

#### DRY RUNNING CLAW VACUUM PUMPS & SYSTEMS

# NDC SERIES



### **OPERATING PRINCIPLE**



Claw pumps operate without the aid of a sealing fluid by expanding a volume of air at the inlet of the pump, carrying that volume around the outside of the pumping chamber, and then compressing that volume out the exhaust. This is aided by very specific rotor geometries. The physical shape of the claw maximizes transport volume per cycle while effectively timing the opening and closing of the suction and exhaust channels against expansion and contraction of that volume.

Claw technology is able to operate in a dry and non-contacting manner thanks primarily to incredibly tight machining tolerances. This allows the tips of the claw to operate close enough to the cylinder wall to effectively seal out air without actually coming into contact. Thus, no cylinder lubrication or sealant is required, friction is minimized, energy efficiency is maximized, and required maintenance is trifling.

Backed by Nash's world-class engineering team and technical service and support, NASH NDC Series dry running claw vacuum pumps deliver a highperformance, versatile vacuum solution for a broad range of industrial processes.

## **Industries & Applications**

Proven, dependable and efficient performance for a wide range of industrial applications.



# Higher Efficiency Lower Power Consumption

#### Oil-Free Dry Running Claw Vacuum Pumps

The energy-efficient design of the NASH NDC offers standard features such as a flanged motor, silencing hood, fine mesh filter, vacuum non-return valve on suction side and vacuum relief valve.

#### **ADVANTAGES AT A GLANCE:**

- Quiet Operation (63-85 dBA average)
- No Oil in Compression Chamber
- Air-Cooled Design
- Ideal for use with VFD
- Reliable and Robust
- Safe for the Harshest Processes



#### NDC-0060 to NDC-0251

Nominal Capacity from 42 to 148.8 acfm Base Pressure 75 to 150 Torr Nominal Motor Power from 1.5 to 7.5 HP



#### NDC-0301 to NDC-0501

Nominal Capacity from 203 to 353 acfm Base Pressure 113 to 150 Torr Nominal Motor Power from 7.5 to 15 HP



NDC-1000

Nominal Capacity 671 acfm Base Pressure 150 Torr Nominal Motor Power 30 HP



#### NDC-0062 & NDC-0122

Nominal Capacity 43.5 to 84.8 acfm Base Pressure from 75 Torr Nominal Motor Power from 2.4 to 4.1 HP

# Nash Products & Systems



#### NASH<sup>®</sup> Liquid Ring Vacuum Pumps & Systems

The reliable and durable solution for demanding process applications. Through ongoing commitment to innovation, Nash continues to introduce liquid ring vacuum pumps that meet the rigors of the most demanding applications while improving efficiency and lowering total cost of ownership.



#### NASH and GARO<sup>®</sup> Liquid Ring Compressors & Systems

The rugged, reliable solution for demanding process applications. Designed to handle toxic, explosive and corrosive gases, and backed by a reliable history of performance under the most demanding conditions.



#### Dry Vacuum Pumps & Systems

Designed to meet your specific process needs, NASH dry systems are ready for operation, easy to integrate into process automation, help minimize installation & operating costs, and meet the rigors of the most demanding applications.



#### ENER-JET<sup>™</sup> Ejectors & Systems

Whether on their own, or as part of a NASH ENER-JET Hybrid Vacuum System, NASH steam jet ejectors are engineered for optimum efficiency, reducing steam consumption, while maintaining their ability to handle large volumes at very high vacuum levels.



#### Oil-Lubricated Rotary Vane Pumps & Systems

Synonymous with reliability and efficient design, NASH Oil-Lubricated Rotary Vane Pumps are the perfect solution for a wide range of Industrial Vacuum Applications.



An Ingersoll Rand Business www.GDNash.com ©2021 Gardner Denver Nash, LLC Printed in U.S.A. GDN-NDC-B-1266 2nd Ed. 11/22

