

Cat[®] Buckets and Ground Engaging Tools

for Hydraulic Excavators 311 - 390



Features:

Solutions

Reliable

Made-to-last

Performance

Benefits:

Caterpillar offers a wide range of standard and specialized excavator buckets with solutions for trenching, excavating, loading and finishing. Each bucket is designed and tested to function as an integral part of your excavator.

Cat[®] Buckets are developed and tested along with your Cat excavator to provide exceptional performance and reliability.

Cat Buckets are designed and built to Caterpillar specifications - guaranteeing quality and durability. High-strength tempered steel provides durability without requiring thick and heavy plates. The optimised design provides longer life and larger payloads.

Cat excavators are the industry standard. Cat Excavator Buckets match the machine to the job and provide the best possible performance in your particular application.

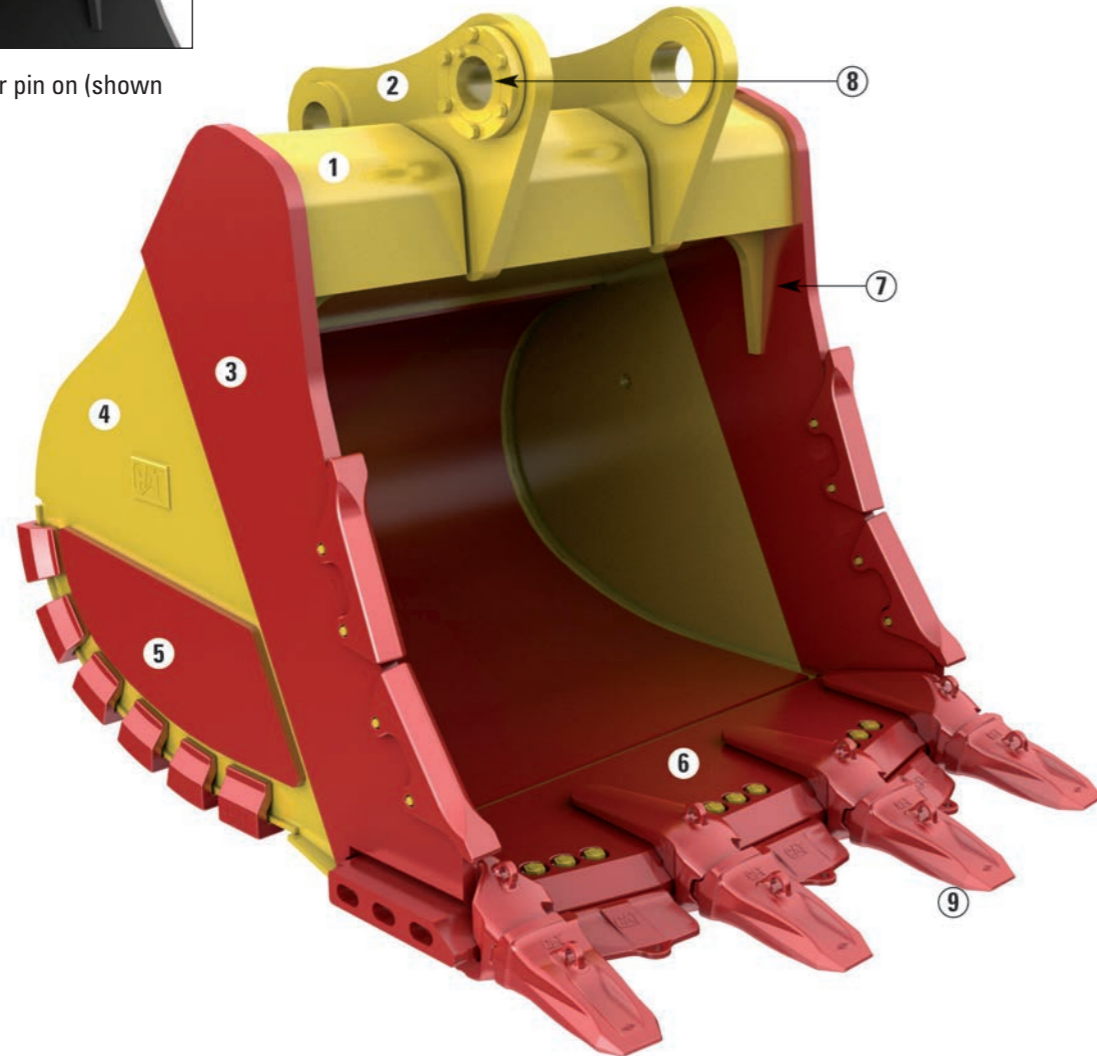


Bucket line constructed for Durability and Performance



Hinges for CW Coupler, or pin on (shown above).

