FEDERAL RESOURCES
MARITIME
Commercial Vessel Product Catalog
Fall/Winter 2014

FILTRATION
PUMPS
STRainers
INSTRUMENTATION
TREATMENT SYSTEMS
AND MUCH MORE

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ISO 9001
Founded in 1986, Federal Resources has expanded into one of the nation’s leading distributors of maritime, safety, and first response products to commercial, military, and federal government markets.

Federal Resources began as a manufacturer’s representative of safety and filtration products to the United States Navy. Expanding not only our footprint with locations across the United States, we have grown our product offering to over 300 original equipment manufacturers with thousands of SKUs. Building upon our core values of quality, integrity, service, loyalty, and determination we quickly evolved from a streamlined distribution company, into a total life cycle solution provider. Offering customers not only best pricing on their procurements, we also developed our training, maintenance, logistics, integrated custom kitting, and technical services to better meet all of the needs of our customers and walk with them throughout the life cycle of their equipment.
Federal Resources Maritime Technical Service Group is equipped to assess and repair all shipboard pumps, strainers, fuel and fire hose reels. We are the only OEM certified repair center supporting Hellan Strainers, Staples & Pfeiffer (S&P) repairs and warranty work. Our quick response and accurate assessments are supported by our ability to stock common spare parts allowing our team to quickly respond and bring your equipment back to full operational readiness. We also offer on-site shipyard training on Hellan Strainer and Mega tor products.

At the request of Port Engineers or Ships Force our service centers can perform inspections and provide condition assessments of strainers and hose reels, identifying problems prior to implementation of work orders. We have the expertise to identify situations where repair rather than replacement makes sense, reducing downtime caused by the long lead times and the costs normally associated with the purchase of new equipment.

Federal Resources also repairs MEGATOR sliding shoe pumps, valves and other ancillary equipment in strainer piping systems. Our service centers understand the crucial timelines and financial hardships placed upon ship operators when equipment failures occur and we know what is needed for fast, accurate, and cost saving measures to get your ship back in working order.

Federal Resources Maritime Technical Service Group

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Newport News, VA 23607
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7020 Alamitos Avenue
San Diego, CA 92154
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www.federalresources.com

HazMatIQ by Federal Resources is an international training company based in the United States that has trained thousands of emergency responders on how to respond safely and effectively to hazardous materials incidents.

HazMatIQ by Federal Resources provides a series of charts that guide the responder using chemistry through the 4-steps of responding to a hazardous emergency: dispatch, responding, arrival and entry. These “cheat sheet” charts give responders the ability to work through hazardous emergencies in minutes.

FEATURED COURSES

Above The Line / Below The Line
The HazMatIQ Above The Line/Below The Line system is developed by responders, for responders and only available from HazMatIQ. The HazMatIQ system incorporates trademarked innovative street smart “Cheat Sheets” that enable responders to safely and efficiently respond to any known or unknown chemical or mixture. Students taking this course will be able to size-up (physical state, hazards, initial hot zone, correct meters and PPE) any chemical in minutes. The system then coaches responders through a streamlined chemical research method to verify their initial size-up, preparing responders to immediately go to work when they arrive on a hazardous Materials/WMD event.

First Responder Offensive
The HazMatIQ FRO system incorporates the proven ‘Above the line /Below the Line’ size-up tool while instructing First Responders equipped with a handful of instruments, whether they can safely enter the Hot Zone to attempt a rescue. This is accomplished by teaching responders how to use and understand meters (Radiation meter, 4-gas meter and Temperature Gun) and reagent papers (pH and F papers). This equipment assures their safety when they choose to enter the hot zone to attempt a rescue.

Course is in two 4-hour sessions.

NEW COURSE

PropaneIQ
Two day course covering propane behavior and mitigation options for DOT cylinders, flaring and mitigation options for ASME tanks. Each student will receive PropaneIQ Smart Charts with a diagram of each propane cylinder and tank, highlighted with counter measures for each leak point. PropaneIQ is 50% hands-on; all students who participate in the hands-on evolution will need structural fire protective clothing and SCBA’s. The host agency will need to provide a fire engine and fire extinguishers for use during the course.

Additional classes available and customized to your needs / department. Visit www.hazmatiq.com for more information.

