

CAT[®] PAYLOAD

FOR EXCAVATORS



CAT® PAYLOAD* TECHNOLOGY

RAISE YOUR PRODUCTIVITY

*NOT LEGAL FOR TRADE

Next generation excavators take on all kinds of tasks - loading, stockpiling, material handling, and more. Cat® Payload technology provides on-the-go weighing to help operators hit exact targets every time and avoid overloading, underloading, or misloading materials.



ACCURATE LOADING. FASTER. EASIER. SAFER. EVERY TIME.

Four ways Cat Payload delivers results for excavator applications:



REDUCE COSTS: SAVE ON TIME, LABOR, AND FUEL COSTS.



IMPROVE ACCURACY: PRECISE PAYLOAD TARGETS HELP ELIMINATE OVER AND UNDERLOADING.



INCREASE OPERATOR EFFICIENCY: EXPERIENCED OPERATORS WORK MORE ACCURATELY THAN EVER, WHILE NEW OPERATORS CAN GET UP TO SPEED MORE QUICKLY.



ENHANCE SAFETY: HELPS PREVENT TRUCK OVERLOADING, WHICH CREATES HEAVIER AND MORE UNSTABLE LOADS, REDUCING BRAKING PERFORMANCE AND PUTTING THE DRIVER AT GREATER RISK OF TIPPING.



DEEP INTEGRATION

SIMPLE TO USE WITH ZERO GUESSWORK

Cat Payload technologies are deeply integrated into next generation Cat excavators to provide operators with a simple-to-use tool for precise loading. Payload is factory installed on new excavators or can be retrofitted as a dealer option for select models.

THE RIGHT TECHNOLOGY FOR ANY LOADING APPLICATION

Operators can instantly view real-time weights on the monitor and know precisely how much material is in the bucket/grapple and in the truck, every load, every time. An easy-to-read display shows bucket/grapple and truck load weights while tracking load counts and material movements. Ensure trucks are loaded to their maximum potential and improve payload consistency for operators of all experience levels.

Payload compatibility varies by excavator model. Contact your Cat dealer to discuss the best systems and options for your fleet, operators, and applications.

PAYLOAD TECHNOLOGY

TRACK AND MONITOR PRODUCTION



Cat Payload technology delivers onboard payload weighing along with valuable production measurement and material tracking data. This data is available for individual machines, plus it can provide valuable fleet-wide operational efficiency data.

A Cat® Productivity or VisionLink® subscription is required for equipment data reporting. Availability may vary by region and model, consult your Cat dealer for details.

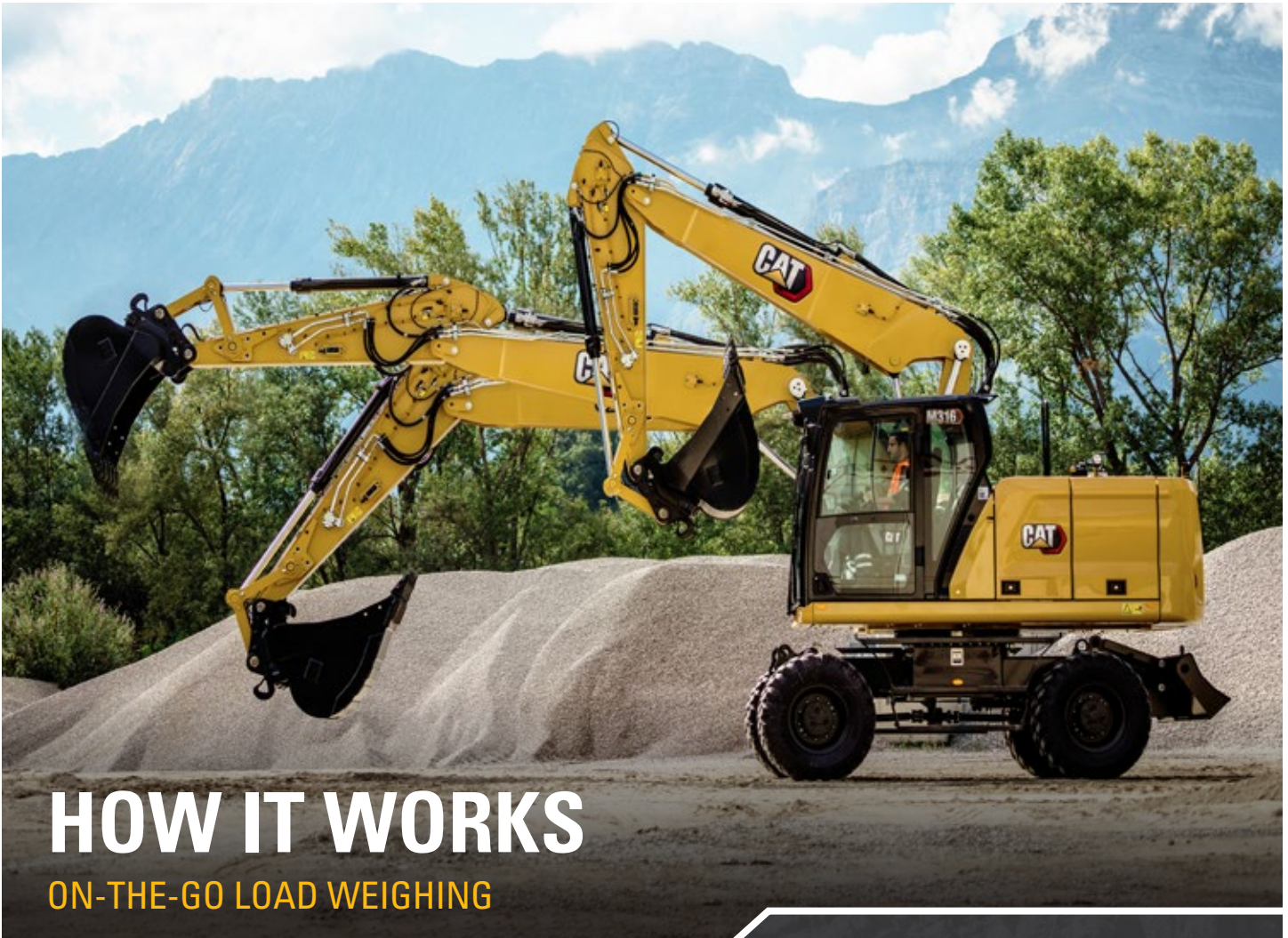
WHAT CAN PAYLOAD DO FOR ME?

