Ground Engaging Tools PRODUCT CATALOG: HMS, ERS, DL, & LHD

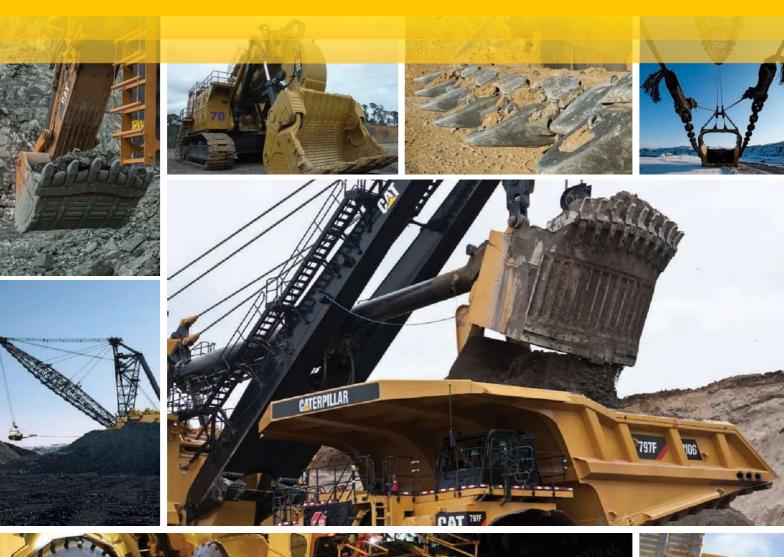
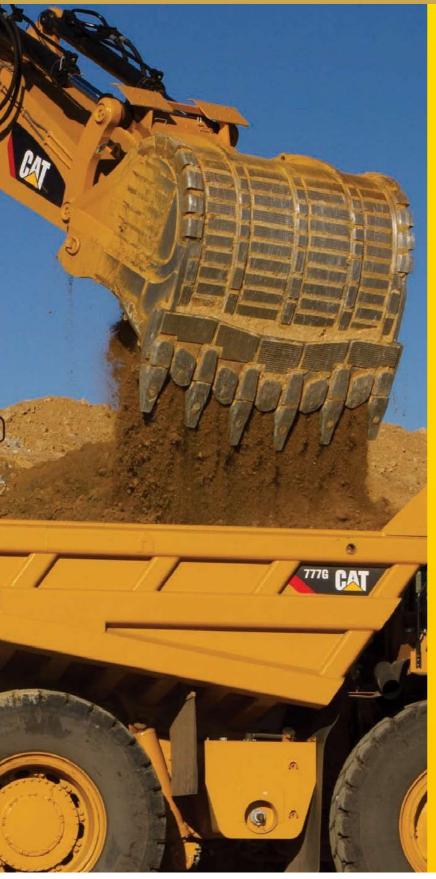








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Ground Engaging Tools

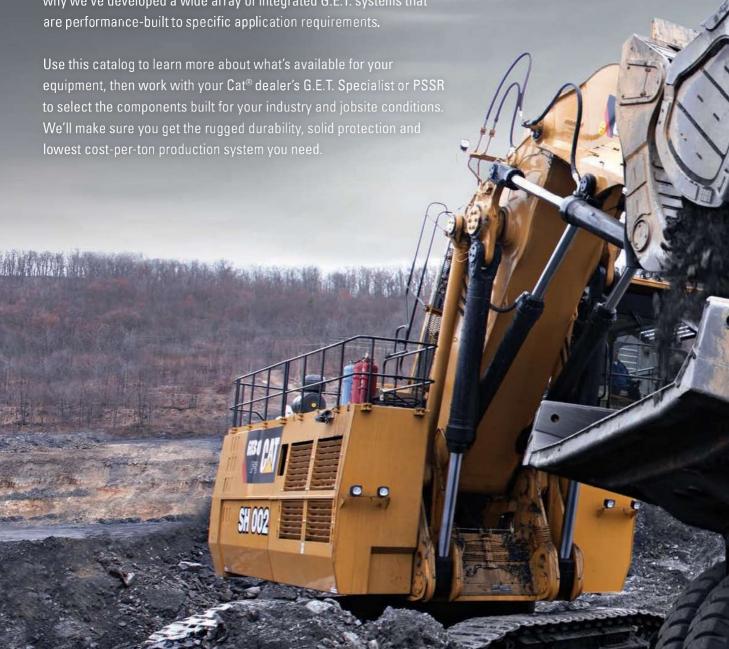
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*Note: Please send all feedback to https://dealer.cat.com/en/ps/parts/parts-mktg/get/c/form.html

