Cat Grade Control Depth and Slope
for Hydraulic Excavators

Cat® Grade Control for Excavators puts the grade checker in the cab with real-time bucket tip elevation guidance to help you stay on grade and reach target grade fast. Visual guidance helps you work more productively and accurately, and achieve consistent grades and slopes with ease.

PRODUCTIVITY / EFFICIENCY

- **Boost productivity up to 35%** vs. traditional grading – improve quality and consistency for operators at all experience levels.

- **Work confidently, without guesswork** – in-cab display indicates bucket position and depth- to-grade; light bars provide visual guidance; height and depth alerts indicate grade or obstacles.

- **Work efficiently, every pass** – cut and fill to exact specification without overcutting; reduce passes and speed time to completion. Save time, labor, fuel and material consumption.

- **Minimize site costs, work safely** – check grade from the cab; eliminate checkers; minimize ground crews, staking, activity, and delays.

- **Maintain accuracy across the jobsite** – standard laser catcher plus customers' laser transmitter allows machine to move without re-benching.

- **Extend the work day** – work in limited visibility and around the clock using visual guidance.

- **Increase machine versatility** – upgrade to AccuGrade™ for 3D guidance (GNSS or UTS) on large jobsites and complex designs.

INTEGRATION

- **Built-in reliability** – integrated components are protected from damage; ensures long life, reliable control, and accurate results.

- **Easy operation** – integrated into machine display to simplify viewing and navigation; joystick buttons allow quick adjustments while keeping hands on the controls.

- **Optimized performance** – machine and grade technologies work as a system; on-board processors and fast response sensors deliver precise real-time bucket tip elevation guidance.

- **World-class support** – Your Cat dealer and SITECH® technology partner can help you get set up and working efficiently.

AVAILABILITY

312E/F	314E/F	316E/F	318E/F
320E	323E/F*	324E	325F
326F	329E/F	336E/F H	336F XE*
349E/F	349F XE*	352F	352F XE*
374F	390F		

(Available only in certain boom/stick configurations. Check with your dealer for model specifics.)
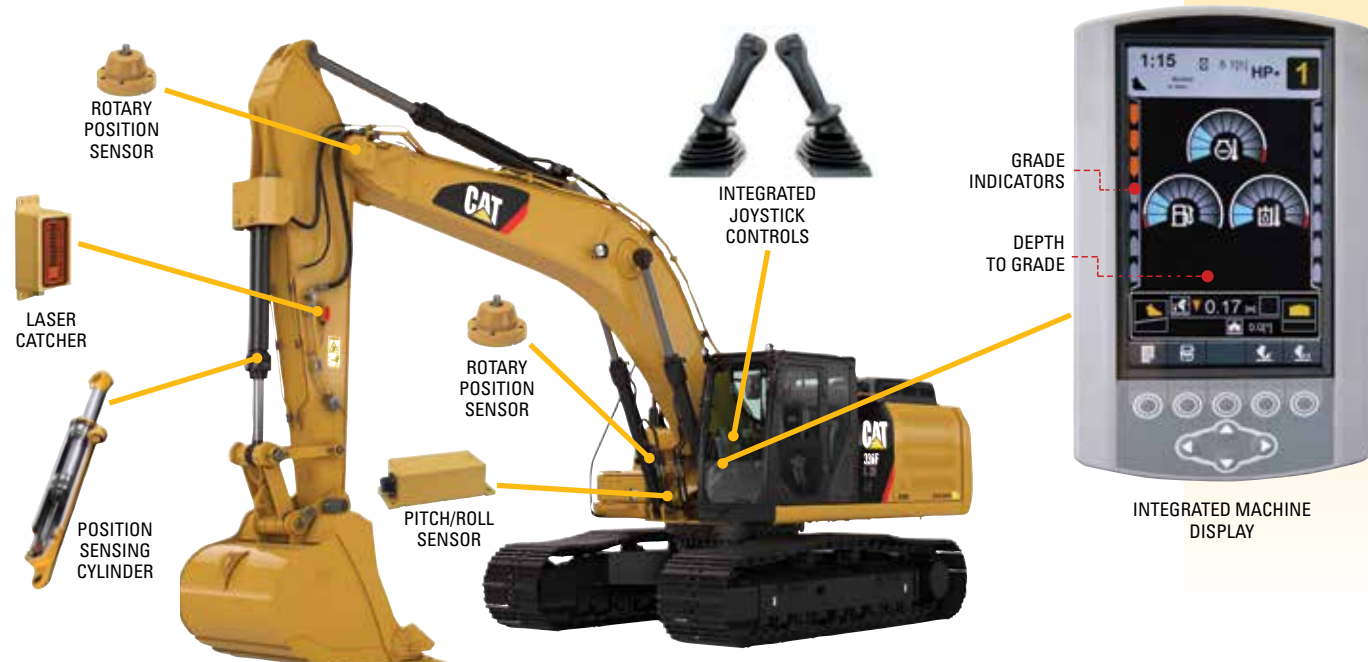**Standard*

