportunity & Data/insights/intelligence opportunity

+300
Experience & History

+80
Brands

+18,000
Global Employees

+150
Customer and Services centers

+65
Major manufacturing sites¹

+5000
Sales, Services, and support employees

¹ Site totals represent major manufacturing locations. 2 Map of installed asset base is illustrative only.

² Lorem Ipsum

Welcome to Engineered Systems and Services (ESS)

Ingersoll Rand's Engineered Systems and Services (ESS) is dedicated business line to providing market-leading, **custom-engineered solutions**.

Formed from a merger of three renowned business units - Ingersoll Rand Air & Gas Solutions, Ingersoll Rand Engineering Project Solutions, and K. LUND Offshore - Ingersoll Rand Engineered Systems and Services (ESS) leverages extensive experience to serve Engineering, Procurement, and Construction (EPCs) contractors and other firms in need of specialized engineering Services.

With a portfolio that includes state-of-the-art **air and gas compressors, dryers, nitrogen generators, and gas recovery Systems**, Ingersoll Rand Engineered Systems and Services (ESS) is committed to pioneering innovation and maintaining the highest standards of engineering excellence. We pride ourselves on managing intricate projects across the globe, employing cutting-edge technology to drive the success of our customers.





Our Mission & Vision

OUR MISSION

To engineer solutions around to each customer’s unique requirements, drawing upon our extensive multi-year expertise, collaborative team strengths, and robust economic growth engine.

OUR VISION

To be recognized as the leading provider of air and gas custom-engineered solutions, where every Customer experiences unparalleled Services, innovation, and expertise makes us the definitive strategic partner for project success.



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What We Do

Ingersoll Rand's Engineered Systems and Services (ESS) is capable of understanding client specific needs and requirements, allowing us to be with you through every step of your project's life-cycle. **We can quickly design the most effective customized solution, giving you total peace of mind.**



Market to Order (MTO)



Engineer to Order (ETO)



Special configuration and Project Lifecycle Support (PLS)



Our Added Values



Global Presence



Extensive Experience



Turn-key Solutions
(PLS)



Project Management



Wide Range of
Technologies



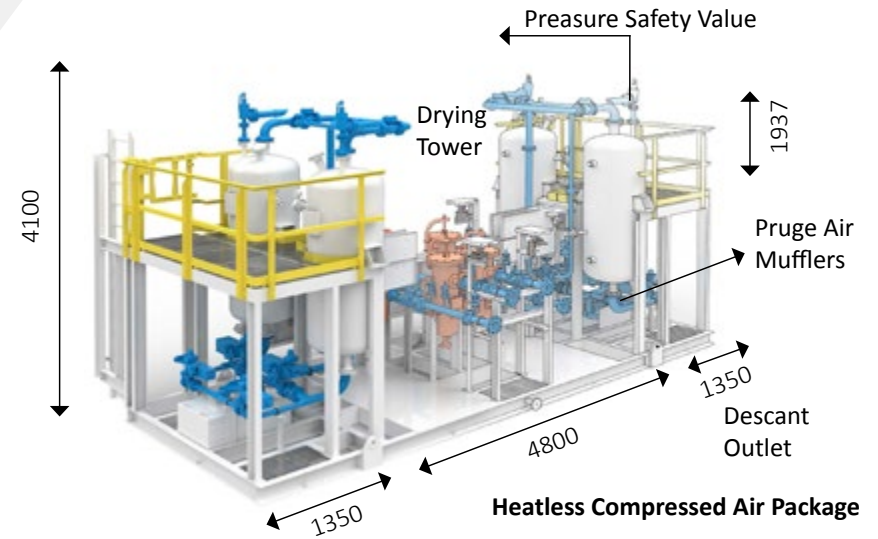
Quality Certificates

Customization - From Concept to Factory Floor

All the machine packages and solutions that we provide can **be tailored to the most demanding technical** specifications of your application.

