



# CAT<sup>®</sup> COMMAND

**Enhance safety in hazardous work environments and increase productivity with Cat<sup>®</sup> Command technologies. Cat Command remote solutions include onboard electronic systems and vision systems that allow machines to be controlled without anyone in the cab. Cat Command technology for compaction semi-automates the compaction process based on user inputs.**

## WHAT WE CAN HELP YOU DO

**Boost:** Safety | Efficiency | Quality

**Reduce:** Overall Costs

**Improve:** Machine Utilization | Jobsite Consistency | Project Accuracy | Profitability

The road to autonomy offers solutions on a scalable continuum. From automation at the machine level to semi-autonomous operations at the system level or a total autonomous solution, we can help to ensure optimum jobsite performance with positive enterprise outcomes.

## CAPABILITIES

**Cat Command is scalable and flexible. Choose the system that's right for your jobsite.**

- The Cat Command Console allows the user to work safely and comfortably outside the machine, while remaining onsite and in direct visual contact by line of sight. It's ideal for short-term and emergency use and requires no onsite communications infrastructure.
- The Cat Command Station enables the user to work remotely in a comfortable, seated "virtual cab" with familiar controls and machine displays. Located in a command center onsite or many miles away, this non-line of sight technology also reduces operator fatigue due to an improved working environment.
- With the semi-autonomous Command for Compaction, the user gives compaction inputs and remains in the cab to monitor progress while the semi-autonomous system executes the compaction process.

Interchangeability has been engineered into the design of Cat Command. The technology can be switched between similar machines if the original remote-control machine is ever sold.



# CAT COMMAND REMOTE SOLUTIONS

## Unprecedented Safety Enhancements

- Control the machine from a safe distance
- Eliminate safety risks in potentially dangerous situations including stockpiles, steep slopes, unstable surfaces and areas with hazardous materials or the possibility of falling debris
- Reduce risk from machine rollover or sliding
- Less potential for injury while climbing on/off the machine

## Extraordinary Efficiency Improvements

- A single user can quickly and easily switch between Cat Command installed machines, and change jobsite locations, with no downtime
- Control the machine with the same response time as sitting in the cab
- Maintain smooth, precise control from a safe location
- Ergonomic layout and familiar control icons allow for easy access to machine functions from the Cat Command Console and Cat Command Station
- Reduce operator fatigue and improve productivity by eliminating the effects of vibration, sound and site conditions
- Allow operators who are injured to return to work and operate the machine earlier

## Fully Integrated Solutions

- Cat Command Console and Cat Command Station controls are fully integrated with the machine's electronic and hydraulic systems for quick response and smooth control
- User inputs from the Command Console are sent directly to the machine electronics via a dedicated radio transmitter/receiver, resulting in real-time implement control
- Select models include easy-to-install roof-mounted electronics enclosures to house the antenna, indicator lights and wireless receiver
- Ground level switch to toggle between manual and remote operation
- Can be retro-installed on certain existing Cat machines



# SUCCESS STORIES

Cat Command has delivered proven results at a number of customer sites. We partner with customers to get real-world feedback about how the system is performing and use that feedback to continually improve the product and technology.

A cargo handling and logistics company with facilities in several ports along the Gulf Coast is utilizing Cat Command Stations to maneuver Cat small wheel loaders and excavators via non-line of sight remote control. Eliminating the need for people to work in potentially dangerous situations, users control the machines from the office headquarters. The user can switch between multiple machines in different locations from the same Command Station, in some cases hundreds of miles apart, with virtually no downtime.

**“WE HAD A VISION OF A SAFER OPERATION, BEING ABLE TO MOVE OUR TEAM MEMBERS OUT OF THE FIELD AND INTO THE OFFICE. OUR PARTNERSHIP WITH LOUISIANA CAT AND CATERPILLAR HAS GIVEN US THE CONFIDENCE TO ACHIEVE THAT VISION, MAKING OUR OPERATION A SAFER, MORE EFFICIENT AND MORE COST-EFFECTIVE ENVIRONMENT.”**

– JEFF MORTON, VICE PRESIDENT OF FINANCIAL PLANNING AND ANALYSIS, ASSOCIATED TERMINALS

An industrial heavy civil contractor in northern Alabama is improving the safety and efficiency of work on the site of an ash pond with three Cat Command Stations and a Command Console. Users can maintain machine vision while controlling a Cat excavator from a Command Station set up inside a mobile office trailer.

**“CAT COMMAND HAS CHANGED OUR BUSINESS IN A NUMBER OF WAYS. MOST IMPORTANTLY, IT'S INCREASED THE SAFETY OF OUR EMPLOYEES. THIS TECHNOLOGY HAS ALLOWED US TO REMOVE THE OPERATOR FROM HAZARDOUS ACTIVITIES AND PUT THEM IN A TRAILER TO REMOTELY OPERATE EQUIPMENT.”**

– FRANK MONTGOMERY, PRESIDENT, SAIIA

# CAT COMMAND SEMI-AUTONOMOUS SOLUTIONS FOR COMPACTION

## BENEFITS

### Complete Process Control

- Cat Command controls the speed, direction, steering and vibration system of the machine
- Ensures compaction is completed with correct number of passes at a constant speed every time
- Complete and consistent coverage even when work is completed by operators with varying levels of experience

### Safe and Simple Operation

- An integrated object detection system alerts the operator of objects in the machine's path
- Does not require any site design files to be created or loaded
- Connects to commonly used base stations
- With the operator still present, you get the benefits of an automated process while being able to integrate into today's jobsites



## CAT COMMAND PRODUCT SOLUTIONS

Keep your team out of harm's way with Cat Command solutions for dozing, excavating, loading and compaction. Work becomes safer, more comfortable and more precise – without sacrificing control, feel or accuracy.

PRODUCT FAMILY	COMMAND CONSOLE	COMMAND STATION	SEMI-AUTONOMOUS
Dozers	●	●	
Excavators	●	●	
Small Wheel Loaders	●	●	
Large Wheel Loaders	●		
Soil Compactors			●

Note: More products will follow. Check availability with your Cat® dealer.

## HOW DO I GET STARTED WITH CAT COMMAND?

Cat Command is designed exclusively for – and deeply integrated into – select Cat machines, resulting in system reliability and durability. Talk to your local Cat dealer for more information.