YORK®

PROCESS SYSTEMS

High-Pressure Screw Compressors For Fuel Gas Boosting

Rock Solid Reliability in a Critical Role

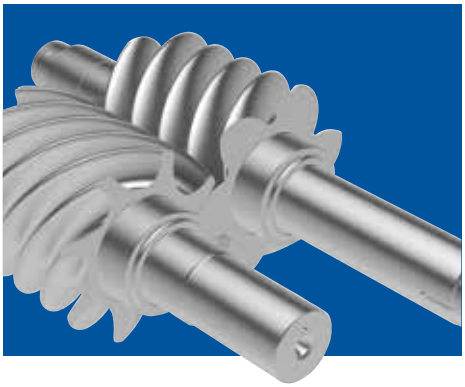
Natural gas is now the leading source of electricity generation in America and a rapidly growing source of power worldwide.

Today's gas turbines – bigger and more efficient than ever before – require a significantly higher feed pressure than their predecessors, one well in excess of the fluctuating pressures in a typical gas pipeline. As a result, they need Fuel Gas Booster (FGB) compressors that can satisfy the steady gas flow rate and high pressure needs of the turbine, while handling the fluctuating gas pressure at the inlet.

These turbines represent significant investments and, as such, are expected to perform at a high level for decades. Further, FGB compressors must do their job with steadfast reliability, because if the compressor fails, the turbine shuts down, too.

The solution?

High-pressure screw compressors from York® Process Systems.



Leading-Edge Screw Compressors:

York® Process Systems relies on the foundation of FRICK® screw compressors.

The FRICK® screw compressor product line is engineered to meet your gas compression requirements.

Each compressor is designed and manufactured to assure reliability, availability, accessibility and ease of service. In addition, advanced energy-saving features reduce operating costs significantly, all of which explains why more than 150,000 FRICK® screw compressors are in operation around the globe.

[1] Maximum outlet operating pressure

[2] Maximum displacement at 3,350rpm of largest model in this rotor diameter

XJF 120L
615 psia[1]
145 cfm[2]

HPS 1510
725 psia[1]
208 cfm[2]

SGC 193-1.3
615 psia[1]
788 cfm[2]

Worldwide Leader in Gas Compression: Compressors Built for the Long Haul

FRICK® Screw Compressors

Our vast experience, advanced technology, and smart controls serve as your assurance of a reliable compressor solution that can continually meet your flow and pressure demands.

Features and Options:

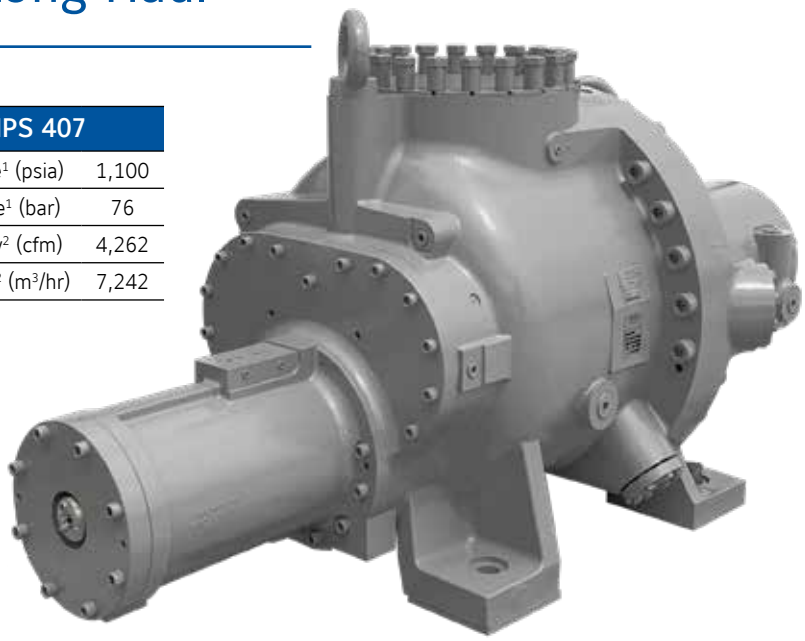
- Electric motor, gas engine, steam turbine drive
- Slide valve for efficient capacity control
- Variable volume ratio (Vi) eliminates over/under compression
- High-efficiency oil removal systems

Compressor Spotlight: HPS 407

The HPS 407 is designed for various high pressure gas compression applications, including Fuel Gas Boosting (FGB), where compressors need to satisfy the steady gas flow rate and high pressure needs of the turbine, while handling the fluctuating gas pressure at the inlet.