Caterpillar offers a complete bucket line for excavators. General Duty (GD), Heavy Duty (HD), Severe Duty (SD) and Extreme Duty (XD). This line of pin-on and coupler buckets feature improved designs to take the full advantage of increased machine power.



1 Top box construction

Optimized reinforced construction for high strength and performance matched to the machine's power.

2 Hinge Plate

Pin-on or dedicated hinges are available. Pass through torque tube for better load distribution and durability.

3 Side Bar

Special angle design for optimal penetration. Pre-drilled to add side bar protection.

4 Side Plate

5 Side Wear Plate

High strength for extra protection.

6 Base Edge

Straight (GD/HD) or "spade" (SD/XD).

7 Gusset

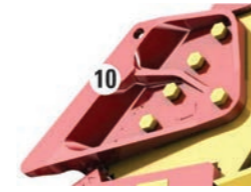
For maximum rigidity.

8 Adjuster Group

Allows for easy correction of "slack" without removing the bucket pin.

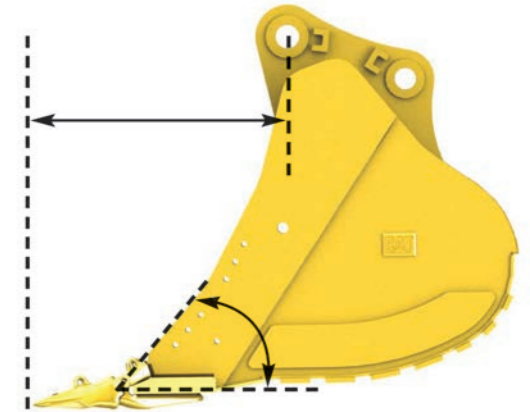
9 Cat Tooth System

Cast from steel with properties that maintain hardness for long wear life.

