CAT® HYDRAULIC HOSE SOLUTIONS

THE PREFERRED CONNECTION



When it comes to hydraulics, you want the safest and most reliable components on your machine.

THAT'S WHY CATERPILLAR OFFERS SUPERIOR HOSE SOLUTIONS

5 Reasons to Choose Cat® Hose Assemblies

UNRIVALED EXPERTISE

RUGGED DESIGN

METICULOUS MANUFACTURING

RIGOROUS TESTING

UNMATCHED SUPPORT

Learn how each advantage delivers genuine value to help you get the most out of your hydraulic systems driving greater efficiency and more value to your bottom line.





UNRIVALED EXPERTISE that instills confidence

A COMPANY YOU CAN COUNT ON

When it comes to operating your Cat equipment, dependability is a must. That is why we manufacture our own line of hydraulic hose and couplings for your replacement hydraulic hose assemblies. In fact, no other equipment manufacturer is more invested in this business.

A Longer History of Know-How to Help You

When you rely on Cat hydraulic components, you have half a century of expertise behind you. Caterpillar began designing and manufacturing hose products in the 1960s to meet the high-pressure hydraulic needs of a growing construction market. Since that time—over several decades—our hydraulic hose and couplings have earned and maintained a global reputation for superior performance and reliability.



Caterpillar entered the hose business in the 1960s primarily out of necessity. The company needed a high-pressure hose that would meet increased productivity demands in the earth-moving industry. However, no such hose was available. That's why, in 1968, Caterpillar designed, tested and began manufacturing its own high-pressure spiral hose. Since that time, over 1 billion feet (300 million meters) of Cat high-pressure spiral hose has been placed in the field.

By the 1970s, Caterpillar was a leading manufacturer of high-pressure hose and coupling products, and the company's innovative Cat Spiral Hose had become the industry standard for high-pressure applications.





Higher Standards to Reassure You

To achieve peak performance from your Cat equipment, you need hydraulic replacement parts that are equivalent to your factory-installed components. That's why we engineer our replacement hose products to the same standards as the hose products originally installed on Cat machines. Close attention to routing and pressure requirements are two key elements that differentiate our ability to provide the highest levels of safety and reliability with our hydraulic systems.

RUGGED DESIGN for endurance in tough applications

A UNIQUE SYSTEM APPROACH

Cat hose assembly products and tooling are designed to work together as a coordinated system. This is the only way to achieve a reliable connection that helps optimize hydraulic system safety and dependability.



Cat Hydraulic Hose is Durable and Flexible

The complete offering includes low, medium and high pressure, as well as speciality hoses that meet a wide range of application requirements. Every hose is engineered to surpass industry standards.

Engineered for Punishing Conditions

Robust, Multiple-Ply Construction Exceeds Industry Standards



- **A.** The inner liner and cushion stock of the hose are made from a high-quality rubber formula proprietary to Caterpillar.
- **B.** Spiral or braided wire reinforcement is added for strength to surpass pressure requirements.
- **C.** Then a tough outer cover is applied to resist oil, weather and abrasion.



When extreme abrasion resistance is needed, Caterpillar offers another option. Cat[®] XT ToughGuard[™] Hose has an exclusive, Caterpillar designed polyethylene cover that has surpassed two million abrasion test cycles without failure. Not only is this hose superior against abrasion, it is also highly resistant to chemicals and weathering. In addition, it eliminates the need for nylon, plastic and other forms of hose protection in most applications, which can significantly reduce material and labor costs.



Formulated for Unmatched Flexibility

Cat hydraulic hoses are designed to work at half of the SAE bend radius without sacrificing extreme cold-temperature flex capability or durability. This enables easier routing in the tightest spaces.



Proprietary Tooling and Software Ensure Exacting Assembly

Your Cat dealer uses Caterpillar designed tooling and industry-unique software to construct every hose assembly to exact OEM specifications. This exclusive tooling and software combination ensures precise crimps every time for enhanced safety and reliability.

Cat Couplings Ensure a Solid Connection

Our one-piece couplings are designed for superior coupling retention with Cat hose to withstand pressure requirements and allow flexing without fatigue. This results in the most reliable connection and eliminates potential for leaks. For select machine sizes, Caterpillar also offers reusable couplings for large-diameter, high-pressure hose.



METICULOUS MANUFACTURING for reliable performance

HOSE ASSEMBLIES BUILT TO EXACT OEM SPECIFICATIONS

Our hydraulic hose assembly solutions are built to same-as-new specifications for Cat equipment. This means every new hose assembly perfectly matches the factory-installed version it is replacing.



