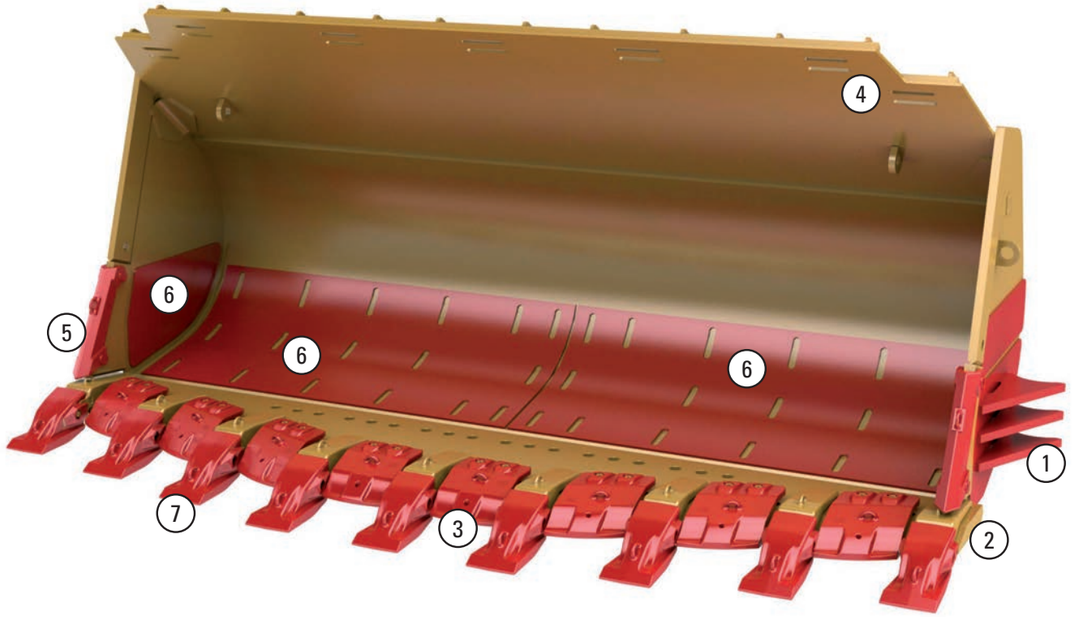
Cat® Buckets and Ground Engaging Tools

for Large Wheel Loaders 986 - 994

Features:	Benefits:
Loads easy	Cat® buckets feature optimizing profile maximizing material retention and minimizing dig time translating into significant productivity and fuel efficiency improvements. The buckets have a long floor for easy penetration of piles. Less time in the pile is less fuel burned. All of this combined with an improved visibility to the load.
High Fill Factor	Cat buckets have a higher fill factor, when compared to other buckets of the same rated capacity, up to 115%. More material can be moved with every pass.
Carries more	Bucket shape and strike plane angle are designed for material retention and consistent load sizes.
More uptime	A spill guard diverts overflow away from the hinge pins, lift arms, hydraulic cylinders and tilt sensors helping to protect these areas of the machine. So less money is spend on parts.
Made to last	Cat buckets are designed and built to Caterpillar specifications - guaranteeing quality and durability. High-strength parts and components provide durability without required thick, heavy materials and lead to longer uptime and larger payloads, cycle after cycle.

