



Expert
Solutions
for Critical
Applications

BRAND
Portfolio



Where Innovation Flows.

www.redscrewump.com

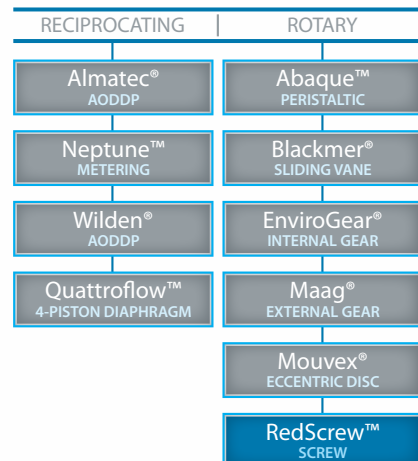
TWIN SCREW
TRIPLE SCREW
MULTI-PHASE PUMPS
SPECIALTY PUMPS
GRANULATOR SYSTEMS



Dover's **Pump Solutions Group (PSG®)**, a global leader in positive displacement pump and supporting technologies, delivers value-added pumps and systems that serve customers requiring the safe and efficient transfer of critical and valuable materials. PSG features world-class pump brands and has multiple facilities on three continents (North America, Europe and Asia) that are ISO certified. We are passionately committed to innovative technologies that will positively impact the world. Our priority is providing the market expertise you need by delivering tomorrow's innovative fluid and material transfer solutions today.

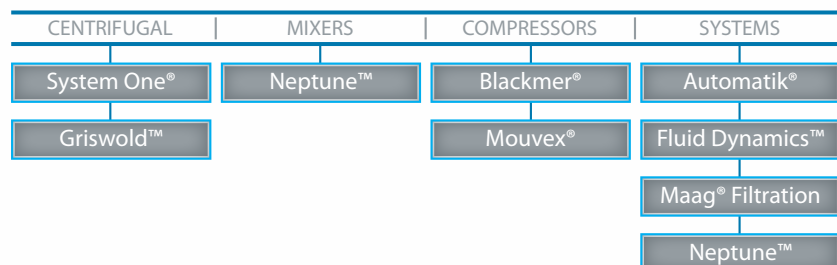
Where Innovation Flows.

POSITIVE DISPLACEMENT PUMPS



PSG® Technologies:

PUMPS & SYSTEMS TECHNOLOGIES



Who We Are



RedScrew™, part of Pump Solutions Group (PSG®), is a globally recognized screw pump manufacturer based in China. RedScrew is an operating company within Dover Corporation's Pump Solutions Group, Oakbrook Terrace, IL, USA. PSG features a broad array of leading pump technologies as well as world-class facilities in the U.S., Germany, France, Italy, India and China. PSG's leading infrastructure, knowledge base and intellectual capital drives our commitment to performance and innovation.



Tianjin, China – RedScrew is headquartered in Tianjin, China. Our state-of-the-art ISO 9001:2008 office building and manufacturing facility is 4,000 sq. meters (43,056 ft²). Our operational facility includes research and development, quality control, and engineering, as well as our own fabrication shop and certified testing facilities. RedScrew offers a wide range of screw pumps and systems technologies. We have the production capacity, intellectual capital and product quality to meet the global demands required by your industry.

Commitment to Innovation – Since 1995, RedScrew has been driven by a relentless pursuit of product perfection and constantly searching for new ideas in fluid transfer technologies. Our engineering department is home to application and design engineers who are focused on developing new products and solving problems for our customers. This commitment to excellence and continuous improvement has provided RedScrew the platform to deliver World-Class screw pumps for the petrochemical, shipping, pharmaceutical, food and metallurgy industries.

TWIN SCREW PUMPS

TRIPLE SCREW PUMPS



Facility

Redscrew operational facility began with the clear vision of becoming a World-Class manufacturer of Screw pump technologies. As we continue to execute our vision through integrated facility design, lean manufacturing and operational effectiveness, we are committed to offering screw pumps that are safe, reliable and efficient.

Redscrew recognizes that having the latest manufacturing equipment, procedures and infrastructure is critical to designing world class product. Our facilities are ISO 9001 and CCS certified. We also have the scalability to support large production runs while maintaining world-class quality.

