

NASH Compressor Systems for Offshore Oil & Gas Production

Proven Technology Built from Experience

For over 50 years, Gardner Denver Nash has been providing the most reliable compressors and vacuum pumps designed for the oil & gas industry's requirements. **Why are we successful?** Because we make you successful by eliminating unscheduled down time.

Our liquid ring vacuum pumps and compressors are renowned for:

- rugged design construction making them tolerant to carryover from process upsets
- low maintenance requirements best up-time in the industry
- cool-running making them ideal for handling the explosive gases found in refinery applications, with pressures up to 215 PSIA (14.8 bar)
- the largest and most experienced technical staff in the industry
- comprehensive value-added centers throughout the world.



Gjøa Platform, North Sea
Built by K-Lund, Norway, featuring a NASH NAB 1500
two stage liquid ring compressor. Designed for a flow rate of
1500 m³/h and a discharge pressure of 6 to 9 bar absolute



NASH 2BG Compressor used for vent gas compression on an offshore rig

Offshore oil rigs:

On offshore rigs, Nash pumps and compressors are used for gas compression, vapor recovery, and glycol recovery systems.

Engineering Expertise

Gardner Denver Nash has years of experience and expertise in designing compressor systems for refinery applications. As a result, we understand the impact of handling various hydrocarbons and their effect on liquid ring compressors. Nash is one of the few companies that has the knowledge, including consideration of external factors, to design, support and troubleshoot liquid ring compressor systems. Nash scrutinizes every detail of the system to make sure it will operate continuously and to the customer's desired expectations.

Our ISO 9001 certified value added centers, located in the Americas, Europe and Asia, provide:

- experienced engineering staff
- optimum solutions for your process
- compliance with industry standards such as API681, NEMA, IEEE, ATEX



The result is a custom NASH system that provides:

- unparalleled RELIABILITY
- lower operating costs
- lower maintenance costs
- environmental compliance

NASH Compressor Systems for Offshore Oil & Gas Production

Compressors for Offshore Applications

Flare Gas Recovery Vent Gas Recovery Glycol Recovery

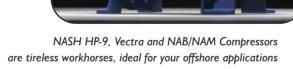
Gardner Denver Nash is committed to helping you meet the stringent environmental legislation which prohibits the flaring of waste gas. Our HP and NAB compressors are the ideal choice for recovering fuel gas and condensing valuable hydrocarbons, making more money for your company.

When reviewing the total life cycle cost of a flare gas compressor system, the NASH liquid ring system provides more value and better reliability than any other technology, hands down.

Liquid ring compressors run cool and they clean the gas as they compress it - eliminating the need for downstream aftercondensers and scrubbers. The result is a simpler, more reliable system.









Features	Benefits
Ability to handle carryover	Minimal process problems resulting in more uptime; Intended for severe applications
Long design life of 40+ years	Highest reliability
No internal lubrication required	Less maintenance required; less downtime
No metal-to-metal contact	Constant wear-free performance
Cool Running, Minimal temperature rise between inlet and discharge	Ideal for explosive gases and vapor recovery applications
Only one moving part	Simple and reliable operation



Gardner Denver Nash is a division of Gardner Denver, Inc. The histories of NASH and elmo provide more than 100 years of experience as the world's leading supplier of liquid ring pumps, compressors and vacuum systems.

Other NASH Products

TC/TCM

Integral 2 stage liquid ring pumps with improved performance at vacuum levels down to 27 mbar (0.8" HgA) Designed to handle large amounts of liquid carryover without difficulty

Capacity of 170 to 3,740 m³/h with vacuum to 27 mbar abs Capacity of 100 to 2,240 CFM with vacuum to 0.8" HgA



Service

We have the know-how, the expertise and the specialists. We provide professional service to make your pumps run for decades. Our service centers are located in:

- Australia
- Brazil China
- Germany

- Korea
- Netherlands

- South Africa
 UK
- USA
- Singapore



Large liquid ring vacuum pumps with superior corrosion resistance Top discharge capability which eliminates need for trench Self-recirculating seal water, reducing need for external seal water source

Capacity of 6,800 to 39,000 m³/h with vacuum to 200 mbar abs Capacity of 4,000 to 23,000 CFM with vacuum to 24" HgV



Vectra

Liquid ring vacuum pumps and compressors Available in feature rich budget designs (SX, XL or GL) Designed to handle high back pressure requirements Capacity of 34 to 6,796 m³/h with vacuum to 33 mbar abs Capacity of 20 to 4,000 CFM with vacuum to 29+ HgV



Compressors

Wide range of liquid ring compressors designed for many applications. Rugged and reliable, they can handle highly toxic, explosive and corrosive gases

Specifically developed for applications such as flare-gas, Chlorine and Vinyl Chlorine Monomer (VCM) recovery Capacity of 100 to 3,740 m³/h with pressure to 15 bar abs Capacity of 60 to 2,200 SCFM with pressure to 200 PSIG Single and two stage models available



Gardner Denver Nash has many ISO 9001 certifications.



Gardner Denver Nash has an extensive network of sales offices and representatives all over Europe and the world

Nash - Zweigniederlassung der Gardner Denver **Deutschland GmbH**

Katzwanger Straße 150 90461 Nuernberg, Germany Phone: +49 911 1454-0 Fax: +49 911 1454-6935 nash.de@gardnerdenver.com

www.GDNash.com