APPLICATIONS

- Basements
- Footings/Foundations
- Drainage Ditches
- Utility Trenches
- Slopes/Embankments
- Leveling/Light Grading
- Underwater Stabilization

ACCURACY

- Within 2-3 cm depending on measure-up, material, application, and machine

ROTARY POSITION SENSOR

LASER CATCHER

POSITION SENSING CYLINDER

ROTARY POSITION SENSOR

PITCH/ROLL SENSOR

INTEGRATED JOYSTICK CONTROLS

GRADE INDICATORS

DEPTH TO GRADE

INTEGRATED MACHINE DISPLAY

CAPABILITIES AND UPGRADES

Maximize productivity using Cat Grade Control Depth and Slope with 2D positioning guidance from the factory. Easily upgrade to expand capabilities as job needs grow—from simple planes and slopes to full 3D guidance for larger sites and complex projects.

CONFIGURATIONS

- **Cat Grade Control** – base 2D system provides real-time bucket tip elevation guidance for flat and sloping planes. Bench to a known elevation point, start digging, and check grade from the cab; re-bench after moving machine.

- **+Laser Catcher** – the included laser catcher is used with a compatible laser transmitter to create a constant elevation reference. Bench once, reference the laser, and continue digging to depth across the jobsite—even after moving the machine. Maintain desired grade more accurately, with less effort, even on uneven terrain.

- **+Tilt Bucket Sensor** – allows depth and slope system to provide accurate guidance while digging with a tilt bucket—at any angle, expanding application versatility.

- **+Heading Sensor** – measures rotation of the cab for accurate guidance, even when rotating machine while digging. Provides better alignment and accuracy when the machine is working on large, flat slopes and embankments.

- **Cat AccuGrade** – upgrade to full 3D capability, which provides vertical and horizontal positioning at the bucket tip. Uses 3D design plan to indicate precisely where to work and how much to cut or fill—without staking or checking. Machine is AccuGrade ready to simplify dealer-installation of Global Navigation Satellite System (GNSS) or Universal Total Station (UTS) system.

CONTROL CAPABILITIES

CONFIGURATIONS	2D	3D
Cat Grade Control	•	
+Laser Catcher	•	
+Tilt Bucket Sensor	•	
+Heading Sensor	•	
AccuGrade		•

EQUIPMENT MONITORING

- **Automatically track** data about machine performance, such as hours, fuel usage, idle time and event codes via LINK technologies using Product Link™ and online VisionLink® user interface. Valuable data can help you monitor operator performance, measure jobsite efficiency, and manage costs.

CAT® CONNECT | PRODUCTIVITY

EQUIPMENT MANAGEMENT   PRODUCTIVITY   SAFETY   SUSTAINABILITY

BUILT FOR IT.

www.cat.com

CAT®