Redscrew manufacturing features a state-of-the-art building, designed with the environment, our customers and future growth in mind. Centered around twin and triple screw pump technologies, Redscrew's 4,000 sq. meters (43,056 ft²) operational facility employs over 110 employees including; skilled production personnel, customer service support and seasoned engineers.



Facility Attributes

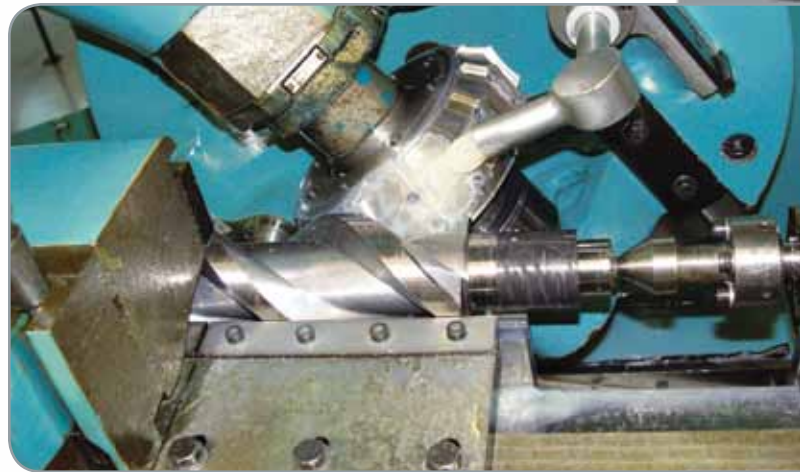
- The ability to expand production to meet the growing demands of our existing and future customers.
- Enhanced infrastructure to support the introduction of new automation systems and technology solutions.
- Advanced R&D and testing capabilities.
- Lean manufacturing processes that enhance production, delivery and quality.

Manufacturing

Delivering exceptional product quality and supporting our technologies through the total life-cycle of the product requires a world-class commitment. We are constantly evaluating our manufacturing processes to deliver quality and reliable products on time. Redscrew uses PSG's lean manufacturing system that increases throughput, dimensional accuracy and customer satisfaction.

Some of the systems put in place to ensure product-manufacturing quality include:

- Computer-aided manufacturing (CAM)
- Automated machining centers
- Cell-based manufacturing
- Continuous quality improvement practices
- Supply chain management
- ISO 9001-registered quality system



RedScrew Patents

- Patent No: ZL 99200405.5: Twin Screw Pump
- Patent No. ZL 99201251.1: New Tooth-Profile Screw of Twin Screw Pump
- Patent No. ZL 00245885.3: Twin Screw Granular Making Machine Special for PAM
- Patent No. ZL 200520025537.x: Single-Suction Double-Side External Bearing Twin Screw Pump
- Patent No. ZL 200520025564.x: Cast Casing for Horizontal Double-Suction Twin Screw Pump
- Patent No. ZL200620026000.x: Low-Inlet Quick-Open Easy-for-Clean Filter
- Patent No. ZL200620027775.9: Multiphase Twin Screw Pumps for High Gas Content Condition
- Patent No. 2008820143478.x: Gas-Liquid Separation Device of LPG Twin Screw Pump

Certifications and Associations

CCS ISO 9001:2008  

Customer Care

At Redscrew, our most important resource is our people. The intellectual capital at Redscrew continues to be the largest asset that distinguishes Redscrew from other screw pump manufacturers.

Redscrew's customer-focused staff is dedicated to customer satisfaction, product knowledge, and application solutions. Our customer care specialists and application engineers are action-oriented specialists committed to making sure every order receives immediate attention, is accurately processed and followed up to keep your process flowing smoothly.

Our goal is to support our customers through technical and application expertise by assisting our customers in making cost effective and efficient use of our technologies globally.



MARKETS SERVED

PROCESS

RedScrew's attention to detail, quality assurance procedures, and expertise in the chemical process market, ensures your success. Our application experts can assist in your toughest applications to ensure maximum efficiency and Mean Time Between Repair (MTBR).

