

# PEERLESS ENGINEERED SYSTEMS







be think innovate

GRUNDFOS

# GRUNDFOS FIRE PUMPS ARE PEERLESS!

The Peerless brand of fire pumps offers engineered fire pump solutions through Peerless Engineered Systems (PES). You will benefit from our extensive experience with the design and manufacturing of packaged systems for a variety of applications. Installations cover a broad spectrum of end-users including, but not limited to Commercial Fire Protection, Industrial & Power Generation, Oil and Gas Fire Protection, and many specialty Design/Build projects.





#### **COMMERCIAL BUILDING**

The Commercial Fire market consists of end-users such as schools, hospitals, churches, office buildings, shopping centers, etc. PES will provide a packaged system including the pump, driver, controls, piping and valves.

The system can be put in place during any construction phase of a project. This can greatly reduce the problems that are common with juggling multiple discipline crews associated with onsite erected component systems. We can also design and build a system that will fit into a current installation.

If required, the skid can be split so that it fits through existing doorways. Many commercial systems are built with IBC compliant enclosures complete with ventilation and climate control compliant with NFPA 20. The buildings around these systems can be manufactured in a multitude of styles and colors.

#### **OIL AND GAS**

The Oil and Gas market consists of LNG Terminals drilling platforms, production platforms, FPSO, and FSO or onshore storage and distribution terminals. PES has built systems that are installed all across the U.S. as well as in the Gulf of Mexico, Indian Ocean, South Pacific, Mediterranean Sea and many coastal regions around the world. PES is an expert in supplying super duplex stainless steel and nickel aluminum bronze material pumps for these aggressive marine applications.

#### **INDUSTRIAL AND POWER**

The Industrial & Power market is made up of power generating plants, manufacturing facilities, and other heavy industrial end-users requiring fire protection. The Peerless engineering staff can design these systems or we can build the system in accordance with the end-users specifications. PES has worked with many large engineering firms to build packaged systems for new power plants and manufacturing facilities all across the United States. PES Engineers and Project Managers are experts at evaluating specifications and providing valuable input to system design. Our experience in this field is unparalleled and you can be confident the system provided will meet the needs of the end-user.

#### **DESIGN AND BUILD**

PES has the capability to design and build a system to meet your customized needs. Your requirements will be reviewed and incorporated into a designed system that is right for you. Through our dedicated and experienced Project Management and Engineering teams, and a world class ISO 9001 production facility, we take full ownership and complete unit responsibility of the job. We work closely with you to get the package on site on time; and of course offer onsite testing and commissioning services, helping to lower installation costs. If you are looking for simple solutions to complex problems, PES has the answer. Let us build your Packaged System so you can focus on the rest of your project.



# COMMERCIAL BUILDING FIRE PUMP SYSTEM

You will benefit from designs that are tough and versatile to meet your pumping needs. The fire pump units, systems and housed packaged systems offer variety, durability, standardized options and configurations unequalled in the industry.





### COMMERCIAL BUILDING FIRE PUMP SYSTEMS

#### **APPLICATIONS**

Applications vary from small, basic electric motor units to diesel engine driven, housed, packaged systems. Standard units are designed to handle fresh water, but special materials are available for sea water applications. Peerless Fire Pumps give superior performance in General Industry, Building Trade, Power Industry, Fire Protection, Municipal, and Process applications.

#### **FEATURES**

State of the art engineered systems arrive ready to install. Pump, driver and controller are mounted on a common base. All engineered systems have complete, interconnected wiring. Preconstruction eliminates costly, complex installation problems. Inhouse fabrication gives us the ability to customize a system and assume complete unit responsibility, which means that you have only one supplier to contact.

All pump houses meet the requirements of UL, ULC, FM, NFPA13, NFPA20, and MBMA. Both horizontal and vertical models provide capabilities to 5,000 gpm. End suction models deliver capacities to 1,500 gpm. In-line units can produce 500 gpm. Head ranges from 92 feet to 1,176 feet with as much as 640 psi. Pumps are powered with electric motors, diesel engines or steam turbines. Standard fire pumps are cast iron with bronze fittings. Peerless Pump furnishes fittings and accessories per NFPA 20.

#### **SPECIFICATIONS**

Capacities: Up to 5,000 gpm (1,136 m3/hr)
Head: Up to 1,176 feet (359 meters)

Pressure: To fit the application
Horsepower: Up to 1000 hp (746 kW)

Temperature: Up to 115° F (46° C)

Drives: Motors, engines, steam turbines,

combinations

Liquids: Water

Materials: Cast iron, bronze fitted as stan-

dard. Other materials available



# INDUSTRIAL AND POWER PLANT FIRE PUMP SYSTEM

When you require complete unit responsibility and service from engineering assistance to field start-up, you want an unrivaled Peerless Pump solution. Solutions that are built using the industry's most comprehensive product line of inline, end suction horizontal split case and vertical turbine models.