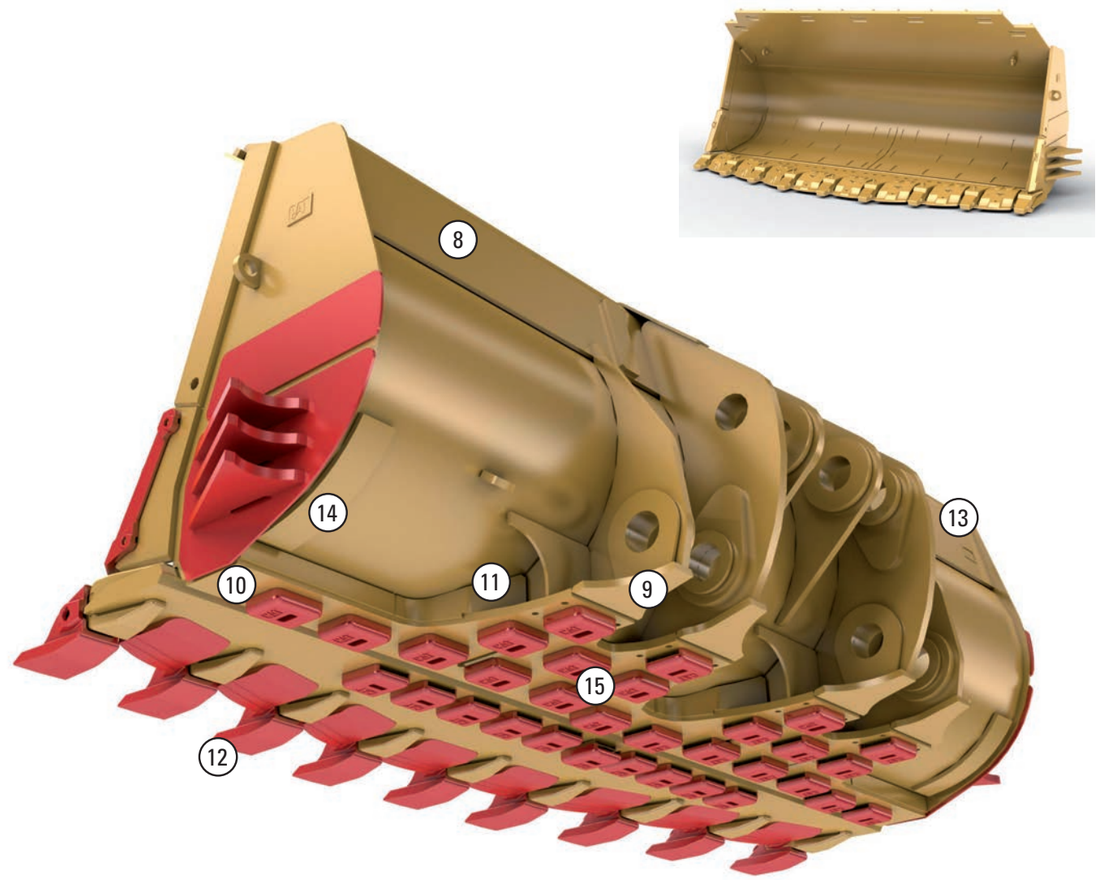
Caterpillar offers a broad range of loading and specialty buckets for Large Wheel Loaders. These buckets configure the machine to suite a wide range of applications. Buckets come in two general classifications, being Performance series for production and loading and Specialty buckets for specific conditions and applications.



Heavy Duty Rock Bucket

1. Rock Deflectors standard on some bucket styles
2. BEEPs (Bucket Edge End Protection)
3. Several segment options available for base cutting edge protection
4. Slots in top guard for visibility to the material
5. Sidebar Protectors available for sidebar protection
6. Additional wear plates and liners standard on some bucket styles
7. GET Caterpillar® K-series GET tips are casted from DH-3TM material that maintains hardness for longer wear life in tough digging applications where higher temperatures are generated

Performance Series Buckets for Large Wheel Loaders

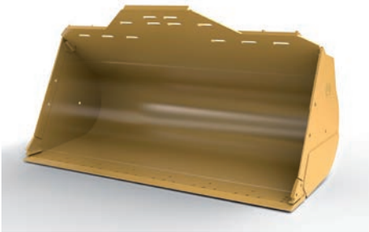


Heavy Duty Rock Bucket

8. Box section with internal gussets for structural life and stress distribution
9. Raised heel plates for reduced wear and drag during loading
10. Bottom plate extends across entire bottom for added structural support
11. Shell-and-Tine construction (box section) to strengthen bucket structure
12. Many tip options available for various applications
13. ID Plate provides bucket information
14. Bottom Bucket “Skis” for added wear protection
15. MAWPS (Mechanically Attached Wear Plate System) available for quick change of wear material

Matched to your machine and your application
The combination of the right bucket with the right machine will provide the best possible performance in any particular application.

