



Oil and Gas Products

Premier Supplier for Industrial Pumps



Product Quality, Reliability and Support You Expect

www.catpumps.com



Industry Leading Value

The oil and gas industry continually seeks pumping solutions that can improve operating efficiencies and bottom-line profits. For nearly five decades Cat Pumps has exceeded the industries expectations for quality, reliability, product availability, delivery, and technical support. Whether supplying heavy equipment washing pumps or triethylene glycol pumps, we focus on optimizing the life cycle value of the equipment which is required in this industry. Cat Pumps is a premium supplier of pumps and control accessories for dehydration, injection, cleaning, accumulator charging, hydrostatic testing, and numerous other industry applications. Leverage our technical resources from our global partners located in North America and 37 countries for your next pumping system.

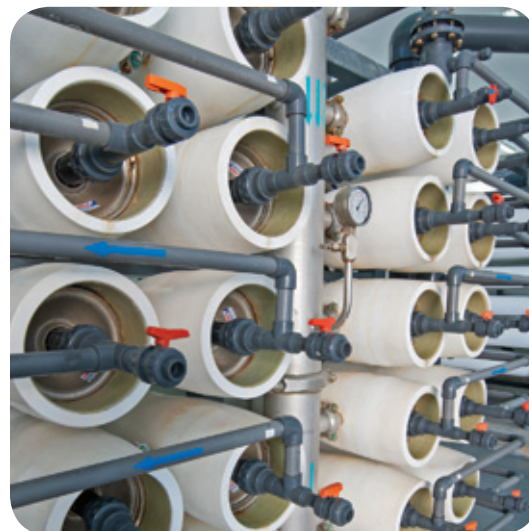
Well or Pipe Injection

Triethylene Glycol (TEG) Dehydration

Hydrate formation in gas pipelines has negatively impacted industry profits for decades causing unplanned production shutdowns and destruction of system equipment. Cat Pumps provides field-proven, continuous-duty, electric motor or engine driven brass or stainless steel pumps to handle glycol temperatures up to 240°F (116°C). Electric motor or engine driven, the pumps will help with HAP's compliance, reduction of regulatory costs and lower maintenance costs when compared to natural gas assisted (energy-exchange pumps) pumps. Standard pumps are available from 2.3 to 25 gpm (8.7 to 94.6 lpm) at pressures from 100 to 2500 psi (7 to 175 bar). Other model performances are available upon request.

Enhanced Oil Recovery (EOR)

EOR can be accomplished with liquid CO₂ injection allowing oil viscosity to decrease and flow to the well head. Cat Pumps has supplied CO₂ pumping solutions for two decades to industry. EOR is also accomplished with chemical injection (polymers or surfactants). Cat Pumps has a wide range of brass, nickel aluminum bronze, 316 and duplex stainless steel pumping options with elastomers to handle a variety of chemical products.



Salt Water (Produced Water) Injection

Salt water is injected into the well to establish sufficient reservoir pressure to extract oil. Salt water injection (secondary recovery) is accomplished using Cat Pumps nickel aluminum bronze and 316 stainless steel pumps. These pumps are chosen due to their superior reliability in continuous-duty applications.

Water and Foam Injection (Well Drilling)

Water and foam injection provides lubricity in the drilling process and helps lift drilling debris from the hole. Cat Pumps piston pumps are the pump of choice for this application due their superior performance life and suction lift capabilities.

High Pressure Washing

Tar Sand Oil Mine Truck Cleaning

Trucks are either cleaned at a maintenance facility using hot water and high pressure spray or in the field using a steam truck. A steam truck uses Cat Pumps to supply high pressure water to heaters downstream of the pump converting the water to steam.

Heavy equipment and platform washing

Heavy Equipment Washing is necessary to clean off solids, dust, mud, grease, oils, sand, and anything else that can affect the equipment operation and safety. Routine cleaning will help avoid costly shut-downs and increased maintenance costs. Heavy equipment includes cranes, forklifts, construction equipment, trucks, conveyor systems, off-shore platform equipment, and other machines.

Cat Pumps are chosen for heavy equipment washing because of our proven reliability in continuous duty applications. Chemical, environment, pump cycling, water temperature, and water quality can be very hard on pumping equipment. Cat Pumps products are specifically designed to stand up to these rigorous demands found in the oil and gas industry.

Paraffin Well Casing Cleaning

Paraffin builds-up on the well casing over time. Cat Pumps are used to pump high temperature water (up to 200°F, 93.3°C) into the casing and breaks-down the paraffin, improving well output performance.

Drilling mud filter cleaning

Drilling mud is recycled and re-used. During the recycling process the used mud is filtered. Cat Pumps are used to deliver water and chemical to clean the filter screens used in the recycling process.

Wet sandblasting

Wet Sandblasting is commonly used for removing surface contamination such as rust, scale, loose paint, barnacles and debris from metal surfaces. An abrasive material mixed with the water creates an abrasive spray, which is extremely effective for removing surface contamination. Wet-sand blasting has advantages over dry sand blast with the added impact from the water and no dust. This application typically uses 5 to 10 gpm with pressures of 3000 to 5000 psi.



Safety and Testing

Blowout preventer (BOP) accumulator charging

Blowout preventers rely on hydraulics to close off the well pipe. Accumulators are used to store the hydraulic energy required to close the BOP in the event of a well blowout. System reliability is critical given the safety implications of the BOP system.

Hydrostatic testing

Components and installed equipment must be hydrostatically tested per API guidelines. Cat Pumps can provide pumping solutions for hydrostatic testing up to 10,000 psi (690 bar).

Fire prevention system

Natural gas compressors are cooled to prevent the equipment from overheating and reducing the risk of a fire using high volume water spray. The cooling system also helps to reduce insurance costs.



Other Applications

Biodiesel production

High oil prices and the global push for renewable resources, the interest in biodiesel continues to grow. Cat Pumps continues to work closely with research and development facilities in North America and Europe as new pumps and processes are explored for the production of biodiesel.

Oil transfer

Cat Pumps can handle continuous duty flow rates up to 240 gpm (908 lpm) for oil transfer applications. Multiple pumps can be installed when larger flow rates are required. Pumps are compact and can be easily fitted into existing piping systems. A broad range of pump construction and elastomers are available to handle a variety of oil compatibility issues.



Seal gland flushing

Large vertical turbine centrifugal pumps are used to inject wastewater in the ground. This water contains abrasives that can be trapped in the seal area causing premature failure of the seal glands. Cat Pumps supplies a high pressure pump to flush the seal gland (stuffing box) area extending the seal gland life. Seal gland life without flushing is two to three months and with flushing can be extended to about one year.

Odor control

Odors from refineries and other oil and gas facilities represents an environmental problem causing unpleasant working conditions, a nuisance to neighboring residents and health concerns. A fragrance or odor neutralizer is added to the misting water through high pressure nozzles.



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