

CAT® GROUND ENGAGING TOOLS



FOR CONSTRUCTION



MADE FOR YOUR APPLICATION.

Protect expensive machine components. Reduce your operating costs. And get the most out of your machine's performance.

The most important part of any machine is its work tool. Buckets or blades, tips or edges, rippers or side cutters—no matter the size, worktools and Ground Engaging Tools (G.E.T.) are the main reason the machine exists. G.E.T. have a direct effect on the machine's ability to produce. Improper selection affects not only your productivity, but also your fuel consumption, maintenance costs and possibly the longevity of your equipment.

Caterpillar offers "off-the-shelf" and custom G.E.T. systems that maximize machine productivity, and your Cat® dealer can help you establish an effective management program that minimizes preventable problems—working to reduce your operating and maintenance costs.

Use this catalog to learn more about what's available for your equipment, then work with your Cat dealer's G.E.T. specialist or PSSR to select the components built for your industry and jobsite conditions. We'll make sure you get the rugged durability, solid protection and lowest cost-per-ton production system you need.





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Part number reference can
be found in Appendix (PEBJ0079)

*Note: Please send all feedback to
<https://dealer.cat.com/en/ps/parts/parts-mktg/get/c/form.html>

WHEEL LOADERS (950-994)

STRENGTH. DURABILITY. LONG LIFE. PLUS EVERYTHING YOU NEED TO BOOST UPTIME ON YOUR JOB.

For wheel loaders, you can choose from Cat Advansys, K Series, J Series and Hammerless Tip & Adapter Systems, each available with multiple tip options for a range of jobsite conditions. Optimize your machine's productivity in every jobsite condition with the wide range of G.E.T. products available. Cat buckets and G.E.T. make up the only bucket system designed and developed to maximize the performance and productivity of your Cat wheel loader.



TIP SELECTION GUIDE

Even though bucket tips come in many shapes and sizes, you don't have to be an expert to choose the right ones. Use the chart below to determine if the material you're digging in is high, medium or low impact and abrasion—then find the balance you need among these three factors:

1 STRENGTH







The ability to withstand digging and penetrating shocks and high breakout forces

2 PENETRATION

The ability to penetrate tough material when it's tightly compacted, rocky or frozen

3 WEAR LIFE

The ability to withstand wearing, scouring and abrasive action of the material being handled

	988-994 WHEEL LOADERS IMPACT (material size)	950-982 WHEEL LOADERS IMPACT (material size)	950-994 WHEEL LOADERS ABRASION (tip life)
LOW	 0-6" 0-152mm	 0-4" 0-102mm	> 1,000 hours
MEDIUM	 6-18" 152-457mm	 4-12" 102-305mm	250-1,000 hours
HIGH	 18"+ 457mm+	 12"+ 305mm+	< 250 hours

CAT ADVANSYS TIP & ADAPTER SYSTEM

BUILT TO DELIVER MAXIMUM PRODUCTIVITY AND THE LOWEST BUCKET LIFECYCLE COST IN THE TOUGHEST APPLICATIONS.

Cat Advansys is built for machine productivity, balancing tip wear material and penetration requirements. Integrated hammerless retention ensures you are back to work in minutes without a separate retainer.

PERFORMANCE & PRODUCTIVITY

Heavy Abrasion and Heavy Penetration designs have more usable wear material while maintaining profile during the full life of the tip.

EXTEND BUCKET LIFECYCLE

Adapter design directs material flow over adapter strap, which can extend adapter service life and bucket lifecycle.

ENHANCE JOBSITE SAFETY

Hammerless system. A 3/4 inch retainer lock requires no special tools for installation and removal.

CAT ADVANSYS TIP OPTIONS

Below are the tip shapes best suited for the wide range of jobsite conditions performed by large wheel loaders. We also offer additional Cat Advansys tips more commonly used with excavators. Your Cat dealer can help you choose the one that offers the right balance of penetration and wear life for your application.

ABRASION ↑

HEAVY ABRASION



» **Heavy Abrasion** tips feature a redesign for the Cat Advansys system that results in 11 percent more usable wear material than K Series and a tip shape that stays sharp through the life of the tip. These tips are available with Abrasion Resistant Material (A.R.M.)*.

A.R.M.
OPTION
AVAILABLE

HEAVY PENETRATION



» **Heavy Penetration** tips feature a redesign for the Cat Advansys system that results in 6 percent more usable wear material than K Series and a tip shape that stays sharp through the life of the tip in the most severe applications.

HEAVY DUTY



» **Heavy Duty** and **Heavy Duty A.R.M.*** tips include approximately 60 percent more wear material in the tip body. The A.R.M. wears around the profile to increase penetration.

A.R.M.
OPTION
AVAILABLE

GENERAL PURPOSE



» **General Purpose** tips are symmetrical and the baseline for other tip styles. All wear comparisons are to the General Purpose tip unless otherwise noted.

COAL



» **Coal** tips have a reduced amount of wear material to maximize bucket payload and a smooth underside to maintain a flat floor.

PENETRATION PLUS



» **Penetration Plus** tips feature 25 percent more wear material and a leading edge with 25 percent less cross-sectional area. They self-sharpen as they wear.

PENETRATION



» **Penetration** tips are ideal for densely compacted materials. They feature a leading edge with 60 percent less cross-sectional area—allowing for maximum penetration—and a single center rib that self-sharpens as it wears. These tips are available with A.R.M.*

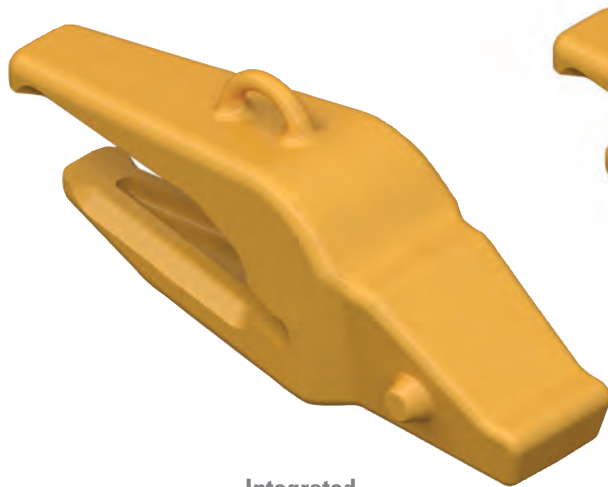
A.R.M.
OPTION
AVAILABLE

↓ IMPACT

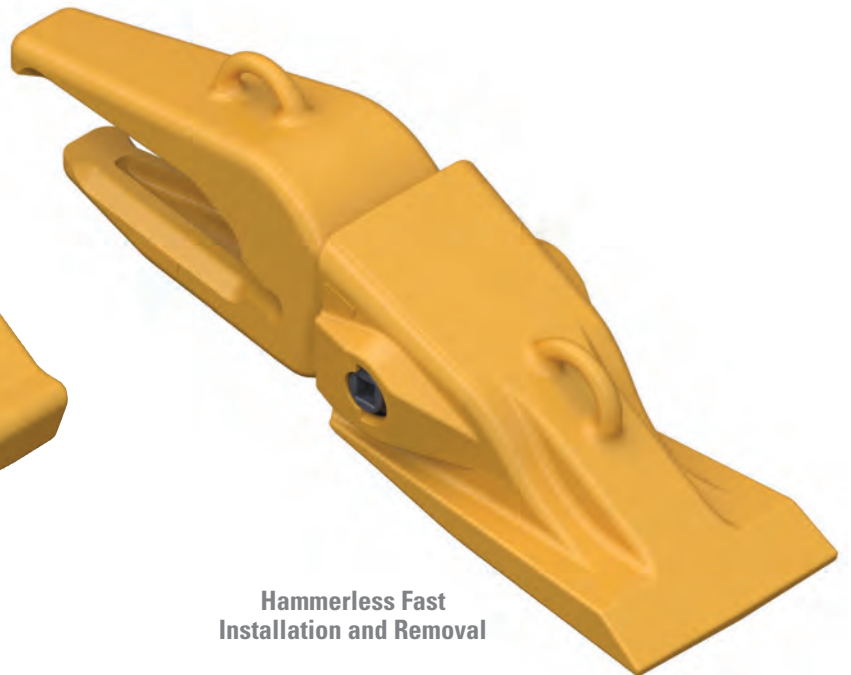
*Abrasion Resistant Material (A.R.M.) is a welding process that bonds very hard tungsten carbide particles to Cat G.E.T. to create a protective shield over the component. Typically, the A.R.M. process doubles wear life and can last even longer in some applications.

CAT ADVANSYS HAMMERLESS TIP & ADAPTER SYSTEM

Cast retention pin means no separate retention pin to buy or lose during tip replacements. The tip loads on the adapter nose, never putting the cast retention lugs under stress or wear.



Integrated Retaining Lug



Hammerless Fast Installation and Removal

CHANGE OUT TIPS QUICKLY & EASILY

CapSure hammerless retention requires no special tools. Just turn the retainer 180° to install or remove the tips.

Scan the QR Code to the right to watch the installation video.



1

Turn retainer 180° clockwise to lock.



2

Turn retainer 180° counter clockwise to unlock.



CAT ADVANSYS ADAPTER SYSTEM



NOSE GEOMETRY DESIGN FEATURES

- Asymmetrical nose geometry reduces sliding wear on adapter nose surfaces, extending the life of the adapter.
- The asymmetrical design ensures a reliable fit even when the adapter surface becomes worn.

Four adapter styles cover the entire wheel loader product range.



994/994K ADAPTER WEAR CAP SYSTEM

- » Adapter cover protects the adapter and welds in high-abrasion applications like granite and iron ore.
- » Allows for more penetration.



FLUSH-MOUNT (SHOWN WITH OPTIONAL COVER)

- » 360-degree weld around the adapter provides 20 percent more weld strength than a two-strap system.
- » Adapter cover and half-arrow segment create a flush surface to keep the quarry floor clean, reducing potential tire damage.
- » Adapter cover protects the adapter and welds in high-abrasion applications like granite and iron ore.
- » Features a higher profile, which can affect penetration.



TWO-STRAP

- » Features a lower profile than the flush-mount adapter.
- » Allows for more penetration.
- » Available with Abrasion Resistant Material (A.R.M.).

A.R.M.
OPTION
AVAILABLE

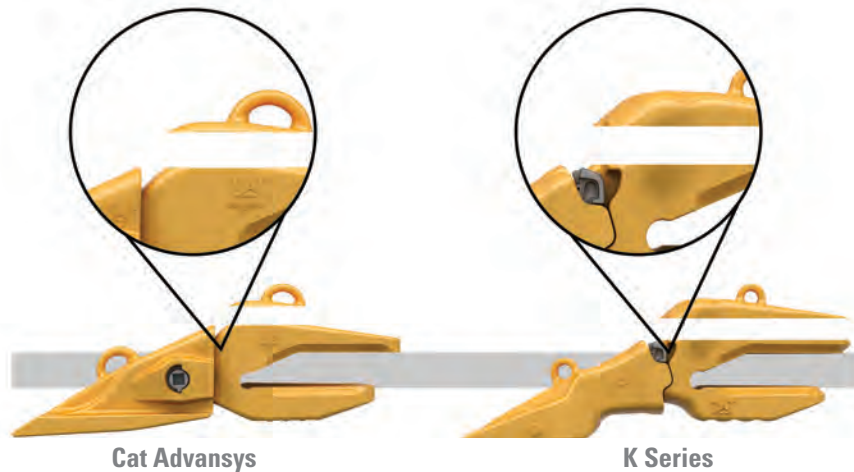


BOLT-ON

- » Gives you the flexibility to switch between cutting edge or teeth when you need more penetration (such as a frozen pile).

