





# Why Red Jacket?



# Boosting flow and your bottom line.

Red Jacket's unsurpassed expertise helps sites optimize fuel flow. Part of the industry's leading Veeder-Root suite of products, Red Jacket's family of Submersible Turbine Pumps and Pump Controllers ensures that sites can pump fuel quickly, efficiently and safely — whether it's motor fuel, diesel, aviation gasoline, LPG, ethanol/methanol or kerosene — in aboveground or underground storage tanks. As a Veeder-Root flagship product line, Red Jacket is backed by the largest network of distributors and authorized service contractors worldwide.

**Problem Solved.** 

# Red Jacket has the industry's most advanced motor.



Improved motor delivers higher efficiency, fuel flow and lower power consumption, allowing Red Jacket to continue to offer the most advanced STPs.

- Up to 5% increased flow
- 8% less power consumption
- Improved quality and reliability
- Improved international safety flameproof standards

# Red Jacket is easier and safer to install and service.

#### Automatic electrical disconnect

Red Jacket's Packer Manifold design automatically breaks the contractor yoke connection when the retaining bolts are loosened. It automatically reconnects when the bolts are tightened

#### Reduced lifting force

Die springs break the extractable seal for easier lifting of the extractable

#### Automatic fuel drain

Fuel in the manifold and non-isolated piping drains safely back to the tank preventing spills and reducing service costs

# Red Jacket fixed speed technology is less expensive than variable speed to buy, own and operate.

See all the ways you can save using fixed speed technology:

- Lower equipment purchase cost = \$200 savings per STP
- Lower installation cost = \$100 savings per STP
   Variable speed causes electrical interference with ATG, POS, cameras and intercoms, requiring shielded cable to reduce
- Lower maintenance cost = Up to \$3,000 savings per STP
   On average, variable speed controllers fail 3x more frequently than
   fixed speed technology. Average replacement cost is \$1,000 more than
   fixed speed per controller
- Lower electrical consumption = Up to \$100 ANNUAL savings per site
   Variable speed controllers consume more power during operation and
   when pumps are idle

# Red Jacket is the world's leader in submersible pressure technology.

#### Most experienced

Over 130 years in STP technology, widest global installation base with over 500,000 submersibles installed worldwide

#### Diverse product portfolio

For commercial/industrial/retail applications using motor fuel, diesel, jet fuel, aviation gasoline, LPG, ethanol/methanol or kerosene — in aboveground or underground storage tanks

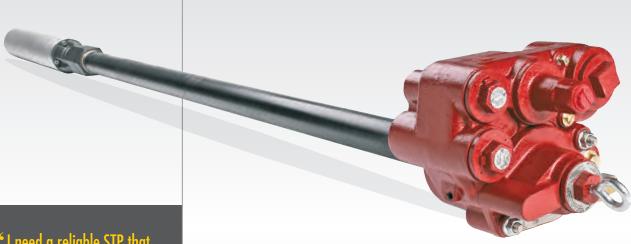
Lowest total cost of ownership
 Compared to variable speed technology



# Red Jacket Submersible Turbine Pumps

Red Jacket Submersible Turbine Pumps (STPs) are the most widely installed submersible fuel pump in the world. That's because Red Jacket continues to offer the industry's most advanced STPs — delivering higher efficiency, fuel flow and lower power consumption.

Our STPs are designed for serviceability, safety and ease of upgrades.



"I need a reliable STP that delivers high flow rates for a low cost."

Red Jacket delivers faster, more reliable fuel flow for the lowest cost of ownership.

**Problem Solved.** 

## The Red Jacket Submersible Turbine Pump

The Red Jacket is a fixed speed submersible turbine pump that optimizes fuel flow to your dispensers. Its motor performance delivers higher flow rates than any other motor in the industry. It features Red Jacket's advanced packer manifold design, making it the industry's easiest and safest STP to install and service. Available in <sup>3</sup>/<sub>4</sub>HP to 2HP configurations and fixed or variable Quick Set lengths.

#### **Key features:**

- Superior motor design delivers higher flow rates, lower power consumption and increased safety and reliability
- Advanced Packer Manifold delivers automatic fuel drain and electrical disconnect for increased site and environmental safety
- Built-in isolated contractor's box for quicker and safer installation

- Die springs break the extractable seal for easier lifting of the extractable
- Check valve and manifold design enable easier line tests & servicing
- AG Model available for 90% Ethanol concentrations or up to 100 % Methanol concentrations



"I need the highest flow possible for my high-throughput site."