Stay Alive Five Equipment (SAFe) Kit
The essential safety kit for all hazmat incidents comes packaged in a custom foam SKB case with in-case charging. The HazMatIQ SAFe Kit will keep your essential equipment secure, organized and ready to go in a moments notice.
*Cast 316 Stainless Steel

Check Valves

All Cast Carbon Steel and Cast 316 Stainless Steel Body Double Disc Check Valves are Retainerless Design.

Fabricated Options:

- Duplex Strainers
- Fabricated Strainers
- Stainless Steel - FSSA
- Cast Carbon Steel - FSA
- Special Coating & Galvanizing
- Custom Nozzle Positions
- Differential Pressure Gauges
- Flanged or Butt Weld
- Oversized Bodies
- Custom Venting & Special Drains
- Custom Blowdown Connections

Cast Bronze
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HELLEN HOSE REELS
THE HELLEN® STRAINER COMPANY

AFFFF FIRE FIGHTING HOSE REELS

US NAVY and US COAST GUARD Approved Reels, Guides, Hoses, Nozzles and Accessories

MIL SPEC APPROVED

MIL-H-24580 (SH)
Hose Assembly

MIL-R-24414D (SH)
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• Pest Control

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US NAVY & US COAST GUARD APPROVED
Reels, Guides, Hoses, Nozzles and Accessories

Models N3100, N3125 and N3200 Series

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• Refueling & Defueling of Aircraft
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• Refueling Trucks
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FEDERAL RESOURCES IS THERE

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HOSE REELS
STRAINERS
DRAEGER TUBES
ACCESSORIES & MORE

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Register online at the Federal Resources Store and gain access to maritime exclusive products geared directly to your needs.
**INDUSTRIAL PIPELINE STRAINERS**

**Cast Carbon Steel**
- Basket Strainers
  - Style B7 Sizes ¼" - 3"
- 150# & 300# Flanged
- Cast Bronze
  - Style B7 Sizes ¼" - 3"
- 150# & 300# Flanged
- 250# Threaded
- Sizes ¼" - 3"; ½" - 4"
- Style E-300
- 150# & 300# Flanged
- 600# Threaded
- Sizes ½" - 12"
- Cast Iron
  - Style B7 Sizes ¼" - 3"
- 1500# Socket Weld
- 1500# Threaded or 600# Socket Weld
- Sizes 2" - 24"
- Cast Carbon Steel
  - Style SSA-7
- 150# & 300# Flanged
- Sizes ½" - 3"
- Cast Bronze
  - Style SSA-7
- 150# & 300# Flanged
- Sizes ½" - 3"
- Duplex Strainers
- Wafer Double Disc Body
- Cast Carbon Steel
  - Cast 316 Stainless Steel
  - Style SSA-7
  - Sizes 2" - 48"
- Wafer Double Disc Body
  - Cast Stainless Steel
  - Style TB
  - Sizes 2" - 48"
- Wafer Double Disc Body
  - Cast Carbon Steel
  - Cast Stainless Steel
  - Style CB
  - Sizes 2" - 12"
- Globe Center Guided Silent
- Cast Carbon Steel
  - Cast Stainless Steel
  - Style SS-2
  - Sizes 2" - 12"
- Knife Gate Valves
  - Options:
    - Manual (Handwheel) 2" to 24"
    - Bevel Gear Actuation from 2" to 24"
    - Air and Hydraulic Cylinder Actuation from 2" to 24"
    - Fabrication through 60" diameter
    - Uni-Directional or Bi-Directional
    - Body Material - Carbon Steel, 304 SS, 316 SS, Special Alloys
    - Seat Material - Metal, PTFE, Viton, EPDM, Buna
- Duplex Options
- Line Blind
  - Differential Pressure Indicators
  - DIN Electrical Probes
  - Fabricated Carbon Steel - FLB Carbon Steel - FLR
    - Sizes 2" - 24"
- Special Options on Fabricated Strainers
  - • Differential Pressure Gauges
  - • Custom Nozzle Positions
  - • Special Coating & Coating
  - • Custom Bypass Connections
  - • Custom Valve & Special Diverter
  - • Over-sized Bodies
  - • Custom Flanged Bends
  - • Custom Mounting Hardware
- Cast Bronze
  - Style E-300
  - 125# Flanged
  - Sizes ½" - 4"
- Cast Iron
  - Style B7 Sizes ¼" - 3"
  - 125# Flanged
  - Sizes ½" - 4"
Megator Self Priming Positive Displacement Sliding Shoe Pumps