CAT ADVANSYS TIP SYSTEM DESIGN

The tip system design naturally shields the adapter strap even without a wear cap. This allows up to a 25% increase in wear life when compared to K series or other low profile systems.



Cat Advansys can improve tip to adapter wear life ratio. Extending your adapter life can mean fewer replacements during the bucket life cycle.

Heavy Abrasion and Heavy Penetration tips both have a longer usable wear life, while staying sharper throughout the useful life of the entire tip.



X220 Heavy Abrasion Tip¹
72% Available Wear Material



X220 Heavy Penetration Tip¹
60% Available Wear Material

¹ This is representative of one customer's and wear rates may vary by application

MACHINE COMPATIBILITY

WHEEL LOADER	SIZE CLASS	ADAPTERS AVAILABLE
950, 962	Cat Advansys 80, 90 Cat Advansys 90	Bolt-on, Flush-Mount with Adapter Cover, Two-Strap with Top Cover
966, 972	Cat Advansys 90	Bolt-on, Flush-Mount with Adapter Cover, Two-Strap with Top Cover
980, 982	Cat Advansys 100	Bolt-on, Flush-Mount with Adapter Cover, Two-Strap with Top Cover
986, 988	Cat Advansys 110	Bolt-on, Flush-Mount with Adapter Cover, Two-Strap with Top Cover
988, 992	Cat Advansys 130	Flush-Mount with Adapter Cover, Two-Strap with Top Cover
992, 993, 994	Cat Advansys 150	Flush-Mount with Adapter Cover, Two-Strap with Top Cover
994	Cat Advansys 200	Two-Strap with Wear Cap System
994K	Cat Advansys 220	Two-Strap with Wear Cap System



K SERIES TIP & ADAPTER SYSTEM

EXCELLENT PENETRATION THROUGH VERTICAL RETENTION AND COMPACT PROFILE.

K Series delivers digging performance throughout the life of the tip with its elliptical adapter nose and vertical retention design. The twist-on fit of the tip and adapter makes installation easier.

IMPROVE YOUR PRODUCTIVITY

Low-profile shape provides optimal sharpness, penetration, and digging ability throughout the tip life.

STAY SAFE & REDUCE MAINTENANCE COSTS

One-piece vertical retainer allows for easy installation and removal.

SIMPLIFY INSTALLATION

Rails on both sides of the adapter and a twist-on design hold the tip in place, allowing for quicker installation.



K SERIES TIP OPTIONS

Below are the tip shapes best suited for the wide range of jobsite conditions performed by large wheel loaders. We also offer additional K Series tips more commonly used with excavators. Your Cat dealer can help you choose the one that offers the right balance of penetration and wear life for your application.

ABRASION ↑
 IMPACT ↓

HEAVY ABRASION



» **Heavy Abrasion** tips are ideal for high-abrasion applications like sand, gravel and shot rock. They feature the maximum amount of wear material—approximately 145 percent more—and a tip base with 35 percent more surface area than Heavy Duty Penetration tips.

HEAVY PENETRATION



» **Heavy Penetration** tips are ideal for high-impact, hard-to-penetrate materials. They feature approximately 120 percent more material in the high wear area as well as a spade design that has 60 percent less cross-sectional area on the leading edge than Heavy Abrasion tips.

HEAVY DUTY



» **Heavy Duty** and **Heavy Duty Abrasion Resistant Material (A.R.M.)*** tips include approximately 60 percent more wear material in the tip body. The A.R.M. wears around the profile to increase penetration.

A.R.M.
OPTION
AVAILABLE

GENERAL PURPOSE



» **General Purpose** tips are symmetrical and the baseline for other tip styles. All wear comparisons are to the General Purpose tip unless otherwise noted.

PENETRATION PLUS



» **Penetration Plus** tips feature 25 percent more wear material and a leading edge with 25 percent less cross-sectional area. They self-sharpen as they wear.

PENETRATION



» **Penetration** tips are ideal for densely compacted materials. They feature a leading edge with 60 percent less cross-sectional area—allowing for maximum penetration—and a single center rib that self-sharpens as it wears. These tips are available with A.R.M.*

A.R.M.
OPTION
AVAILABLE

*Abrasion Resistant Material (A.R.M.) is a welding process that bonds very hard tungsten carbide particles to Cat G.E.T. to create a protective shield over the component. Typically, the A.R.M. process doubles wear life—and can last even longer in some applications.

K SERIES DRIVE-THROUGH TIP & ADAPTER SYSTEM

The drive-through system is for K80-K100 adapters and tips.

Lower-profile tip



Twist-on design



No hole in adapter



Drive-through retainer

INSTALLATION & REMOVAL

It's safe and easy—just use a standard pry tool and follow this three-step process:

Scan the QR code to the right to watch the installation video.



1 INSERT
RETAINER



2 HAMMER
RETAINER



3 SECURE
RETAINER



K SERIES TIP HAMMERLESS TIP & ADAPTER SYSTEM

The hammerless system is for K110-K170 adapters and tips.



Lower-profile tip



Twist-on design



No hole in adapter



Retainer - Bolt Drive

- » Extreme Packing
- » Slag Operations

INSTALLATION & REMOVAL

It's safe and easy—just use a standard pry tool and follow this three-step hammerless process:

To watch the installation video go to www.youtube.com/watch?v=xKWEdWjV6nl or by scanning the QR code to the right.



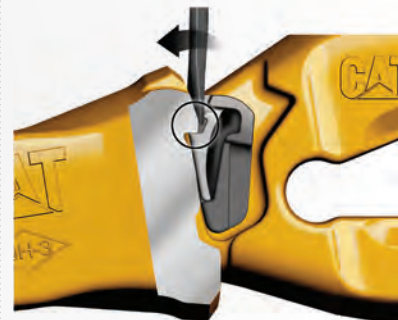
1 INSERT
RETAINER



2 PRESS DOWN
RETAINER



3 REMOVE
RETAINER



K SERIES ADAPTER OPTIONS

All K Series adapters feature rails on both sides of the nose for a twist-on design that stays in place during installation.



FLUSH-MOUNT (SHOWN WITH OPTIONAL COVER)

- » 360-degree weld around the adapter provides 20 percent more weld strength than a two-strap system.
- » Adapter cover and half-arrow segment create a flush surface to keep the quarry floor clean, reducing potential tire damage.
- » Adapter cover protects the adapter and welds in high-abrasion applications like granite and iron ore.
- » Features a higher profile, which can affect penetration.



TWO-STRAP

- » Features a lower profile than the flush-mount adapter.
- » Allows for more penetration and higher productivity.
- » Available with Abrasion Resistant Material.

A.R.M.
OPTION
AVAILABLE



BOLT-ON

- » Gives you the flexibility to switch between cutting edge or teeth when you need more penetration (such as a frozen pile).

K SERIES

WHEEL LOADER	SIZE CLASS	BUCKET TYPE / ADAPTERS AVAILABLE
950, 962	K80	Material handling,GD
	K90	Rock
966, 972	K90	Material handling,GD, rock, HD rock
972	K100	Slag
980, 982	K100	Material handling,GD, rock
	K110	HD quarry rock
980	K130	Slag
988	K110	Flush-Mount, Two-Strap, Bolt
988, 990	K130	Flush-Mount, Two-Strap
990, 992	K150	Flush-Mount, Two-Strap
992, 993, 994	K170	Two-Strap

J SERIES

WHEEL LOADER	SIZE CLASS	BUCKET TYPE / ADAPTERS AVAILABLE
950, 962	J300	Material handling,GD
	J350	Rock
966	J350	Material handling,GD, rock, HD rock
972	J350	Material handling,GD, rock, HD rock
	J400	Slag
980	J400	Material handling, GD, rock
980, 982	J460	HD quarry rock
980	J550	Slag
982	J400	Material handling, GD, rock
988	J550	Flush-Mount, Two-Strap, Bolt
990	J600	Flush-Mount, Two-Strap
992	J700	Flush-Mount, Two-Strap
994	J800	Flush-Mount, Two-Strap, Mechanically Attached Adapter

J SERIES TIP & ADAPTER SYSTEM

SIDE-PIN SECURITY WHEN YOUR APPLICATION DEMANDS IT.

Great performance and proven reliability over time—that's what you get with this classic horizontal retention system, a staple in the mining industry.

BOOST YOUR VERSATILITY

Industry-standard side-pinned design performs across a variety of applications.

ENHANCE YOUR RELIABILITY

Weld-on adapters offer excellent retention.

IMPROVE SAFETY & MAINTENANCE TIME

Ability to retrofit means you can use the hammerless CapSure™ system.



J SERIES TIP & ADAPTER SYSTEM



Rock Chisel Tip

INSTALLATION & REMOVAL

Simply use the standard pin and retainer system—and make removal even easier with our Tip Pin Remover tool.*

1 Place the tool on the tip and align the extractor with the pin.



2 Strike the tool with a hammer until the pin is removed.



3 Place the tool over the tip (A), locate the pin in the hole of the holder (B) and strike the tool (C).



*Models 992 and down use Tip Pin Remover tool. Consult your dealer for larger machines.

J SERIES TIP OPTIONS

Below are the tip shapes best suited for the wide range of jobsite conditions performed by large wheel loaders. We offer additional J Series tips more commonly used with excavators. Your Cat dealer can help you choose the one that offers the right balance of penetration and wear life for your application.

ABRASION

HEAVY DUTY ABRASION



- » **Heavy Duty Abrasion** tips are ideal for high-abrasion applications like sand, gravel and shot rock. They feature the maximum amount of wear material—approximately 145 percent more—and the tip base has 35 percent more surface area than Heavy Duty Penetration tips.

HEAVY PENETRATION



- » **Heavy Penetration** tips are ideal for high-impact, hard-to-penetrate materials. They feature approximately 120 percent more material in the high wear area, and the spade design has 70 percent less edge area than Heavy Duty Abrasion tips.

HEAVY DUTY LONG



- » **Heavy Duty Long** and **Heavy Duty Abrasion Resistant Material (A.R.M.)*** tips include approximately 60 percent more wear material in the tip body. The A.R.M. wears around the profile to increase penetration.

A.R.M.
OPTION
AVAILABLE

LONG



- » **Long** tips are symmetrical and the baseline for other tip styles. All wear comparisons are to the Long tip unless otherwise noted.

PENETRATION PLUS



- » **Penetration Plus** tips feature 30 percent more wear material and 25 percent less cross-sectional area. They self-sharpen as they wear.

PENETRATION



- » **Penetration** and **Penetration A.R.M.*** tips are ideal for densely compacted materials. They feature a leading edge with approximately 50 percent less cross-sectional area and a single center rib for strength—allowing for maximum penetration.

A.R.M.
OPTION
AVAILABLE

ROCK CHISEL



- » **Rock Chisel** tips are Heavy Duty Long tips ideal for high-impact and high-abrasion applications, such as granite. Additional length and wear material in the body helps retain the chisel shape throughout tip life.

