



# **SUPER T SERIES®**

Self-Priming, Solids-Handling Trash Pumps





Gorman-Rupp has been revolutionizing the pumping industry since 1933. Many of the innovations introduced by Gorman-Rupp over the years have become industry standards.

More than ever, we continue to update our factories, processes, research and development, and engineering to ensure that our pumps and systems are among the most reliable and efficient in the world. One of our most successful and innovative lines of pumps has been our selfpriming models.

Revolutionary improvements were made in 1963 with the introduction of our T Series® self-priming pumps. Since then, continuous improvements to head, flow and efficiency have been made.

In 2000 we introduced our Super T Series® with many added maintenance features to enhance serviceability.

Today, Gorman-Rupp self-priming pumps are the world's leading choice for waste handling applications in industries such as steel and paper mills, mining operations, food processing plants, power plants, automotive factories, tanneries and wineries. They are also the pump of choice in many sewage-handling applications worldwide.

Gorman-Rupp's commitment to our original philosophy of innovation, continuous improvement, unparalleled quality and customer service continues to set us apart from others.

# OUR PUMPS DELIVER DECADES OF PERFORMANCE AND VALUE

Gorman-Rupp is committed to meeting your fluid-handling requirements long after installation. The quality manufacturing and testing that go into every Super T Series® pump guarantee long-lasting, trouble-free operation. And we provide a five-year warranty and fast parts service to back up our products and ensure your peace of mind.

#### **Value**

Super T Series® pumps boast some of the lowest lifecycle costs in the industry. Because of the quality manufacturing and testing that goes into every Gorman-Rupp product, you benefit from minimal service interruptions and some of the lowest maintenance in the industry. Gorman-Rupp delivers the best ROI by ensuring low operating costs for decades.

#### **Parts And Service**

When you need a replacement part for your Super T Series, you'll have it fast. With tens of thousands of genuine Gorman-Rupp parts and pumps at our disposal, we fill and ship 99% of parts orders within 24 hours. Should your Super T Series pump or ReliaSource® pump package ever require service, our worldwide network of factory-trained distributors is ready to quickly respond to your needs. With just one number to call for parts and service, it's easy and convenient to keep your equipment performing as it should.

#### **Peace Of Mind**

At Gorman-Rupp, we don't just say our pumps are reliable. Unlike standard 90-day or one-year warranties, we guarantee every part and working component of a Super T Series pump for a full five years. With Gorman-Rupp, reliable performance is always guaranteed.









Sound-attenuated, engine-driven models are environmentally engineered to operate much quieter than industry standards.



## **Deal With Tough Solids Applications**

New challenges for solids-handling pumps are presented with the rise of stringy solids such as flushable, nonwoven wipes which are increasingly present in sewage. This, along with other clogprone solids such as feathers in poultry processing applications, can be dealt with effectively with the Gorman-Rupp Eradicator® Solids Management System. The system is available for all Super T Series® pumps.

#### **Design Features**

The Eradicator system features an aggressive self-cleaning wearplate incorporating a number of notches and grooves, as well as a patent-pending lacerating tooth, that helps break up stringy materials and pass them through the pump without impacting performance or interrupting service. A special back cover includes a patented lightweight inspection cover that can easily be removed if it is necessary to inspect the impeller. The innovative design greatly reduces troublesome clogging and expensive downtime.

#### **System Benefits**

does the entire back

Easier access to the impeller, increased uptime, improved operational efficiency, reduced maintenance costs and lower life-cycle costs are major benefits of the Eradicator system. No longer

cover assembly have to be removed to gain access to the impeller, and Eradicator-equipped pumps do not require expensive chopper blades that need periodic replacement. The system is available in cast iron and G-R Hard Iron configurations and can be factory-equipped in new pumps or purchased as a retrofit kit that is interchangeable with Super T Series pumps currently operating in the field.

The Eradicator® Solids Management System is available for all sizes of Gorman-Rupp Super T Series® pumps.

## **SUPER T SERIES®**

Self-Priming, Solids-Handling Trash Pumps



#### **Superior Solids-Handling**

Designed for economical, trouble-free operation, the superior solids-handling capabilities of the Super T Series® pumps make them ideally suited for a variety of applications including solids-laden liquids and slurries. The large volute design allows automatic repriming in a completely open system without the need for suction or discharge check valves.