General Purpose

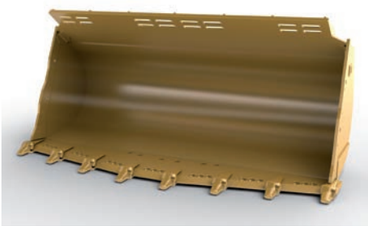


Width range: 3695 - 3900 mm
Capacity range: 6.1 - 8.4 cum

For stockpile loading loose materials such as gravel, sand, and dirt in load-and-carry applications. Intended for use in low impact materials.

- Equipped with straight edge
- Available with bolt-on cutting edge, bolt-on two-strap adapters, or bolt-on adapters with segments
- The Caterpillar corner guard system allows interchangeability between bolt-on cutting edge and bolt-on adapters
- Pre-drilled to accept corner protectors as recommended with a bolt-on cutting edge
- Wide range of tips available for specific applications

Rock

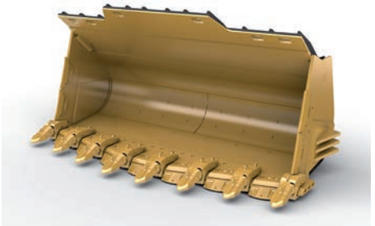


Width range: 3812 - 6220 mm
Capacity range: 5.4 - 19 cum

For use in applications such as face loading limestone and other unprocessed rock. Also used in truck and hopper loading for a wide range of quarry materials. Intended for use in low to moderately abrasive applications.

- Available with spade or straight edge
- Available with bolt-on cutting edge system or weld-on two-strap adapters with segments
- As an option, general duty, heavy duty, or half arrow segments are available for additional edge protection
- Pre-drilled sidebars to accommodate up to two sets of sidebar protectors
- Wide range of tips available for specific applications

High Abrasion Rock



Width range: 4146 mm
Capacity range: 5.0 - 13 cum

For use in extremely aggressive applications such as face loading iron ore. Intended for use in materials where high abrasion and moderate impact is encountered and a smooth floor is desired. Includes all of the construction features of a Rock Bucket with the following additions:

- Thicker spade edge with up sized weld-on top strap adapters
- Additional wear material including floor and radius liners, additional inside and outside wear plates, as well as bottom skis
- Bolt-on half arrow segments
- Rock deflectors for tire protection
- Four (2 sets) sidebar protectors
- BEEPs
- Available with or without MAWPS
- Adapter covers
- Top mounted wear plates

Performance Series Buckets for Large Wheel Loaders

Heavy Duty Rock

Width range: 4014 - 5080 mm
Capacity range: 5.4 - 17 cum

For use in extremely aggressive applications such as face loading tightly compacted pit materials. Intended for use in materials where moderate abrasion and high impact is encountered. Includes all of the construction features of a Rock Bucket with the following additions:

- Thicker spade edge with up sized weld-on double strap adapters
- Additional wear material including floor and radius liners, additional inside and outside wear plates, as well as bottom skis
- Bolt-on half arrow segments
- Rock deflectors for tire protection
- Four (2 sets) sidebar protectors
- BEEPs
- Available with or without MAWPS

Heavy Duty Granite

Width range: 3988 - 5160 mm
Capacity range: 4.4 - 13.0 cum

For use in extremely aggressive applications such as face loading granite. Intended for use in materials where high abrasion and high impact is encountered and a smooth floor is desired. Includes all of the construction features of a Rock Bucket with the following additions:

- Thicker spade edge with up sized weld-on top strap adapters
- Additional wear material including inside and outside wear plates, as well as bottom skis
- Bolt-on half arrow segments
- Rock deflectors for tire protection
- Four (2 sets) sidebar protectors
- BEEPs
- MAWPS
- Adapter covers
- Top mounted wear plates
- Bolt-on top cutting edge protection
- Heel shrouds
- Strong rock guard
- Full shell liner wear protection

Bucket application guide

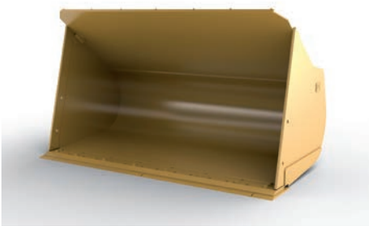
Choosing the right bucket optimizes production, lowering operating cost significantly. The right machine-bucket combination will better withstand wear and fatique.