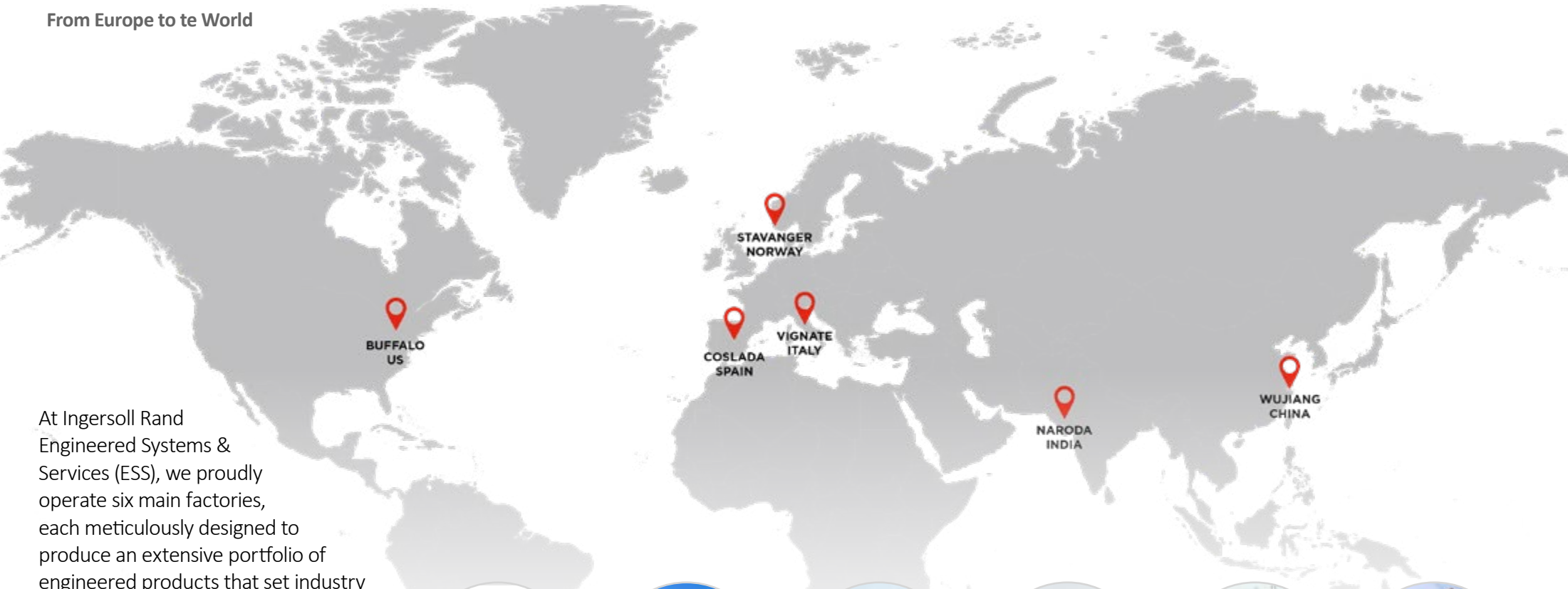
Engineered Systems and Services (ESS) are designed **to operate in harsh environments and face the most extreme environmental conditions.**

Additionally, a wide variety of options can be customized to **meet international and local quality requirements.** Our solutions can comply with the **API, ISO (9001, 14000 and 14001), Norsok, ATEX, iECEx, Magnet JQS, ASME, ANSI and DIN standards, among others.**



Our Facilities

From Europe to te World



At Ingersoll Rand Engineered Systems & Services (ESS), we proudly operate six main factories, each meticulously designed to produce an extensive portfolio of engineered products that set industry standards.



Vignate, Italy



Coslada, Spain



Stavanger, Norway




Buffalo, US



Wujiang, China



Naroda, India

 Our Ingersoll Rand Engineered Solutions Factories















Applications & Products

We provide our engineered to order solutions for many key industries and industrial applications.



FIND OUT MORE DETAILS ABOUT OUR PRODUCTS
CLICK ON THE INTERACTIVE TABLE

Our Products At a Glance

AIR COMPRESSORS	GAS COMPRESSORS	DRYERS	NITROGEN GENERATION	BLOWERS
 <p data-bbox="152 512 380 539">Screw Air Compressors</p>	 <p data-bbox="577 515 810 542">Screw Gas Compressors</p>	 <p data-bbox="969 499 1261 555">Heatless, External Heater, Heater Blower and Non-purge</p>	 <p data-bbox="1462 515 1592 542">PSA Systems</p>	 <p data-bbox="1921 515 2009 542">Blowers</p>
 <p data-bbox="138 719 398 746">Reciprocating Compressor</p>	 <p data-bbox="645 722 743 750">Gas-ends</p>	 <p data-bbox="1010 722 1225 750">Refrigerant Air Dryers</p>	 <p data-bbox="1417 722 1637 750">Membrane Systems</p>	
 <p data-bbox="134 930 407 957">Centrifugal Air Compressors</p>	 <p data-bbox="571 930 817 957">Process Gas Compressors</p>			
	 <p data-bbox="577 1137 817 1165">Liquid Ring Compressors</p>			
	 <p data-bbox="611 1337 788 1393">Reciprocating Gas Compressors</p>			







Screw Air Compressors

Our tailored air compressors are ready for operation, flexible, easy to integrate into any process, help minimize operating costs and prepared to face the strictest quality standards. Ingersoll Rand is your single source solution for instrument, plant, bulk and nitrogen generation applications.