IMPACT

*Abrasion Resistant Material (A.R.M.) is a welding process that bonds very hard tungsten carbide particles to Cat G.E.T. to create a protective shield over the component. Typically, the A.R.M. process doubles wear life—and can last even longer in some applications.

J SERIES ADAPTER OPTIONS

J Series adapters use a classic side-pinned retention system for proven, reliable performance.



FLUSH-MOUNT WITH TOP COVER

- » 360-degree weld around the adapter provides 20 percent more weld strength than a two-strap system.
- » Adapter cover and half-arrow segment create a flush surface to keep the quarry floor clean, reducing potential tire damage.
- » Adapter cover protects the adapter and welds in high-abrasion applications like granite and iron ore.



TWO-STRAP

- » Offers a lower profile than flush-mount adapters.
- » Allows for more penetration and higher productivity.
- » Available with Abrasion Resistant Material.

A.R.M.
OPTION
AVAILABLE



TWO-STRAP BOLT-ON

- » Used on 988 wheel loaders for surge or stock piles.
- » Gives you the flexibility to switch between cutting edge or teeth when you need more penetration (such as a frozen pile).



MECHANICALLY ATTACHED ADAPTER

- » Used on 994 wheel loader for mechanically attached edges.
- » Requires a C-clamp retainer.

WHEEL LOADER	SIZE CLASS	ADAPTERS AVAILABLE
988	J550	Flush-Mount, Two-Strap
990	J600	Flush-Mount, Two-Strap
992	J700	Flush-Mount, Two-Strap
994	J800	Two-Strap

HAMMERLESS SERIES TIP & ADAPTER SYSTEM FEATURING CAPSURE RETENTION

LOSE THE HAMMER, NOT THE FLEXIBILITY.

Simplify bucket tip replacement with hammerless CapSure retention. These tips are matched to side-pin adapters, allowing the flexibility to use our conventional pin retention if your application demands it.

LOWER OPERATING COSTS

Side-pin retrofit design used on J-style adapters means the pin is reusable.

ENHANCE JOBSITE SAFETY & MAINTENANCE TIME

A ¾-inch retainer lock requires no special tools and allows for hammerless installation and removal.

CHANGE OUT TIPS QUICKLY & EASILY

Positive stop is cast into the tip to prevent over-rotation—just turn 180 degrees to lock or unlock.

SPEED UP YOUR INSTALLATION TIME

Tip and retainer are one system, so there's no special assembly or extra pieces.



HAMMERLESS SERIES TIP & ADAPTER SYSTEM FEATURING CAPSURE RETENTION



Scan the QR Code to the right to watch the installation video.



INSTALLATION & REMOVAL

It's fast, easy and safe with the CapSure locking system—just follow these four simple steps:

- 1** Insert pin and washer into the adapter hole.



- 2** Slide the tip onto the adapter.



- 3** Tighten 180° into the locked position with a 3/4" ratchet.



- 4** Remove by loosening 180° to the unlocked position.



CAPSURE TIP OPTIONS

We offer four CapSure tip options designed for a range of jobsite conditions. Your Cat dealer can help you choose the one that offers the right balance of penetration and wear life for your application.

ABRASION ↑
↓ IMPACT

HEAVY DUTY ABRASION



- » **Heavy Duty Abrasion** tips are ideal for high-abrasion applications like sand, gravel and shot rock. They have the maximum amount of wear material—approximately 145 percent more—and the tip base features 35 percent more surface area than Heavy Penetration tips.

HEAVY PENETRATION



- » **Heavy Penetration** tips are ideal for high-impact, hard-to-penetrate materials. They feature approximately 120 percent more material in the high wear area as well as a sharp spade design with 70 percent less cross-sectional area on the leading edge than Heavy Duty Abrasion tips.

HEAVY DUTY



- » **Heavy Duty** tips are the baseline for other tips. All wear comparisons are to the Heavy Duty tip unless otherwise noted.

PENETRATION PLUS



- » **Penetration Plus** tips feature 30 percent more wear material and 25 percent less cross-sectional area. They self-sharpen as they wear.

OUR J SERIES ADAPTERS ARE MATCHED WITH HAMMERLESS SERIES TIPS

You can choose hammerless or positive pin systems—giving you the flexibility you need when you need it. Full details about J Series adapters can be found on page 18.



FLUSH-MOUNT WITH TOP COVER



TWO-STRAP BOLT-ON



TWO-STRAP



MECHANICALLY ATTACHED ADAPTER



BASE EDGE SYSTEMS

FASTEST INSTALLATION TIMES IN THE INDUSTRY.

Cat base edge systems go through a series of carefully controlled manufacturing processes to deliver maximum strength, durability and long life. They come completely welded and assembled with no need for preheating, dramatically shortening your installation and replacement time.

INCREASE DURABILITY

A consistent heat-treat process maximizes strength and resists abrasion. Shot blasting removes impurities that can cause inclusions on a weld, and controlled cooling reduces the chance of stress points.

SAVE INSTALLATION & REPLACEMENT TIME

Butterbead is applied to the back side of the base edge and the top strap of the corner adapter, so you can weld the edge onto the bucket without preheating.

OPTIMIZE MACHINE PERFORMANCE

Base edges are designed by Caterpillar engineers for optimal performance on specific machines.

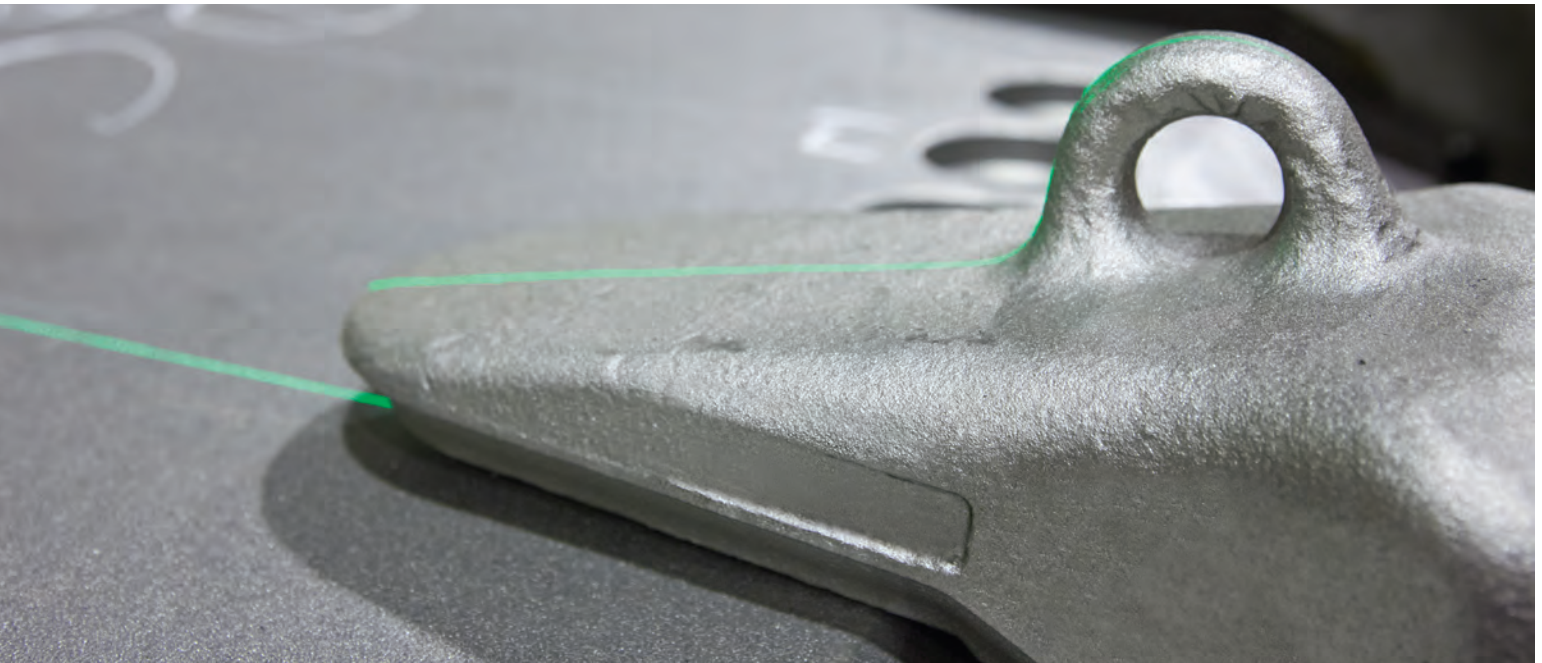


BASE EDGE SYSTEMS

Base edge replacement for 988-994 wheel loaders usually involves a base edge assembly, which is a base edge with adapters welded in place at the factory. Choose from three shapes (straight, spade and stepped spade) and three levels of build to get the right protection for your application.

GET MORE ACCURACY

Lasers place the adapters within 0.1mm of specifications.



STRAIGHT

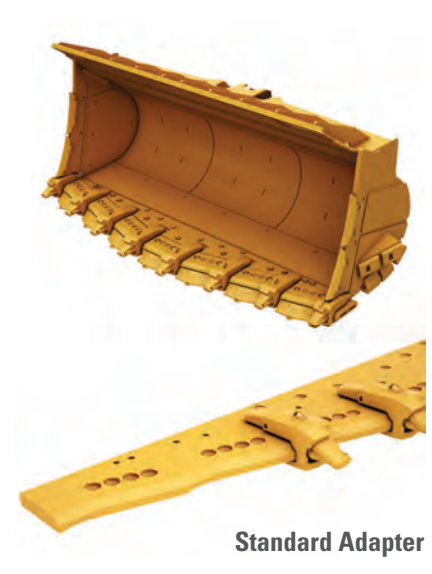


SPADE



Angled Adapter

STEPPED SPADE



Standard Adapter

BUTTERBEAD BASE EDGE ASSEMBLY

DURABLE PROTECTION COMBINED WITH SHORTER INSTALLATION TIMES.

The protection you need, with no preheating required—that's what you get with butterbead weld prep. This technique, which involves applying a layer of weld to a heat-treated, higher hardness part, makes it possible to weld a base edge to a bucket without preheating the hardened part. Choose from three shapes (straight, spade and stepped spade) and three levels of build to get the right protection for your application.

SPEED UP YOUR INSTALLATION TIME

Weld prep eliminates the need for preheating, shortening edge installation time by 30-50 percent.

GET MORE DURABILITY

Base edges have the proper butterbead weld because it is applied in the factory.



BUTTERBEAD BASE EDGE ASSEMBLY

The chart below shows how much time and money you can save by using Cat base edges prepared with butterbead weld. All 988-994 large wheel loaders have butterbead base edge offerings.

BASE EDGE THICKNESS (mm)	TIME SAVED (hours)
< 40	3 to 6
40 - 50	8 to 12
50 - 60	12 to 16
> 65	16 to 20



MECHANICALLY ATTACHED ADAPTER SYSTEM (MAA)

ADAPTER RETENTION WITH NO HAMMERS OR WELDING.

Featuring side-pin adapters and CapSure G.E.T. components, our MAA system uses a bolt-in wedge method to tighten a C-clamp, which locks the adapter securely in place every time.