Our equipment has run in some of the most complicated processes in the most demanding industries for over a century. We bring this unmatched experience to the new HPS 407 high pressure screw compressor which delivers a pressure range of 1,100 psi (76 bar).

HPS 407	
Pressure[1] (psia)	1,100
Pressure[1] (bar)	76
Capacity[2] (cfm)	4,262
Capacity[2] (m^3/hr)	7,242



Our full line of rotary screw compressor models is manufactured to meet the exacting requirements of the gas compression industry.

FEATURE	SPECIFICATIONS RANGE
Flow Range	Up to 8,212 cfm (13,952 m3/hr)
Power Range	Up to 6,000 hp (4,474 kW)
Pressure Range	Up to 1,100 psi (76 bar)
Gases	Natural Gas
Certifications and Classifications	ANSI, ASME, BS OHSAS 18001, CE, CSA, ISO 9001 + 14001, PED, UK, UL

HPS 273-1.2
1,100 psia[1]
1,298 cfm[2]

SGC 355-1.1
615 psia[1]
6,402 cfm[2]

HPS 407-1.2
1,100 psia[1]
4,262 cfm[2]

Everything You're Looking For in Fuel Gas Boosting Compressor Packages

Performance and Long-term Reliability

You expect your gas turbines to run hard for a long time. It's not unreasonable to expect the same durability and reliability from your FGB compressor. Our screw technology is significantly more reliable than other technologies.

Availability

When you call on our compressor packages, they will be ready with the steady supply of gas at the pressure you need. Our engineering expertise and non-wearing parts combine to deliver longer intervals between scheduled maintenance and greater performance over longer periods of time.

Heightened Compressor Efficiency for Enhanced Sustainability

Our advanced technology brings exceptional energy efficiency to your operation.

Experience

With more than 135 years of industry-leading compression experience and more than 150,000 compressors installed, we have earned a reputation for making screw compressors that are extremely reliable.

Low Oil Carryovers

Years of R&D and rigorous testing have enabled us to optimize our oil separators and deliver the low oil carryover you demand to protect your investment.

Meeting the Highest Industry Standards

Our compressors are designed to meet ASME, ANSI, NEMA, ISO standards and other standards as applicable.

Lower Total Cost of Ownership

Non-wearing parts, longer maintenance intervals and less frequent rebuilds, coupled with the rotary screw compressor's longer operating life, make the FRICK® screw compressor the perfect component in your 20+ year, life-cycle planning.

Our State-of-the-Art Screw Compressor Test Laboratory Allows You to Buy With Total Confidence

Our new, high-pressure, variable speed, Screw Compressor Test Stand is one of the largest, most sophisticated test stands in the screw compressor industry, and is a significant addition to our existing lab.

At 7,000 square feet, the $6.7 million facility features the latest testing technology to verify large compressor capabilities, capacity and power ratings with unsurpassed accuracy.

With it, we are uniquely capable of precisely load testing and confirming performance of our array of large screw compressors that support refrigeration and gas compression applications in the oil and gas process industries.

The resulting data allows you to purchase equipment with the highest degree of confidence. Exactly the kind of confidence you need when selecting FGB compressors for your gas turbines.

At the heart of the stand is a 5,000 HP variable speed electric motor. The test loop is rated for 1,100 psig, supporting test conditions up to 1,000 psig discharge pressure. An ammonia refrigeration system equipped with a FRICK® RWFII 177 screw compressor with electric motor drive is used, along with a cooling tower to remove the heat of compression and achieve desired suction temperatures. The lab operates on nitrogen, with the ability to model a wide range of gases.