Focused on Quality

Caterpillar uses cutting-edge machinery to produce their own hose products. Stringent quality and contamination control processes ensure consistently manufactured, high-quality components.



We apply statistical process control to verify that every batch of rubber has been mixed to our exact specifications.



Our couplings are forged and machined from high tensile strength steel. Then they are heat treated and plated to ensure maximum durability and corrosion resistance.



Before application, the hose is routed through a cooling chamber until it reaches a suitable temperature. This prevents perforation of the hose as the high tensile strength reinforcement wire is applied.



Cat hose is carefully monitored to ensure precise inner and outer diameter measurements are maintained. This provides precise coupling retention capability.



RIGOROUS TESTING for optimum safety

THE BEST IN THE INDUSTRY

Cat hydraulic hose and couplings are subjected to the most rigorous testing processes in the hose and coupling manufacturing industry.

An All-in-One Approach Produces Most Reliable Results

Every Cat hose and coupling combination is tested as a system—not as separate components—to ensure a perfect fit that yields maximum safety and dependability.

Comprehensive Analysis Verifies Critical Standards Are Met

We use an array of measures to evaluate both raw materials and finished components. These include rubber compression and elongation testing; wire tensile-strength testing; hose impulse testing, burst pressure testing, temperature adaptability testing, abrasion testing, flexibility and diameter testing; and coupling salt-spray and metallurgical testing—all of which help ensure unparalleled hydraulics safety and dependability for your machines.





The number one cause of hose failure is abrasion. Cat ToughGuard hose, designed for severe abrasion applications, features a polyethylene cover that has surpassed two million cycles of abrasion testing without failure. The SAE standard is 39,000 cycles.



To simulate punishing conditions, Caterpillar impulse-tests hose assemblies at 130% of operating pressure for one million cycles double the SAE standard of 500,000 cycles.



Cat hose is burst tested by applying pressure at a constant rate until it reaches a burst pressure of four times the normal operating pressure.

THE KEY TO MAINTAINING MACHINE PRODUCTIVITY

When you need a hose assembly, you need it now. That is why your Cat dealer is uniquely skilled to perform the assembly and installation. Trained dealer technicians use the latest tooling, assembly information, routing standards, inspection techniques and contamination control processes to get your machines up and running—quickly and reliably.

Solutions That Are Optimal for Your Entire Fleet

Mining, earthmoving, excavation, forestry and compact machines can all benefit from Cat hose and couplings. Our product line meets wide-ranging applications, from the channeling of high-pressure fluids to low-pressure applications, such as fuel or brake lines in any brand machine.

Unmatched Convenience

The only thing your dealer needs to build an exact replacement Cathydraulic hose assembly is the Cat part number—and it's right on the hose label. Order by phone and your dealer will have a replacement hose waiting for you when you arrive.



In-stock Components

Your dealer uses ongoing inventory analysis and management to ensure adequate components for customers' machines are always available. In addition, Caterpillar backs up dealers with a network of strategically placed distribution centers in every part of the world to ensure continued parts availability.



Cat Dealer Expertise

Your Cat dealer is equipped with proprietary tools and reference materials that are unmatched in the industry. From hose routing guides that eliminate potential for abrasion, to the ability to identify hydraulic-related concerns before failure through inspection of your machine, they are there to ensure your safety and machine dependability are always maintained.

On-site Service

When a hose failure occurs at a remote location, you expect a quick, reliable repair. A Cat Hose Assembly Mobile Workshop—engineered and stocked to support your machine population—provides the immediate support you need, exactly where you need it. This minimizes your downtime by ensuring that any hose failure can be addressed immediately so your machine is quickly back in operation.



Every Cat Hose Assembly Mobile Workshop is sealed from outdoor contaminants and features durable, high-density cabinets and other storage solutions designed for clean, efficient storage of parts and tooling.

DISCOVER THE VALUE OF USING CAT COMPONENTS

Whether you have 1 machine or 100, whatever your equipment or application, make Cat hydraulic hose assemblies your preferred connection. From expertise, design, manufacturing and testing, to unmatched dealer support, the difference is in the details. And the performance is for the long run.

CAT DEALERS DEFINE

WORLD-CLASS PRODUCT SUPPORT.

We offer you the right parts and service solutions including comprehensive hydraulic support—when and where you need them. The Cat dealer network of highly trained experts keeps your entire fleet up and running to maximize your equipment investment.



HELPING YOU GET THE MOST FROM YOUR EQUIPMENT. THAT'S WHAT WE'RE BUILT TO DELIVER.

LET'S DO THE WORK."

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