CHANGE ADAPTERS FASTER

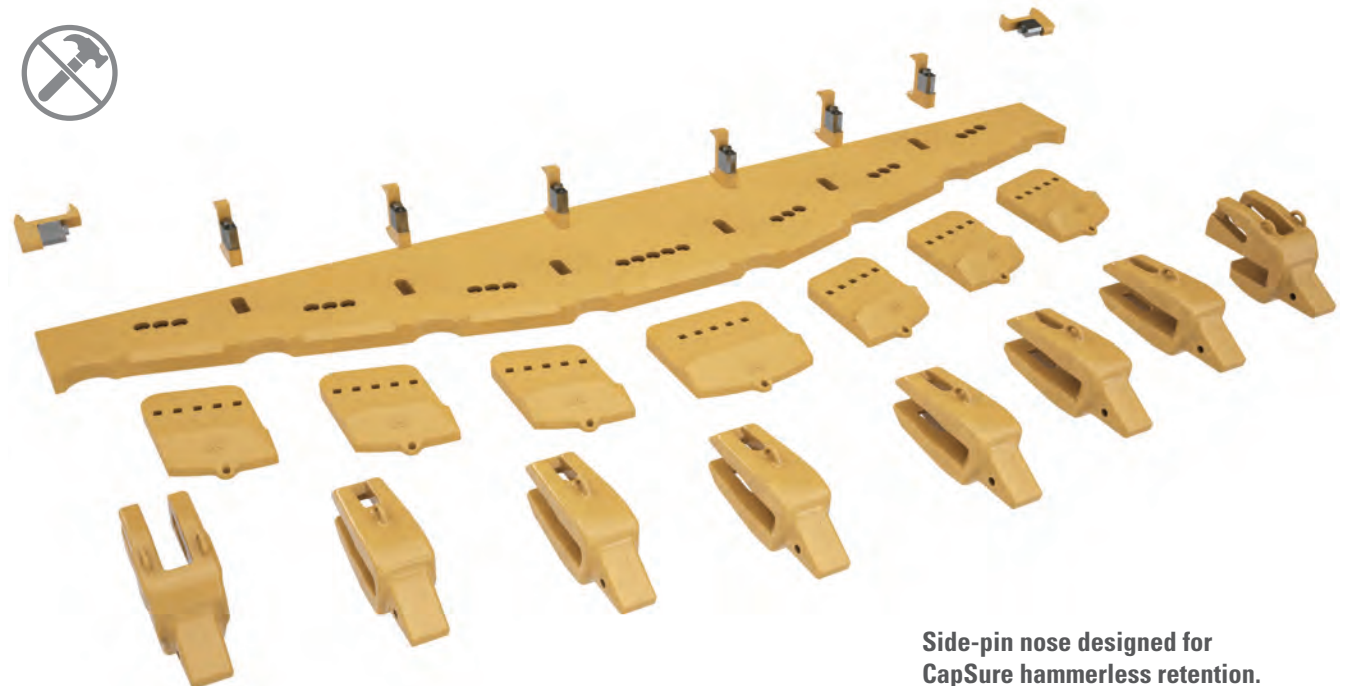
Hammerless system reduces change time to less than 60 minutes—70 percent quicker than welded systems.

IMPROVE SAFETY ON YOUR JOBSITE

Bolt-in design eliminates the need for welding and sledgehammers.

LOWER YOUR OPERATING COSTS

Full base edge protection reduces wear.



Side-pin nose designed for CapSure hammerless retention.

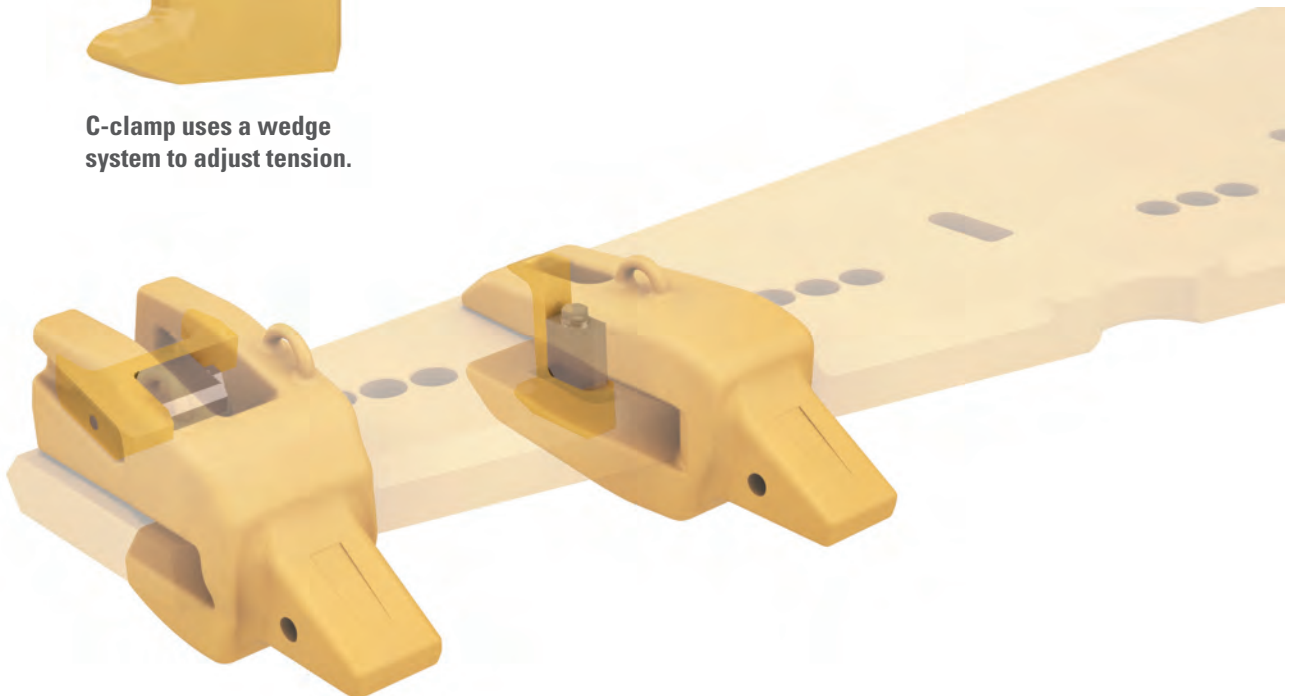
MECHANICALLY ATTACHED ADAPTER SYSTEM (MAA)



C-clamp secures MAA to the base edge.



C-clamp uses a wedge system to adjust tension.



FLUSH-MOUNT ADAPTER SYSTEM

MORE UPTIME AND PRODUCTIVITY ON YOUR JOB.

Our flush-mount adapter system is ideal for high-impact, high-abrasion applications. The larger adapter and cover offer greater durability and more wear protection than a traditional two-strap system.

GET IMPROVED ADAPTER LIFE

Upsized adapter resists impact better than a two-strap system.

ENHANCE DURABILITY

A 35-degree bevel on the adapter and base edge provides a thicker edge section to reduce cracks and breakage.

BOOST UPTIME

Complete weld-around design provides 20 percent more weld strength than a two-strap system.

SPEED UP CHANGE-OUT TIMES

Cover protects the adapter and welds.

INCREASE PRODUCTION

Adapter cover matches half arrow thickness, providing a flat, clean floor.



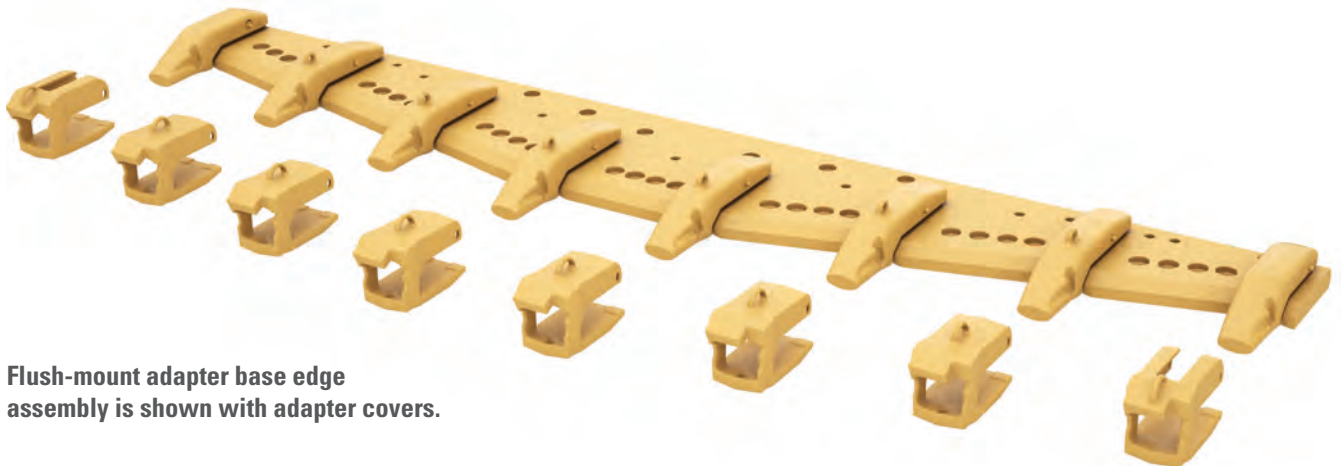
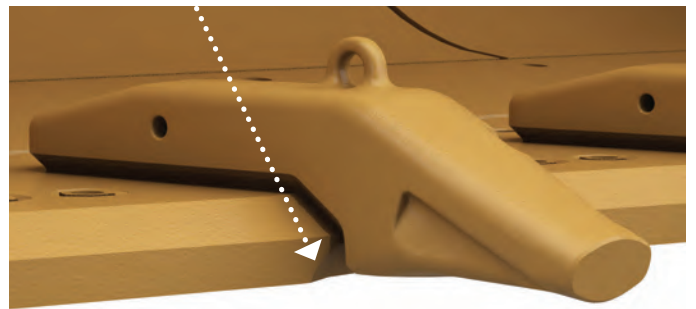
FLUSH-MOUNT ADAPTER SYSTEM

NOTE: Investing in additional protection up front provides lower G.E.T. cost during production. Reduced maintenance intervals usually outweigh any penetration differences.

Adapter cover protects the weld bead.



Strap is welded, even under the adapter.



Flush-mount adapter base edge assembly is shown with adapter covers.

SERRATED EDGE SYSTEM

PENETRATES LIKE A TIP, WITH NO ADAPTER REQUIRED.

The serrated cutting edge increases the penetration capabilities of wheel loaders in highly compacted soil or in applications that have higher impact loading requirements. This lends greater versatility to the machine without requiring bucket changes or the addition of other G.E.T. to the existing bucket.

SHORTEN YOUR DIGGING CYCLES

Self-sharpening chamfers provide the best possible penetration.

SIMPLIFY MAINTENANCE

Flat floor offers easy cleanup on your jobsite.