Bucket Material Recommendations	GP	Rock	Heavy Abrasion Rock	Heavy Duty Rock	Heavy Duty Granite
Sand and Gravel	Recommended	Recommended	Acceptable	Acceptable	Not Recommended
Coal Seam	Not Recommended	Recommended	Acceptable	Acceptable	Not Recommended
Loose Coal	Recommended	Acceptable	Acceptable	Acceptable	Not Recommended
Shot Limestone	Not Recommended	Recommended	Recommended	Acceptable	Not Recommended
Crushed Stone (rehandled)	Recommended	Recommended	Acceptable	Acceptable	Not Recommended
Shot Granite	Not Recommended	Not Recommended	Not Recommended	Acceptable	Recommended
Iron Ore	Not Recommended	Not Recommended	Not Recommended	Recommended	Acceptable
Gypsum	Acceptable	Recommended	Recommended	Acceptable	Not Recommended
Woodchips	Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended
Cinders / Ash	Recommended	Acceptable	Not Recommended	Not Recommended	Not Recommended
Soil	Recommended	Acceptable	Not Recommended	Not Recommended	Not Recommended
Slag / Skulls	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended

Recommended
Acceptable
Not Recommended

Matched to your machine and your application
Caterpillar offers a range of buckets for special applications.

Coal

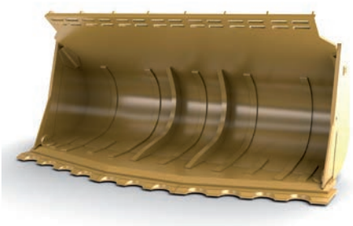


Width range: 3692 - 6300 mm
Capacity range: 10.3 - 36 cum

For use in coal or other light density non-abrasive materials.

- High capacity for maximum material movement
- Light construction increases the material volume that can be lifted
- Bolt-on cutting edge and floor liner for improved life of wear surfaces
- Coal Bucket also available for chopping and prying applications

Slag

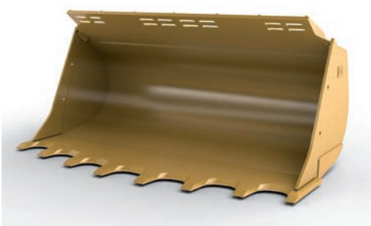


Width range: 3900 - 4710 mm
Capacity range: 6.5 - 9.2 cum

Designed to work in the extreme conditions of a steel mill, including moving slag and skulls.

- Replaceable weld-on serrated edge segments with ARM (Abrasion Resistant Material) featuring self-sharpening chamfers that provide excellent penetration
- Also available with replaceable weld-on straight cutting edge or adapters and tips
- Additional wear strips and gussets in the inside floor and radius for additional strength for maximum bucket structural life in extreme temperatures
- Additional material thickness in critical structural components to maximize durability in aggressive slag handling applications

Serrated Edge Rock



Width range: 3812 - 5080 mm
Capacity range: 6.1 - 14.9 cum

Based on the standard Rock bucket design and can be used for face loading low abrasive materials where greater penetration is required, such as limestone or coal applications. As there are no loose tips (which can fall into a crucher) used on this bucket the integrated serrated teeth prevent damaging stationary.

Bucket Ground Engaging Tools to protect your investment

Caterpillar Ground Engaging Tools (GET) can increase machine productivity and protect the expensive structural components of your buckets.

Cat K-series GET offer:

- Reliable tip retention from better retainer locks
- Faster tip change-out due to a convenient twist-on design
- Increased tip life of 10 to 15 percent with sharper, better penetrating tips

Heavy Penetration
Recommended for high abrasive and impact conditions, especially shot rock. Excellent penetration and wear material, stays sharp.

Extra Duty
Recommended for general applications requiring additional wear material in moderate impact conditions. Good wear material, good penetration.

Penetration Plus
Recommended for harder to penetrate, moderate to high impact, moderate abrasive materials. Good penetration, stays sharp.