Technical Data & Benefits

TECHNICAL DATA*	OIL FLOODED	OIL FREE
Flow Rate (m³/h)	Up to 3900	Up to 5000
Operation Pressure (barg)	5 ~ 13	5 ~ 10
Power (kW)	2 ~ 400 (2,7 ~ 550)	37 ~ 670 (50 ~ 900)

* This data can be modified based on customer needs

 OPERATE IN THE MOST EXTREME TEMPERATURES. BETWEEN -47C° TO 55C°	 OPTIMIZED FOOTPRINT	 SIMPLE "PLUG & PLAY" INSTALLATION
 HIGH EFFICIENCY	 EASY TO INTEGRATE INTO ANY PROCESS	 VERY FLEXIBLE

[Read More](#)



Reciprocating Air Compressors

Our reciprocating compressor packages are known for their excellent energy efficiency. We have consolidated and at the same time consistently developed this proven technology, maintaining its cutting edge, high-quality, robust construction along and excellent efficiency. The result is an improved Return On Investment (ROI) and shorter payback time.


Technical Data & Benefits

TECHNICAL DATA*	
Flow Rate (m ³ /h)	170 to 2600 CFM
Operation Pressure (barg)	2- 414
Power (kW)	45 to 300

* This data can be modified based on customer needs



EASY MAINTENANCE



LONG LIFE EXPECTANCY



HIGH EFFICIENCY

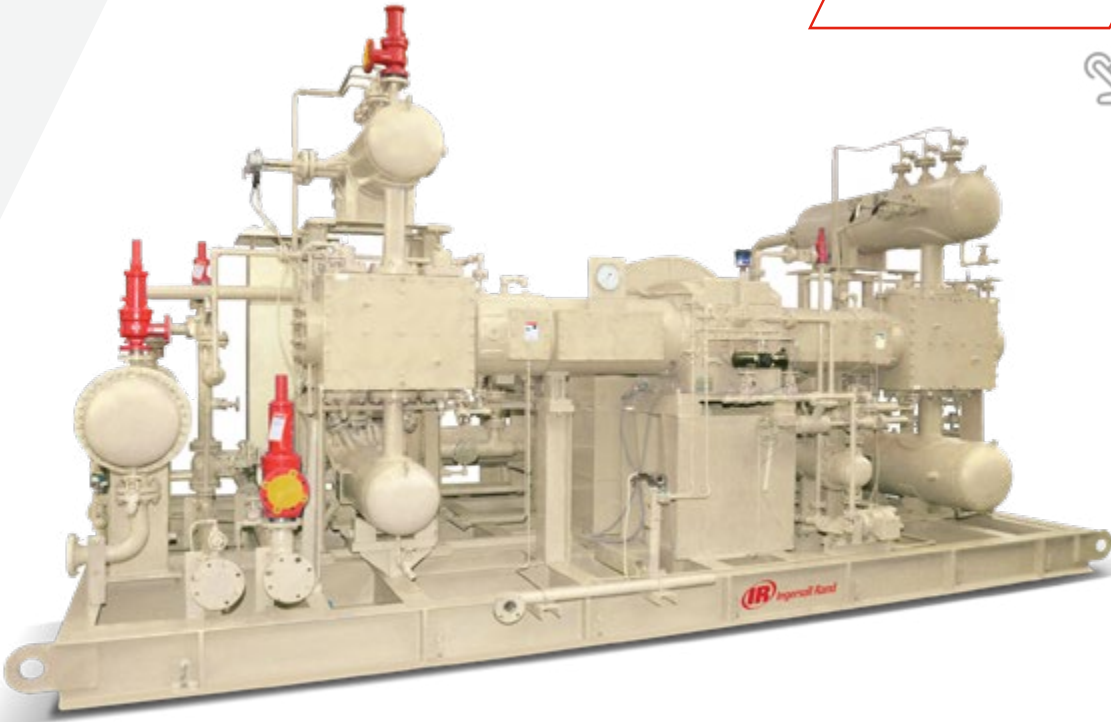


ROBUST CONSTRUCTION



EASY TO INTEGRATE INTO ANY PROCESS

[Read More](#)




Screw Gas Compressors

Ingersoll Rand's oil-injected rotary screw gas compressors are an ideal solution for those seeking additional options for specific project needs. We are able to serve a vast range of applications in the Oil & Gas, Industrial, Process and many other industries, including ones in corrosive gas environments. Vapor recovery, gas lift, well unloading, and BioGas are just a few suitable applications.

Technical Data & Benefits

TECHNICAL DATA*	
Flow Rate (m ³ /h)	235-18000
Operation Pressure (barg)	Up to 34
Power (kW)	15-600