The Megator self priming positive displacement sliding-shoe pump provides exceptional suction performance, versatility, and the ability to pump at constant capacity against heads to 250 ft (75m). It can run without harm during dry suction, is self compensating for wear, has a simple design with few working parts and single cover access. It might be said to resemble a reciprocating piston pump, and it has indeed all the well known merits of that type - powerful suction and self priming, constant capacity at varying heads, the ability to cope with rough conditions and to handle a great variety of liquids, viscous or free flowing, clean or dirty. Yet in its simplicity, compactness and even flow it more closely resembles the centrifugal pump. It therefore combines the advantageous features of both these two main pump types without their respective limitations.

Benefits

- Self priming.
- Operates with dry suction.
- Simple to install.
- The same pump for water and oils.
- Constant capacity at varying heads.
- Remove the last drop from containers.
- Single cover access.
- Simple to operate.
- Self compensating for wear.
- Minimal shear/emulsification.
- High suction lift.

Features

- Capacities up to 264 US gpm (60 m³/hr).
- Suction lifts up to 27 ft (8.2 m).
- Viscosities up to 5000 cSt.
- Heads up to 250 ft (75m).
- Available in bronze, cast iron & aluminum casings.
- Air, diesel, electric, hydraulic or gasoline driven.
- Variable speed inverter control.
- Direct coupled or belt drive options.
- Available assemblies include stationary, skid-mounted & mobile options.

An example of their superiority for this class of work is their adoption by the U.S. Navy as a standard pump on all warships and auxiliary vessels for transporting waste oils from slop tanks to shore treatment facilities. The Megator Sliding Shoe Positive-Displacement Pump, constructed to its normal marine standards, is equal in quality to the stringent requirements of military specifications.
Pumps 2000 Pneumatic Diaphragm Pumps

Pumps 2000 Pneumatic Diaphragm Pumps, developed originally for the underground mining industry, have been used in the coal and hard rock mining industry of Australia since 1989. Using engineered plastics to operate lubrication-free, they are lightweight and manually handling-friendly. Pumps 2000 prove reliable in the harshest of conditions. The product ranges include applications for underground use, slurry or clean fluid transfer, a range of chemicals, continuous or occasional explosive atmospheres, fixed or portable installations, marine environments, construction, and the food industry.

Manufacturing processes are in accordance with the International Organization for Standardization ISO 9000 Quality Management Systems and EN 13980 Potentially Explosive Atmospheres: application of quality systems.

Large Particle Handling
Pumps 2000’s unique slurry pumps allow you to pass varying sizes and types of particles through the pump without any issue. As long as there is enough liquid carrying the solids, the Pumps 2000 slurry pumps will get the job done.

Light Weight
The lightweight feature allows quick and easy relocation of a pump whenever needed and maintenance is also easier with pumps that are lighter to handle.

Lubrication Free
Save on your oil costs, time and labor expense used to maintain lubricators, save on spare parts and also protect your environment from oil pollution by using Pumps 2000.

Efficient Air Usage
With a lower air consumption to output, you will find that Pumps 2000’s air operated double diaphragm pumps will do a better job using less air. This can lead to savings on your compressor and leave you with more air that can be utilized elsewhere within your operation.

Long Life Operation
Pumps 2000 utilizes the toughest in engineering grade plastics to give you a longer working life in the harshest of pumping conditions. Along with the employment of the best in materials, there are a number of patented design components to give you trouble-free long life operation.

Also Available: Pumps 2000 Ebony Series

Test Gauge Kits
Available with one, two or three gauges, Schroeder Test Gauge Kits offer accurate, precise and efficient pressure control and monitoring for your hydraulic system, while eliminating the risk of introducing newfangled contamination. The kits include test points, gauges and adapters ideal for venting and draining hydraulic systems and are well suited for oil sampling and pressure measurement.

Cold Clear
The new ASTM D6751 Cold Soak Filtration test is leaving many biodiesel producers and consumers ‘out in the cold’. In response, Schroeder Biofuels is proud to present ColdClear™, a new proprietary, patent pending, multi-stage separation technology designed specifically to ensure that biodiesel products conform to this ASTM standard for cold flow properties.