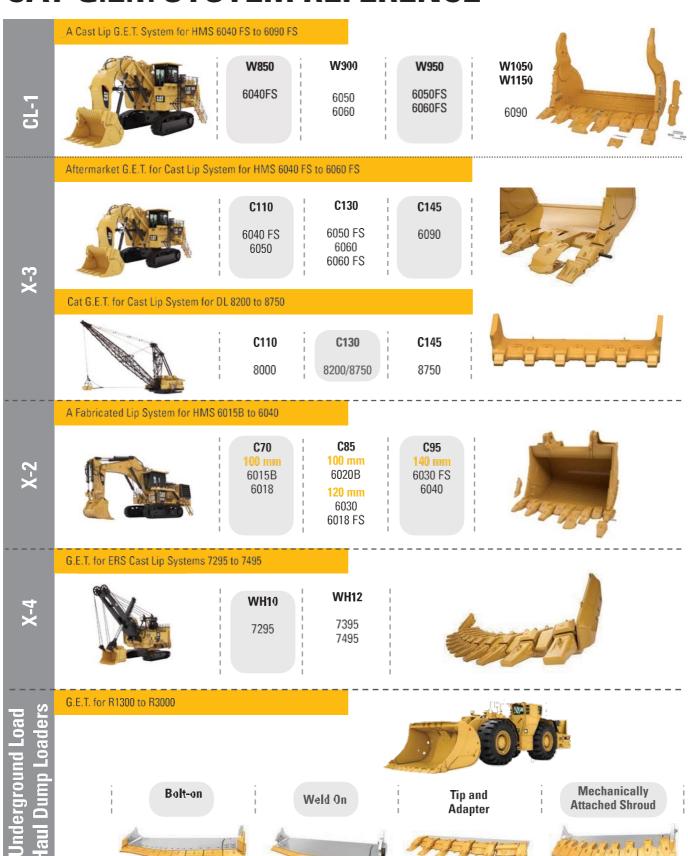


Protect expensive components. Reduce your operating costs. And get the most out of your machine's performance.

Choosing the right Ground Engaging Tools (G.E.T.) can make a big difference in your operation's productivity and profitability. That's why we've developed a wide array of integrated G.E.T. systems that are performance-built to specific application requirements.



CAT G.E.T. SYSTEM REFERENCE



MINING G.E.T. DESIGN PRINCIPLES

Cat G.E.T. is designed to match our world class Mining portfolio. G.E.T. is an important part of the total machine system. G.E.T. alone can influence machine performance by 5%, 10%, and even up to 20%! Choosing the right bucket, wear package, and G.E.T. is critical to get the most out of your machine.

Why choose genuine Cat components over aftermarket G.E.T. systems? It's simple! We design the G.E.T., bucket, and machine as a system offering the best overall performance.

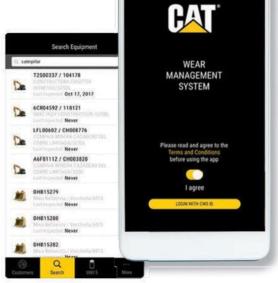


CAT WEAR MANAGEMENT SYSTEM INTRODUCES...

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.





USING BUCKET PRO, YOUR DEALER CAN PROVIDE:

| Cut was | Bucket GET Impection Report | Johnston Whitness | 10Mart 8 | Decket GET. | Decket GET Impection Report | Johnston Whitness | 10Mart 8 | Decket GET. | ERS Organ Adve Black | W200171991 | Bucket 4 | 80 And 3 NA Adversaria | Pk 2 | Categoria | Pk 3 Decket GET | Decket

» 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.

