



# Railway Industry

Filtration Products and Solutions

aerospace  
climate control  
electromechanical  
**filtration**  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding



ENGINEERING **YOUR** SUCCESS.

## Class 1 and Light Rail Locomotives



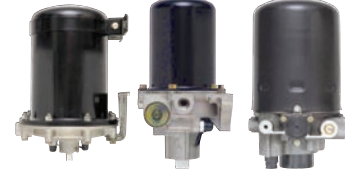
**FBO Fuel Filters**  
Bulletin No. 7648

Offering versatility, these filter vessels will accept a wide range of Microfilters, Coalescers/Separators and Monitor cartridges. The vessel is particularly targeted at medium volume fuel delivery systems and offers an economical solution to fuel delivery filtration requirements. Includes filters service indicator and water-in-fuel (WIF) sensor.



**Air Filtration Systems**  
Brochure No. 7539

Racor offers a wide range of air filtration systems to fit your application, including ECO series air filters, ember separators, air filter/water separators, air precleaners, safety filters, and cabin air filters. These products can save you fuel, money, and time.



**Air Dryer Systems**  
Bulletin No. 7821

Racor has teamed up with Nabtesco Corporation to provide a full line of proven, high-quality compressed air drying systems. Applications include on-highway trucks, buses, emergency vehicles, and trains.

## Refrigeration



Parker's has broadened the company's industrial product line to include new technology in the emerging area of environmentally optimal or "green" refrigerants. Parker provides the industry with the most comprehensive product lines in the Industrial Refrigeration market worldwide.

**Industrial Refrigeration Systems**  
Parker Catalog No. CIC2007

## APU/PowerGen



**Filtration Systems**  
Racor Catalog No. 7480G

For ground support equipment, we offer fuel, oil, air, hydraulic, and emission reduction filtration solutions. Racor filtration systems are competitively priced to allow users to fulfill all of their filtration needs from one quality source.



**Crankcase Ventilation**  
Brochure No. 7790

Racor Crankcase Ventilation Filter Systems protect turbochargers and other precision components from oil mist in the crankcase. Racor offers both open and closed crankcase ventilation filters depending on the specifications of the application.



**ECO Series Air Filters**  
Brochure No. 7655

ECO systems can be configured to meet a wide variety of over-the-road, off-road, and industrial applications. Racor filtration systems are competitively priced to allow users to fulfill all of their filtration needs from one quality source.

# Ground/Rail Support Equipment/Fixed Base Operations



**Hydrocarbon Fuel Filters**  
Bulletin No. 7648

Offering versatility, these filter vessels will accept a wide range of Microfilters, Coalescers/Separators and Monitor cartridges. The vessel is particularly targeted at medium volume fuel delivery systems and offers an economical solution to fuel delivery filtration requirements. These vessels include fuel filters/water separators, service indicators, water-in-fuel (WIF) sensors, and water detection modules.



**Filtration Systems**  
Bulletin No. 7529, 7460, 7790

For ground support equipment, we offer fuel, oil, air, hydraulic, and emission reduction filtration solutions. Racor filtration systems are competitively priced to allow users to fulfill all of their filtration needs from one quality source.



**Automatic Particle Counters**  
Bulletin No. 7715

Automatic Particle Counters have become flexible enough to enable the instruments to be taken out of the laboratory to obtain the most credible form of results. The LCM (hydraulic) and ACM (fuel) feature a microprocessor controlled optical scanning for accurate contaminant measurement and read-out/reporting.



**Filter Cartridges**  
Bulletin No. 7537

Racor is a qualified supplier of API/EI (IP) 1581 and military standard aviation fuel coalescers and separators, or EI 1583 monitors and API/EI (IP) 1590 microfilter cartridges. Racor aviation fuel filtration systems are used by customers worldwide to assure the delivery of clean, dry fuel.



**Hydraulic Filter Systems**  
Bulletin No. 7729

The competitively priced ParFit™ hydraulic filters are interchangeable with OEM and aftermarket filters to allow users to acquire all their replacement filters from one quality source. Racor ParFit™ hydraulic replacement filters conform to all the same rigorous tests as standard replacement filters.



**FWS Fuel Filters**  
Bulletin No. 7537

Racor Hydrocarbon FWS series vessels use a 2 stage separation system. The first stage coalesces the fuel/water emulsion by means of high efficiency filter media combined with a resin impregnated fiberglass coalescing shell. The second stage uses a hydrophobic separator as a water drop barrier, allowing the clean, dry fuel to pass. A full range of standard and 1581 5th Edition qualified combinations are available in any flow rate.