* This data can be modified based on customer needs




HIGH RELIABILITY
& COST EFFECTIVENESS



MAXIMIZED EFFICIENCY
& FLEXIBILITY THROUGH
VARIABLE V1 AND INTEGRAL
PORTING



EXTENDED LIFE
EXPECTANCY AND
REDUCED

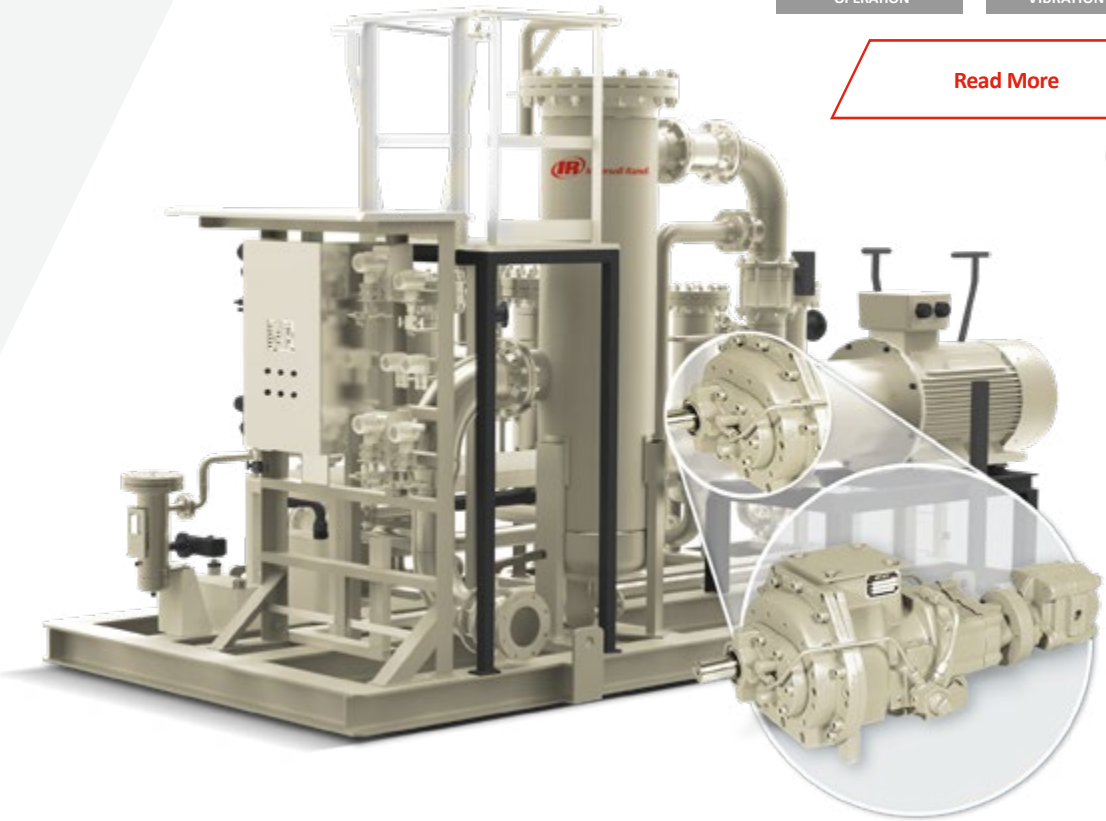


IMPROVED EFFICIENCY
AND SMOOTH
OPERATION



LOW OPERATING
COSTS DUE TO LONGER
VIBRATION LIFE

Read More




Gas-ends

Ingersoll Rand rotary screw natural gas compressors can be provided in one-stage and two-stage options. They are very cost-effective for handling high volumes of gas in field gathering, vapor recovery, and a wide range of other applications and delivering gas at high pressures.

SINGLE STAGE ROTARY SCREW GAS ENDS

TWO STAGE ROTARY SCREW GAS ENDS



WIDE RANGE OF FLOWS



INTEGRAL GEARING



HEAVY-DUTY CONSTRUCTION

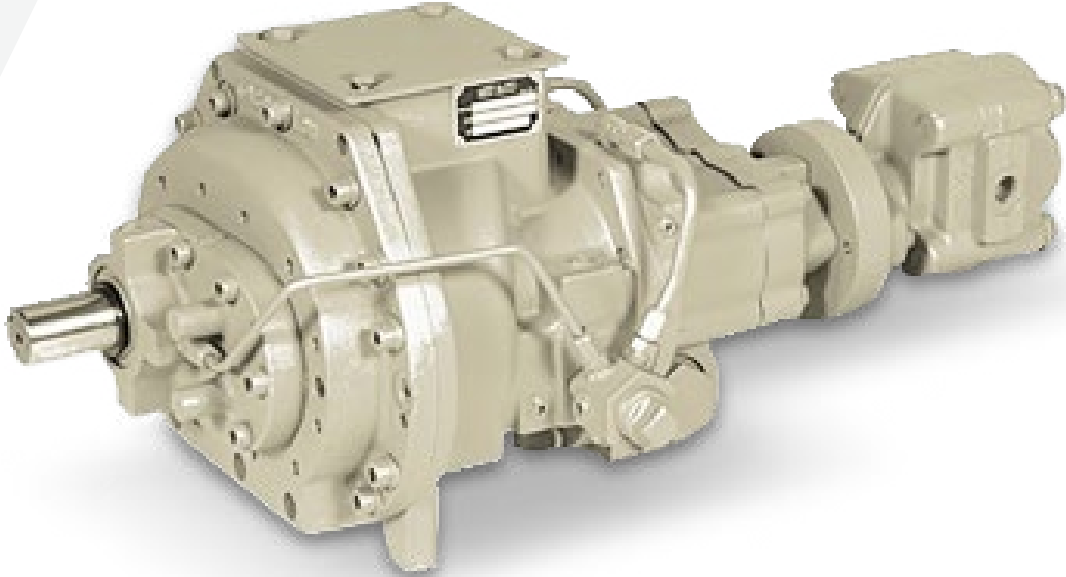


HIGH EFFICIENCY COMPRESSOR BLOCK



EXTENDED LIFE EXPECTANCY

[Read More](#)



Centrifugal Air Compressors


Ingersoll Rand Centrifugal Air Compressors are custom designed and built for individual customer needs for a variety of applications. These compressors are manufactured with a highly engineered air flow components, designed for easy, low-cost installation and operation.

