Custom Pumping Systems
Custom engineered systems to meet your applications demands

Product Quality, Reliability and Support You Expect
www.catpumps.com
For over 25 years, Cat Pumps has been the industry leader in providing customers with quality custom-engineered pumping systems to meet a wide range of application needs. Each custom system is built to meet the needs of the individual customer with the assistance and expertise from our technical sales and engineering team. They will assist in all phases of the build including gathering application information, component/configuration selection, building and testing as well as aftersales support. This includes installation, operation, maintenance and troubleshooting support. All systems are designed, built and pressure tested in Cat Pumps’ Minneapolis location, and typically ship in two to eight weeks. Each system includes an owner’s manual with start-up and maintenance information.

Purchasing a custom system from Cat Pumps offers more benefits than simply providing a high quality pumping system. By choosing Cat Pumps for your next custom system need you can greatly save time and expenses of:

- Initial Design
- Multiple Source Buying
- Fabrication
- Assembly
- Testing

Our custom pumping systems are the quickest way to get up and running with the proper equipment. Each system includes all the required safety and pressure regulation valves to assure optimum performance and safety. Our technical sales staff will provide you with industry leading after sale support for assistance with installation, operation and maintenance.

With thousands of installations running around the world, choose Cat Pumps for your next custom pumping system.
Applications

With experience in hundreds of different applications around the globe, we have built custom systems that can be configured to meet even the most challenging application demands. Applications served include:

- Ag Fertilizer/Pesticide Injection
- Airplane De-icing
- Arch Misting Systems
- Bakery Sanitizing
- Barnacle Removal
- Barrel Cleaning
- Boiler Feed
- Butter/Margarine Processing
- Central Cleaning Systems
- Compressor Cleaning
- Conveyor Cleaning
- Drain, Pipe, Sewer Cleaning
- Equestrian Misting
- Exposed Aggregate
- Fire Suppression
- Fish Scale Removal
- Food Processing
- Glycol/Methanol Injection
- Golf Course Injection/Aeration
- Gypsum Cutting
- Ham, Chicken, Turkey Deboning
- Heavy Equipment Drive-thru Arch Cleaning
- Homogenization
- Hydraulic Powered Cleaner
- Hydro-evacuation
- Hydrostatic Testing
- Industrial Cleaning
- Label Removal
- Laser Cutting
- Laundry Moisture Extracting
- Liquid CO2
- Lumber Humidity Control
- Machining Flushing and Cooling
- Mining Dust Suppression
- Mold and Casting Cleaning
- Moss and Mildew Treatment
- Odor Control
- Oil, Gas Process Systems
- Outdoor Cattle, Swine & Horse Cooling System
- Paint and Rust Removal
- Pesticide Injection
- Portable Rubber Remover
- Pulp and Paper
- Reclaim Vehicle Washing
- Screen Cleaning
- Seawater Reverse Osmosis
- Secondary Recovery
- Sewer and Pipe Cleaning
- Slaughter and Smoke House Cleaning
- Swimming Pool Cleaning
- Temperature Control - Hen Houses
- Train Washing
- Turbine Mist Cooling
- Waste Water Re-injection
- Wet Sandblasting
- Window Awning and Blind Cleaning
- Underground Boring
- Underground Tank Cleaning

“We have used Cat Pumps customized pumping system over the years because they know how to get the job done right. From the beginning of the process to the completion, Cat Pumps has provided a quick turnaround and a very professional looking piece of equipment that meets our customer needs.”

Michael Brown
President • Georgia Chemical
System design starts with choosing the base that best fits your application. Numerous base configurations are available to meet space, portability, sound and material demands.

Popular configurations include:

**Standard**
Our standard base configuration is constructed of heavy duty steel, epoxy coated for added protection and available in a variety of sizes. Includes heavy-duty shock mounts for easy leveling and shock absorption. Drive guard also included for proper ventilation and operator safety. Aluminum and stainless steel models available by request.

**Stacked**
For compact installations, we offer a variety of vertically stacked options that provide smaller footprint, yet still provide easy accessibility for maintenance.

**Portable**
We offer a wide variety of portable base configurations to suit any portable application. Wheels and handle can be added to our standard base package or we can design a custom base to better meet your requirements. Carrying handles, carts, fork lift slots, lifting lugs and truck mount bases are popular configurations.

**Enclosed**
For installations that require extra protection or lower sound, we have designed fully enclosed bases to best suit your application needs. Enclosed bases still provide easy accessibility for routine maintenance.

**Multiple Pump**
For applications that require a higher flow or pressure rating than a single pump can achieve, we have special configurations designed to hold multiple pumps to meet your application demands.
Evaluate which power source will best fit the needs of your installation. A qualified and proven staff with extensive experience can assist in recommending the correct product for any power source available.

**Power Source**

Popular configurations include:

**Electric**
Our most popular power source is electric motors. There are number of options that we offer but are not limited to, such as: Horsepower range - 1/4 to 200; RPM – 1800 or 3600; Phase - single or three; Enclosure – TEFC, ODP, explosion proof; Frequency - 60Hz or 50Hz; Nema frame styles – 56C to 449T; Voltages - 115 to 575.