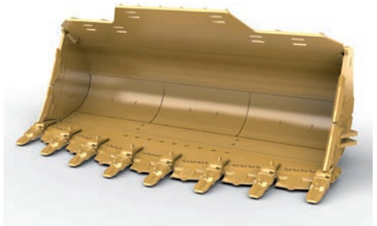
Heavy Abrasion
Recommended for high abrasive, moderate impact, easier to penetrate materials. Excellent wear material, less penetration.

Penetration
Recommended for harder to penetrate, moderate impact, lower abrasive materials. Very good penetration, less wear material, stays sharp.

General Duty
Recommended for general applications in moderate impact and abrasive conditions. Good penetration, self-sharpening cavities.

Special application Buckets for Large Wheel loaders

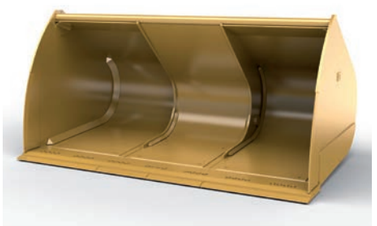
Iron Ore



Width range: 3940 - 5160 mm
Capacity range: 4.4 - 10.0 cum

For use in extremely aggressive applications such as face loading iron ore. Intended for use in material where high abrasion and moderate impact is encountered and where a smooth floor is desired.

Bonus Bucket

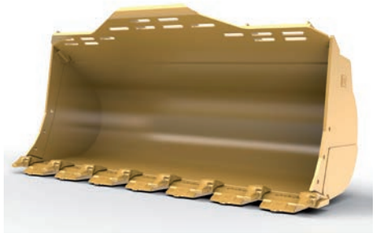


Width range: 4000 - 5000 mm
Capacity range: 10.0 - 30.0 cum

Bonus Buckets are for handling light and loose materials up to a material density of 1.0 ton/cum.

These buckets have increased capacity rearwards alongside the machine suspension. It allows the bucket to be bigger due to a rearwards shift of the center of gravity compared to standard buckets. The benefit of a slightly larger dump height can be very important too.

Custom



For buckets that differ from the standard design we can also provide assistance in engineering and building to suit your particular application. Ask your dealer for more information.

Bucket Ground Engaging Tools to protect your investment

Sidebar Protectors
- Protects bucket sidebars from wear
- Pin-on for easy removal and installation
- Can be stacked one above the other for more protection
- Protectors are reversible to maximize the use of available wear material and minimize cost per hour

Corner Protector
- Protects against wear on bucket corners
- For use with bolt-on cutting systems on General Purpose Buckets
- Improves penetration while loading

Wings (Rock Deflector)
- Flat, triangular pieces of steel strategically located and welded on to the sides of buckets
- Designed to defl ect or move rocks away from the path of the machine wheels

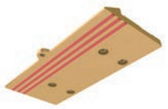
MAWPS (Mechanically Attached Wear Plate System)
- Alternative to traditional weld-on or bolt-on wear plates
- Hammerless retention system allows for quick replacement times in the field
- Can be installed on virtually any flat or moderately curved surface
- Works well on the bottom surface, side plates, and any other high wear area of the bucket

Top Mounted Wear Plates
- Provides additional wear protection to the top of the base cutting edge
- For use with the bolt-on half arrow segments for full coverage of the base edge
- Recommended for use in highly abrasive, moderate impact applications

Bolt-on Half Arrows
- Made from Caterpillar through-hardened DH-2® steel alloy for superior hardness and strength properties
- Maximizes base edge protection by covering the leading edge face
- Enhances penetration by providing a smooth transition with the bucket base edge

General Duty and Heavy Duty Segments
- Made from Caterpillar through-hardened DH-2 steel alloy for superior hardness and strength properties
- Heavy Duty segments feature increased thickness compared to the General Duty segments
- Segments are solid steel providing maximum potential wear material
- Offer increased wear for bucket base edges
- Reversible to provide customers the ability to obtain a second wear surface

Adapter Covers
- Protect the adapters and the welds on the adapters from excessive wear
- Use these in extremely high abrasive conditions such as granite and iron ore
- Comes standard on high abrasion and heavy duty granite buckets