- + Increases productivity from operators
- + Helps to prevent over/underloading and misloading
- + Improves cycle times
- + Helps improve fuel efficiency, save on fuel costs
- + Helps retain skilled operators
- + Reduces unnecessary equipment wear and damage



INCREASE PRODUCTIVITY

UP TO 10% FASTER LOAD TIMES



HOW IT WORKS

ON-THE-GO LOAD WEIGHING

The Cat Payload system calculates material weight on-the-go by using data from sensors that measure bucket/grapple position and hydraulic pressure.

- + Automatic weighing provides estimated weights at low lifts (below weigh range) and scaled weights with the boom raised (through the weigh range).
- + Easily tip-off excess material on the last pass with real-time weight estimates for precise loading - eliminate under / overloading.
- + Bucket/grapple payloads are transferred to the truck cumulative payload weight as soon as an estimated weight is calculated. The payload is latched to the truck once the bucket is fully dumped.
- + Set optional grab and dump area boundaries to help prevent payload miscounts, which may occur during activities such as re-sorting.
- + View bucket/grapple payload and truck cumulative payload weight effortlessly from the touchscreen monitor.
- + Receive payload overload alerts when bucket/grapple loads exceed machine payload limits.
- + Operators can track daily production from the cab with quick access to truck weights, load/cycle counts, material movement, and daily totals.
- + Managers can view payload details and key performance indicators online to help manage the business - requires a Cat Productivity or VisionLink® subscription.

PAYLOAD TECHNOLOGY BASIC OPERATION:

1. Warm up lift components for better weigh range accuracy.
2. Zero the empty bucket/grapple.
3. Set payload target weight (optional).
4. Load bucket/grapple with material.
5. Lift smoothly through the weigh range to generate a scaled weight (indicated by icon on display).
6. Tip-off bucket/grapple (as needed) to remove excess material to meet target weight for the last pass.
7. After the last bucket/grapple pass, press store to save payload data to memory and update totals.