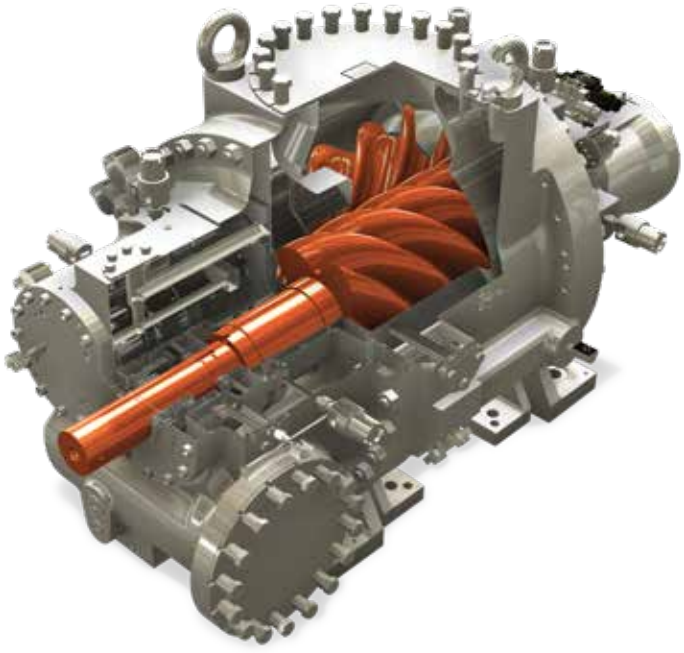
Our state-of-the-art test lab stands as unequivocal proof of our commitment to – and confidence in – the industry and its bright future.

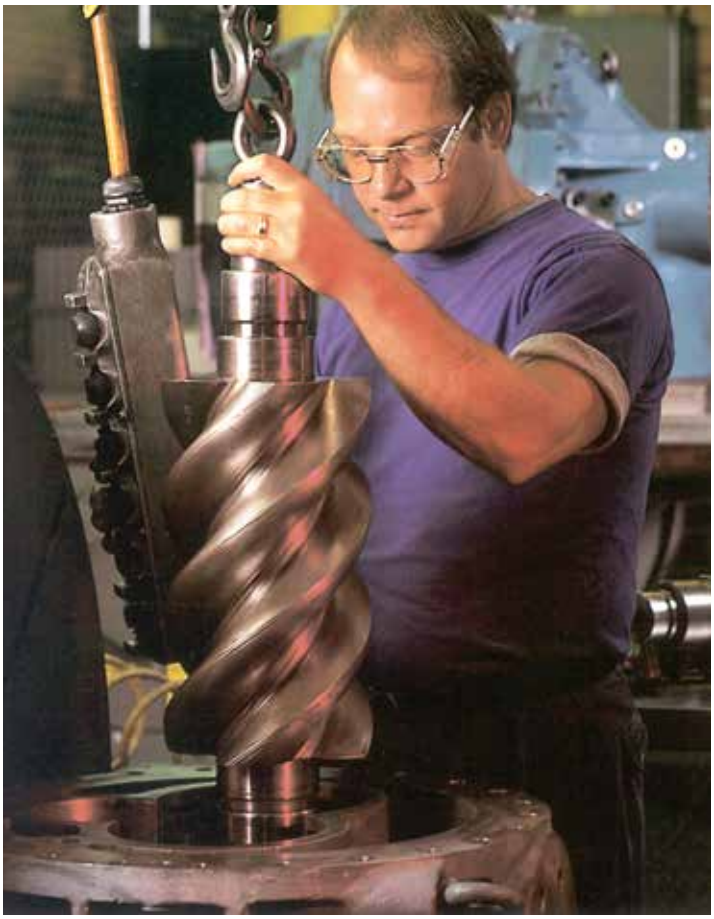
135 Years of Compressor Manufacturing Experience

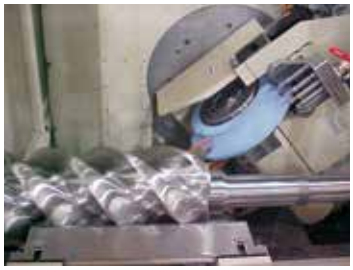
Designed for durability. Built with precision.
Our screw compressors are manufactured in advanced facilities in multiple locations globally in order to be close to our worldwide customers. We design and build compressors to deliver the most rugged, efficient, and flexible machines on the market.