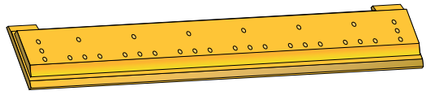
Abrasion Resistant Material (ARM)
- Applied per customer specifi cations, tungsten-carbide chips are embedded into a weld, which greatly adds wear life to welds and base material.
- Provides wear surface hardness of 90 Rockwell

Heel Shrouds
- Provides replaceable wear protection to the bottom and side of the bucket, as well as protection for the weld in this area
- Increases life and durability of this area

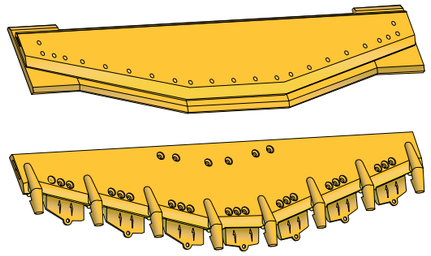
Base Edge End Protectors (B.E.E.P.s)
- Protects the end of the cutting edge and outside adapter weld from wear
- Replaceable weld-on protection

Bucket Base Edge selection guidelines

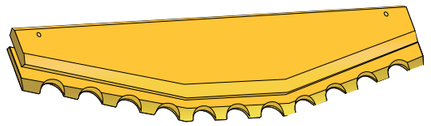
Choosing the proper bucket and front edge type can dramatically increase productivity and lower your cost per ton.



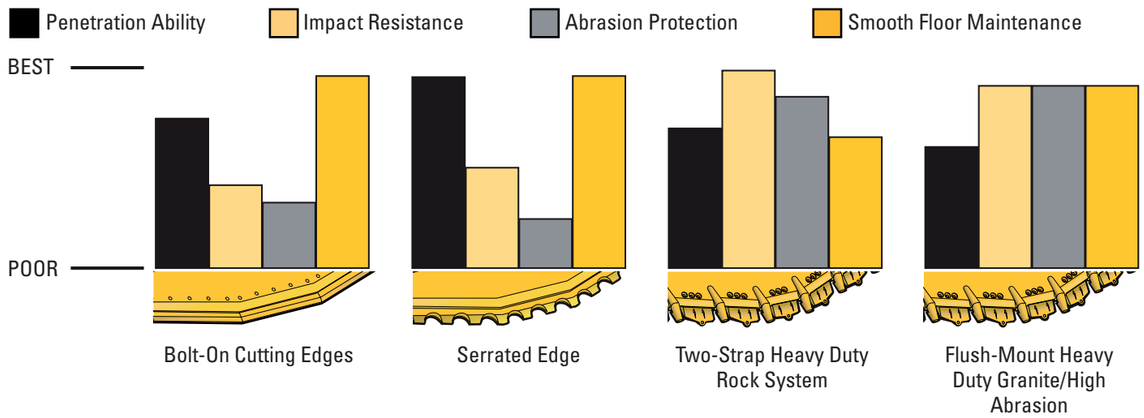
1. Straight (with BOCE, Weld-on or Bolt-on Adapters)
- Straight edges are used for loading loose material where penetration is not critical
- Used mainly on General Purpose / Material Handler and Coal Buckets



2. Spade (with BOCE or Adapters)
- Spade edges are used to increase bucket penetration in a face loading application
- Used on most Rock, Heavy Duty Rock, High Abrasion Rock and Heavy Duty Granite Buckets



3. Serrated
- Serrated edges are a self-sharpening design for low to medium abrasive materials giving the customer excellent penetration and floor clean up
- Used on Slag and Coal Buckets, as well as specialty buckets



