

# **Internal Gear pump**



## "RMIG Series"

Rotomake Internal Gear Pumps are designed to deliver superior performance, maximum reliability, and smooth flow for a wide range of industrial fluid-handling applications. With precision engineering and robust construction, Rotomake pumps ensure consistent operation even with highly viscous, abrasive, or temperature-sensitive liquids.

Using an optimized internal gear design with a rotor, idler gear, and crescent, our pumps provide gentle, pulseless flow with reduced shear—making them ideal for oils, polymers, food-grade materials, chemicals, adhesives, and lubrication applications. Rotomake's advanced gear geometry minimizes internal leakage, enhances volumetric efficiency, and ensures quiet, vibration-free operation.

Rotomake offers internal gear pumps with multiple material options such as Cast Iron, Stainless Steel, Carbon Steel, and Hardened Alloy Steel to suit varied industrial needs. We also provide steam-jacketed models for heating bitumen, chocolate, resin, and high-viscosity fluids, ensuring trouble-free pumping in demanding environments.



#### **TECHNICAL SPECIFICATIONS**

Parameter Typical Range

Pump Type Internal Gear Pump

Flow Range 5 – 500 LPM

Pressure Rating Up to 14 bar (low pressure) / Up to 210 bar

(high pressure models)

Speed Range 200 – 1800 RPM

Viscosity Range 1 cSt – 100,000 cSt

Temperature Range -40°C to +250°C (with suitable seals &

materials)

Mounting Type Foot / Flange

Rotation CW / CCW

Seal Options Mechanical Seal / Gland Packing / Double

Seal

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

Component Material Options

Pump Casing Cast Iron / Carbon Steel / Stainless Steel

Rotor & Idler Gear Alloy Steel / SS316 / Hardened Steel

Shafts EN8 / EN19 / SS304

Crescent Hardened Steel / SS316

Bearings Bronze / Carbon / Teflon

Seals NBR / Viton / PTFE / Mechanical Seal

#### **KEY FEATURES**

- Smooth, pulseless flow
- Self-priming capability
- Excellent handling of high-viscosity liquids
- Low noise and vibration
- Highly efficient at low and medium pressures



### **APPLICATIONS**

- Oil Transfer
- Lubrication Systems
- Adhesives, Paints & Chemicals
- Bitumen & Asphalt
- Fuel & Diesel Systems
- Food-grade liquids (chocolate, syrup, edible oils)
- Hydraulic oil transfer
- High-viscosity polymer pumping

#### **AVAILABLE VARIANTS**

- Jacketed internal gear pump (for heating with steam/oil)
- Stainless steel food-grade pump
- High-temperature model
- Reversible flow model
- Customized port size & mounting