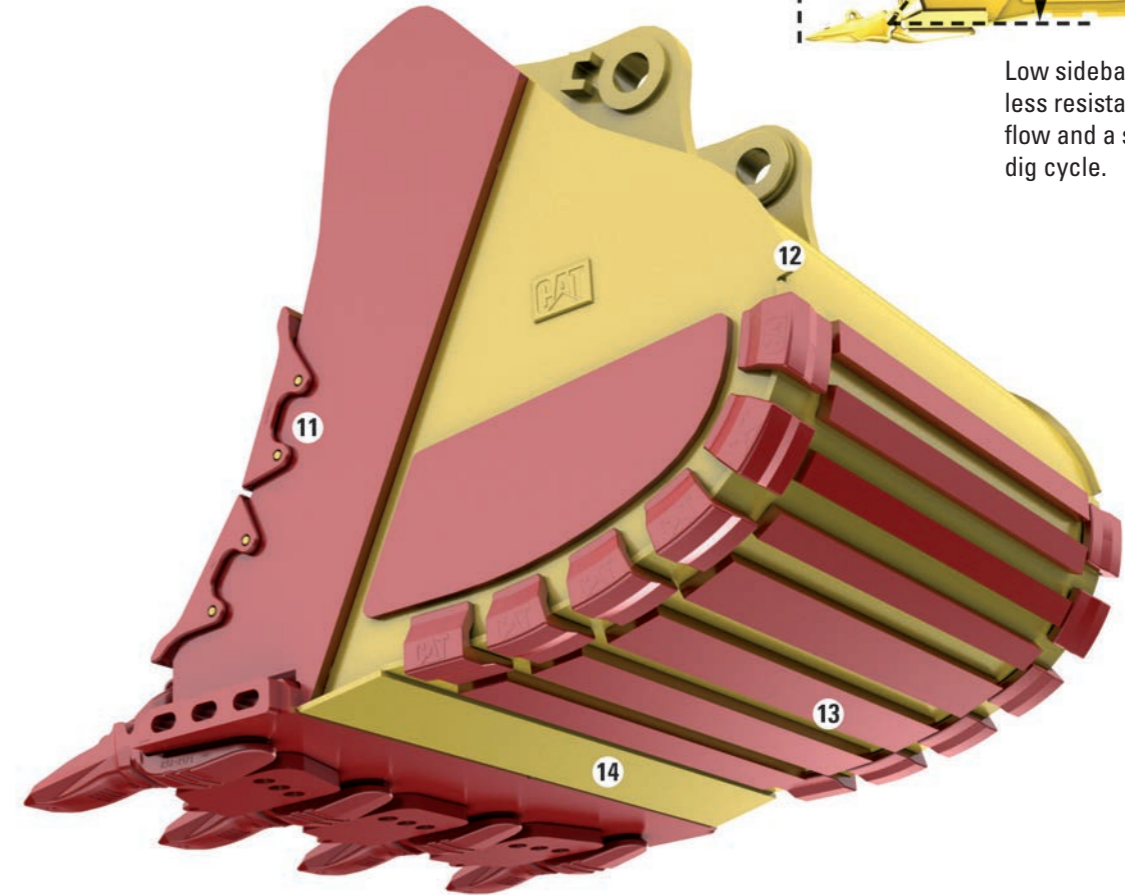


10 Side bar cutter
Option for GD/HD bucket.

"Tip forward" position improves material flow and visibility into the bucket.



Low sidebar angle means less resistance to material flow and a smoother, faster dig cycle.



11 Side bar protector

Protects bucket corners and sidebars from wear. Pin-on for easy removal and installation.

13 Horizontal Bottom Wear Plates

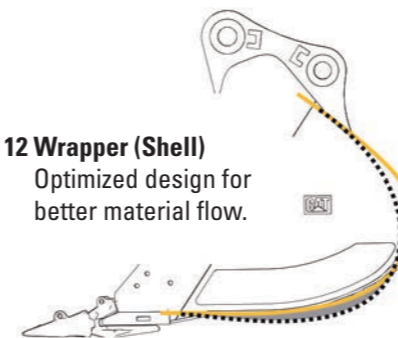
Protects wrapper area and reinforces bucket for greater strength and rigidity. Easily replaced.

14 Reinforcement Plate

Supports cutting edge.

12 Wrapper (Shell)

Optimized design for better material flow.



Additional Heel Clearance
 — Dual Radius (Cat)
 - - - Single Radius

Bucket structural and wear components

Structural components are yellow. Wear components are red.

Four Durability Categories Suitable for Any Application

Caterpillar offers four standard bucket categories for excavators. Each category is based on intended bucket durability when used in recommended application and material. Each bucket is available as pin-on, or can be used with a Quick Coupler. Red areas on bucket images below illustrate additional protection against wear as it increases across each category.

General Duty



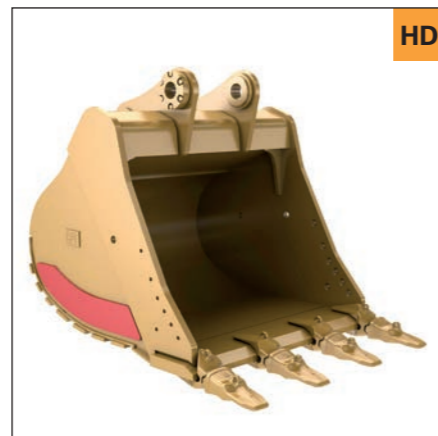
For digging in low impact, lower abrasion materials such as dirt, loam, and mixed compositions of dirt and fine gravel.

Example: Digging conditions in which General Duty tip life exceeds 800 hours.

Typically larger General Duty Buckets are the most popular sizes, and are used by site developers to mass excavate in low abrasion applications.

- Lighter structures decrease load time and increase the weight that can be lifted.
- Standard size adapters and tips.
- Sidebars are pre-drilled for optional sidecutters and sidebar protectors.

Heavy Duty



The most popular excavator bucket style. A good "center line" choice, or starting point, when application conditions vary.

For a wide range of impact and abrasion conditions including mixed dirt, clay and sand & gravel. Example: Digging conditions where Penetration Plus tip life ranges from 400 to 800 hours.

Heavy Duty Buckets are recommended for trenching in utility work and for the general contractor working in a variety of different situations.

- Thicker bottom and side wear plates than General Duty Buckets, increasing bucket wear life.
- Sidebars are pre-drilled for optional sidecutters and sidebar protectors.

