Cat® Hydraulic Pumps & Motors

# PUMP UP MACHINE PERFORMANCE

## WITH THE BEST COMPONENTS IN THE BUSINESS

You've invested in a prime piece of equipment to drive premium performance in the harshest conditions and applications. Shouldn't you use the only components built to those requirements?

Cat<sup>®</sup> hydraulic pumps and motors are precisely designed and manufactured to meet the demanding OEM requirements of Cat equipment, offering the highest standard of quality and reliability in the industry. Ready to power your equipment and outperform the competition, these components ensure the greatest performance and durability for optimal hydraulics system operation.



# **OPTIMIZE POWER & DURABILITY**

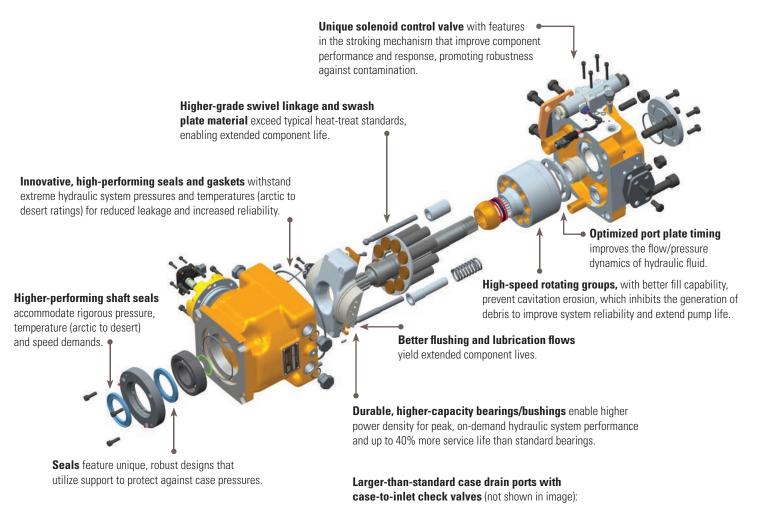
Cat hydraulic components—including pumps and motors—work as a **highly refined, specialized, holistic system** that enables precise control, ease of operation and peak performance for maximum value over the life of your equipment. "Off the shelf"/will-fit varieties can compromise the system, which may lead to fluid contamination. Contaminants will slowly erode hydraulic system efficiency (which can decrease as much as 20 percent before the machine operator even detects a problem), resulting in catastrophic failures and costly repairs.

🗏 Why risk using any other brand? 📔

### WHAT MAKES CAT PUMPS BETTER THAN THE COMPETITION

Caterpillar offers the best pumps in the industry for the most demanding applications.

Robust design, durable, high-end materials and precision tolerances make Cat hydraulic pumps and motors superior to their will-fit counterparts. This piston pump example highlights numerous unique features\* that set Cat pumps apart.



- Limit case pressures, which protects shaft seals and shaft bearings for improved/longer life
- Increase pump durability for the most severe applications



#### **PUMP VARIETIES AND FEATURES ACCOMMODATE EVERY APPLICATION**

The entire line of Cat hydraulic pumps provides higher quality, durability and performance than any other pump on the market.

**Gear pumps** are used in open-center applications that require increased pressure and temperature capabilities, which push them to new technological limits. They are optimized with rugged journal bearings, high-pressure end plates and high-temperature seals that extend component life.

- Simplest, most rugged and least expensive
- Highest resistance to contamination
- · Well suited to lower-pressure, higher-flow applications
- Higher pressure capabilities
- More durable and reliable two-piece cast iron vs. three-piece aluminum design helps prevent shaft seal leaks that may result from impact
- Smaller units use valves to improve hydraulic system integration
- Available in fixed-displacement option

**Vane pumps** are used in open-center applications. They feature a refined design of the cam-rings, pressure plates and pressure seals to withstand tougher duty cycle requirements, including increased pressure limits.

- Relatively simple and inexpensive
- Used in less-demanding applications
- Available in fixed-displacement option

**Piston pumps** are highly refined to satisfy the customer's growing demand for increased hydraulic system efficiency, longer service life and improved overall value. Each pump model is customized to optimize performance and life per specific application.

- Most efficient
- Highest pressure capabilities
- Less resistance to contamination
- · Slightly higher cost
- Available in fixed and variable options





#### **KEY POINTS OF DIFFERENTIATION**

Contamination robustness extends component life and maximizes uptime.

**Rigorous testing and validation under real-world conditions** ensures improved operational stability and longer component and hydraulic system life.

Efficient hydraulic fluid flow control improves service life and reduces operating costs.

Optimum power density increases efficiency and performance.

Lower noise emissions promote environmental sustainability and job site safety.

### **CAT DEALERS DELIVER WORLD-CLASS SUPPORT**

Partnering with your local Cat dealer ensures you always have the right parts and service solutions customized to your equipment and operation. Their component and application prowess will keep your hydraulic pumps and motors—and the whole hydraulic system— working hard to maximize your investment.



Application- and equipment-specific expertise guides dealers in properly testing and fine-tuning hydraulic pump and motor control settings for optimal productivity and efficiency.

**Diagnostic services and equipment** help dealers pinpoint problems and provide solutions.

**Trained dealer technicians** use the latest tooling, inspection techniques and contamination control processes to keep hydraulics-equipped machines up and running.

**SEE YOUR CAT DEALER TODAY** to purchase genuine Cat hydraulic pumps and motors that keep your equipment primed for power, performance and productivity.

Visit Parts.cat.com to learn more.



#### PEDJ0335

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#### REPAIR OPTIONS MAKE REPAIR OR REPLACE DECISIONS EASY The Choice Is Yours

Regardless of the utilization or age of your Cat machine, when hydraulic components need servicing, your dealer is a one-stop shop for selection and service. Dealers offer a comprehensive lineup of on-demand repair options to fit your budget and time requirements.

Select from the most basic and economical maintenance and repairs, such as a pump rebearing and reseal, to full component replacement with remanufactured (reman) or brand new Cat parts.



Durable new and reman replacement parts extend life and minimize contamination/ collateral damage to your hydraulic system.



Strict adherence to reuse and salvage guidelines assures peace of mind with repaired parts performance.



Convenient availability and common parts between sizes/series reduce operating cost and promote faster turnaround.