ColdClear™ system consists of a three-stage bank of housings using a combination of filtration and adsorption principles to capture compounds that could cause plugging or crystallization in biodiesel fluids. Notably, ColdClear™ is the premiere multi-stage treatment system for solving the cold soak filtration dilemma in B100 biodiesel and biodiesel blends in a single pass while resulting in a negligible yield loss.

Hydraulic Test Bench
The Schroeder Model HTB hydraulic test bench is the ultimate diagnostic tool, capable of thoroughly testing a vast array of new or rebuilt components and subassemblies prior to their installation in a working system. Test bench instrumentation has been designed to make diagnosis fast and accurate, with virtually no requirement for connecting external instruments.

Triton Dehydration Station

MFD Fluid Particulate Filter
- Pressure bearing parts are thick-section aluminum capable of removing particulate contamination and/or water quickly, conveniently and economically
- Clears up existing systems and can prefilt or treat new fluids
- Modular base eliminates hoses and fittings between components
- Easy element servicing through the K9 base-ported filter housing
- DS5 Dirt Alarm that indicates when the filter element needs to be changed

Hydraulic Test Bench

Test Gauge Kits

Triton Dehydration Station

MFD Fluid Particulate Filter
**PureShip BilgeKleen**

PureShip BilgeKleen is a full range of MyCelx Engineered Oily Water Systems and Solutions capable of maintaining the highest quality of bilge water overboard discharge mandated by the International Maritime Organization. PureShip BilgeKleen Systems and Solutions have been successfully deployed in numerous cargo vessels, oil and product tankers, recreational cruise liners, yachts and work boats.

The core component of the MyCelx system is the MyCelx Advanced Polisher. The polisher removes traces of hydrocarbon contamination, even highly emulsified and soluble oils, down to critically low levels. The MyCelx Advanced Polisher can easily achieve oil and hydrocarbon removal down to 1 ppm or below.

The MyCelx Advanced Polisher uses patented MyCelx polymer filter cartridges that remove fine solids and captures trace oils and solids that come through the system. The MyCelx Advanced Polisher is so effective at removing highly emulsified and soluble oils, including oil coated solids, that water passing through a MyCelx system has no oil sheen.

MyCelx Advanced Polishers can be implemented to augment existing systems or as part of a fully customized MyCelx water purification system.

**Features of Products and Solutions:**
- Certifications: USCG MEPC 107(49), Lloyd’s Register and ABS type approval
- Less than 5 ppm discharge. Guaranteed no oil sheen
- Incorporates MyCelx Oil Removal Technology
- Low Capital and low operating cost
- Low maintenance – no chemicals or back flushing
- Fail safe; redundant oil removal stages for free and emulsified oils

**PureShip BilgeKleen range of products includes:**
- PureShip BilgeKleen MEPC 107 (49) OWS Systems
- PureShip BilgeKleen Polisher Retrofit for MEPC 60 (33)/107 (49) OWS
- PureShip BilgeKleen Big Blue Systems

**Other Submersible Switches**

- **M4182 Bottle Switch** for bilge and external tank applications, available in stainless steel (left) and aluminum (right)

**M4182 Specifications:**
- Specific Gravity - Float: 0.70
- Max Pressure - M4182-SS: 300 PSIG
  M4182-AL: 150 PSIG
- Max. Temperature - M4182-SS: 200° C (392° F)
  M4182-AL: 105° C (221° F)
- Switch Operation - SPST, normally closed
- Electrical - 70 VA; 240 VAC resistive load

Madison Company offers its newest universal design for bilge and external tank applications. The M4182 Series is a standard liquid level switch product available in four housing material configurations. These Bilge/Bottle models allow for in-field replacement of the float switch, helping to ensure minimal down time in applications where they are used. The same highly reliable liquid level switch technology used in other Madison Company reed switch products is also used in the M4182.

This design supplements the M4147 bracket-mounted liquid level switch and other submersible switches, which have been long-standing solutions for bilge and sump applications. The M4182 family of designs can also be bracket mounted and encloses the float for purposes of minimizing the effect of turbulence and possible contamination of the float’s performance.