# Racor Has Solutions For



1

## Air Dryer Systems

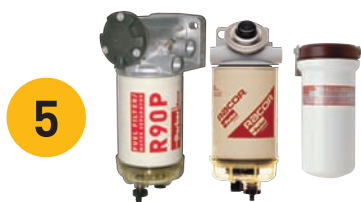
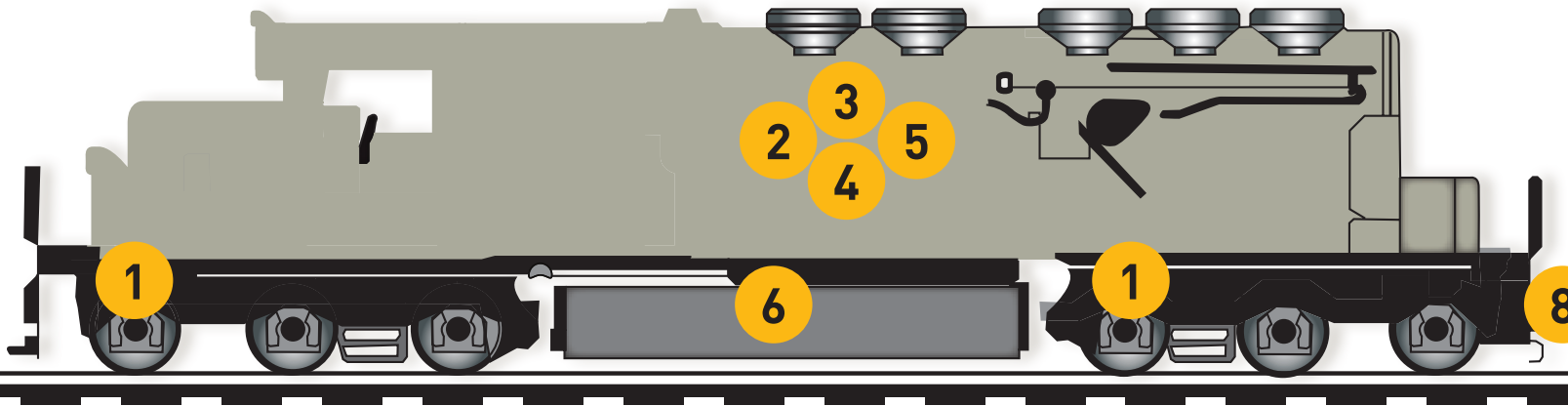
Bulletin No. 7821



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## Air Filtration Systems

Brochure No. 7539



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## Filtration Systems

Bulletin No. 7529, 7460, 7790



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## Hydrocarbon Filtration Systems

Bulletin No. 7648

# or Railway Applications



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## Crankcase Ventilation Systems

Brochure No. 7790



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## ECO Series Air Filters

Brochure No. 7655



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## Industrial Refrigeration Systems

Parker Catalog No. CIC2007



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## Hydraulic Filter Carts

Bulletin No. 7729

See pages 2 and 3 for more detailed information. →

# Engineered Solutions That Save You Time and Money



## Fuel Filter/Water Separators

The heart of these filtration advances is a proprietary engineered filter media. Aquabloc®II media is known worldwide for its combination of high efficiency, and long life, and is unsurpassed for removing water and particulate matter. On land and sea, Racor is meeting today's need for clean, dry fuel.

## Alternative Fuels

Racor offers the industry's first and most complete line of alternative fuel filter/coalescers and prefilter/strainers. From pipeline to engine, they deliver the ultra-fine filtration required by alternative fuels.

## Fuel Dispensing Systems

Racor offers high capacity solutions to remove water and contamination from diesel fuel, kerosene, and light hydrocarbons at fuel pumps, in day tanks, and fuel tanks.



## Heavy-Duty Air Cleaners and Replacement Filters

Racor has expanded its air filtration family of products to include Heavy-Duty Air Cleaners and replacement air filters. These high-capacity, efficient, and flexible products expand the breadth of line that Racor customers have grown to expect.



## Crankcase Ventilation Filtration Systems

Racor Crankcase Ventilation Systems help keep emissions low and engine rooms clean. The patented CCV™ contains Racor's high-performance Vaporbloc™ filter made with depth loaded, engineered fiber coalescing media.



## Bypass Oil Filtration

Removes dirt, varnish, ash, tar, soot, and other contaminants along with condensed water which forms damaging acids if left in oil.

- Extends the miles between oil changes
- Saves maintenance costs and downtime
- Keeps oil cleaner longer

# Parker's Motion & Control Technologies

At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further info call 1 800 C-Parker (1 800 272 7537).