Integrally geared centrifugal compressor (IGC) technology is well-suited to accommodate multiple-process requirements. Significant savings in floor space, installation time, initial investment and maintenance costs can be realized when combining the duties of multiple compressors in one multi-process IGC.


Technical Data & Benefits

TECHNICAL DATA*	
Flow Rate (m ³ /h)	2549 to 230000
Operation Pressure (barg)	up to 82
Power (kW)	up to 16400 (22000 hp)


* This data can be modified based on customer needs




HIGH RELIABILITY




LOW OPERATING LIFE CYCLE COST



NO PULSATION

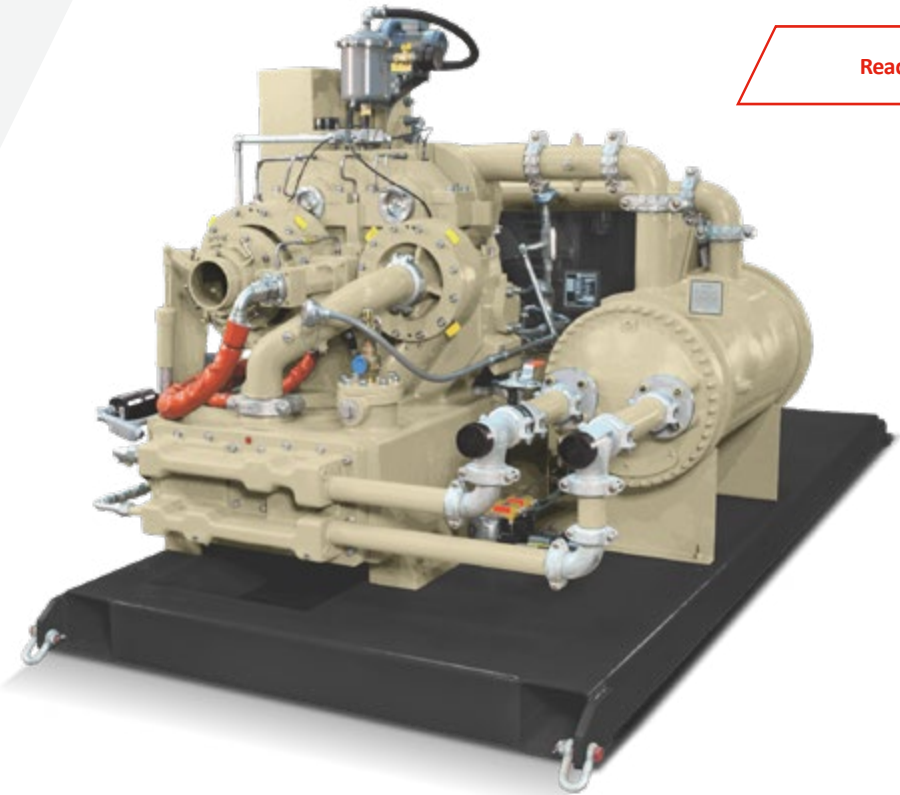


OPTIMUM CONTROL



LOW MAINTENANCE & REDUCED COSTS

[Read More](#)



Process Gas Compressors


MSG[®] compressors are efficient, reliable solutions for your gas compression needs. Depend on MSG[®] compressors for reliability combined with minimal maintenance to deliver a low total cost of operation and ownership.

The MSG[®] centrifugal compressors are great for handling fuel gas, carbon dioxide, carbon monoxide, petrochemicals, mixed refrigerants, landfill gas, and steam.


Technical Data & Benefits

TECHNICAL DATA*	
Flow Rate (m ³ /h)	3400 to 170000
Operation Pressure (barg)	up to 82 bar
Power (kW)	up to 16400 (22000 hp)