**Gas**
For portable applications or installations that do not have an electric motor source available, we offer a variety gas engine options: Horsepower range – 3.5 to 40; 3600 rpm; 4 stroke OHV; horizontal shaft; electric or manual start; cyclonic air cleaner; muffler.

**Diesel**
For portable applications or higher horsepower installations that do not have an electric motor source available, we offer variety of diesel engine options: Horsepower range 9.9 to 80; RPM – 2600 to 3600; four stroke; electric start; manual clutch; air or liquid cooled.

**Hydraulic**
For custom systems being installed where hydraulics are available, we offer three types of hydraulic motor options: SAE “A”, 2 bolt mount, 12 SAE side ports, dual rotation, 3000rpm, up to 17.5 gpm, 3000psi, in a variety of displacement sizes or SAE “B”, 2 bolt mount, 16 SAE side ports, dual rotation, 3000rpm, up to 44.0 gpm, 3000psi, in a variety of displacement sizes or SAE “C”, 2 bolt mount, dual rotation, 400 to 2500rpm, 14 to 50gpm, up to 3500psi, in a variety of displacement sizes.

**Pneumatic**
For explosive environments or where an air source is plentiful, we have a variety of lubricated pneumatic (air-driven) motors with and without gearboxes available. We can cover a variety of mounting configurations from hub, foot, face, NEMA C-flange to metric D series. Clockwise, counter-clockwise or reverse rotations. Horsepower up to 9.5, and rpm ranges from 300 to 10,000.
Popular drive packages include:

**Belt**
Our most common drive package gives you the flexibility to run pump at different performances based on set up. Anti-static, synchronized, and v-belt options available.

**Direct**
For lower flow applications, we have a variety of compact, direct-drive pumps available. These models bolt directly to your electric motor or gas engine for simple installation and space saving.

**Flex Coupling / Bell Housing**
Another space saving direct-drive option is a flex coupling and/or bell housing. Options available from small 3CP models to our large frame models. This configuration provides a simpler, more compact design while eliminating belt maintenance.

**Gearbox**
For gas engine installations, we offer a variety of gearbox models that provide the ability to directly mount as well as reduce the pump speed to correct RPM. Available for 3/4", 1" and 1-1/8" shaft sizes.

**Clutch**
For applications where the pump will run in by-pass for extended time, we have a variety of clutches available that provide the ability to remotely engage/disengage the pump, extending life.
Accessories

Choose from hundreds of high-quality genuine Cat Pumps accessories to ensure optimum system performance and life.

Popular accessories include:

**Regulator/Unloader**
A pressure regulator is used to accurately set and maintain consistent system pressure. For trigger gun applications, an unloader is recommended which reduces load on the pump and motor when the system is in by-pass.

**Relief / Pop-off Valve**
A relief or pop-off valve provide your system with an accurate and reliable secondary pressure relief to protect your pump and system from damage caused by over-pressurization.

**Pressure Gauge**
A pressure gauge is used to accurately monitor pump pressure. All models are glycerine filled for consistent and accurate pressure readings with brass and stainless steel options available. We also offer a variety of panel mount options.

**Pulsation Dampener**
A pulsation dampener is used to help provide smooth and consistent flow as well as increase overall system life. Most models available are rechargeable and are available in steel or stainless steel.

**Oil Level Indicator**
Our oil level indicators can be installed in a variety of locations for convenient monitoring of crankcase oil levels. Kits are also equipped with oil drain plugs for fast and convenient oil changes.

**Captive Acceleration Tube (C.A.T.)**
A captive acceleration tube or C.A.T. is used to stabilize and maintain consistent inlet pressure when dealing with high temperatures, booster pump feed, long inlet lines or pressure spikes caused by regulating valves.

**Inlet Filter / Strainer**
Inlet filters or strainers are used to catch standard water particles and debris from reaching and causing damage to your pump. Removable bowl permits easy cleaning without removing filter or plumbing.

**LPS Monitor**
A low pressure seal monitor can be added to your system to alert you when the low pressure seals are worn and need replacement. Either PLC or lighted versions are available to signal maintenance personnel the seals need to be replaced.
Ask about Cat Pumps’ wide variety of advanced control options which is designed to help ensure maximum system performance, as well as provide maximum system protection. Some options include:

- Variable Frequency Drives
- PID Loop (varies speed of pump to maintain system pressure)
- Multiple Pump Systems
- Low-Pressure Seal Monitors
- Auto Shutdowns (Temperature and Low Inlet Pressure)

Other control options to suit your application needs are available upon request.

Quality Service and Support

Cat Pumps has partnered with many leading manufacturers in many industries. You can expect responsive service and technical support, as well as, the reliability and durability you demand from your equipment.

Product Availability
You can count on quick turnaround times for equipment with our 99% fill and accuracy rate and over 95% of orders shipped within 24 hours (U.S. and Canada).

Distributor Partners
Our global distributors represent the very best in our industry and can provide local after-market support for parts, accessories, and technical expertise.

Technical Support
We have a seasoned technical sales and support staff to answer your application questions. Many of our sales and engineering team members have over 25 years of experience. Live technical support is available Monday-Friday, 7:30 a.m. to 5:00 p.m. CST.

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