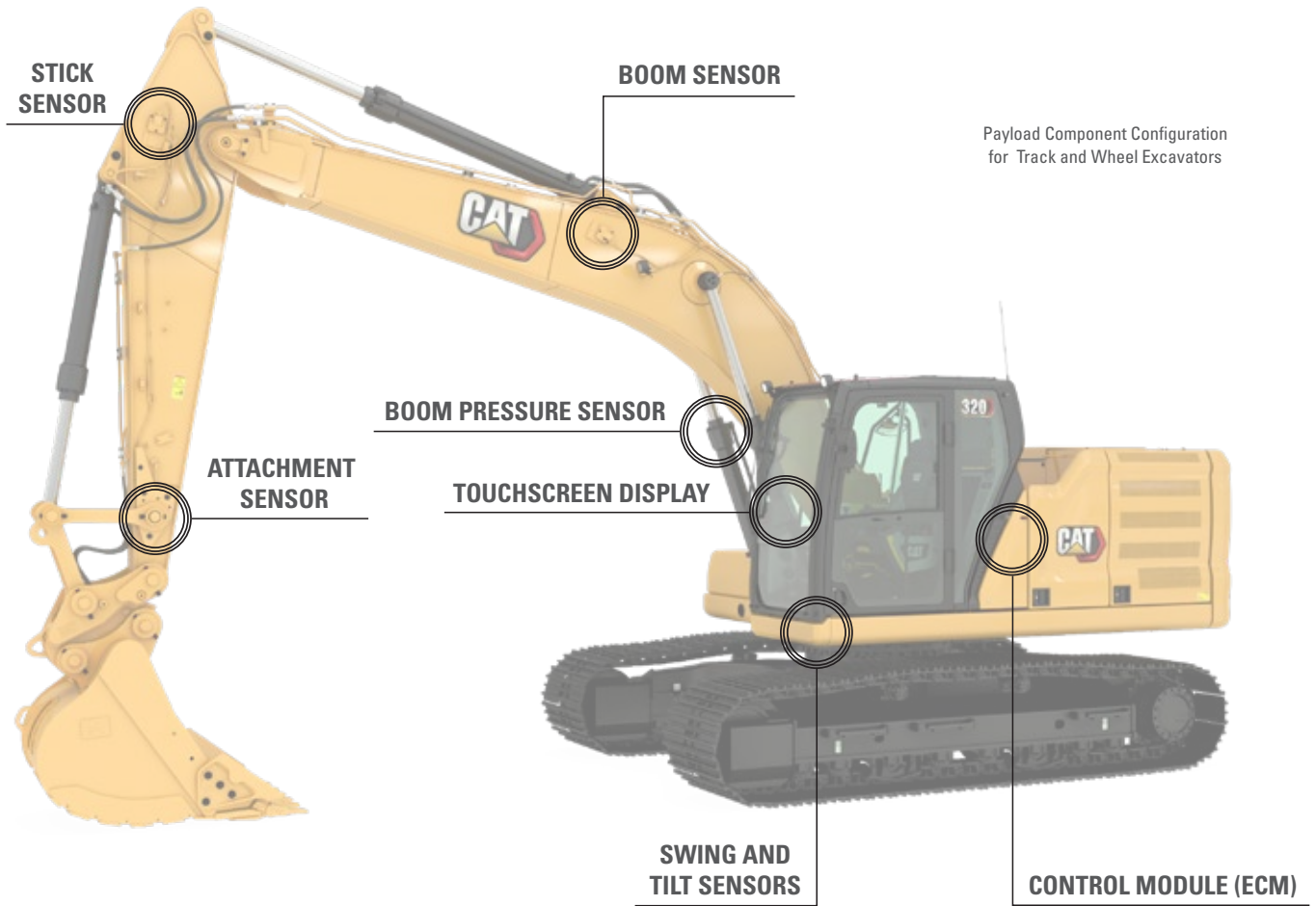


FASTER CYCLE TIMES

PAYLOAD TECHNOLOGY

MODULAR COMPONENTS

Cat Payload's integrated components are protected from damage, ensuring long life, reliable control, and accurate results. Features and availability may vary. Consult your Cat dealer for model-specific information.



ATTACHMENTS

Payload for excavators functions with a wide array of work tool attachments.



Buckets
(Various Types)



Demolition & Sorting Grapples



Clamshell Grapples



Orange Peel Grapples

NOTE: Payload for grapples may require a software update. Availability may vary by region and model. Consult your Cat dealer for details.

PAYLOAD DISPLAY OVERVIEW



Next Generation Display Shown
(Display Can Vary By Machine Model)

PAYLOAD NAVIGATION MENU	
1	Material ID - The material type that is being loaded.
2	Bucket/Grapple Count - The number of payloads the machine has loaded into the current truck.
3	Bucket/Grapple Payload - Displays the weight of material currently in the bucket/grapple.
4	Weight Status Icon - Conveys the different weight statuses to the operator.
5	Target Weight Status Icon - Conveys the target weight status to the operator (only active if a target has been set).
6	Remaining Payload - Displays the remaining weight needed to achieve the target payload.
7	Grab Dump Area Active Icon - Conveys if grab dump area boundaries have been set. Helps prevent payload miscounts during activities such as re-sorting.
8	Truck Payload Active Icon - When grab dump areas are in use, this alerts the operator if a payload value will be added to the truck payload (icon will turn green).
9	Truck Payload - Weight of the amount of material currently loaded in the truck.
10	Truck Count - Indicates number of times the truck has been loaded during the current shift.
11	Truck ID - Identifies the truck that is being loaded.

