

CAT® GRADE for Hydraulic Excavators

**GET TO
GRADE FASTER
AND MORE
ACCURATELY**



NO MORE GUESSING — NO MORE GRADE CHECKERS



UP TO 30% MORE GRADING WORK CAN BE DONE IN THE SAME AMOUNT OF TIME THANKS TO INCREASED ACCURACY

**HIGHER
PRODUCTIVITY**



GRADE HELPS OPERATORS TO ACHIEVE A FINAL GRADE WITHIN 1.5-2.5 CM OF THE TARGET GRADE

**INCREASED
ACCURACY**



GRADE ELIMINATES THE NEED FOR GRADE CHECKERS, KEEPING THEM OUT OF HARM'S WAY

**IMPROVED
SAFETY**



UP TO 20% LOWER FUEL CONSUMPTION IS POSSIBLE BECAUSE FEWER PASSES ARE REQUIRED TO ACHIEVE GRADE

**IMPROVED FUEL
EFFICIENCY**



IN-CAB GRADING GUIDANCE ELIMINATES GUESSWORK AND REDUCES MISTAKES THAT LEAD TO REWORK

**LESS
REWORK**



ALL GRADE FUNCTIONS ARE LOCATED ON THE JOYSTICKS, MAKING IT USER-FRIENDLY AND SIMPLE TO OPERATE

**EASY
TO USE**



CAT® GRADE is an integrated system that enables operators to achieve grade faster and more accurately by showing the height and angle of the bucket in relation to the target grade on an in-cab display.

Sound and visual alerts inform the operator when the bucket is on grade, helping to prevent overcutting and significantly reducing rework and fuel consumption.

Cat Grade is simple to use with all functions on the joystick and decreases the number of necessary operator inputs, lowering operator fatigue and strengthening productivity.

Cat Grade improves the accuracy and efficiency of both novice and experienced operators, and is available on most Caterpillar hydraulic excavators.

FAMILY

MODEL

AVAILABLE FROM FACTORY

F Series Small Excavators

313F
315F
316F
318F



F Series Medium Excavators

323F
325F
326F
330F



F Series Large Excavators

336F
336F XE
352F
352F XE
374F
390F



In addition to in-cab guidance, **CAT GRADE with Assist recalls and automates the bucket position during grading activities such as sloping and trenching, further improving accuracy, efficiency and productivity.**

When the cutting edge of the bucket gets close to the target grade, Cat Grade with Assist takes over, adjusting boom and bucket movements while the operator controls the stick speed. This significantly reduces manual inputs, errors, and fatigue - improving grading consistency for operators at all experience levels.

Cat Grade with Assist comes with grade protection features that keep the cutting edge of the bucket from penetrating below target grade, preventing overcutting, rework and additional fuel and labor costs.

The integrated safety function Ceiling & Floor Protect prevents the boom, stick and bucket from going above or below a pre-set height or depth. This increases safety when working under low ceilings, electric cables or above underground utilities.



