

# Vacuum pump



## "RMVP Series"

Rotomake Vacuum Pumps are engineered to deliver reliable, high- performance vacuum generation for industrial, chemical, pharmaceutical, and utility applications. Designed with precision manufacturing and superior mechanical integrity, our vacuum pumps ensure consistent suction performance, low noise, and long operating life.

With a focus on durability and efficiency, Rotomake vacuum pumps are built to handle challenging environments and continuous-duty cycles. Our solutions provide excellent vacuum levels, smooth operation, and easy maintenance, making them a preferred choice for industries requiring dependable vacuum systems.

Rotomake continues to serve customers with trusted technology, high-quality components, and customized vacuum systems tailored to meet diverse application needs.

#### **TYPES OF VACUUM PUMPS**

- Oil-Lubricated Rotary Vane Vacuum Pump Provides deep, stable vacuum with smooth operation.
- Dry Vacuum Pump Oil-free, suitable for food, pharma, and electronics.
- Liquid Ring Vacuum Pump Uses liquid as sealing medium, ideal for moisture-laden gas.
- Roots Blower Vacuum Pump High-speed booster pump for deeper vacuum applications.



### **WORKING PRINCIPLE (Rotary Vane)**

A rotor placed eccentrically inside a chamber rotates. Sliding vanes create increasing volume on the inlet side, pulling air inside. As rotation continues, the air is compressed and discharged, creating the vacuum.

#### **TECHNICAL SPECIFICATIONS**

Parameter Typical Range

Pump Type Rotary Vane / Dry / Liquid Ring / Roots

Capacity  $5-500 \text{ m}^3/\text{hr}$ 

Ultimate Vacuum Up to 0.1 mbar

Pressure Range Atmospheric to deep vacuum

Motor Power 0.5 HP to 20 HP

Noise Level  $60 - 78 \, dB(A)$ 

Operating Temperature Ambient to 80°C

Cooling Type Air / Water cooled

Lubrication Oil / Dry type

Duty Continuous 24/7 operation

## **MATERIAL OF CONSTRUCTION (MOC)**

Component Material

Pump Body Cast Iron / Aluminum / Stainless Steel

Rotor Alloy Steel / SG Iron

Vanes Carbon / Graphite Composite

Shaft EN8 / EN19

Seal NBR / Viton / PTFE

Impeller (Liquid Ring) Bronze / SS304 / SS316



#### **KEY FEATURES**

- High vacuum capability
- Compact, reliable, and low noise
- Continuous-duty operation
- Low maintenance design
- High efficiency & stable vacuum
- Anti-suck back valve protection
- Moisture & vapor handling (liquid ring type)

### **APPLICATIONS**

- Packaging machines
- Pharma & chemical processing
- Degassing, filtration & drying
- CNC and wood industry
- Food processing & preservation
- Autoclaves and sterilizers
- Printing & lamination
- Laboratory vacuum systems

#### **AVAILABLE OPTIONS**

- Oil-lubricated / Dry vacuum models
- Single-stage / Two-stage
- SS construction for corrosive gases
- Air-cooled / Water-cooled
- Noise-reduced models
- Flameproof motor option