Madison Company can also provide application-specific designs for external tank and bilge applications.

**Features:**
- Available with anodized or electropolish finish for harsh environments
- Universal design for bilge or bottle switch applications
- Reliable reed switch technology
- Multiple submersible switch models are also available as standard products

**M SERIES**

**Bilge/Bottle & Submersible Switches**

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- Max Pressure - M4182-SS: 300 PSIG
  M4182-AL: 150 PSIG
- Max. Temperature - M4182-SS: 200° C (392° F)
  M4182-AL: 105° C (221° F)
- Switch Operation - SPST, normally closed
- Electrical - 70 VA; 240 VAC resistive load
N.E.I’s patented Venturi Oxygen Stripping™ (VOS™) System uses deoxygenation and cavitation to ensure 100% compliance with IMO’s Ballast Water Discharge Standards, safely and cost-effectively eliminating harmful aquatic organisms without the use of active substances.

The VOS™ System creates a low-oxygen, non-toxic environment which protects the ship’s ballast tank coatings against degradation and prevents corrosion of steel surfaces, thereby extending the vessel’s useful life to more than 30 years and delivering a compelling return on investment.

Safe for installation and operations:
- No use of dangerous chemicals
- Intrinsically safe for installation in hazardous zones

Does not limit trading range – operates in all ports and every type of water:
- Fresh or salt
- Warm or cold
- Muddy or polluted

Currently installed on Tankers, Bulk Carriers and Container Vessels

Unlimited ballast water flow rate capacity

Compelling return on investment:
- Low maintenance costs
- Can eliminate topping generator for oil tankers
- Eliminates ballast tank air vent heads

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XNX Universal Transmitter

A universal transmitter compatible with all Honeywell Analytics gas sensor technologies.

XNX is an extremely flexible transmitter that can be configured to accept an input from any of the Honeywell Analytics range of gas sensor technologies. It can also be configured to provide a wide variety of industry standard output signals. This enables users to have a single type of interface to all their gas detection needs, even when different types of detectors are employed, to most effective

HA71 Digital Gas Controller

The Honeywell Analytics HA71 16 Channel Digital Gas Controller provides simultaneous display and alarm functions for up to 16 input variables. The HA71 can expand with up to ten additional HA71 units to provide up to 160 points of gas detection.

A graphic LCD displays monitored data as trends, bar graphs and engineering units. Three adjustable alarm levels are provided per channel. Relay outputs allow control of beacons horns and other alarm events. A horn relay may be set for steady or pulsing operation. Nonvolatile memory retains all configuration data indefinitely.

- Trouble-free operation--menu driven easy calibration, no moving parts
- Improved drift and temperature compensation
- Accepts inputs from up to 16 4-20mA sensors transmitters.
- CSA certified to C22.2 NO. 152 for combustible detection and Class I, Div. 2, Groups A,B,C,D CE
- Certifications: ABS, UL,CSA, ATEX, IECEx, BV, Lloyd’s, DNV

Sensepoint XCD Transmitter with Sensor

Flammable, toxic and Oxygen, 3 wire loop powered 4-20mA gas transmitter with integral gas concentration display.

The Sensepoint XCD range provides comprehensive monitoring of flammable, toxic and Oxygen gas hazards in potentially explosive atmospheres, both indoors and outdoors. Users can modify detector operation using the LCD and magnet switches without ever needing to open the unit. This enables one-man, non-intrusive
Dräger Detection Tubes

The Dräger-Tube system is an established method for measuring and detecting contaminants in the soil, water and air. The Dräger-Tube method of measurement is used for investigating soil pollution, for investigating liquid samples, and for air analysis.

More than 500 substances can be detected and measured using the Dräger-Tube system. Typical applications include the monitoring of workplace air, emissions measurements, quality control, process control and monitoring of compressed air for breathing apparatus, as well as environmental and hazardous substance detection applications.