Rotors are precision-cut in temperature controlled machining areas; profiles are finish ground for consistent surface finish and close tolerances.

Assembly areas are also temperature controlled and under positive air pressure to assure cleanliness and accuracy. All rotors are balanced to ISO 1940-Grade G2.5 for smooth running, and every compressor is test run to guarantee proper operation.







With More than 300 Locations Around the World to Serve York® Process Systems Equipment

We're There When You Need Us

As part of Johnson Controls, York® Process Systems has access to the resources of a global technological and industrial leader.

We have more than 300 service locations around the world, so when you partner with us, you benefit from one of the industry's foremost commitments to service.

Regardless of your location, our locally-based teams of factory-trained technicians stand ready to provide preventive maintenance, troubleshooting, repair, and, if need be, retrofit services.

All of our services are performed by highly skilled technicians who specialize in specific types of equipment, enabling them to ensure continued safe, reliable, efficient equipment performance.

If unexpected failure should occur, York® Process Systems will be at your door with expert repair service and support. We know critical equipment breakdowns always seem to happen at the worst time, and that your compressor is one of the most vital assets in your facility.

We make sure that you get the most out of your investment by offering the following time- and money-saving support services:

- **Supervision of installation**
- **Start-up and commissioning**
- **Staff training**
- **Service and maintenance (4,000 technicians in 192 countries, trained on all brands of rotary screw and centrifugal compressors)**
- **Technological upgrades**
- **Power-saving improvements**
- **Replacement parts**
- **Information and advice**
- **Design studies**

Global Manufacturing Locations

Sales Offices Strategically Located Around the Globe

NORTH AMERICA
Robert F Fahey,
GM, Global YPS
100 Cumberland Valley Ave
Waynesboro, PA 17268 USA
Tel: +1 717-765-2510
Mobile: +1 484-467-1954
E-mail: Robert.f.fahey@jci.com

LATIN AMERICA
German Salcedo,
Regional Market Mgr.
10644 West Little York Rd, Suite 200
Houston, TX 77041 USA
Tel: +1 713-934-2405
Mobile: +1 832-914-8822
E-mail: carlos.g.salcedo.garcia@jci.com

EUROPE
Christoph Winkler,
Branch Manager
Gottlieb-Daimler-Str 8
Mannheim, D-68165 Germany
Tel: +49 621468-457
Mobile: +49 152 56728212
E-mail: christoph.winkler@jci.com

MIDDLE EAST & AFRICA
Sarvesh Baser, Sales Manager
PO Box 31065
Suite 1704, 17th Floor
API World Tower
Sheikh Zayed Rd, Dubai, UAE
Tel: +971 4 309-9735
Mobile: +971 56 683-2514
E-mail: sarvesh.baser@jci.com

SOUTH AFRICA
Gert Joubert Deale,
Branch Manager
42 Electron Ave
Isando, 1600 South Africa
Tel: +27 11 921-7154
Mobile: +27 82 890-038
E-mail: gert.deale@jci.com

SOUTHEAST ASIA
Kenneth Low, Sr. Sales Manager
6 Changi Business Park Ave
#06-21/22
Singapore 486017
Tel: +65 6517-2832
Mobile: +65 9154-0053
E-mail: kenneth.ct.low@jci.com

INDIA
Haresh Rupchandani,
Mgr., Product & Channel Sales
501, A Business Plaza
Pune, MH 411001 India
Tel: +91 20 6606-7113
Mobile: +91 99232-00941
E-mail: haresh.rupchandani@jci.com

CHINA
Eric Li, GM China Refrigeration
No. 518-11, Fu Quan Bei Rd
Changning District
Shanghai, China 200335
Tel: +86 21 2285-7664
Mobile: +86 13801981507
E-mail: eric.li@jci.com

AUSTRALIA
Terry Presley, Operations Manager
Unit 4/121 Newmarket Road
Windsor, QLD, Australia 4030
Tel: +61 7 3630-3018
Mobile: +61 407 296 647
E-mail: terry.presley@jci.com

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Rock solid reliability™

YORK®
PROCESS SYSTEMS

York® Process Systems · 100 Cumberland Valley Avenue · Waynesboro, PA 17268 USA · Phone: 717-762-2121

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