* This data can be modified based on customer needs




HIGH RELIABILITY




LOW OPERATING LIFE CYCLE COST



SIMPLE INSTALLATION

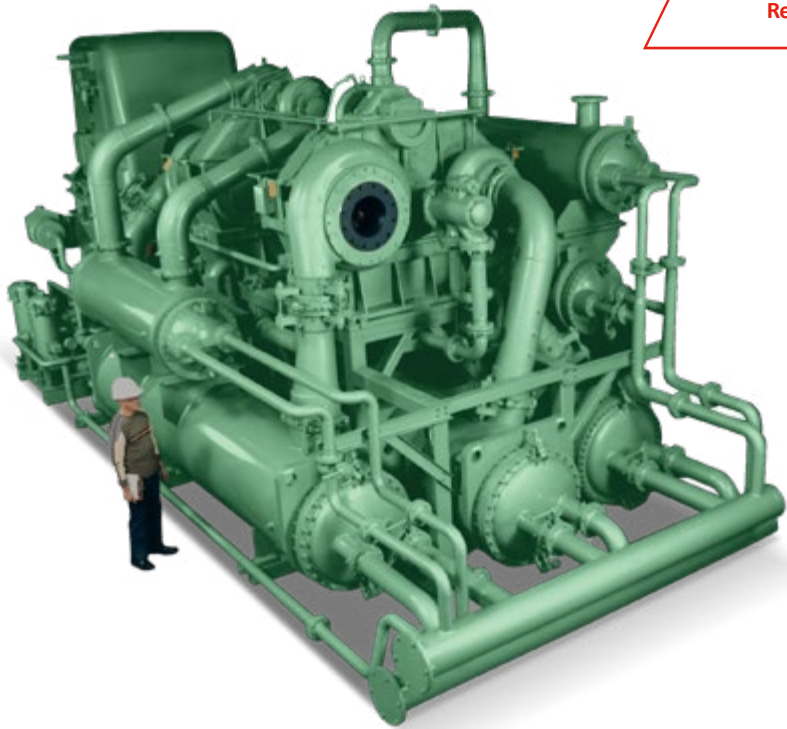


PROVEN TECHNOLOGY



LOW MAINTENANCE & REDUCED COSTS

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Liquid Ring Compressors for Flare Gas

Flare Gas Recovery Systems (FGRS) are specialized compression packages, which aim to recover and repurpose gasses and emissions, that would normally be burned during the flaring process.

The process involves capturing the gas from the flare knock-out vessel and compressing it using liquid ring compressors. The so-recovered gases can be reused within the facility’s fuel gas Systems, as refinery feedstock or for re-injection.

Technical Data & Benefits

TECHNICAL DATA*	
Flow Rate (m³/h)	50- 39000
Operation Pressure (barg)	up to 14
Power (kW)	up to 1000

* This data can be modified based on customer needs



REDUCED NOISE AND VIBRATION



ENERGY SAVINGS



SAFE AND RELIABLE OPERATION



HIGH EFFICIENCY



OPERATE IN HARSH ENVIRONMENTS

[Read More](#)




Reciprocating Gas Compressors

Our multi-stage reciprocating piston compressors are engineered for bespoke applications that require the highest capacities and special features. These configured compressors offer a wide pressure, capacity, and speed range. Tailored for compressing industrial gasses, or for use as boosters, the lubricated design can be either air or water cooled, minimizing space without compromising performance.


Technical Data & Benefits

TECHNICAL DATA*	AIR COOLED	WATER COOLED
Flow Rate (m ³ /h)	170- 2600	170- 2600
Operation Pressure (barg)	2- 414	2- 414
Power (kW)	45- 300	45- 300


* This data can be modified based on customer needs




HIGH RELIABILITY




ROBUST CONSTRUCTION



LOW MAINTENANCE & REDUCED COSTS



HIGH EFFICIENCY COMPRESSOR BLOCK



VERY FLEXIBLE

[Read More](#)



Adsorption Air Dryers

Adsorption compressed air dryers are designed to remove moisture by passing air over a regenerative desiccant material, which attracts and retains water vapour molecules. The term pressure dew point refers to the temperature at which water condensation will occur, a typical pressure dew point specified for an adsorption dryer is -40°C which prevents corrosion.