Available in discharge sizes of three, four, six, eight and ten inches, this line of self-priming pumps boasts capacities to 3400 gallons per minute (214.5 liters per second) and heads to 148 feet (45 meters). Pumps four inches and larger are engineered to allow up to three-inch diameter spherical solids to pass through any critical area, including the recirculation port.

Super T Series pumps are available in several configurations, including a B version for higher head applications, close-coupled or engine-driven models. All Gorman-Rupp Super T Series pumps are backed by a five-year manufacturer's warranty.

### **Easy To Maintain**

Super T Series pumps are designed with ease of service in mind. Because they are self-priming, they can be mounted above the liquid being pumped. Should service or maintenance be required, it can be easily performed using common hand tools without disconnecting piping. The impeller, seal, wear plate and flap valve can all be accessed through the shimless coverplate opening for inspection or service.\*

All Super T Series pumps can be coupled to a standard NEMA motor, which means there's no waiting for special motors.

#### **G-R Hard Iron**

G-R Hard Iron is offered as an option for our popular Super T Series pumps and is available for your abrasive applications. For years, Gorman-Rupp has proclaimed the benefits of G-R Hard Iron. This durable material provides superior performance by extending the pump life up to six times over standard cast iron or ductile iron components. G-R Hard Iron has a measured hardness in excess of 400 Bhn (Brinell), providing the best abrasion resistance for nearly all pumping applications.

\*Not available on ten-inch models.

# Super-TSERI\S

- 01 | Fill Port
- 02 | Suction Check Valve
- 03 | O-Ring Seal
- **04** | Replaceable Wearplate
- **05** | Balanced Impeller
- 06 | Oversized Seal Oil Chamber
- 07 | Seal Oil Monitor
- **08** | Removable Rotating Assembly
- 09 | Bearing Oil Monitor
- 10 | Pusher Bolt Capability
- 11 | Optional Casing Heater

- 12 | Double Lip Seals
- 13 | Atmospheric Bearing Isolation
- 14 | Cartridge Mechanical Seal
- 15 | Easy-Off Coverplate Nuts
- 16 | Removable Coverplate
- 17 | Easy-Grip Handle
- 18 | Pressure Relief Valve
- 19 | Pusher Bolt Capability
- 20 | Shimless Coverplate Adjustment

### Eradicator® Solids Management System

**21** | Lightweight Inspection Cover

The patented design allows for easy access to the impeller for routine maintenance and clearing blockages.

22 | Aggressive Self-Cleaning Wearplate

Incorporates grooves, notches and tooth to shred stringy materials to further reduce clogging.



#### **Specifications**

Pump Size: 3" (75 mm),

4" (100 mm), 6" (150 mm), 8" (200 mm), 10" (250 mm)

Max Capacity: 3400 GPM (214.5 lps)

Max Head: 152' (46.3 m) Max Solids: 3" (76.2 mm)

Materials of Construction: Cast Iron, 316 Stainless Steel Fitted, CD4MCu, G-R Hard Iron Fitted, G-R Hard Iron

with Hard Iron Volute





# **ECONOMICAL OPERATION**& EASY TO SERVICE



# Gorman-Rupp's patented external shimless adjustment design doubles the life of the impeller and wearplate.

The external shimless coverplate allows for easy adjustment of the clearance between the impeller and the wearplate. This process eliminates the need to realign belts, couplings or other drive components. In turn, the working height of the seal assembly and impeller back clearance are not disturbed. The unique collar and adjusting screw allow for incremental adjustments of the wearplate clearance.

Once adjustments have been made, the collar locks in place, maintaining the clearance setting even if the coverplate is removed. This design feature doubles the life of the impeller and wearplate while maintaining peak operating efficiency.

#### **Easily Removable Coverplate**

The removable coverplate with easy-grip handle and pusher bolt capability provides quick and easy access to the pump interior (not available on 10" models).







## Solids-Handling Impeller

Two-vane, ductile iron, semiopen solids handling impeller handles up to 3" (76.2 mm) diameter solids, depending on pump model. Pump out vanes on the impeller shroud reduce foreign material buildup behind



the impeller and reduce pressure on seal and bearings.
Multi-vane impellers are available in "B" hydraulics
models for higher head applications with limited solids.
Optional materials include: G-R Hard Iron, 316 Stainless
Steel, CD4MCu and High Chrome.