### INDUSTRIAL AND POWER PLANT FIRE PUMP SYSTEM

#### **APPLICATIONS**

Peerless design and build engineered systems from a simple pump and driver arrangement on a skid to a fully-enclosed, completely integrated pump and control center, with a diesel engine, and all the required controllers, fittings and ancillary equipment per NFPA 20.

#### **FEATURES**

State-of-the art engineered systems arrive ready to install. Pump, driver and controller are mounted on a common base. All engineered systems have complete, interconnected wiring. Preconstruction eliminates costly and complex installation problems. Inhouse fabrication allow us the ability to customize a system and assume complete unit responsibility, which means that you have only one supplier to contact. All pump houses meet the requirements of UL, ULC, FM, NFPA13, NFPA20, and MBMA. Both horizontal and vertical models provide capabilities to 5,000 gpm. End suction models deliver capacities to 1,500 gpm. In-line units can produce 500 gpm. Head ranges from 92 feet to 1,176 feet with as much as 640 psi. Pumps are powered with electric motors, diesel engines or steam turbines.

Standard fire pumps are cast iron with bronze fittings. Peerless Pump furnishes fittings and accessories recommended by the NFPA as published in their current edition of NFPA 20. The Peerless UL/FM Power Plant Fire Pump System Designed to your specifications, Peerless Packaged UL/FM Power Plant Fire Pumps come with or without enclosures, with one or more pump/driver combinations, and include controls with inlet/outlet piping/valves and fittings per NFPA 20.

#### **SPECIFICATIONS**

Capacities: Up to 5,000 gpm (1,136 m3/hr)
Head: Up to 1,176 feet (359 meters)

Pressure: To fit the application Horsepower: Up to 1000 hp (746kW)

Temperature: Up to 115° F (46° C)

Drives: Motors, engines, steam turbines,

combinations

Liquids: Water

Materials: Cast iron, bronze fitted as stan-

dard. Optional materials available

for sea water applications



### OIL AND GAS FIRE PUMP SYSTEM

Engineered and built to meet the harsh environments of the Oil and Gas industry, Peerless Fire Pump Systems offer compact designs that can be supplied in special metallurgies to meet a range of requirements. When purchasing a fire pump system for on shore off shore or any type of oil and gas facility, Peerless provides you with a single point of contact and single source responsibility.





#### **OIL AND GAS FIRE PUMP SYSTEM**

#### **APPLICATIONS**

Peerless fire pump packages for oil and gas facilities will be designed and built to NFPA 20 standards, as well as incorporating customer specifications, including hazardous and non-hazardous area classifications. The diesel and/or electric driven engineered fire pump systems can be furnished as simplex or duplex units that can include sound attenuation enclosures, skid mounted, flow meter loops, unlimited discharge piping, and valves and fittings as required. The pumps can be provided in various materials of construction: Ni-Resist, Nickel Aluminum Bronze, 316 Stainless Steel and/or Duplex Stainless Steel.

#### **FEATURES**

State-of-the art engineered systems arrive ready to install. Pump, driver and controller are mounted on a common base. All engineered systems have complete, interconnected wiring. Preconstruction eliminates costly, complex installation problems. Inhouse fabrication gives us the ability to customize a system and assume complete unit responsibility, which means that you have only one supplier to contact. All PES fire packages meet the requirements of UL, ULC, FM, NFPA13, NFPA20, and MBMA. The vertical models provide capabilities to 5,000 gpm. Pumps are powered with diesel engines. Customer specific paint application with zinc primer, epoxy intermediate coat, and polyurethane top coat.

#### **QUALITY ENGINEERING**

Built for dependability, Peerless Fire Pump Systems offer special fabrication techniques and protective coatings, as well as meticulous standards of construction. This ensures long life and exceptional reliability.

- ISO 9001 Fabrication and Manufacturing Facility
- Underwriters Laboratories (UL)
- · State of the Art Engineering Designs
- NFPA-70 and NEC
- ABS Certification
- Worldwide Technical Support

The Peerless engineering staff can design a versatile system to meet your pumping requirements. The same-quality and versatility that goes into all Peerless standard fire pumps, can be found in a Peerless Offshore Fire Pump System.

The Peerless UL/FM Offshore Platform Fire Pump System Designed to your specifications, Peerless Packaged UL/FM Offshore Platform Fire Pumps come with or without enclosures, with one or more pump/driver combinations, and include controls with inlet/outlet piping/valves and fittings per NFPA 20.