**Model | Part Number**
--- | ---
Hydrogen Sulfide 1-200 PPM | B101831
Chlorine 0.1 - 5 PPM | B101521
Ethylene Glycol 10-180 mg/m3 | B101351
Fluorine 0.1 - 2 PPM | B101410
Hydrogen Peroxide 0.1 - 3 PPM | B101331
Hydrogen Sulfide 0.2 - 40 Vol% | B101201
Hydrogen Sulfide 1-200 PPM | B101831
Chlorine 0.1 - 5 PPM | B101521
Ethylene Glycol 10-180 mg/m3 | B101351
Fluorine 0.1 - 2 PPM | B101410
Hydrogen Peroxide 0.1 - 3 PPM | B101331
Hydrogen Sulfide 0.2 - 40 Vol% | B101201

**Standard Features**
- Automatic manual test and reset operation
- Adjustable alarm and lockout contacts
- Adjustable pre-alarm contacts
- Full 500 VOC test lifetime
- Fusible link and U.V. Test leads
- Compact, lightweight enclosure with terminal guard
- Flashing LED display with test, pre-alarm and alarm indication
- Shock and vibration resistant construction
- Vis switchboard meg ohm meter, color-coded 6” dial (optional 2” panel meter)

**Optional Features**
- Remote LCD assembly
- 4-20 mA transducer output
- Data Handler RS232/485 output

**Applications Include:**
- Bow Thruster Motors
- Propulsion Motors
- Ship’s Main Generators
- Emergency Generators
- Deck Winch Motors
- Anchor Motors
- Deck Crane Motors
- Bilge Pump Motors
- Hydraulic Steering Motors
- Fluid Pump Motors
- Shore Power Cables
- Air Ventilation Motors

**Measure Different Substances Even Under Difficult Conditions**

**Don’t Let Electrical Equipment Failure Shut You Down**

Unscheduled motor, generator or cable downtime is costly: it destroys your operation schedule and puts lives at risk. Moisture, contamination and heat combine to break down winding insulation, shorten equipment life and threaten your critical processes with catastrophic motor, generator or cable failure. Meg-Alert solutions also greatly reduce the risks associated with arc flash.

- Increase equipment reliability
- Improve safety
- No arc flash exposure
- Extend equipment life
- Reduce maintenance hours
- Reduce repair expense
- Faster FM testing
- Monitors insulation resistance when off
- Eliminates periodic manual megger
- Protects motors/generators at start up

*Meg-Alert products are used by the Military Seafull Command and the U.S. Coast Guard to protect on-board motors and generators in their critical operations.*

www.federalresources.com
**Lights**

**3H Air Horn**
Federal Signal air horns feature a one-piece, cast aluminum alloy housing which has been treated to provide corrosion resistance. The horns include specialized long-lasting stainless steel diaphragms. These precisely machined horns will yield peak performance at proper working air pressures and are virtually indestructible. The 3- and 4-inch horns (Models 3H, 4H, 4M) have threaded female pipe connections. The Model 6H features flanges for additional support.

**AM15XD2 AudioMaster® Public Address Hazardous Location Speaker**
The Federal Signal Model AM15XD2 is an 8 ohm, re-entrant, Type 4X speaker for use in public address or paging applications. The AM15XD2 features a rugged cone and projector constructed of spun aluminum. The speaker wiring connections are enclosed in a dust- and moisture-proof, die-cast aluminum housing. All external surfaces are sealed with a gray powder coat paint.
Rated for 15 watts and is UL Listed for Class 1, Division 2, Groups A,B,C, and D; Class II, Division 2, Groups F & G; and Class III environments. The design and seal of the speaker assembly and housing have been tested and approved by UL for Type 4X requirements.

**Electromechanical Siren**
Federal Signal Electromechanical Sirens were first introduced in 1901 and continue to be popular today because they produce loud and distinctive tones that cut through industrial noise. Rugged, corrosion resistant and maintenance free, Federal Signal sirens are a good choice for harsh environments.

**Fireball Strobe Beacon**
Powerful strobe flash in a compact package-perfect for difficult mounting applications.
Federal Signal’s FireBall® strobe light is one of the most compact, high-power strobe beacons available. Although it stands less than 5 inches tall, it produces an effective flash comparable to powerful strobes in much larger size beacons.
The Fireball strobes produce 75 double flashes per minute (11 joules per double flash, 150 total per minute). The compact strobe beacon can be installed permanently or mounted with the magnetic version for temporary use and easily stored.
- Long-life “silicone-based” replaceable strobe tube
- Vibration, moisture and corrosion resistant
- Automatic adjustment to function at any voltage from 12-48VDC
- Available in permanent or magnetic mount
- SAE J845 Class 1 approved (SAE J1318 Class 1, 2009)
- Three-year product warranty