REDUCE YOUR REPAIR COSTS

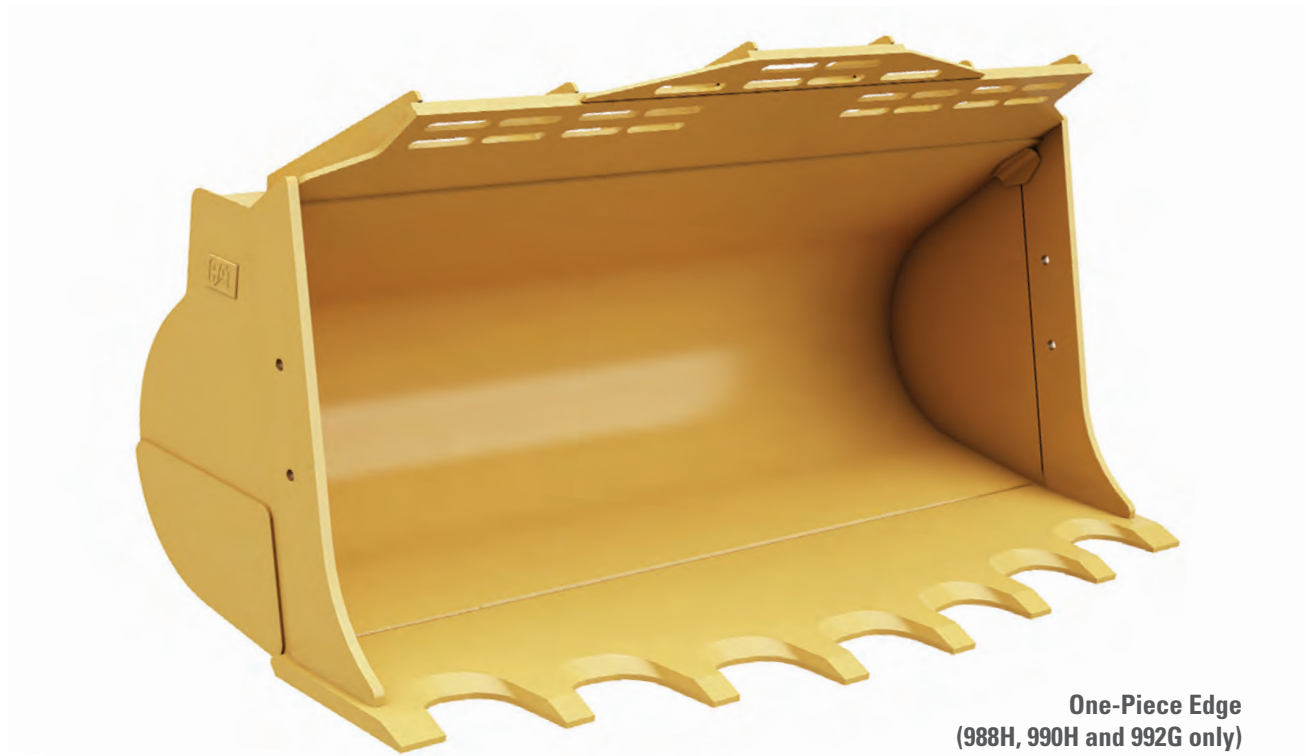
Bolt-on segments mean no welding, so you only need to replace worn sections (988H and 990H only). *See page 32 for example bucket.

ENHANCE DURABILITY

One-piece edge means no loose parts or parts falling into crushers (988H, 990H and 992G only). *See image below for example bucket.



SERRATED EDGE SYSTEM



BOLT-ON CUTTING EDGES (BOCE)

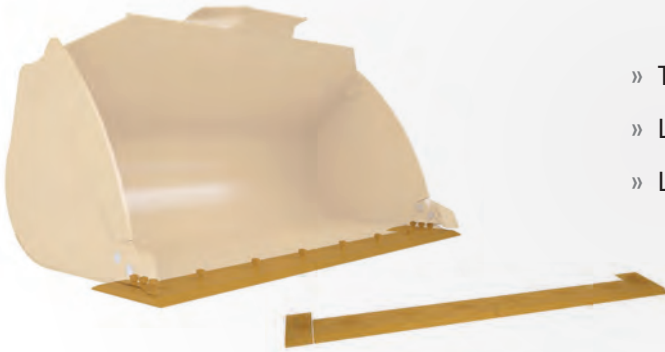
BALANCED EDGE SYSTEMS FOR EVERY APPLICATION.

Finding the best solution for your bucket and application is easy with Cat's broad portfolio of edge options. Increase your machine's productivity by reducing operating costs and maintenance interval costs.

Cat bolt-on cutting edge options are available in standard and heavy-duty thicknesses, Cat Abrasion Resistant Material (A.R.M.) and half arrow options. Cat A.R.M. is recommended for applications where sand, gravel or other abrasive materials severely diminish wear life. Hard tungsten carbide particles are bonded to critical wear areas, providing up to five times greater wear life. See your Cat dealer for details.

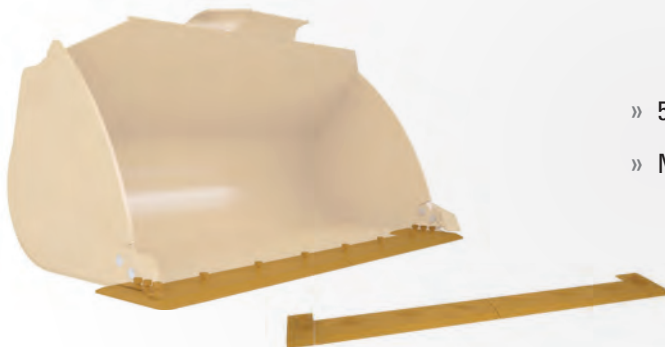
We have G.E.T. for your bucket, no matter the application or environment. Maximum wear life and breakage resistance is possible with our steel alloy that can endure 2 times the heat and pressure of traditional cutting edge steel products. Consult your local Cat dealer to help determine the best cutting edge system for your application to give you the lowest cost per hour.

STANDARD BOCE



- » This is the baseline for all other bolt-on edge systems.
- » Lower initial price.
- » Low- to medium-impact, low-abrasion materials only.

HEAVY DUTY BOCE



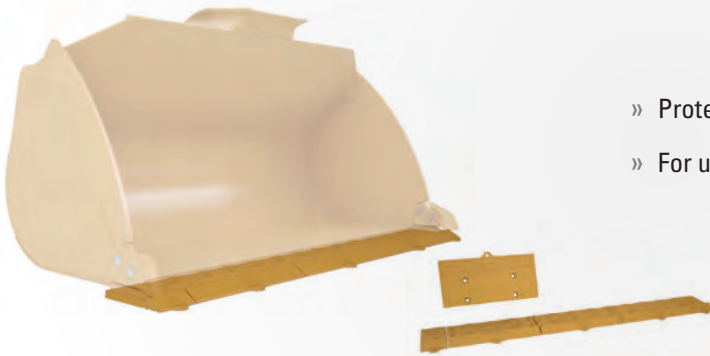
- » 5mm thicker edge thickness delivering increased wear life.
- » Medium- to high-impact, medium-abrasion materials.

ABRASION RESISTANT BOCE



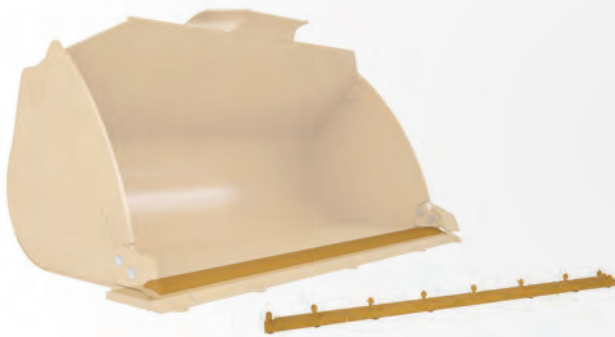
- » Lighter weight than the HD edge.
- » Up to 5 times the wear life of a standard BOCE.
- » For use in high-abrasion, low-impact materials only.

HALF ARROW BOCE



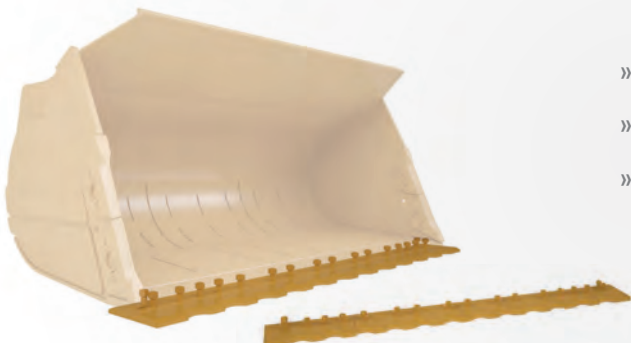
- » Protects the front of your base edge as well as the bottom.
- » For use in high-abrasion, high-impact materials.

TOP COVER



- » Protects the bevel and top of your base edge.
- » Use with half arrows to fully protect your base edge investment.

SERRATED BOCE



- » Increases the penetration of your bolt-on edge system.
- » For use in packed or frozen materials.
- » Maintains smooth floor.

CAPSURE SHROUDS

Shorten change-out time without sacrificing base edge protection with these easy-to-install shrouds, available in a range of thicknesses and angles. Hammerless CapSure retention shrouds were designed for high-abrasion bucket systems. Most shrouds fit to base edges that have a 35-degree bevel angle and are equipped with flush-mount adapters. Shrouds can be matched with J or K Series adapters.

SPEED UP YOUR CHANGE-OUT TIME

It's easier to install a single casting than two-piece protection.

SIMPLIFY REMOVAL & INSTALLATION

Hammerless system is fast and easy and reduces the risk of injury.

BOOST YOUR UPTIME

Wear indicator holes signal change-out time, so you can plan maintenance.

LOWER YOUR OWNING & OPERATING COSTS

Pin lug is reusable.



Base Edge Pin



TOP COVERS, SEGMENTS & HALF ARROW SEGMENTS

Protect your investment in buckets and base edges with these flexible components. Half arrow segments allow for a smooth transition of material over the base edge to protect the leading edge. Top covers complement the half arrow segments to protect the base edge fully. And segments are ideal for moving re-handled materials with medium impact and medium abrasion.

SIMPLIFY MAINTENANCE

Individual pieces that protect the edge can be changed independently.

ENHANCE DURABILITY

Half arrow segments cover the leading edge for smooth material transition.

BOOST YOUR UPTIME

Top cover reduces wear on weld joints.

SAVE ON INVENTORY COSTS

Reversible segment creates more leading edge wear material, reducing piece parts.

Segments



Half Arrow Segments



Top Covers



BASE EDGE END PROTECTION (BEEP)

PROTECT YOUR CORNERS—WITHOUT CUTTING THEM.

Reduce base edge end wear and subsequent corner adapter weld erosion with our BEEP design. It makes adapter replacement on the edge much easier when it's time to rebuild the base edge assembly.

BOOST YOUR UPTIME

Through-hardened Rc ~45 (Br ~3.0) weldable steel is easily installed in the shop or the field.

EXTEND LIFE

Extended base edge end protects adapter corner welds.

SPEED UP INSTALLATION

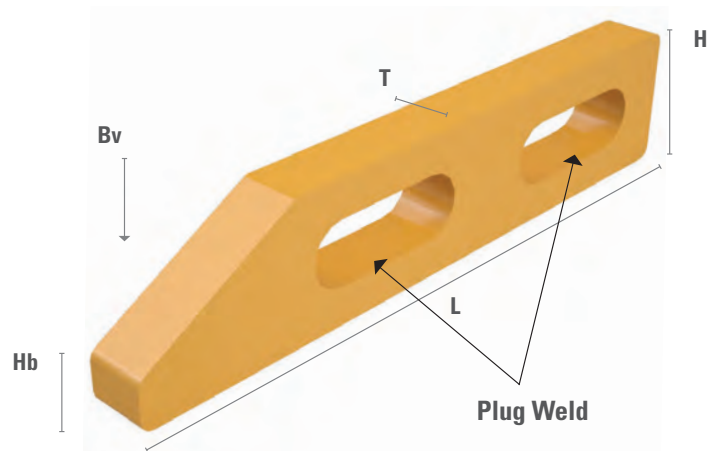
Height and bevel are matched to the base edge, so there's no additional fabrication.