### Gorman-Rupp Cartridge Seal

Exclusive double-floating, self-aligning, oil lubricated mechanical cartridge seal with stationary and rotating face of silicon carbide or tungsten titanium carbide is specifically designed for abrasive and/or tra



designed for abrasive and/or trash handling service.

Consult the factory for additional seal configurations.

## **Removable Rotating Assembly**

The entire rotating assembly can be removed without disturbing the pump volute or piping. Pusher bolt holes are provided to assist with removal. This allows for quick and easy installation of a spare rotating assembly, resulting in less downtime.



### **Dual Bearing Protection**

An atmospheric barrier along with two lip seals provide additional protection of the pump bearings. This unique design also allows for quick and easy external monitoring of the bearing cavity.



## **GORMAN-RUPP SUPER T SERIES®**

The Right Pump For The Job

### **Basic Pump**

Gorman-Rupp Super T Series® pumps are available in five sizes and multiple drive variations. When space is critical, close-coupling can be used to solve "tightfit" problems. V-belt

configurations offer the

advantage of flexibility

in speed selection and usually provide

maximum operating speed for the required head and capacity without trimming the impeller. Super T Series pumps are also available with diesel or natural

gas powered engines,

or as part of a packaged pumping station.



Super T Series®
Size: 3" (75 mm)
Shown with optional flanges



Super T Series®
Size: 4" (100 mm)
Shown with optional flanges



Super T Series®
Size: 6" (150 mm)
Shown with optional flanges



Super T Series® Size: 8" (200 mm) Shown with optional flanges



Super T Series® Size: 10" (250 mm)

#### **Drive Variations**



Super T Series®
Close-coupled



Super T Series® V-belt driven



Super T Series®
Engine driven
Shown with optional wheel kit



Super T Series® ReliaSource® packaged pumping station



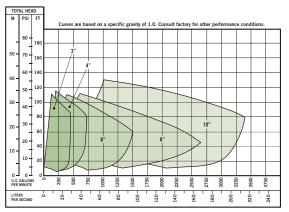
**Super T Series**® ReliaPrime® soundattenuated back-up system

#### **Optional Accessories**

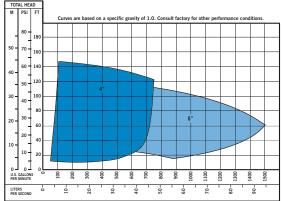
- Eradicator<sup>®</sup> Solids Management System
- Volute Casing Heater
- Automatic Air Release Valve
- Discharge Check Valve
- Pump High-Temperature Shutdown Kit
- G-R Hard Iron Casings (3", 4" and 6" models)
- High Chrome Impellers (+600 Bhn, limited pump sizes)
- Suction & Discharge Gauge Kits
- Complete Replacement Rotating Assembly
- Pump Spare Parts Kit
- Pump Easy Drain Kit
- Continuous Vane Impeller (10" model only)
- Optional Elastomers and Suction Flap Valve Materials (EPDM, Neoprene, AFLAS-TFE, Viton®\*)
- Custom Seal
   Options including:
   Flush Kits, Metal
   Bellows, Double
   and Chemical
   Duty Seals, and
   John Crane Type 9
   Mechanical Seals
   (limited pump sizes)

#### **Pump Performance Data**

#### A Version



#### B Version – Limited Solids



<sup>\*</sup>Viton® is a registered trademark of DuPont Performance Elastomers. All rights reserved.

# FLUID-HANDLING EQUIPMENT DESIGNED WITH YOUR NEEDS IN MIND



- **★ Manufacturing Facilities**
- Distribution Centers

Gorman-Rupp USA Mansfield, Ohio, USA Gorman-Rupp Canada St. Thomas, Ontario, Canada Gorman-Rupp Europe
Waardenburg, Netherlands
Namur, Belgium
Gorman-Rupp Africa
Cape Town, South Africa
Durban, South Africa
Johannesburg, South Africa (Headquarters)

#### **Distribution Centers**

Dubai, United Arab Emirates Grand Prairie, Texas, USA

Engineering and manufacturing superiority has been the hallmark of Gorman-Rupp since our inception in 1933. Today we bring our products to life in some of the most efficient, modern and state-of-the-art manufacturing facilities in the world. Gorman-Rupp has a selection of nearly 3,000 pump models, and our world-class team of distributors has worked closely with thousands of end users around the world. We have the proven expertise and the resources to specify, manufacture, test and service your pump, and to ensure reliable performance for the long haul.





#### **GORMAN-RUPP PUMPS**

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