				Material Consent Posts	trous ommendations	Abrasion	House Per Week		
			x :	General reco	mmengations	162			
	8	Normal Wear	3.4	73	01Aug17	31May18	5411	1461	
398-3028	9	Abnormal Wear	3	85	01Aug17	18Apr18	4647	697	Remain
Average Life (Hours)							4960	1010	Site (Ho
Wear Caps									2
	1	Normal Wear	1.4	31	01Mar18	30Mar18	806	556	2.
	2	Normal Wear	1.4	31	01Mar18	30Mar18	806	556	
	3	Normal Wear	1.4	31	01Mar18	30Mar18	806	556	7
	4	Normal Wear	1.5	23	01Mar18	09Apr18	1087	837	1-
	5	Normal Wear	1.4	31	01Mar18	30Mar18	806	556	2
	6	Normal Wear	1.3	38	01Mar18	25Mar18	658	408	2.
	7	Normal Wear	1.3	38	01Mar18	25Mar18	658	408	
	8	Normal Wear	1.4	31	01Mar18	30Mar18	806	556	2
	9	Normal Wear	1.3	38	01Mar18	25Mar18	658	408	
Average Life (Hours)							788	538	10 14 14
Lip Shrouds									21
	1	Normal Wear	1.3	81	01Aug17	01May18	4877	927	12
	2	Normal Wear	1.3	81	01Aug17	01May18	4877	927	10
	3	Normal Wear	1.3	81	01Aug17	01May18	4877	927	10
394-9744	4	Normal Wear	1.1	94	01Aug17	24Mar18	4202	252	
394-9744	5	Normal Wear	1	100	01Aug17	10Mar18	3950	0	
394-9744	6	Normal Wear	1.1	94	01Aug17	24Mar18	4202	252	
	7	Normal Wear	1.3	81	01Aug17	01May18	4877	927	
		Alexand Miles		0.4	04447	0414	4077	007	

» 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.

CAT G.E.T. SOLUTIONS FOR SURFACE MINING SHOVELS

6015 - 7495



CL-1 FOR HYDRAULIC MINING SHOVELS 400 to 1,000 Ton

MAXIMUM PRODUCTIVITY THE MOMENT YOU HIT THE GROUND.

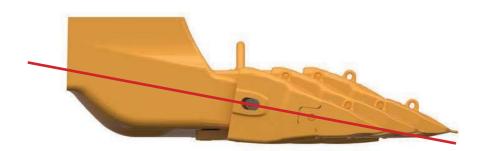
Caterpillar offers two styles of G.E.T. systems for CL-1. A performance system focused on increasing productivity, rates of penetration, and bucket fill. The other being an extended wear life system focused on maintaining the benefits of the performance system, but for use in hard rock applications and high abrasion areas.

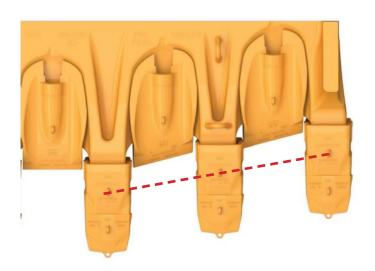


CL-1 LIP AND SYSTEM DESIGN

CL-1 cast lips are designed for use with CL-1 G.E.T systems. It is designed to be highly productive with a lowest cost per ton target. CL-1 lips are light weight which result in faster cycle times, improved RSL, and higher capacity bucket.







- » Less energy required to penetrate and fill the bucket
- » Stronger lip resulting in less flex
- » Less maintenance of cast lip due to positive retention
- » Optimized Spade Angle Shrouds reduce normal material forces on the shroud faces
- » Contoured shroud is recessed into the lip
- » 4300, 5100, 5600 mm widths
- » 5 nose sizes to match application

X-3 SYSTEM FOR HYDRAULIC MINING SHOVELS 400 to 1,000 Ton

The X-3 class of G.E.T. readily fits onto existing nose base systems for 500-ton hydraulic mining shovels. Side pin and vertical (wedge and spool) couplers work with a full selection of tip styles and lip protection. The robust design can be easily enhanced with Cat Laminated Wear Products to extend the life in high-abrasion applications.



CAT RELOAD™ CAST LIPS

Reload cast lips are designed for use with X-3 G.E.T system with a Cat C130 nose base. It is a "classic design" focused on reliability and lowest cost per hour.

- » 100% CapSure retention—simple, fast, safe, reliable
- » Machined fit surfaces—Optimized fit control between G.E.T. and new lips
- » Cat C130 specific nose base—not compatible with aftermarket adapters
- » 4300 mm and 5100 mm widths available



^{*}Aftermarket only—cannot be sold on new machines

X-2 SYSTEM FOR HYDRAULIC MINING SHOVELS 100 to 400 Ton

The X-2 class adapters are welded to our fabricated base edges that provide industry-leading durability. Hammerless shrouds protect the base edge, while conventional pins secure the wing shrouds. Six tip shapes are available to help you be productive in any application. All hammerless components feature CapSure retention that is serviced with a simple square drive.

SIMPLIFY INSTALLATION

Retainer is built into the tip.

SPEED UP CHANGE-OUT

Lock or unlock with just one turn.

ENHANCE JOBSITE SAFETY

No special tools are required to service this hammerless system.