#### ABS CERTIFIED FOR OFFSHORE FIRE PUMP SYSTEMS

Peerless Pump can design an offshore fire pump system with ABS certification for floating offshore facilities. These systems can also be built to UL standard for non-hazardous area classifications.



## WHY PEERLESS ENGINEERED SOLUTIONS

Thousands of Peerless Pump installations (UL, ULC or FM approved) deliver superior fire protection to facilities worldwide. You will experience a complete service offering, from engineering assistance to in-house fabrication to field start-up.

Grundfos offers total fire pumping solutions on any scale. Our expertise in the full range of fire pump products and application areas can be tailored to your specific requirements. Let us build your packaged system so that you can focus on the rest of your project.

#### **EQUIPMENT**

Solutions are designed from a broad selection of pumps, drives, controls, baseplates and accessories. Pump choices include horizontal, in-line and end suction centrifugal fire pumps, as well as vertical turbines. Design and built systems range from a simple pump-driver arrangement on a skid to a fully enclosed, completely integrated fire protection system, that produce up to 5000 GPM in a diesel engine or electric motor drive. All the required controllers, fittings and ancillary equipment per NFPA 20 can be part of the packaged system.

#### **ACCURATE PREDETERMINED COST**

A Peerless Pump packaged system will eliminate the headaches of cost over-runs and unforeseen operational problems, often experienced with a component system. Total cost and schedule are accurately determined long before installation is completed.

#### **FACTORY TESTING**

By taking the system approach to the pump package design, important safety features are integrated into the system. A wide variety of standard and optional tests are available, including:

- Fire pump, driver, and controller are factory tested as standard.
- Packaged system piping hydrostatic test to ensure piping integrity.
- Electrical testing verify the function of each component.
- Optional customer witnessed complete unit factory testing.

#### **EPC CAPABILITIES**

#### **Engineering**

- Specifications: Our dedicated staff will review your specifications or write them for you. As experts in the field, we will provide you the peace of mind knowing your system will be right for your needs.
- System Sizing: Peerless will develop a system that fits your requirements by determining the performance characteristics and layout, saving you time and money.
- Compliance: Peerless' experienced staff will ensure your system complies with industry codes (UL, FM, NFPA13, NFPA 20, & NFPA 37, IBC, NEC).

#### **Procurement**

- Pricing: You will receive a detailed, comprehensive quote, to our specifications or yours. Purchasing a packaged system will eliminate the hidden costs of manpower involved in building the system on site, saving you as much as 28% over a component system.
- Single Source: You will only issue one purchase order and Peerless will build all of the major fire protection components into a single packaged system.
- Quality: Peerless is an ISO 9001 certified manufacturing facility so you will have the peace of mind that we will get things done right.
- One Contact: Our dedicated project management staff will be available throughout the design, manufacture, and start-up; so you'll only have one contact for the entire project.



- Packaged System: Because you are buying a packaged system, you will not have to manage multiple crews to build the system on your site, we will send a complete package for installation that can be as simple as three connections.
- Schedule: Peerless manufactures packaged pump systems in a controlled environment ensuring an accurate and reliable shipment schedule. You will avoid the hassles of weather delays and your system can be built at any time throughout the year. This will greatly simplify related project scheduling.
- Documentation: Peerless' professional engineering staff is capable of handling all levels of documentation, including the documentation lists of the most demanding end users.
- Equipment: You are dealing with the pump OEM.
   Peerless Pump provides packaged equipment built to achieve the highest industry standards. We have the confidence and ability to stand behind our product throughout the world.

#### INSTALLATION

- Easy: Because you are buying a packaged system, installation can be as simple as connecting the suction piping, discharge piping, and the incoming power.
- Instructions: Our project manager will provide detailed installation instructions prior to shipping the unit to your jobsite.

- Commissioning: Available through a Peerless Factory Authorized representative.
- Training: Offered for your Operations staff in a class room setting or on-site.
- Start-up: Our factory based and trained service engineers can travel to your location to provide expert technical assistance.

#### **SERVICE, WARRANTY, PARTS**

- Service: Whether it's a relief valve, pump gauge, control circuit, or installation supervision, our network of certified service engineers will get the job done.
- Warranty: You have one point of contact for any warranty related issues, as we take unit responsibility.
   Should a problem arise with any component in the system, we will solve it, saving you time and money.
- Parts: We stock inventory of spare parts and provide you a recommended spare parts lists for packaged systems allowing you the option to stock the expendable items you will need for normal operation. This will reduce your downtime and save you money.



### PEERLESS ENGINEERED SYSTEMS

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