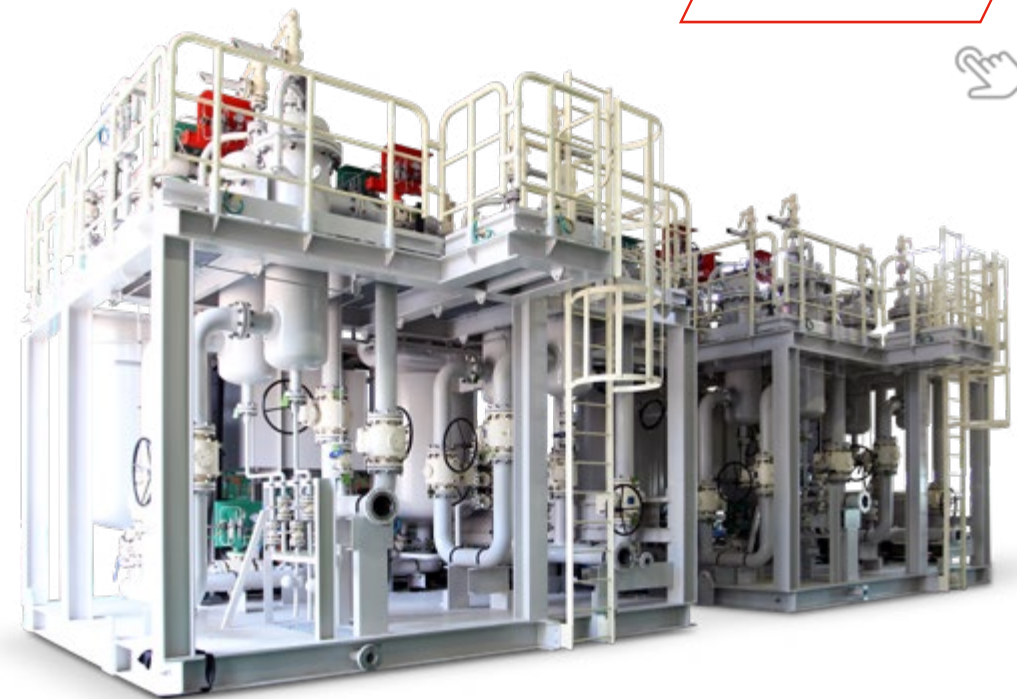
Technical Data & Benefits

TECHNICAL DATA*	
Flow Rate (m ³ /h)	As per requirement
Dew point (PDP) (°C)	-40 def.C (heated) / -70 deg.C (heatless)
Power (kW)	up to 175

* This data can be modified based on customer needs



[Read More](#)




Refrigerant Air Dryers

Ingersoll Rand designs and manufactures packages refrigeration Systems with as alternative technical solutions to ensure no more vapor forms in compressed air. This is achieved thanks to the heat exchangers that are used to cool compressed air which will condense the bulk amount of water vapor within the air.


Technical Data & Benefits

TECHNICAL DATA*	
Flow Rate (m³/h)	4,9 m³/hr- 5028 m³/hr
Dew point (PDP)	3


* This data can be modified based on customer needs




OPTIMIZED FOOTPRINT




LOW OPERATING LIFE CYCLE COST



ROBUST CONSTRUCTION

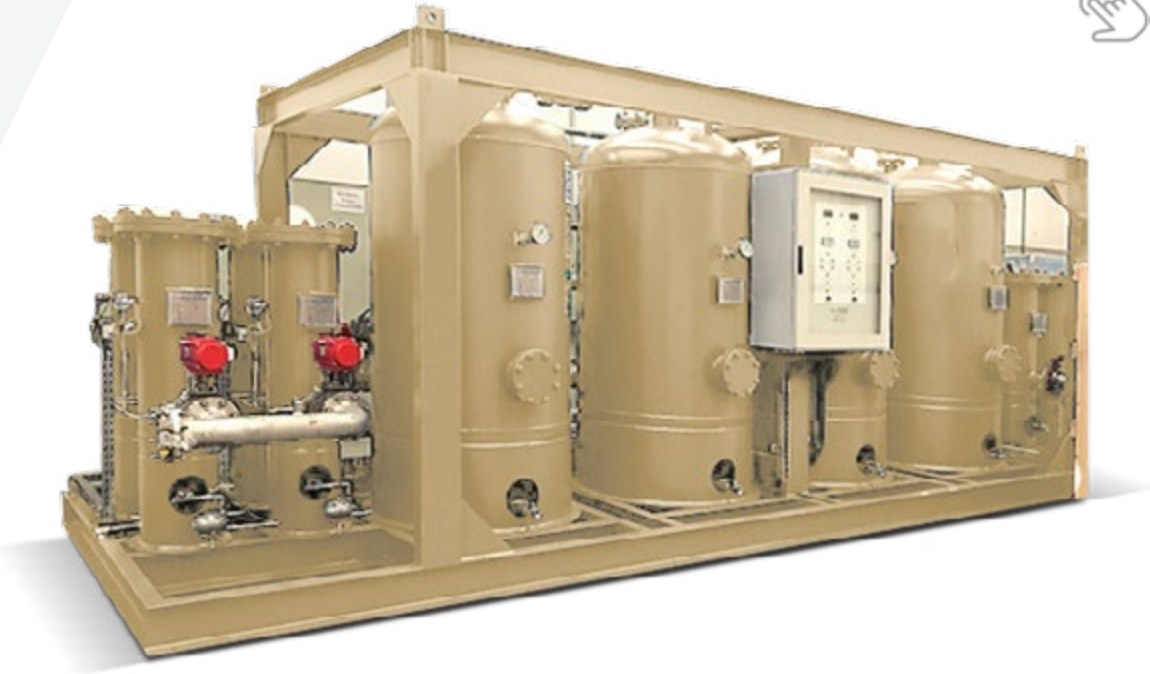


HIGH EFFICIENCY COMPRESSOR BLOCK



OPERATE IN HARSH ENVIRONMENTS

[Read More](#)



Hybrid Air Dryers

Hybrid compressed air dryers are designed by combining refrigerant and adsorption dryer technology. This unique combination offers higher quality air and lower energy consumption compared to traditional heatless and heat regenerative adsorption dryer technology.