**Hazardous Area LED Strobe Light with XLT™**
The 191XL comes standard in flashing mode and is field-configurable to steady burn mode for maximum functionality.
- XLT™ Technology
- Available in 24VAC/DC, 120VAC and 240VAC
- Five lamp/lens colors
- Flashing mode standard, configurable to Steady-burn
- 60,000 hour, vibration resistant LED lamp
- 3/4 inch pipe mount
- Dome guard included
- Type 4X, IP66 Enclosure, Marine Listed
- UL and cUL Listed

**MOD Modulator® Speaker Array**
Federal Signal’s Modulator® Speaker Array Series consists of a family of six electronic sirens. These innovative omni-directional sirens are capable of producing high-intensity warning signals over a wide area. This efficient design enables these sirens to produce a high sound level, while making only moderate demands on the power source.
- 360º sound coverage with no variation in the horizontal plane
- Multiple tones and public address
- Excellent frequency response
- Produces 106dBC to 121dBC @ 100’
- Each module has four 100 watt drivers
- Operates with UV controller
- UL and cUL Listed

**Hazardous Location LED Strobe Light**
Federal Signal’s AM15XD2 hazardous location flashing signal light features the super bright LED array with XLT™, Extreme Light Technology. The unit is available in 24VAC/DC or 120-240VAC and five colors - amber, blue, clear, green and red. The AM15XD2 produces 75 double flashes per minute (11 joules per double flash, 150 total per minute). The compact strobe beacon can be installed permanently or mounted with the magnetic version for temporary use and easily stored.

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- Automatic adjustment to function at any voltage from 12-48VDC
- Available in permanent or magnetic mount
- SAE J845 Class 1 approved (SAE J1318 Class 1, 2009)
- Three-year product warranty
Airstar products provide a powerful source of light with absolutely no glare. Specially created covers create a diffused illumination. The unit’s are non-glare, high-wattage, making them the perfect safe light source for any nighttime construction site, ship light or rescue operation.

Airstar lighting balloons come in a variety of sizes and are equipped with a halogen or HMI lighting system and inflated with either air or helium.

The Airstar lights are quick and easy to set up and will operate in all kinds of weather.

Unlike tubular lights, their cylindrical design spreads the light out in a circle and the reflective internal coating on the top of the balloon cylinder reflects the light down to the work area where it is needed most.

Sirocco S 60W
Rechargeable LED

Perfect for confined spaces above and below decks.

**FEATURES**
- All-In-One Unit
- Wireless and Rechargeable
- Easy To Setup And Transport
- Glare-Free 360° Safety Light

**SPECs**
- Lamps 1x 60w LED
- Average Lamp Life* 30,000 hours
- Efficiency 91 lm/W
- Operating Time On Single Charge - Approx. 8 hrs
- Charging Time - Approx. 5 hours

**INCLUDED**
- 3-Section Telescopic Stand - 7.2ft
- 48v/60w Fixture and Top Reflector Envelope
- 48v 10Ah High Output LiMnNiCo Battery
- Battery Charger - 110V
- Transport Case

Perfect for confined spaces above and below decks.
**PAC IA - Rayon/Kevalr Fire Hood**

The PAC IA style offers an economical option while meeting the NFPA minimum requirements. The notched shoulder allows for proper drape without restricting movement.

**CERTIFICATION:** Meets or exceeds NFPA 1971-2007 Edition and is UL Certified. Meets or exceeds Cal/OSHA Standards.

**STYLE:** 2 ply, one piece design with notched shoulders.

**LENGTH:** From top of head to bottom: 18 inches

**SIZING:** One size fits all. Do not modify, change, or alter your protective hood in any manner.

**CONSTRUCTION SEAMS:** All seams are merrowed, then top and bottom covered with a 5-thread cover stitch for extended durability. All bottom edges are bound with binding.

**THREAD:** 100% Nomex.

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**PAC IX - Military Approved Fire Hood**

The PAC IX style is a military approved hood. No matter what area of service you’re in, no matter what the elements are, these hoods have unmatched performance which sets them apart in the field.