BASE EDGE END PROTECTION SYSTEM (BEEP)

BEEPs are available in a wide array of thicknesses and angles to fit 988-994 wheel loaders. Use this height, length and bevel angle chart to determine which BEEP best matches your base edge end profile.

HEIGHT (H)	LENGTH (L)	BEVEL (Bv)	BLUNT HEIGHT (Hb)	THICKNESS (T)
50	355	22.5	15	25
63.5	336	22.5	22	30
63.5	355	22.5	22	30
63.5	331	35	33	30
70	325	22.5	30	30
70	384	35	35	30
70	456	35	35	30
70	370	35	35	30
76	308	22.5	24	30
76	384	35	35	30
90	400	35	35	40
90	369	35	35	40



SIDE & EDGE PROTECTION

MAINTAIN YOUR PERFORMANCE EDGE.

Protect your bucket's structural integrity and enhance penetration with sidebar protection and shear blocks.

- » Sidebar Protectors (CapSure and traditional locking system)
- » Half Arrows
- » Top Covers
- » Segments
- » CapSure Shrouds



SIDEBAR PROTECTORS

Protect your bucket's structural integrity and enhance penetration with sidebars and shear blocks.

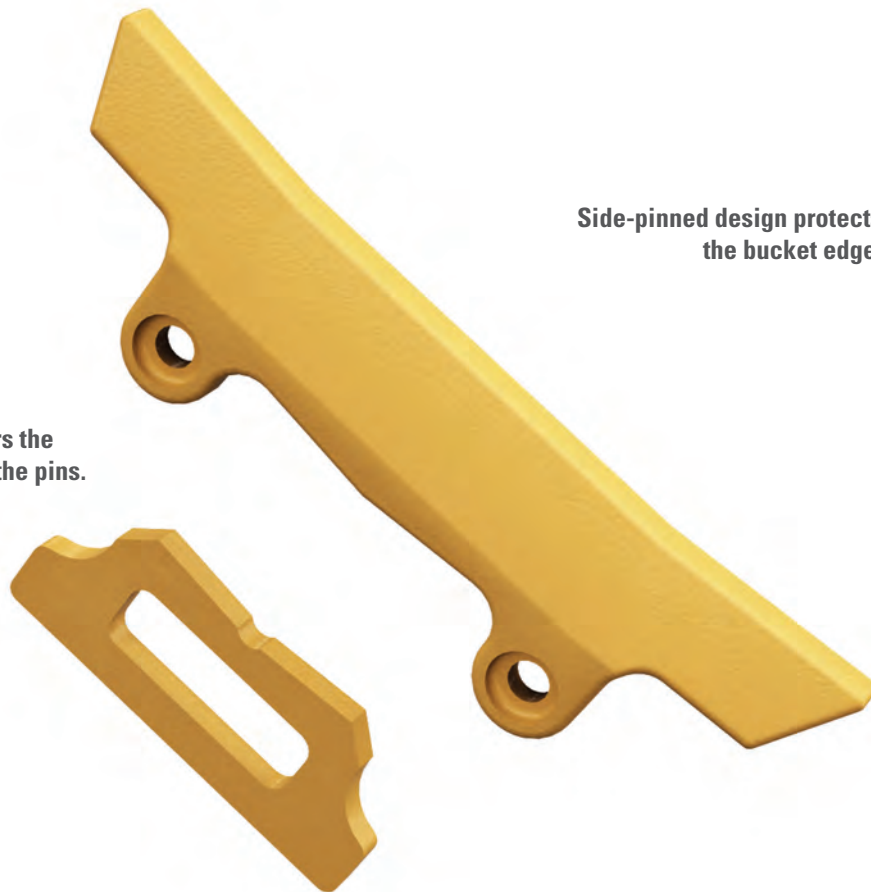
INCREASE YOUR UPTIME

Shear block protects the pin from extreme loads and breakage, helping ensure sidebar protector retention.

CUT YOUR MAINTENANCE COSTS

Sidebar protector protects the bucket edge.

Shear block bears the loads instead of the pins.



Side-pinned design protects the bucket edge.

CAPSURE SIDEBAR PROTECTORS

Get all the benefits of the sidebar protector without the hammer. CapSure sidebar protectors use hammerless locks for fast, easy installation and reduce the risk of injury.



990, 992 and 993 SBP



994 SBP



Shear Block

PERFORMANCE SERIES SIDEBAR PROTECTORS

INSTALLATION & REMOVAL

Get all the benefits of the sidebar protector without the hammer. Performance Series Mechanically Attached sidebar protectors use proven hammerless spring retainers for fast, easy installation and reduce the risk of injury.

1 Insert the protector into the dove tail base plate.



2 Mechanically attached wear plate compression retainer.



3 Install one end of the compression retainer.



4 Install the other end of the compression retainer in place using a small pry bar.



Scan the QR code to the right to watch the installation video.



CORNER GUARD SYSTEM

Reduce your bucket's maintenance costs and increase bucket performance with the Cat Corner Guard system. Cat corner guards are an easily replaced bolt-on system to fit your 950-982 wheel loader buckets. These corner guards are available with and without adapters to fit your application needs.

1 Slide the corner guard into place.



2 Torque, Bang, Torque bolts to the proper bolt torque.



BUCKET SELECTION GUIDE

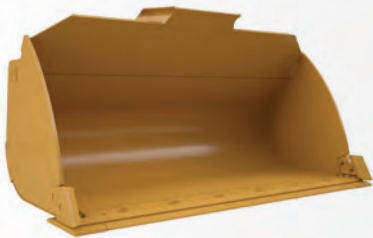
We offer four standard bucket durability categories suitable for any application. Each category is based on the bucket's intended durability when used in the recommended application and material.

GENERAL PURPOSE



- » Good all around performance for stockpiling, re-handling, excavating and bank loading.
- » Intended for use in low-impact materials.

MATERIAL HANDLING



- » For stockpile loading loose materials such as gravel, sand and dirt in load-and-carry applications.
- » Intended for use in low-impact materials.
- » These are the best performers for production loading.
- » Flat bottom bucket.

ROCK BUCKETS



- » 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 moderate- to high-abrasion applications.
- » Balances the need for high production in more abrasive applications.

HEAVY DUTY QUARRY ROCK BUCKET

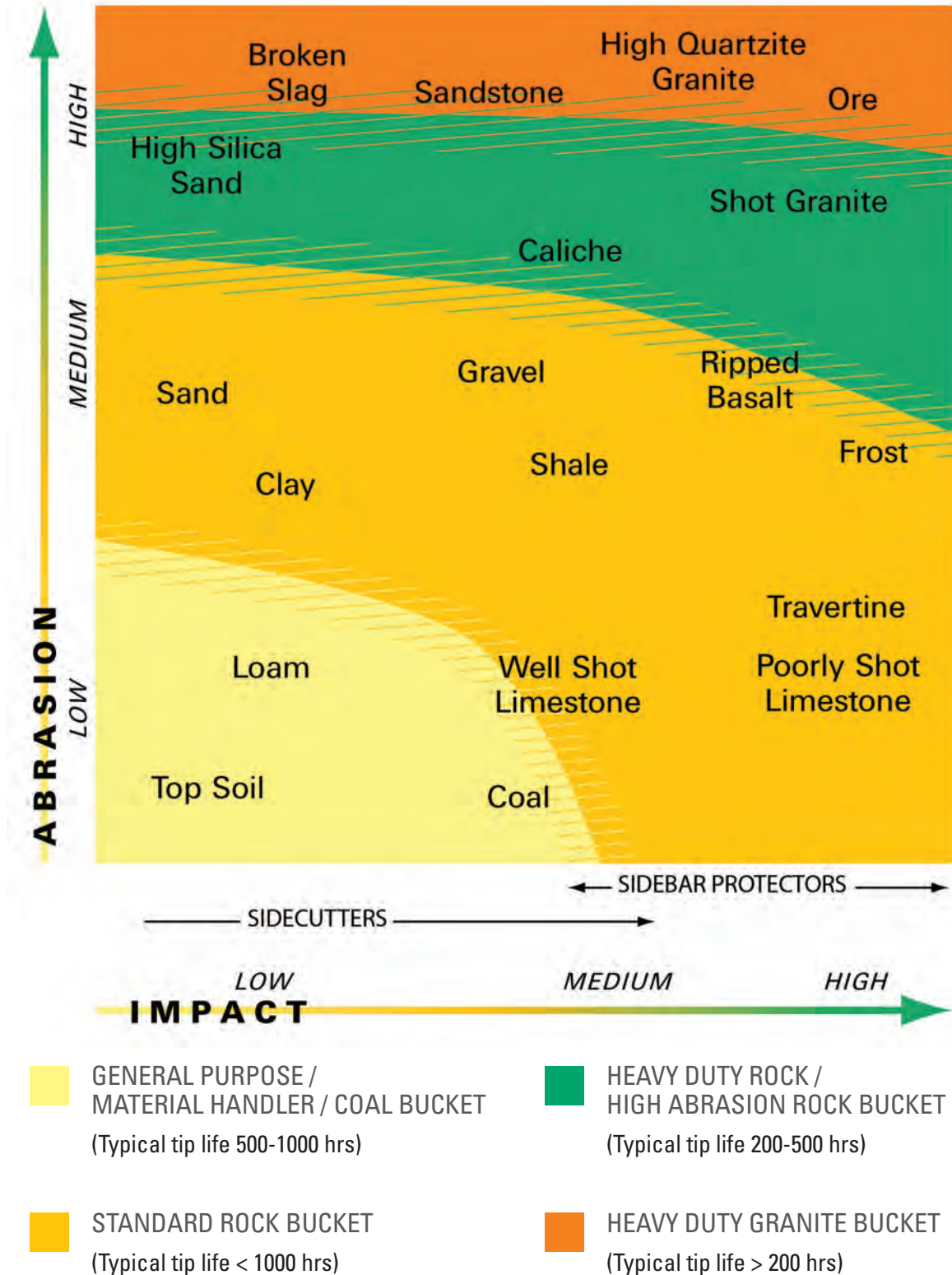


- » For use where maximum abrasion resistance is required.
- » Intended for use in high-abrasion, high-impact applications.

CHOOSING THE RIGHT DURABILITY.

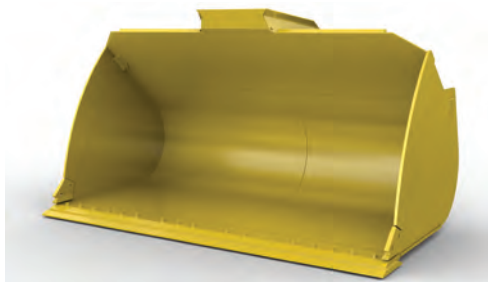
Choosing the wrong bucket can easily reduce production and increase operating costs by 10-20% or more. It can also cause unnecessary wear and fatigue for both machine and bucket.

Contact your local Cat dealer for more detailed information on choosing the right wheel loader, bucket and work tool attachment combinations to meet your application needs.