Severe Duty

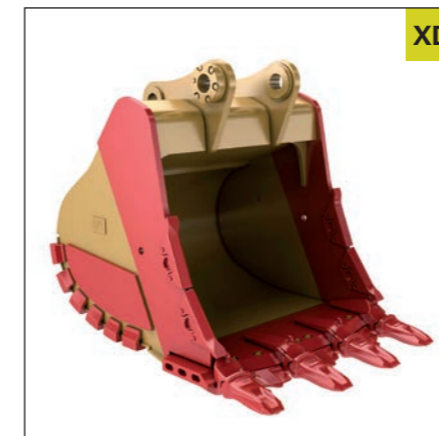


For higher abrasion conditions such as shot rock and sandstone.

Example: Digging conditions where tip life ranges from 200 to 400 hours with Penetration Plus tips.

- Bottom wear plates up to 50% thicker than Heavy Duty Buckets.
- Side wear plates up to 40% larger than Heavy Duty Buckets for added protection against abrasive and gouging wear.
- Spade edge with adapters are sized to accommodate higher abrasion conditions while maintaining ease of penetration.
- Sidebars are pre-drilled for optional sidebar protectors.

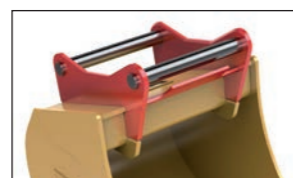
Extreme Duty



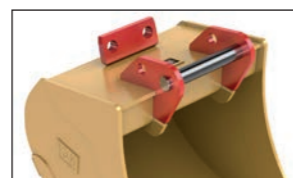
For very high abrasion conditions including high quartzite granite.

Example: Digging conditions where tip life is less than or equal to 200 hours with Extra Duty tip.

- Corner (or heel) shroud A, Base Edge End Protector (BEEPs) B, base edge segment C, liners D.
- Side wear plates are larger and Sidebar protection has been added for protection against abrasion and gouging wear.
- Spade edge with adapters are sized to accommodate higher abrasion conditions.



OQ hinges



HS hinges

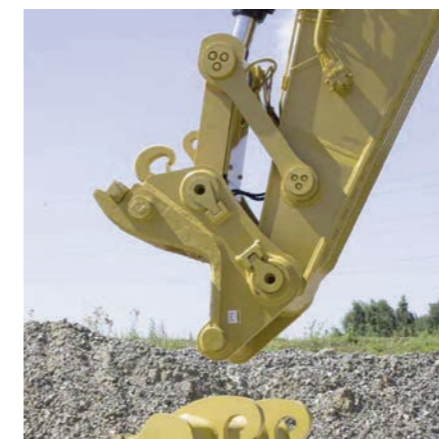
General Duty Bucket with Leveling Edge

These buckets are used in the same material and soils as the GD bucket.

The leveling edge attached to the tips of this bucket helps during refilling the trenches which are dug out by this same bucket. A smooth soil surface finish can be obtained using the leveling edge.

These buckets are available with hinges for CW, OQ/70/55 and HS10/HS21 quick coupler.