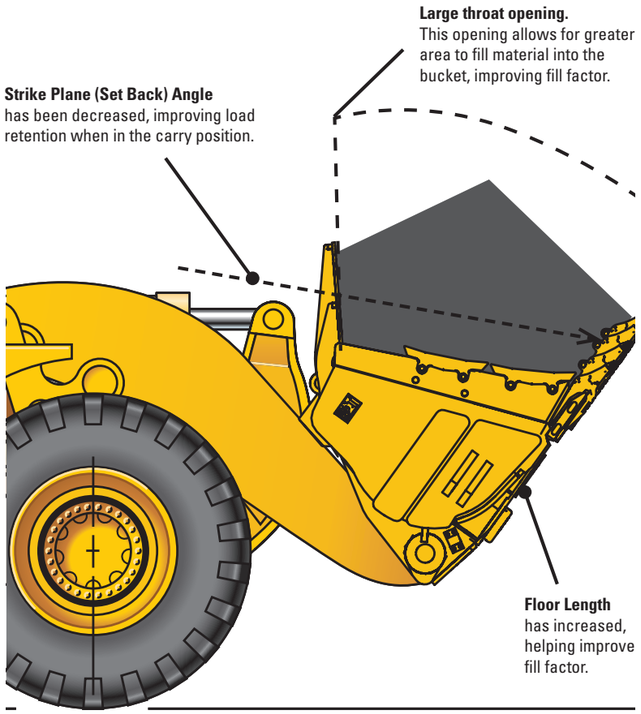
Bucket Options

This chart shows, by bucket type, the features that are standard, optional, custom or not available on a particular bucket type.

Bucket Options	GP	Rock	High Abrasion Rock	Heavy Duty Rock	Heavy Duty Granite
Straight Edge	Standard	Option	Custom	Custom	Custom
Spade Edge	Not Available	Option	Standard	Standard	Standard
Serrated Edge	Not Available	Custom	Custom	Custom	Custom
Floor Liner	Custom	Custom	Standard	Standard	Standard
Radius Liner	Custom	Custom	Standard	Standard	Standard
Inside Wear Plate	Custom	Custom	Standard	Standard	Standard
Outside Wear Plate	Standard	Standard	Standard	Standard	Standard
Standard Duty Segment	Option	Option	Custom	Custom	Custom
Heavy Duty Segment	Option	Option	Custom	Custom	Custom
Bolt-on Half Arrows	Option	Option	Standard	Standard	Standard
Top Mounted Wear Plates	Custom	Custom	Custom	Standard	Standard
Sidebar Protectors	Custom	Option	Standard	Standard	Standard
Wings (Rock Deflectors)	Custom	Custom	Standard	Standard	Standard
Corner Protectors	Option	Not Available	Not Available	Not Available	Not Available
Base Edge End Protectors (BEEPs)	Custom	Custom	Standard	Standard	Standard
Bolt-on Cutting Edge (BOCE)	Option	Option	Not Available	Not Available	Not Available
Flush-Mount Adapters (K-Series)	Custom	Custom	Custom	Standard	Standard
Double-Strap Adapters (K-Series)	Custom	Standard	Standard	Not Available	Not Available
Bottom Wear Plates K-110 988H	Standard	Standard	Standard	Standard	Standard
Full Liner K-130 988H / 990H	Not Available	Custom	Custom	Custom	Standard
Heel Shrouds K-150 990H / 992G	Not Available	Custom	Custom	Custom	Standard
Top Cutting Edge Cover K-170 992G	Not Available	Custom	Custom	Custom	Standard
Skis J-700 994F	Custom	Custom	Standard	Standard	Standard
Mechanically Attached Wear Plate System (MAWPS)	Custom	Custom	Standard	Standard	Standard

Standard Option Custom Not Available

Performance series buckets



Performance Series Buckets (foreground) have a longer floor and large throat opening over current buckets (background), resulting in improved performance.

Cat Buckets for Large Wheel Loaders

You can count on genuine Cat quality built in every bucket
Caterpillar has a 35 year legacy designing and manufacturing buckets. A tremendous amount of data and customer feedback on use in applications and materials from around the world is integrated into each bucket design. With every Cat bucket that leaves our factory, not only leaves a world-class product, but also a first-class promise. So you can be sure that every day we do our utmost to build the products that will make you more efficient and productive.

Cat Buckets offer you:

MORE PAYLOAD

- Better Fill Factors
- Better Material Retention
- Less need for skilled operators

LESS FUEL BURNED

- Faster Loading
- Less clean up (improved spill guard)

LESS MACHINE DAMAGE

- Tires
- Sensors
- Glass

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

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Featured machines in photos may include additional equipment. See your Caterpillar dealer for available options.

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