ALL CAT GRADE BENEFITS ARE ALSO VALID FOR CAT GRADE WITH ASSIST

CAT GRADE



AUTOMATED ADJUSTMENTS COMPLETE THE PRECISION WORK, THE OPERATOR SIMPLY CONTROLS THE SPEED

SEMI-AUTOMATIC



PREVENTS THE CUTTING EDGE FROM PENETRATING BELOW GRADE, ELIMINATING THE CHANCE OF OVERCUTTING AND REWORK

GRADE PROTECT



UP TO 45% MORE GRADING WORK CAN BE DONE IN THE SAME AMOUNT OF TIME THANKS TO INCREASED ACCURACY AND AUTOMATION

HIGHER PRODUCTIVITY



GRADE WITH ASSIST HELPS ADVANCED OPERATORS TO MAINTAIN A HIGH OUTPUT LEVEL DURING ROUTINE WORK

SUPPORTS ADVANCED OPERATORS



GRADE WITH ASSIST SUPPORTS DEPTH AND SLOPE APPLICATIONS AND CAN BE UPGRADED TO 3D

FLEXIBLE AND SCALABLE



THE BUCKET AND BOOM AUTOMATICALLY STOP AT A PRESET HEIGHT OR DEPTH TO PREVENT HITTING OVERHEAD OR UNDERGROUND OBSTACLES

FLOOR & CEILING PROTECT



GRADE WITH ASSIST HELPS NOVICE OPERATORS, BOOSTING THEIR INITIAL PRODUCTIVITY

BOOSTS NOVICE OPERATORS



20 DIFFERENT WORKTOOL SETTINGS CAN BE STORED FOR EASY SWITCHING BETWEEN WORKTOOLS

EASY WORKTOOL CONFIGURATION

FEWER OPERATOR INPUTS – INCREASED ACCURACY AND EFFICIENCY

FAMILY

E Series HEX

F Series HEX

MODEL

323E

323F

AVAILABILITY*

○

●○

○ retrofit kit

● from factory

OPERATOR INPUTS
ARE SIGNIFICANTLY
REDUCED, LOWERING
THEIR FATIGUE AND
KEEPING OPERATORS
PRODUCTIVE LONGER

+

REDUCED
OPERATOR FATIGUE

* Soon available on more Cat excavators.

CAT ACCUGRADE™ 3D adds geospatial positioning to the depth and slope guidance offered by Cat Grade, eliminating the need for surveyors and grade stakes.

Cat AccuGrade 3D is fully integrated into the excavator and uses GPS signals or a Total Station to show the operator the exact position of the bucket in relation to the grading design.

Offering maximum accuracy and control, Cat AccuGrade 3D is the ideal system for three-dimensional grading jobs with complex geometries.



GRADE HELPS OPERATORS TO ACHIEVE A FINAL GRADE WITHIN 1.5-2.5 CM OF THE TARGET GRADE



INCREASED ACCURACY



UP TO 40% INCREASED PRODUCTIVITY IN MOST APPLICATIONS IS POSSIBLE BECAUSE OF INCREASED ACCURACY AND AUTOMATION



INCREASED PRODUCTIVITY



ALL COMMANDS NECESSARY TO OPERATE CAT GRADE WITH ACCUGRADE 3D ARE AVAILABLE ON THE JOYSTICK



EASY TO USE



NO GRADE STAKES

ACCUGRADE 3D REPLACES GRADE STAKES AND SLOPE RAILS; CHECK POINTS ARE REQUIRED ONLY EVERY 200 M



EASY TO LEARN

GRADE WITH 3D IS SIMPLE TO LEARN AND VERY SIMILAR TO 3D GRADING IN OTHER CAT EQUIPMENT



OPTIMIZED OPERATOR CARE

UP TO 80% FEWER OPERATOR INPUTS ARE REQUIRED, SIGNIFICANTLY REDUCING OPERATOR FATIGUE



OPTIMIZED FUEL EFFICIENCY

UP TO 40% LOWER FUEL CONSUMPTION IS POSSIBLE BECAUSE FEWER MANEUVERES ARE REQUIRED TO ACHIEVE GRADE



GPS/UTS COMPATIBLE

GRADE WITH 3D IS COMPATIBLE WITH GPS POSITIONING (SATELLITE) AS WELL AS UTS POSITIONING (UNIVERSAL TOTAL STATION BY TRIMBLE)



OPTIMIZED SAFETY

SURVEYORS AND GRADE CHECKERS ARE NO LONGER REQUIRED AT THE JOB SITE, OPTIMIZING JOBSITE SAFETY



THE PERFECT SOLUTION FOR COMPLEX GRADING JOBS

FAMILY

F Series HEX

MODEL

RETROFIT KIT



For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

PEDJ0282

© 2016 Caterpillar
All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