FABRICATED EDGES

Caterpillar provides a complete line of base edge assemblies for Cat buckets. For mixed fleet buckets your Cat dealer can perform a bucket inspection and Provide a custom Cat G.E.T. layout.



MODEL	SIZE CLASS	ADAPTERS AVAILABLE
6015B	C70	100mm
6018	C70	100mm
6020B	C85	100mm
6030	C85	120mm
6018 FS	C85	120mm
6030 FS	C95	140mm
6040	C95	140mm

Contact: GET_Layouts@cat.com

- To request bucket inspection forms
- To submit request for Cat GET base edge assemblies

X-4 SYSTEM FOR ELECTRIC ROPE SHOVELS 800 to 1,500 Ton

HAMMERLESS G.E.T. FOR ELECTRIC ROPE SHOVELS (ERS)

The industry standard for electric rope shovels (ERS), the Whisler style adapter is matched with CapSure retention—making installation and removal quick and safer than hammered alternatives.



Installation and removal is safer with our hammerless screw-drive adapter.

SPEED UP CHANGE-OUT

One retainer, one turn, means fast and easy change-outs.

SIMPLIFY INSTALLATION

No piece part assembly—CapSure retention system is built into the component.



ERS CAST LIP DESIGN

PERFECT FIT, BEST RELIABILITY, EVERY TIME

Cat ERS lip systems are delivered ready to work, saving hours of G.E.T. fitment and installation time. Fully machined lip surfaces ensure that Cat G.E.T. fits perfectly, and secures tightly This reduces the rate of lip wear, extending your lifecycle. Machined retention holes reduce stress that originates in this area.



EXTEND LIP LIFECYCLE

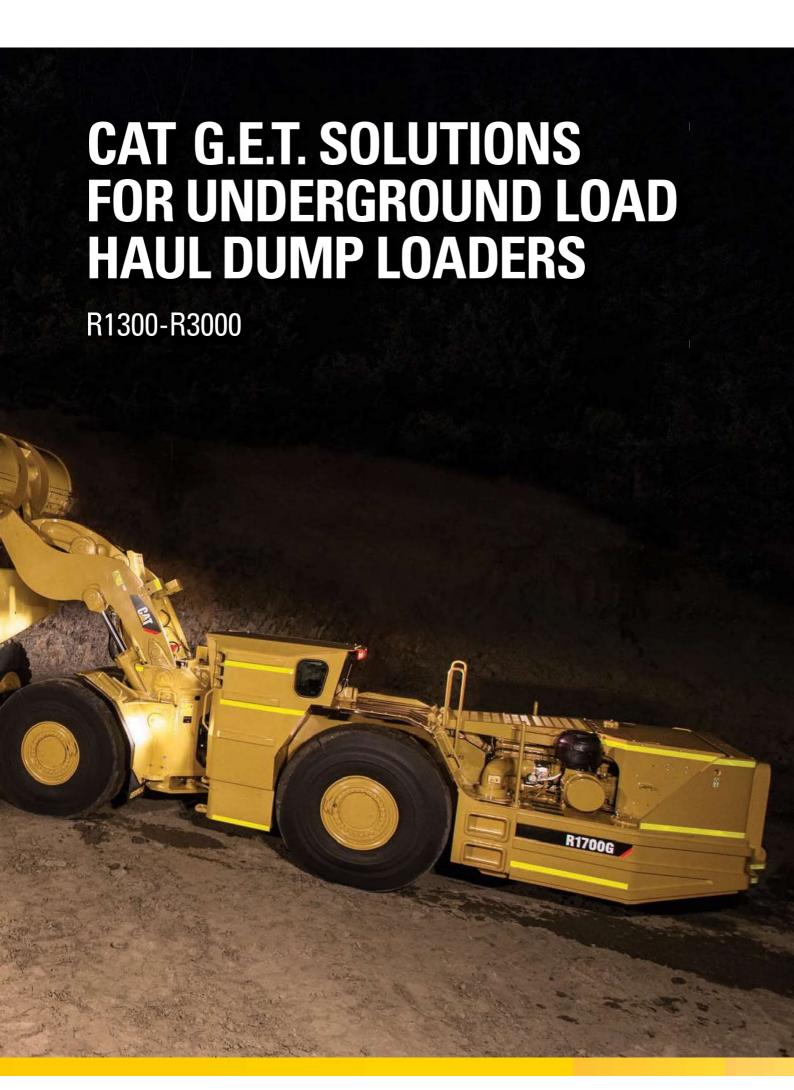
Machined surfaces provide precise dimensional control and tighter fitting G.E.T.