Hood is constructed with an outer layer of P.I.B. Gold and an inner layer of P.I.B.

**DESIGN – TWO PIECE with NOTCHED SHOULDER and SHOULDER INSERT**

**HEAD DESIGN**

**LAYERS:** 2 ply

**LENGTH:** From top of head to neck: 13 inches

**WIDTH:** Back seam to top of face: 9 inches
Back seam to bottom of head: 11 inches

**SIZING:** One size fits all.

*LAYERS Head is constructed with an outer layer of P.B.I. Gold and inner layer of P.B.I.

**BIB DESIGN**

**LAYERS:** 2 ply

**LENGTH:** 9 inches (front and back)

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**Honeywell**

**PhD6 Multi-Gas Detector**

**Confined Space Multi-Gas Detector**

The Honeywell PhD6 is a state-of-the-art six-gas detector in the IQ Management System with five sensor ports, up to six channels of detection, and 16 sensor options including electrochemical, LEL, PID and Infrared. The PhD6 is built to be reliable and sophisticated while maintaining the ease of use that you have come to expect. Day-to-day detector operations are controlled entirely through the mode button. A status bar on the display with easy-to-recognize icons, gives the user immediate access to everything from time to calibration status. Built-in and easy-to-navigate menus give advanced users the ability to configure the detector in the field.

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**AIR-PAK SCBA**

Firefighter Respiratory Protection System

The Scott Air-Pak 75 SCBA is defining the future of SCBA technology by going beyond the standards with innovative features, advanced technologies, and optional accessories not available on any other SCBA.

Accessories include: integrated carrying handles, buddy indicators lights, a Drag Rescue Loop (DRL) for rescuing downed firefighters, an angled mechanical gauge with edge lighting, a simplified central power management system with a single battery module, and a streamlined backframe for improved hose management and user comfort, all while continuing to offer the time-tested legendary features and reliable performance you’ve come to know from Scott.

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ALL MYCELX products are infused with our Patented MYCELX Technology

We manufacture the most technologically advanced, efficient products available for immobilizing oil. Our products are infused with patented MYCELX technology and are designed for cleanup tasks from sheen to tarballs.

**OIL SPILL REMEDIATION**

**Designated for protection**

container for future spills.

deployed and retrieved back into its storage it has been saturated with pollutants. Easily doubles as a disposal drum for the boom once

purpose container provides a durable storage overflows and fueling operations. The dual container to encircle spills from fuel docks,

Quickly and easily dispenses from its storage and

Sheen Discharges

Several of the products can be assembled as an emergency response/spill containment and clean-up kit.

**MYCELX INFUSED OIL IMMOBILANT PRODUCTS**

**The FIRST RESPONSE for Marine Fuel Spills and Sheen Discharges**

FuelKleen

has been designed to catch drips and

sprays from fuel filling nozzles in Ma

terial composition enables it to protect the shore from the complete range of spill generated pollution. The slit fingers and sheen/tarball portions always float above the oil/water interface giving it maximum exposure to sheen. Sheen Devil's patented chemistry instantly attaches to freshly spilled oil preventing weathering, and the formation of tarballs and sheen.

Sheen Devil is available in 10 ft. interconnectable lengths. 4 Per Box.

For Bulk Sorption of Light to Heavy Oils

Infused with patented chemistry rendering it highly absorbent to oil and repellent to water. The Versimat has been designed to maximize effective contact area and minimize weight. This maximizes performance while reducing water drag and waste disposal costs. Its large surface contact area, the largest square footage per pound of any product available, allows it to immediately absorb much more effectively than standard sweep / boom products.

**MYCELX INFUSED OIL IMMOBILANT PRODUCTS**

**The FIRST RESPONSE for Marine Fuel Spills and Sheen Discharges**

**Rapid Response Containment Boom**

Part Number: RD10

- Will never sink or become ineffective
- Instantly attaches to oil
- Instants weathering & separation on contact
- Triboelectrically inactive & will not generate static charge.
- Prevents weathering & separation on contact

**Versimat**

Part Number: VM-4

For Bulk Sorption of Light to Heavy Oils

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SUPERIOR FLEETS DEMAND SUPERIOR PRODUCTS

THE HELLAN® STRAINER COMPANY

www.frmaritime.com  |  www.federalresources.com