## AEROSPACE

### Key Markets

- Aircraft engines
- Business & general aviation
- Commercial transports
- Land-based weapons systems
- Military aircraft
- Missiles & launch vehicles
- Regional transports
- Unmanned aerial vehicles

### Key Products

- Flight control systems & components
- Fluid conveyance systems
- Fluid metering delivery & atomization devices
- Fuel systems & components
- Hydraulic systems & components
- Inert nitrogen generating systems
- Pneumatic systems & components
- Wheels & brakes



## CLIMATE CONTROL

### Key Markets

- Agriculture
- Air conditioning
- Food, beverage & dairy
- Life sciences & medical
- Precision cooling
- Processing
- Transportation

### Key Products

- CO<sup>2</sup> controls
- Electronic controllers
- Filter driers
- Hand shut-off valves
- Hose & fittings
- Pressure regulating valves
- Refrigerant distributors
- Safety relief valves
- Solenoid valves
- Thermostatic expansion valves



## ELECTROMECHANICAL

### Key Markets

- Aerospace
- Factory automation
- Food & beverage
- Life science & medical
- Machine tools
- Packaging machinery
- Paper machinery
- Plastics machinery & converting
- Primary metals
- Semiconductor & electronics
- Textile
- Wire & cable

### Key Products

- AC/DC drives & systems
- Electric actuators
- Controllers
- Gantry robots
- Gearheads
- Human machine interfaces
- Industrial PCs
- Inverters
- Linear motors, slides and stages
- Precision stages
- Stepper motors
- Servo motors, drives & controls
- Structural extrusions



## FILTRATION

### Key Markets

- Food & beverage
- Industrial machinery
- Life sciences
- Marine
- Mobile equipment
- Oil & gas
- Power generation
- Process
- Transportation

### Key Products

- Analytical gas generators
- Compressed air & gas filters
- Condition monitoring
- Engine air, fuel & oil filtration & systems
- Hydraulic, lubrication & coolant filters
- Process, chemical, water & microfiltration filters
- Nitrogen, hydrogen & zero air generators



## FLUID & GAS HANDLING

### Key Markets

- Aerospace
- Agriculture
- Bulk chemical handling
- Construction machinery
- Food & beverage
- Fuel & gas delivery
- Industrial machinery
- Mobile
- Oil & gas
- Transportation
- Welding

### Key Products

- Brass fittings & valves
- Diagnostic equipment
- Fluid conveyance systems
- Industrial hose
- PTFE & PFA hose, tubing & plastic fittings
- Rubber & thermoplastic hose & couplings
- Tube fittings & adapters
- Quick disconnects



## HYDRAULICS

### Key Markets

- Aerospace
- Aerial lift
- Agriculture
- Construction machinery
- Forestry
- Industrial machinery
- Mining
- Oil & gas
- Power generation & energy
- Truck hydraulics

### Key Products

- Diagnostic equipment
- Hydraulic cylinders & accumulators
- Hydraulic motors & pumps
- Hydraulic systems
- Hydraulic valves & controls
- Power take-offs
- Rubber & thermoplastic hose & couplings
- Tube fittings & adapters
- Quick disconnects



## PNEUMATICS

### Key Markets

- Aerospace
- Conveyor & material handling
- Factory automation
- Food & beverage
- Life science & medical
- Machine tools
- Packaging machinery
- Transportation & automotive

### Key Products

- Air preparation
- Compact cylinders
- Field bus valve systems
- Grippers
- Guided cylinders
- Manifolds
- Miniature fluidics
- Pneumatic accessories
- Pneumatic actuators & grippers
- Pneumatic valves and controls
- Rodless cylinders
- Rotary actuators
- Tie rod cylinders
- Vacuum generators, cups & sensors



## PROCESS CONTROL

### Key Markets

- Chemical & refining
- Food, beverage & dairy
- Medical & dental
- Microelectronics
- Oil & gas
- Power generation

### Key Products

- Analytical sample conditioning products & systems
- Fluoropolymer chemical delivery fittings, valves & pumps
- High purity gas delivery fittings, valves & regulators
- Instrumentation fittings, valves & regulators
- Medium pressure fittings & valves
- Process control manifolds



## SEALING & SHIELDING

### Key Markets

- Aerospace
- Chemical processing
- Consumer
- Energy, oil & gas
- Fluid power
- General industrial
- Information technology
- Life sciences
- Military
- Semiconductor
- Telecommunications
- Transportation

### Key Products

- Dynamic seals
- Elastomeric o-rings
- EMI shielding
- Extruded & precision-cut, fabricated elastomeric seals
- Homogeneous & inserted elastomeric shapes
- High temperature metal seals
- Metal & plastic retained composite seals
- Thermal management



ENGINEERING YOUR SUCCESS.

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