WEIGHT STATUS ICONS	
	Estimated Weight Complete
	Estimated Weighing
	Accurate Weight Complete
	Accurate Weighing

TARGET WEIGHT STATUS ICONS	
	Target Not Reached
	Last Cycle
	Target Reached
	Overloaded

GRAB DUMP AREA ICONS	
	Swing Left Angle On
	Swing Right Angle On
	Forward Border On
	Swing Left & Right On
	All On (Swing & Forward)

PAYLOAD CYCLE

HIT PRECISE TARGETS EVERY TIME



1. DIG

The weight from the previous bucket is displayed. If the previous load only obtained an estimated weight, the weight status indicator will be outlined in white. If an accurate weight was obtained, the indicator will be outlined in green.

2. LIFT

The weight status indicator will change to indicate an estimated weight when the bucket is curled and lifted. The estimated weight will be displayed.

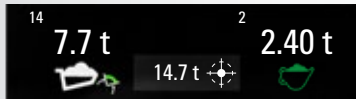


3. SWING (START)

Bucket payload weight begins to converge with swing data and the estimated weight is still displayed.

4. SWING (END)

Weighing is completed. Bucket payload for current cycle is updated to the new weight and the weigh status indicator shows accurate weighing.



5. DUMP

When the material is dumped, truck payload, remaining payload, and bucket count are updated.

6. RETURN

When the bucket is lowered to begin excavation the weigh indicator displays the accurate weight complete icon.





GRAB-DUMP AREA

STOP MISCOUNTS WHEN USING GRAPPLES

Operators can set grab-and-dump area boundaries to help prevent miscounts when using a grapple. If limits are not specified, a miscount can occur during a re-grab of material.

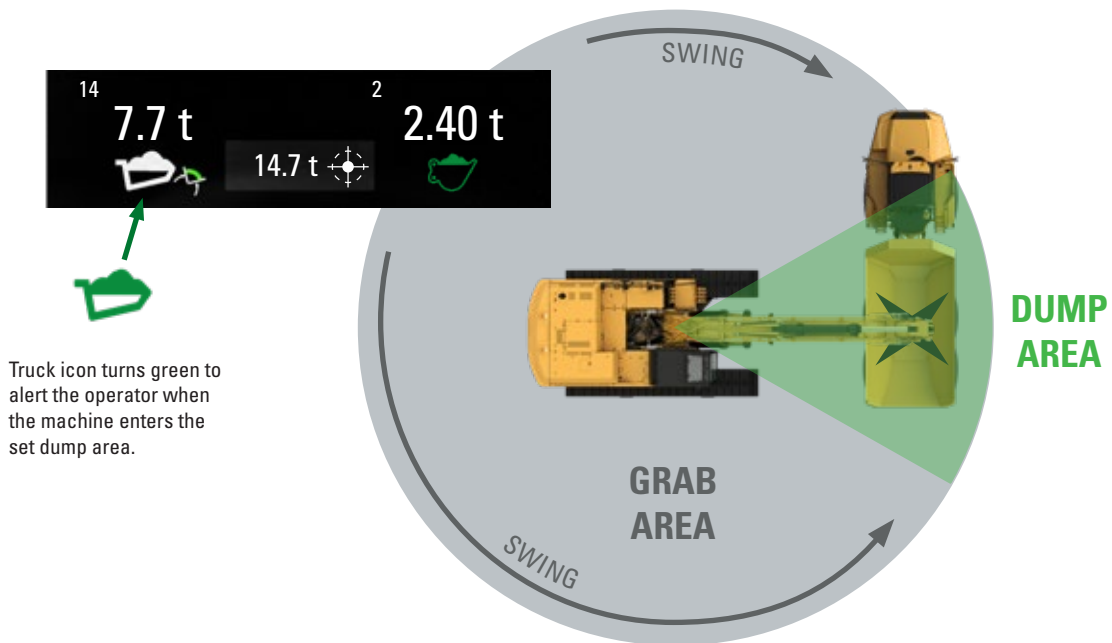
Grab-and-dump functionality calculates and counts the weight of the dump operation as soon as the grapple crosses over a preset angle or distance. This functionality is helpful for industrial waste, demolition, and wood applications.

GRAB AREA

- When the machine dumps an object in this area, the bucket payload value will not be reflected in the truck payload.

DUMP AREA

- The determined bucket payload value will be added to Truck Payload when dumping the object inside this area.





RIGHT AMOUNT

ELIMINATE UNDER OR OVERLOADING

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

AEXQ2265-02 (09-2022)
(Global)

© 2022 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, LET'S DO THE WORK, VisionLink, their respective logos, "Caterpillar Corporate Yellow," the "Power Edge" and Cat "Modern Hex" 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 Caterpillar Inc., registered in the United States and in other countries.

www.cat.com www.caterpillar.com