Red Jacket delivers the highest flow rate of any 6" high capacity pump in the industry.

**Problem Solved.** 

## The Maxxum Big Flo Submersible Turbine Pump

The Red Jacket Maxxum Submersible Turbine Pump is a 6" high flow submersible fuel pump that provides the highest flow rates for its size. With a 3 or 5 HP motor, it's specifically engineered for high throughput applications such as truck stops, where high demand, multiple fuel points and long piping runs reduce fuel flow to the nozzle. It boasts the industry's leading serviceability and safety features.

### **Key features:**

- Delivers over 20% more flow than alternative high capacity pumps
- The only 6" STP that can provide 0.1 gph testing with PLLD
- Transducer port for electric line leak detection

- Vapor recovery pump driving port
- Easy and safe electrical yoke disconnect
- Easy termination of pump wiring in conduit box
- Quick removal of extractable pump head and quick accessibility of check valve

"I need a reliable and low

Red Jacket delivers the highest reliability and lowest cost of ownership for LPG fueling.

cost way to pump LPG."

**Problem Solved.** 



## The Red Jacket LPG (Liquefied Petroleum Gas) Pump

The Red Jacket LPG Pump is the most efficient, cost-effective explosion-proof submersible pump/motor unit, designed to pump liquefied petroleum gas (LPG) in its liquid state. It provides increased flow rates and operator fueling uptime with changing LPG mixtures, lower installation and maintenance costs and lower operating costs than suction technology. And because it pumps butane, propane, or any mixture of the two, this multistage centrifugal pump supplies exceptional performance at peak efficiency. The Red Jacket LPG Pump is designed for fleets, government and retail petroleum applications. Available in 50 Hz 3 or 5 HP configurations.

### **Key features:**

- Certified EEx ed IIB T3 design explosion-proof submersible electric motor
- Bearing cooling and lubrication system for maximum cooling during dispensing, leading to longer life and lower maintenance
- Internal bypass for continual cooling of system prior to dispensing
- Multistage centrifugal pumping system for reduced power consumption
- Split pump/motor design for easy installation and maintenance



# Experience the Red Jacket Advantage

# Red Jacket Fixed Speed Technology

The highest reliability AND lowest total cost of ownership.

- Most reliable technology
- Lower purchase cost
- Lower installation cost
- Lower maintenance cost
- Lower electrical consumption

# The Industry's Most Advanced Motor Raising the performance bar.

- More flow
- Increased reliability
- Less power
- Unsurpassed quality

## Quick Set Adjustable Column Pipe

Adjustable length for easy installation





## **Red Jacket Control Boxes**

Reduced downtime, increased safety, better profit control.

- IQ Control Box for demand-based pump staging and dry run detection
- Isotrol 1-8 Control Box for dispenser signal isolation
- Standard Control Box for simple site fueling





# The Red Jacket Packer Manifold

Easier and safer to install and service.

- Reduced lifting force
- Easier line tests & servicing
- Automatic electrical disconnect & fuel drain
- Isolated & integrated contractor's box and capacitor housing





# Removable Siphon Cartridge

Easy installation and service.

- Two siphon cartridge ports allowing multiple systems
- Works in Veeder-Root vacuum monitoring applications
- Unique swivel design, enabling odd connection angles
- Uses a check valve with in-line filter screen for longer life

Over 130 years, more than half a million installations worldwide and the largest distributor and service network.

**Trust Your Business to Red Jacket** 



# Red Jacket Pump Control Boxes

Red Jacket offers a broad range of pump control boxes to help sites optimize flow. Together with our Red Jacket Submersible Turbine Pumps, our control boxes are engineered to reduce downtime, increase safety and help operators take control of their profits.

"I need system control that helps ensure my fueling operation is never interrupted."

Red Jacket's IQ Control Box provides operators protection against downtime and is a more reliable alternative to ensure maximum fuel flow during peak fueling times than variable speed technology.

Problem Solved.





## **IQ Control Box**

P/N: 880-051-1; 880-058-1

Red Jacket's IQ Control Box is a submersible turbine pump interface that improves the longevity of the submersible pump motor. It's engineered to provide protection from dry-run conditions, locked rotor and site voltage fluctuations. It cuts downtime and boosts bottom line profits by warning site personnel of conditions impacting the ability to fuel. Plus, it meets fuel flow requirements, provides seamless backup and extends motor life by staging multiple pumps based on site fuel demand.