Typical Applications Handled:

- Chemical
- Caustics
- Adhesives
- Food and beverage
- Petrochemicals
- Acids
- Polymers

ENERGY

RedScrew's knowledge and proven success in the power generation, oil & gas industries have instilled confidence in users world-wide. Consult our experts at RedScrew today, to ensure your success in the energy market.

Typical Applications Handled:

- Crude oil
- Asphalt
- Kerosene
- Oil field
- Residuals
- Electric generation

TRANSPORT

Whether it's tankers, railcars, or terminals, RedScrew's solutions offer top-notch reliability in the transport industry. Keep your products moving with one of our application engineer's today.

Typical Applications Handled:

- Bulk transfer
- Loading / unloading
- Terminals
- Shipping

MARINE

RedScrew is here with proven success, to support the marine and shipbuilding industries. With a wide range of compatibility, the safe, swift and reliable transfer of marine fluids is a core function of RedScrew pumps.

Typical Applications Handled:

- Shipbuilding
- Bilge and ballast
- Diesel
- Seawater
- Lube oil
- Fire suppression





Garrison Shipping Co.

Alden Chemical Co.

CBK Power Generation

Salem Food & Beverages

LB Storage Terminal

North Shore Oil & Gas



TECHNOLOGY: SCREW

WTG Series Twin Screw with Timing Gears

Redscrew's twin screw pumps are offered with a double suction design configuration. Twin Screw pumps with timing gear transmissions are perfectly suited for transferring non lubricant fluids, or even abrasive mediums. WTG pump series offer no metal contact between the hydraulic components and automatic axial balancing. Redscrew WTG Series pumps can be applied in a variety of different operating conditions and fluids that includes but is not limited too; corrosive and non-corrosive, low or high viscosities; clean or abrasive.

Applications

- Petroleum
- Petrochemical
- Refineries
- Chemical
- Storage and transportation
- Shipping
- Oil terminals
- Food & beverage
- Lubricating oil

Features and Benefits:

- Low noise
- Overload protection
- Nearly pulsation-free
- Increased reliability
- Direct drive
- No fluid agitation
- No emulsified shear
- Suitable for a wide range of viscosity

Technical Data:

- Over 80 sizes

Performance Data:

- Flow rate: 1 m³/hr (5 gpm) thru 2200 m³/hr (10,000 gpm)
- Max. differential pressure: 60 bar (900 psi)
- Max. temperature: 350° C (650 °F)

Certifications & Associations:



TECHNOLOGY: SCREW

NTG Series Twin Screw Pumps

The twin screw pumps of non-timing-gears transmission are single suction design. The axial hydraulic force on the hydraulic components is compensated by a balance piston. Metal contact exists between the screw profiles; however there is no metal contact between the screws and casing. The NTG series pumps are especially suitable to deliver various lubricating fluids with high viscosity, e.g. bitumen and residual oil, at medium or high temperatures.

Applications

- Asphalt
- Heavy fuel oil
- Petrochemical
- Chemical fiber
- Chemical
- Oil terminals
- Lubricating oil
- Shipping

Features and Benefits:

- Low noise
- Low pulsation reliability
- No fluid agitation
- No emulsified shear
- Suitable to wide range of viscosity

Technical Data:

- Four models to fit your application

Performance Data:

- Flow rate: 1 m³/hr (5 gpm) thru 480 m³/hr (2,200 gpm)
- Max. differential pressure: 16 bar (230 psi)
- Max. temperature: 350° C (650 °F)

Certifications & Associations:





TECHNOLOGY: SCREW

Triple Series Screw Pumps

Triple screw pumps adopt a cycloid profile of meshing principals at the screw profile. The power spindle is driven by a motor and the idler spindles are driven by fluid hydraulic power in an intermeshing screw groove. Hydraulic force on the spindle is balanced by hydraulic load on the balanced piston.