Technical Data & Benefits

TECHNICAL DATA*	
Flow Rate (m ³ /h)	2,8 cfm – 2959 cfm
Operation Pressure (barg)	2,5 to 16
Power (kW)	up to 325

* This data can be modified based on customer needs



OPTIMIZED FOOTPRINT



HIGH RELIABILITY



ENERGY SAVINGS



HIGH EFFICIENCY COMPRESSOR BLOCK



OPERATE IN HARSH ENVIRONMENTS

[Read More](#)



PSA Nitrogen Generators

Pressure Swing Adsorption (PSA) is a technology utilized in air separation to enable the creation of a continuous stream of nitrogen by means of air filtration. Ingersoll Rand nitrogen generators use PSA technology to separate nitrogen molecules from other molecules found in compressed air. This modular concept offers greater flexibility.

Technical Data & Benefits

TECHNICAL DATA*	
N2 Flow Capacity	max. 1.800
N2 Purity	99,99%

* This data can be modified based on customer needs



HIGHEST PURITY
UP TO 99,9%



HIGH
RELIABILITY



ROBUST
CONSTRUCTION



LOWEST ENERGY
CONSUMPTION



OPERATE IN HARSH
ENVIRONMENTS

[Read More](#)



Membrane Nitrogen Generators

Membrane Nitrogen Generation Systems consist of fibrous membrane modules arranged in a convenient housing equipped with a control Systems and integral filtration. High quality compressed air (<+5°C pdp) that enters these fiber walls is filtered of water vapor, CO2, and oxygen.

Technical Data & Benefits

TECHNICAL DATA*	
N2 Flow Capacity	max. 3.000
N2 Purity	99,99%

* This data can be modified based on customer needs

- HIGHEST PURITY UP TO 99,9%
- REDUCED NOISE AND VIBRATION
- LOW MAINTENANCE & REDUCED COSTS
- SIMPLE INSTALLATION
- OPERATE IN HARSH ENVIRONMENTS

[Read More](#)








Blowers

We specialize in creating comprehensive blower packages tailored to meet our clients' specific needs. Our designs also integrate a suite of auxiliary equipment like pre-coolers, dryers, filters, receiver tanks, and both closed-loop cooling and chilled water Systems.

Technical Data & Benefits

TECHNICAL DATA*	
Flow Rate (m ³ /h)	up to 15000
Operation Pressure (barg)	up to 2.5
Power (kW)	up to 1000

* This data can be modified based on customer needs

- 
VERY FLEXIBLE
- 
HIGH RELIABILITY
- 
LOW MAINTENANCE & REDUCED COSTS
- 
EASY TO INTEGRATE
- 
OPERATE IN HARSH ENVIRONMENTS

[Read More](#)



Advanced Aftermarket Services & Parts

We work to increase **profitability by minimizing downtime with minimal maintenance requirements and maximized equipment lifetime.**



We offer comprehensive portfolio of custom maintenance Services programs that include:

PRE-COMMISSIONING & COMMISSIONING



Assembly Supervision



Comissioning



Site Training

SERVICES AGREEMENTS SCOPE



Preventive Maintenance



Breakdown & Repair



IIoT Ecoplant Field Services



Field Services



Redesigns & Upgrades



Warranty Programs



Inventory & Equipment Audits



Genuine Spare Parts



Customer Trainings



Advanced Aftermarket Services & Parts

We have a global network of strategically located manufacturing facilities, sales offices and authorized Services centers. **This allows us to think globally and act locally**, providing Services and support to our customers wherever and whenever they need it. Cutting-edge technology to drive the success of our customers.



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IloT Real-time Remote

Helix™ Connected Platform monitors supply compressed air users with comprehensive machine data in real time, which is required for precise production planning, maximum operational uptime and to protect your investment. Enabling Helix™ monitoring are advanced sensors inside the compressor that send data on a regular basis to our cloud-based platform that you can access anytime.



FEATURES

- Advanced remote analysis
- Real-time knowledge about air Systems
- Evaluates historical data
- Predictive maintenance

BENEFITS



Maximize uptime



Highest air quality



Cost savings



More safety



Maximizes energy efficiency



Works to an open standard - easily support compressed air products from other manufacturers

EcoPlant

EcoPlant™, in collaboration with Ingersoll Rand, is a machine learning compressed air monitoring and control network that optimizes utility operation to achieve peak efficiency of compressed air generation.



EcoPlant™, is a cloud-based SaaS platform that integrates with your compressed air Systems to increase energy efficiency and reduce factory downtime.



FEATURES

- Brand agnostic solution connects to all compressed air technologies
- Machine learning control for energy efficiency and predictive maintenance
- 24/7 continuous monitoring and unlimited data logging
- Manage your air Systems from anywhere in the world

BENEFITS



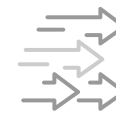
Positive cash flow on day 1



Prevent unplanned downtime



Reduce your energy costs



Optimized production changes—dynamic control



How to contact us



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