#### **Key features:**

- Allows for demand-based staging of multiple pumps to control fuel flow based on changing fuel demand
- Automatically resets after dry run condition when fuel is added to the tank to minimize downtime
- Protects wiring and controls from locked rotor or high current
- Warns site personnel of conditions impacting the ability to fuel
- Monitors site power conditions to ensure long motor life and uninterrupted fueling

**"Safety is a top priority."** I need to protect my personnel and my equipment from electrical shorts."

Red Jacket's Isotrol 1-8 Control Box isolates dispenser handle signals to protect equipment and technicians.

**Problem Solved.** 

<sup>66</sup>I want simple, safe, and reliable fueling."

Red Jacket's Standard Control Box is our simplest way to control site fueling.

**Problem Solved.** 



### **Isotrol 1-8 Control Box**

P/N: 880-047-1; 880-049-1

The Red Jacket Isotrol 1-8 Control Box is the most versatile dispenser handle signal isolation system available. The Isotrol 1-8 Control Box isolates handle signals between each dispenser and protects against wiring shorts and phasing issues. Plus it keeps technicians working on-site safe from dangerous feedback. The Isotrol 1-8 Control Box is available with a built-in relay or without.

#### **Key features:**

- Dedicated Automatic Tank Gauge (ATG) line leak output and coil for easy compatibility with PLLD
- Terminals are labeled for easy wiring and compatibility
- Compatible with Red Jacket's Submersible Turbine Pump, Maxxum, or Legacy Big Flo Pump, IQ Control Box, or as a "stand-alone"
- Easily retrofitted to existing locations

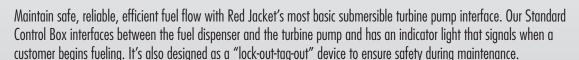
VEEDER-ROOT PART No. 880-047

• Compliant with NEC requirements for handle isolation



### **Standard Control Box**

P/N: 880-04X-5



#### **Key features:**

- Easy interface between dispenser and turbine pump
- Enables "lock-out-tag-out" for safe pump servicing

 Available with internal capacitor for ease of troubleshooting and repair, saving time and money







# Red Jacket Additional Features



"I need the highest accuracy line leak detection available."

Veeder-Root's PLLD provides greater accuracy than any other PLLD system.

**Problem Solved.** 

## PLLD Pressurized Line Leak Detection System

Veeder-Root's electronic Pressurized Line Leak Detection System uses patented measurement technology to test lines at full pump pressure for highly accurate 0.1 gallons per hour precision and 3.0 gallons per hour gross testing. Electronic leak detection gives operators options that will substantially reduce costs.

#### **Key features:**

- Can test lines at full pressure for greater accuracy than other pressure line leak detection systems
- Automatic, precision 0.1 gph testing option meets 0.1 gph specification requirements
- Certified to exceed U.S. E.P.A. performance standards
- PLLD transducer mounts directly into the mechanical line leak detector port
- SwitftCheck or SpikeCheck valves are available to retrofit older pumps

- No need to break product lines
- No sump or manhole reconstruction required for installation
- Ideal for applications where there is no existing sump
- Supports a wide-range of pump and pipe types; see Veeder-Root Line Leak Application Guide for details

## **FXV System Mechanical Line Leak Detector**

Red Jacket FXV Mechanical Line Leak Detection products are built for superior performance and keeping operators in compliance — even in the most challenging environments. They offer the fastest Mechanical line leak test available for hourly monitoring — the most cost-effective and reliable means to meet U.S. Federal E.P.A. catastrophic line leak detection requirements — and are guaranteed for two full years.



#### **Key features:**

- UL listing = 100% diesel, 100% gasoline, gasoline and up to 10% ethanol
- Meets E.P.A. requirements in environments that experience extreme temperature changes
- Adapts to applications using high-resiliency lines, such as flexible piping
- Installs and troubleshoots without requiring special tools
- Can be used with any Red Jacket or competitive STP
- Guaranteed to detect at a rate of 3 gph at 10 psi for 24 months from date of manufacture



## Trapper Intake Screen

Prolong filter life and save money with the Red Jacket Trapper Intake Screen. High-quality, continuous slot design prevents accumulation and lodging of particles from underground storage tanks, maintaining peak performance of the submersible pump and keeping debris from entering the site's fueling system and dispensers.

#### **Key feature:**

 Designed specifically to fit at the end of Red Jacket Turbine Pumps

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