ADDITIONAL BUCKET STYLES

Several different bucket styles are available—each with a special purpose:



COAL: Coal Buckets are high-volume material movers for loading and stockpiling coal and other materials of similar density.



GRAPPLE: Grapple Buckets clamp loose material with dual ladder-style grapple tines. These are key producers in transfer stations, landfills or wherever loose, lightweight material needs to be moved.



HIGH DUMP: High Dump Buckets utilize dedicated dumping cylinders and a bottom hinge to “roll out” material. Higher than ordinary bucket types, they are ideal for transfer stations or loading high-sided trucks.

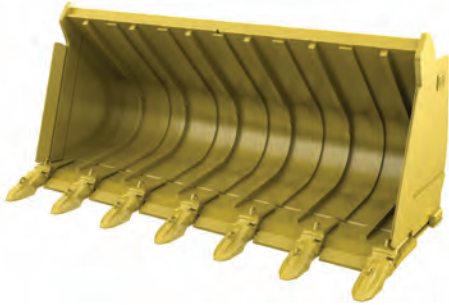


MULTI-PURPOSE: Multi-Purpose Buckets have a unique action that can load, bulldoze, clamp and perform many other tasks. A versatile design for site cleanup, demolition or similar situations.



SIDE DUMP: Side Dump Buckets dump both to the front and to the side of the machine, an advantage when working in tight quarters such as street work, tunnel construction and building levees.

ADDITIONAL BUCKET STYLES (CONT.)



SLAG: Cat Slag Buckets are heavy duty and specifically constructed to handle extreme conditions that come with handling hot slag.



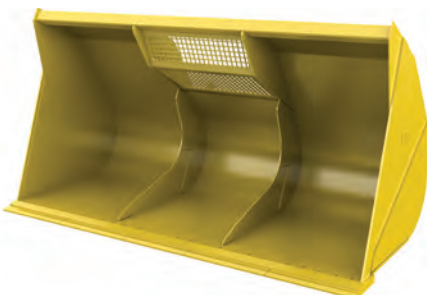
WASTE HANDLING: Waste Handling Buckets move large volumes of low-density waste in transfer stations, landfills and recycling yards. Large capacities give maximum production when loading conveyors, trucks or hoppers.



WASTE LOAD & CARRY: Load & Carry Buckets are primarily designed to load and carry lightweight material, minimizing contact with the floor for less bucket and floor wear.



WASTE DOZING: Dozing Buckets are designed to push waste loads along the floor to a hole or hopper in the floor for below-grade truck loading.



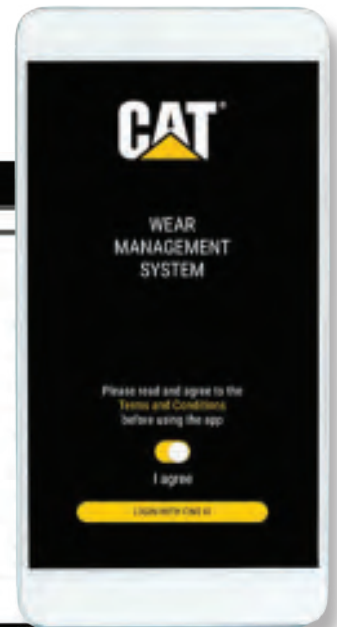
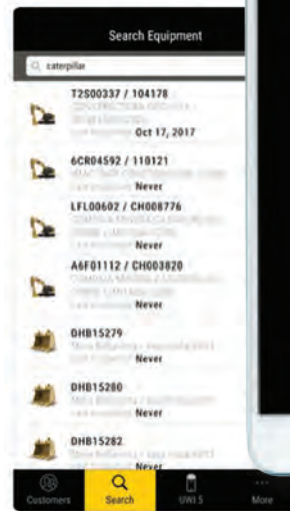
WOODCHIP: As the name suggests, Woodchip Buckets are optimized for moving large volumes of wood chips. The flat floor and straight edge work to scoop the bucket full and help heap the load high.

CAT WEAR MANAGEMENT SYSTEM INTRODUCES...

BUCKET PRO



You may be familiar with CTS Pro for Cat Undercarriage Inspections. Now, the Cat Wear Management System is launching the second module to help you manage G.E.T. on your bucket fleet.



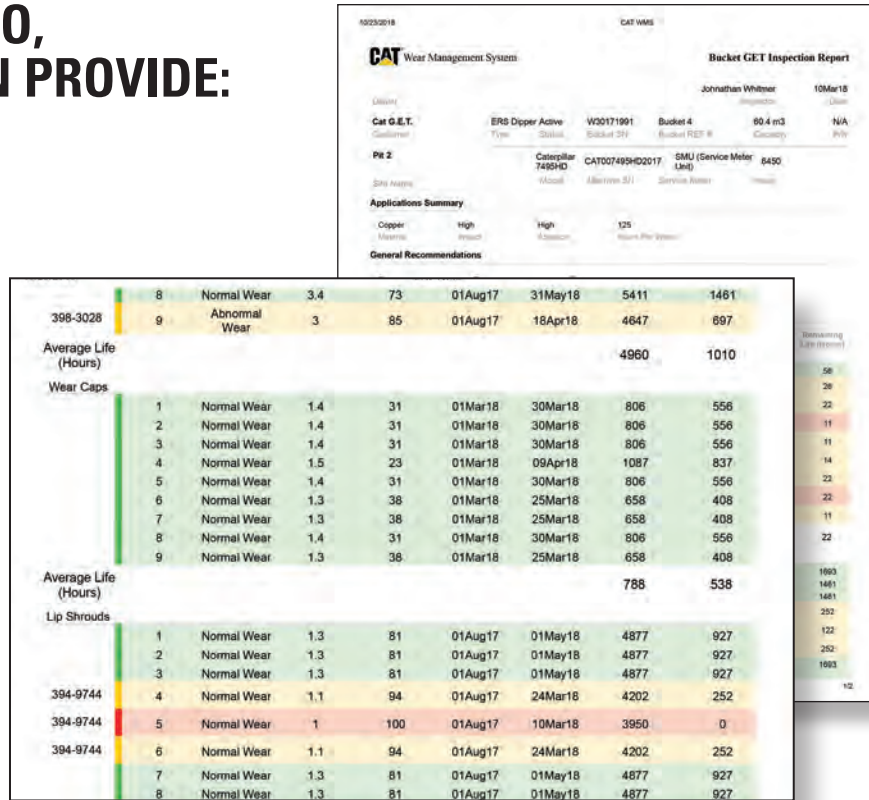
Your Cat dealer offers sales, service and technical support you need to keep your bucket at maximum productivity.

- » Work with your Cat Dealer to set up your site and bucket fleet within the Bucket Pro App.
- » Use smart phone, IPad, or tablet to perform regular inspections of G.E.T. and get instant reports.
- » Go online to calculate costs and view production trends of each bucket.
- » Use data to reduce costs and improve production of your G.E.T. system.



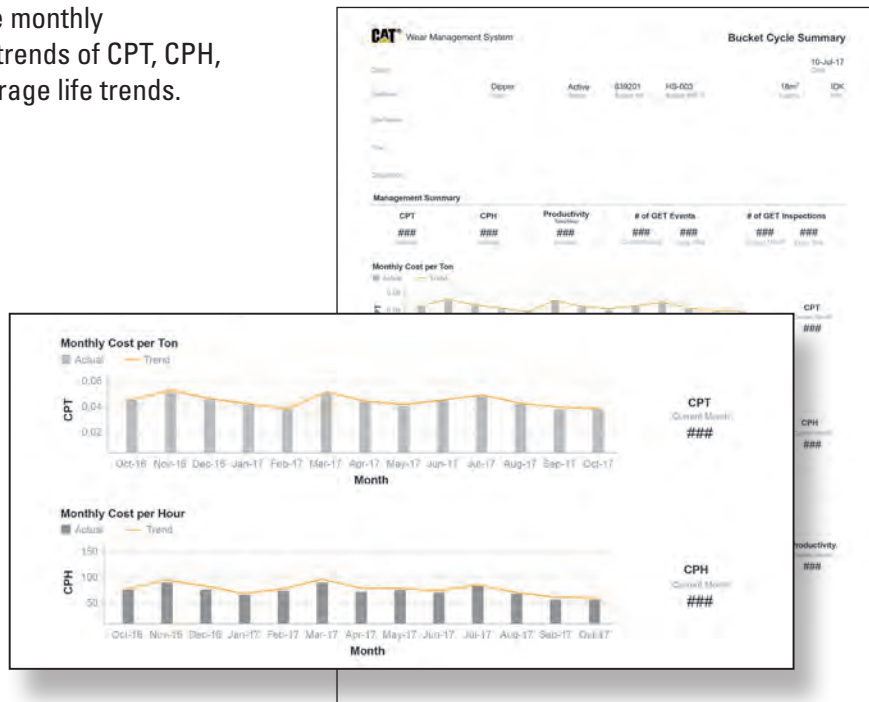
USING BUCKET PRO, YOUR DEALER CAN PROVIDE:

- » **G.E.T. Inspection Reports**
These instant, on-site reports include % worn, future change out dates, and average life of all your G.E.T. components.



- » **Bucket Cycle Summary**—these monthly summaries show bucket cycle trends of CPT, CPH, and Productivity as well as average life trends.

- » Get real time data on G.E.T. performance and expected life.
- » Plan maintenance
- » Manage Inventory
- » **Identify the best G.E.T. solutions**
- » **Know your CPT**



GET THE FACTS YOU NEED! STOP MANAGING YOUR G.E.T. WITH OPINIONS AND ASSUMPTIONS.

Talk to your Product Support Representative or G.E.T. Specialist today to learn how they can help you simplify your bucket management.

WEAR PARTS & A.R.M.



MECHANICALLY ATTACHED WEAR PLATE SYSTEM (MAWPS)

Safeguard wear areas with this hammerless system—available for a wide variety of applications.

INCREASE YOUR UPTIME

Two minute change-out—no hammer required.



LOWER YOUR INVENTORY COSTS

Flexible, versatile system welds to flat and curved surfaces.