Width range: 650 – 1500 mm
Capacity range: 0.5 – 1.5 cum

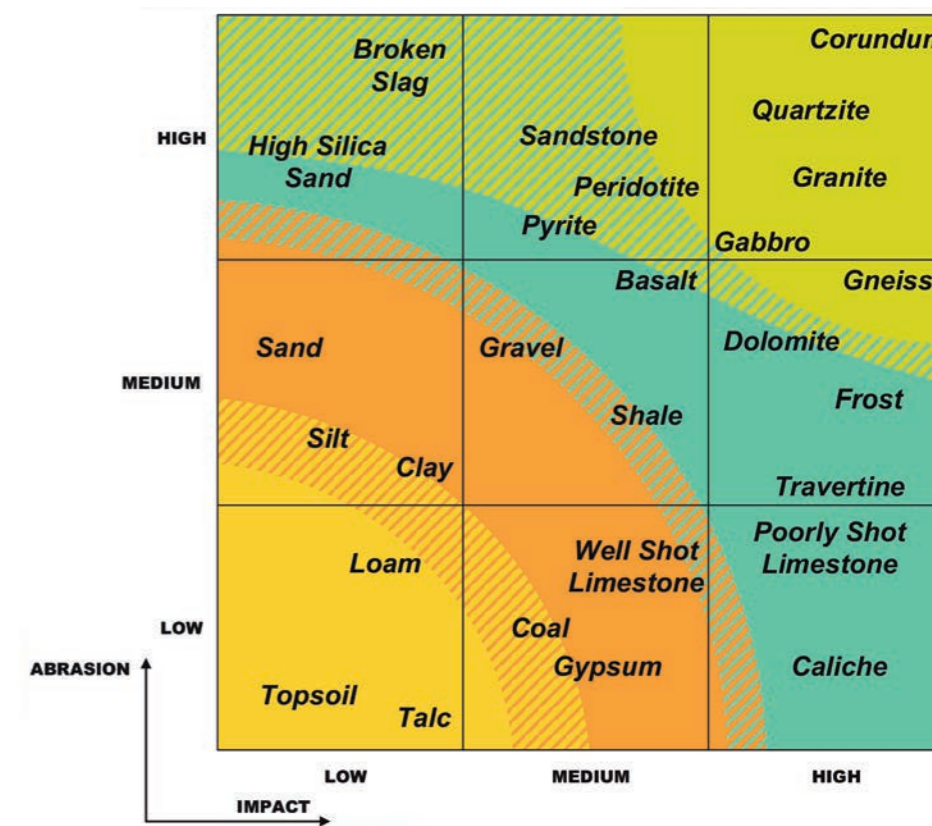


- XD
- SD
- HD
- GD

Choosing the Right Durability

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

Contact your local Cat dealer for more detailed information on choosing the right excavator, bucket and Work Tool attachment combinations to meet your application needs.



Note:

For indication only. Bucket may require optional GET and wear products. Please contact your dealer for support.

Quick Coupler CW

The Cat quick coupler can pick up any work tool and is equipped with a wedge-style locking system minimizing break-out force loss. The CW is highly suitable for harsh applications, such as demolition and quarrying.

The CW has become an industry standard, with over 45,000 units having been sold in the last 35 years. It is interchangeable with different machine classes, and has been designed for use with more than 700 different machines, both Cat and non-Cat.

Skeleton buckets

Skeleton buckets are used for their sieving capabilities and high break-out forces at demolition sites and road work applications.

Light Duty



Width range: 1250 – 1300 mm
Capacity range: 0.74 – 0.98 cum

For digging up brick roads and pavements, loading, sieving and light spading work. Buckets are available with bare base edge only.

- Light construction and large bucket opening for easy penetration underneath road bricks and asphalt

General Duty



Width range: 1250 – 1500 mm
Capacity range: 0.86 – 2.04 cum

For light demolition work, spading, sieving and breaking up asphalt and pavements. Buckets are available with J-system adapters or without adapters.

- More rigid construction that allows higher breakout force

Heavy Duty



Width range: 1250 – 1600 mm
Capacity range: 0.98 – 2.16 cum

For heavy demolition work and rock handling applications. Buckets are made of wear resistant steel types. Buckets are available with J-system adapters or without adapters.

- Thicker vertical bars and more wear resistant materials used to break up concrete

Ditch cleaning buckets

Ditch Cleaning buckets are also used for cleaning sites and during the finishing stage of landscaping.

Fixed Ditch Cleaning bucket



Width range: 1800 – 2400 mm
Capacity range: 0.68 – 2.68 cum

For light applications such as Cleaning ditches and surface Finishing.

- Buckets are available as Pin-on and for Quick Coupler.

Tiltable Ditch Cleaning bucket



Width range: 1800 – 2400 mm
Capacity range: 0.51 – 2.30 cum

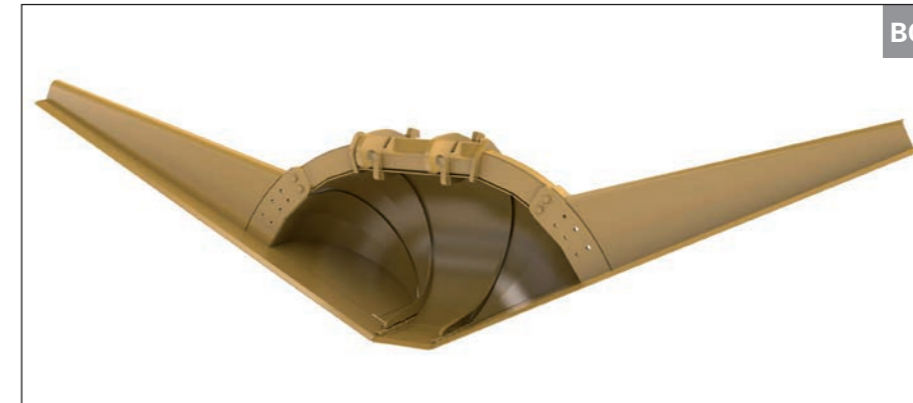
For light applications such as cleaning ditches, finishing slopes and landscaping. Buckets are made from wear resistant steel types.