Applications

- Fuel oil delivery
- Shipping industry
- Power
- Hydraulic units
- Petrochemical
- Machineries
- Iron and steel

Features and Benefits:

- Low noise
- Low maintenance cost
- Reliable
- Strong self-priming capacity
- No leakage
- Environmentally friendly

Technical Data:

- Four models to fit your application

Performance Data:

- Flow rate: 2 lpm (1 gpm) thru 5300 lpm (1,400 gpm)
- Max. differential pressure: 160 bar (2,250 psi)
- Max. temperature: 280° C (530 °F)

Certifications & Associations:



TECHNOLOGY: SCREW

Multiphase Twin Screw Pumps

Designed for medium to low pressure applications, the Multiphase Twin Screw Pumps are robust, reliable and built to last within the Oil & Gas industry. Redcrew multiphase pumps are commonly used in the oil fields that have untreated streams. The 2MP Series is designed for higher differential pressure and higher suction pressure applications.

Applications

- Crude oil
- Desert oil field
- Offshore platform
- Natural gas
- Beach-sea oil field
- Wellhead

Features and Benefits:

- Reduces backpressure
- Increased production
- Quick installation
- Reduced downtime
- Unique materials for extreme Operating conditions

Technical Data:

- Three models to fit your application

Performance Data:

- Flow rate: 30 m³/hr (130 gpm) thru 1500 m³/hr (6,500 gpm)
- Max. differential pressure: 60 bar (870 psi)
- Max. temperature: 120° C (250 °F)

Certifications & Associations:



TECHNOLOGY: SCREW

Specialty Twin Screw Pumps

Redscrew offers specialty twin screw pumps for specialty applications such as asphalt, and molten sulphur.

Applications

- Asphalt
- Molten sulfur
- Petrochemical plant

Features and Benefits:

- Easy maintenance
- Quick installation
- Low vibration
- Low noise
- Reliable
- Custom configurations

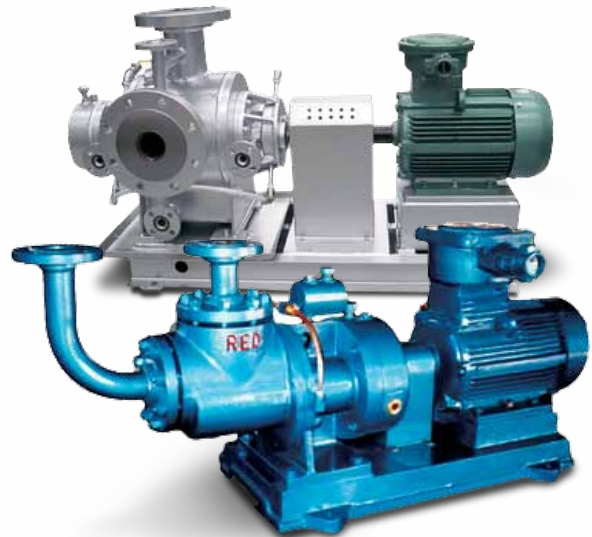
Technical Data:

- Custom models to fit your application

Performance Data:

Consult Factory

Certifications & Associations:



TECHNOLOGY: SCREW

PAM Twin Screw Granulator Systems

PAM Granulator is specially designed for PAM colloid granulating. The twin screw PAM Granulator was developed in 1999 and quickly found its application in the oil fields of China. The Granulator is comprised of four units: an extruding system; a dispersant feed system; a cutting system and a variable frequency control systems. PAM series offer a wide range of materials of construction making it an ideal solution for a variety of chemical applications.

Applications

- Chemical
- Oil fields

Features and Benefits:

- Controllable output, infinitely matching with dry vulcanizing speeds
- Adjustable size of grains, meeting different demands for various diameters
- Individual activator injection system, accommodating variable dosages to the output
- Auto-control system, realizing overload protection
- Low noise Level
- Low vibration

Technical Data:

- Two models to fit your application
- VFD control

Performance Data:

- Grain size: 2mm (.08") thru 10mm (.39")

Certifications & Associations:



ABAQUE™
PERISTALTIC PUMPS
mouvex.com

ALMATEC®
AIR-OPERATED
DOUBLE-DIAPHRAGM PUMPS
almatec.de

BLACKMER®
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POLYMER BLENDING SYSTEMS
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maag.com

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VANE PUMPS &
COMPRESSORS
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POLYMER SYSTEMS & MIXERS
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4-PISTON DIAPHRAGM
quattroflow.com

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AIR-OPERATED
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Where Innovation Flows.

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