SIMPLIFY INSPECTIONS

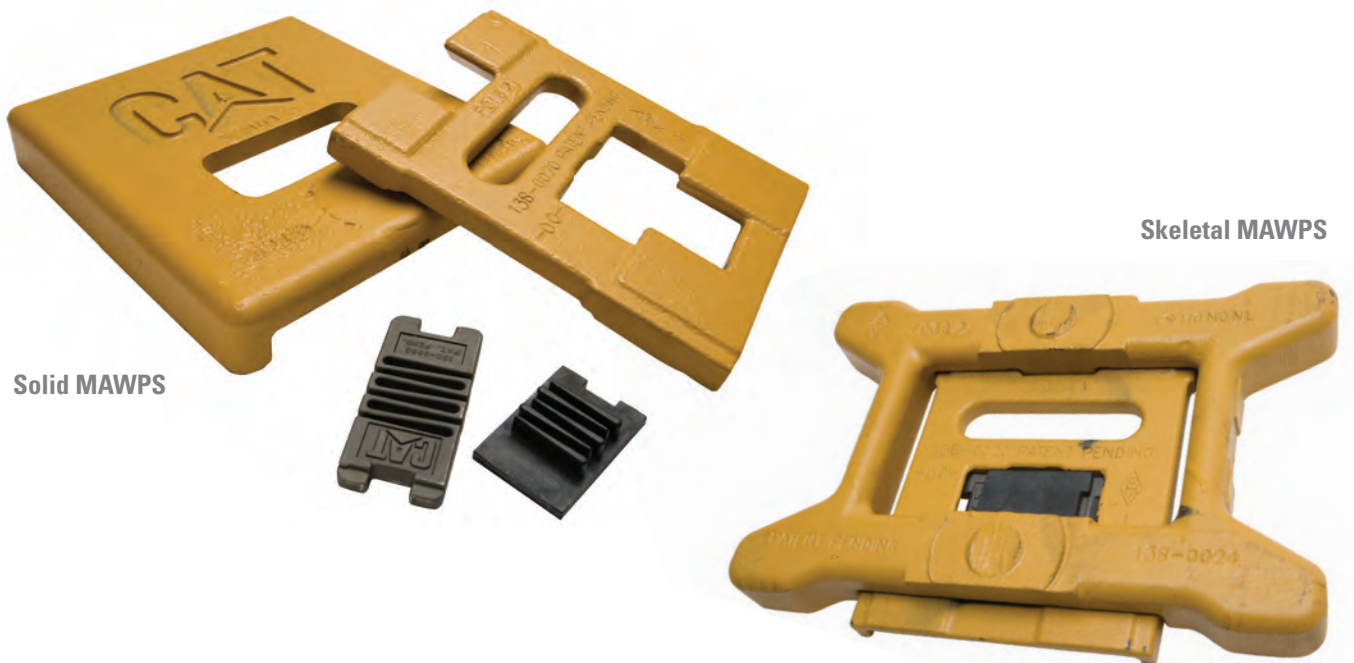
Wear indicator holes allow for quick and easy inspections, reducing maintenance time.

EXTEND WEAR LIFE

You can install the system perpendicular to material flow, then rotate it for more wear material.

RETENTION WITHOUT THE RISK.

Retention components are located within the base plate, where they're shielded from wear and load—eliminating the risk of wear plates falling off.



Solid MAWPS

Skeletal MAWPS

CHOOSE THE LOWEST-COST WEAR PROTECTION PER HOUR.

MAWPS VERSUS STEEL PLATES.

When you choose MAWPS instead of steel wear plates, you can see cost savings as high as 44 percent, thanks to significantly lower labor and replacement costs.



TOTAL ANNUAL COSTS WITH STEEL PLATES

	PARTS	LABOR	TOTAL
Installation costs	\$4,000	\$1,200	\$5,200
Replacement costs (2 times per year)	\$8,000	\$2,400	\$10,400
			\$15,600 or \$7.80/hour



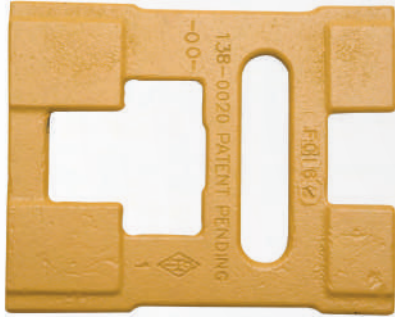
TOTAL ANNUAL COSTS WITH MAWPS

	PARTS	LABOR	TOTAL
Installation costs	\$4,000	\$600	\$4,600
Replacement costs (2 times per year)	\$4,000	\$83	\$4,083
			\$8,683 or \$4.34/hour

EASY INSTALLATION & REMOVAL

Save time and money with MAWPS' two-minute installation and removal.

- 1** Weld the adapter perpendicular to material flow for maximum wear material (or parallel to flow with the Cat logo on top for maximum coverage).



- 2** Position the wear plate over the base plate and slide the wear plate onto the base plate.



- 3** Install one end of the compression retainer with the plug and pry it into place with an 8mm-wide small pry bar.



- 4** Clean, use pry bar to remove the compression retainer, and slide the wear plate off the base plate.



Scan the QR Code to the right to watch the installation video.



Reduce maintenance hours with MAWPS' easy-to-use wear indicator holes. Just look, then rotate or replace.

SOLID MAWPS

DESIGN SOLUTIONS FOR YOUR BUCKET.

With solid MAWPS, you can enhance protection while keeping machine weight to a minimum. Choose a layout designed by Caterpillar engineers for your specific machine or application to maximize your productivity. Cat dealers can access the global library of MAWPS layouts.



A.R.M.
OPTION
AVAILABLE



SIZE	MACHINE
50 Series	5230, 994
40 Series	993, 5130, R2900
30 Series (available with A.R.M.)	992, 990, 5080, 374-390
	R1700, R1600
20 Series (available with A.R.M.)	980 and down
	365 and down
	Trucks
10 Series	972 and down
	320-349
	R1300

SKELETAL MAWPS

STAY COVERED ACROSS YOUR PASS MATCH.

Quick and easy to install, skeletal MAWPS protect the rear portion of truck bodies to help you maximize uptime. A through-hardened DH-2 wear plate slides onto a weld-on base plate and is held in place with a patented compression retainer, trapping materials from any direction.

TRAP MORE MATERIAL

The skeletal wear plate traps material in and between plates, allowing for material-on-material wear instead of wear on steel body liner products.

EXTEND WEAR LIFE

Because the compression retainer is positioned low in the base plate, more of the wear plate can be worn away before you need to replace it.

SIMPLIFY REMOVAL & INSTALLATION

You can typically replace worn wear plates in two minutes or less without hammering or welding.

INCREASE YOUR FLEXIBILITY

Available in standard and heavy-duty sizes, skeletal MAWPS can be customized to fit virtually any truck body configuration—flat floor or dual slope.



TOTAL WEAR PROTECTION

INCREASED PRODUCTIVITY. FOR EVERY ENVIRONMENT. FOR EVERY APPLICATION.

Get the best available protection for every product on your site, from wheel loaders to cable shovels, with our Total Wear Protection line.



Chocky Bars, available in four shapes, feature a V-groove design that can be bent around a radius. They can be separated or modified in length. The inset of the Cat logo allows for the trapping of fine material in each section, extending the life of the wear material itself. Chocky bars come in four sizes.



Wear Buttons, designed for applications that optimize the round profile, trap material to provide material-on-material wear. Wear buttons are available in four sizes.



Wear Blocks feature a zigzag inset design that allows for material-on-material wear. They prevent channel wear common in parallel grooves, delivering extended life in extreme operations.



Roll Bars protect the leading edge of dozers, loaders, mining shovels and other equipment, providing maximum wear protection while minimizing drag. Roll bars are available in three sizes.



Bolt Protectors help prevent hardware wear on cutting edges, top plates, sidebar protectors and more by allowing material to pack. They also allow for easier removal when replacing G.E.T.



Chocky bars in application

WELD-ON HEEL SHROUDS & HALF ARROW EDGES

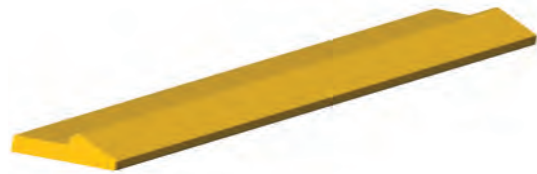
WELD-ON HEEL SHROUDS

Weld-on heel shrouds protect the bottom and side of the bucket, concentrating extra wear material in the corner where it's needed most, and are ~400 Bn in hardness. Straight or curved shrouds come in three sizes, offering up to two inches of corner protection.



WELD-ON HALF ARROW EDGES

Weld-on half arrow edges can be used to customize a bucket with sidebar protection, as side cutters to improve penetration or as segments between teeth to reduce scalloping.



WELD-ON EDGE SHROUDS

Stackable edge shrouds are designed to fit any bucket configuration and extend the life of your excavator bucket edge assembly. Shroud profile is designed to work with K Series vertical pin retainers and horizontal J Series side pins. Tabs allow for easy alignment while installing your edge protection. Two shroud sizes are available per edge thickness to fit any bucket tooth spacing.

ABRASION RESISTANT MATERIAL (A.R.M.)

Cat Abrasion Resistant Material is a coating made of extremely hard tungsten carbide particles that forms a protective shield over key wear surfaces. Cat G.E.T. with A.R.M. is ideal for high-abrasion, low-to-moderate impact applications—such as working in sand, gravel and other abrasive materials that can severely diminish G.E.T. wear life.

EXTEND YOUR WEAR LIFE

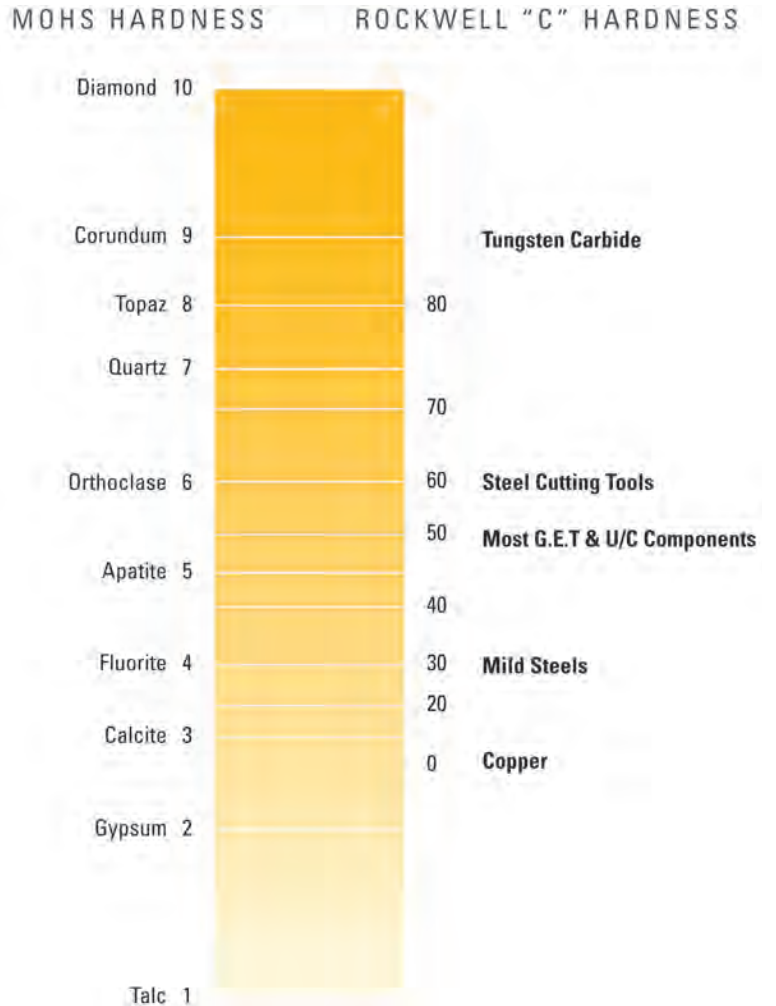
Tungsten carbide offers three to five times the life of through-hardened G.E.T.

LOWER YOUR COST PER HOUR

Self-sharpening wear pattern means fewer change-outs in the right applications.



HARDNESS COMPARISON



EXAMPLE PARTS WITH A.R.M. APPLIED



Two-Strap K Series Adapter



J Series Penetration Tip



K Series Heavy Duty Tip



A.R.M.
OPTION
AVAILABLE

NOTE: Products available with the A.R.M. option feature this symbol.



PEBJ0078-06

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