- Buckets are available as Pin-on and for Quick Coupler. Tilt angle is 42 degrees both ways.

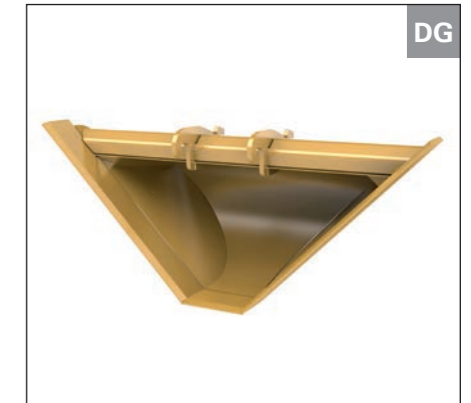
Profile buckets

For those applications where new trenches have to be made the profile buckets offer outstanding possibilities for making these trenches in an economical way. The shape of the bucket determines the shape of the trench cross section.

Adjustable wing angles



Fixed shape



Profile Buckets are available with sides that can be adjusted from 30 to 45 degrees relative to the horizon (BG) as well as in a fixed configuration with a side angle of 45 degrees (DG) relative to the horizon. These buckets are used to easily dig out ditches.

Custom buckets

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





















Caterpillar's Ground Engaging Tools (GET) and wear protection products are designed to:

- Increase machine productivity by matching GET products to a machine and its applications
- Protect structural or more expensive machine components from wear

For the best performance, always use Cat® GET. Your Caterpillar Dealer can advise the proper GET and wear protection products that will match your job.

Ground Engaging Tools for Hydraulic Excavators

Tip selection and Ground Engaging Tools (GET)

J Series Tips	K Series Tip	
 Long/Short	 General Duty	Used in most general applications.
 Heavy Duty Long	 Extra Duty	Used on larger machines in general loading and excavation work. Has longer wear life and greater strength.
 Penetration	 Penetration	Used in densely-compacted material such as clay. Gives enhanced penetration. Self sharpening.
 Penetration Plus	 Penetration Plus	Used in difficult to penetrate material with moderate-to-high impact conditions such as sedimentary rock, cemented gravel or poorly shot rock.
 Penetration Long Life	 Heavy Penetration	Ideal for use in shot rock and tight bank loading where both impact and abrasive conditions are moderate to high.
 Heavy Duty Abrasion	 Heavy Abrasion	Used on larger machines when working in sand, gravel and shot rock. Maximum wear material.,
 Wide	 Wide	Provides a clean floor. Increases capacity with less spillage.
 Sharp/Corner Sharp	 Spike	Provides maximum gouging and penetration capabilities, less wear materials are self-sharpening.
 Twin Sharp	 Double Spike	Used for enhanced fracture capability. Less penetration than sharp tip. More wear material than sharp tip.



Sidebar Protector
Protects sidebars from wear and damage. Pins on for easy installation and removal. Can be stacked, one above the other on the side of the bucket for more protection.





General Purpose Sidecutter
Effective in low-impact conditions. Suitable for most soil conditions. Provides a strong, wearresistant surface to help protect bucket sides. Extends bucket side width to match the teeth bite.



Heavy Duty Sidecutter
For tough digging conditions. More wear material. Covers more of sidebar for enhanced protection of the bucket. Scalloped profile improves bucket penetration and machine performance.



Strikeoff Sidecutter
Half-arrow shaped to provide better penetration than bare bucket, while protecting the lower bucket sides and corners. Use in moderate- to light conditions. Can be stacked for more protection.

J800 Tips		Application	Benefit
Heavy Duty Penetration		Hard-to-penetrate, highly abrasive materials Very good penetration. Long life ensured by heavy wear pad.	Very good penetration. Long life ensured by heavy wear pad.
HD Long		General excavation and loading. Good combination of penetration, strength and wear material.	Good combination of penetration, strength and wear material.

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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