REDUCE STRESS CRACKING

Machined retention holes lower stresses by 22%





CAT HALF ARROW WELD-ON SYSTEM for R1700 to R3000

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



HALF ARROW OPTIONS

The Cat half arrow weld-on system provides a longer service life for your bucket, while increasing your machines productivity and reducing your machine downtime in relation to G.E.T. events. The system has been designed to increase the penetration of your bucket and provide more usable wear life to extend the life of the G.E.T.

HALF ARROWS



Half arrows have been designed to maximize the usable wear material. While at the same time maintaining a sharp edge to provide a high rate of penetration.

CORNER HALF ARROWS



Corner half arrows have been designed with 73% more wear to allow the whole system to wear at an even rate. This allows for replacement of the whole system at once rather than replacing multiple components at different times.

CAT DURILOCK™ SHROUD SYSTEM With Cat INFINITITE™ Retention for R1700 and R3000 LHD

Cat DurilockTM Shrouds adapt to your ever-changing mining environment in minutes without having to change the base edge or retention system. InfinititeTM secures the 3 shroud systems for maintenance free retention.

HAMMERLESS

50% Faster Installation & removal vs competitive shrouds systems.

MAINTENANCE FREE

No Re-torque. INFINITITE™ spring delivers continuous retaining force.

DYNAMIC

3 performance levels from the same base edge system



CAT DURILOCK™ SHROUD SYSTEM

WITH CAT INFINITITE™ RETENTION FOR R1700 TO R3000 LHD

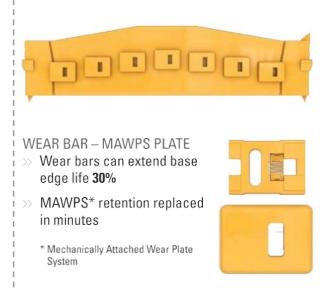
The Lip assembly provides the mounting surfaces for the shrouds and corner protectors, which balance corner and center station wear rates.



STEPPED CORNER BASE EDGE

Reduces corner shroud torsional loads by 26% to prevent breakage



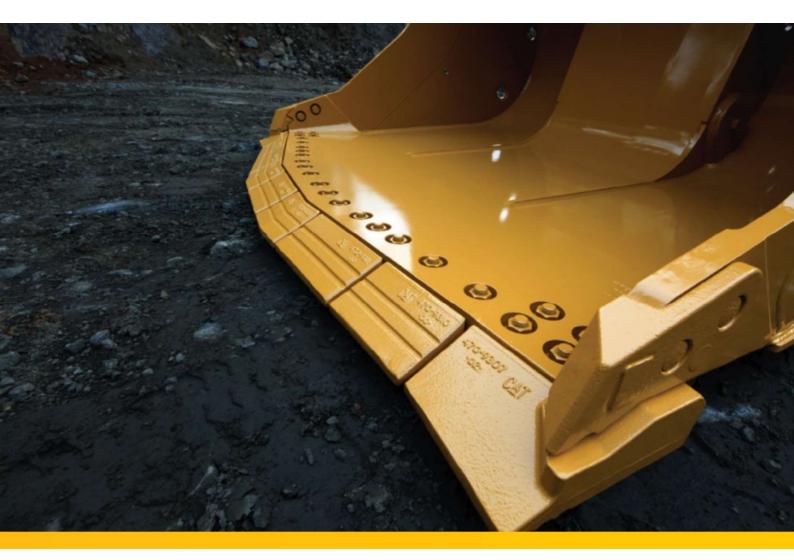


CAT BOLT-ON HALF ARROWS

MAXIMUM LIP PROTECTION THROUGH INTEGRATED DESIGN

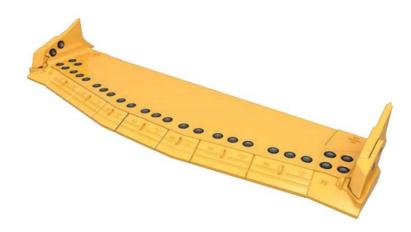
The bolt-on half arrow (BOHA) system delivers best-in-class lip protection with fewer parts than competitive systems. Reducing maintenance cost through better protection, and fewer parts to manage. BOHA segments have superior hardness vs. welded components.

HIGH PERFORMANCE	14% harder than weld-on.
SIMPLIFY INSTALLATION	Up to 75% faster replacement vs. weld-on when using Cat dirt blocker rings.
SAFETY	No welding-related concerns.



BOHA BASE EDGE DESIGN

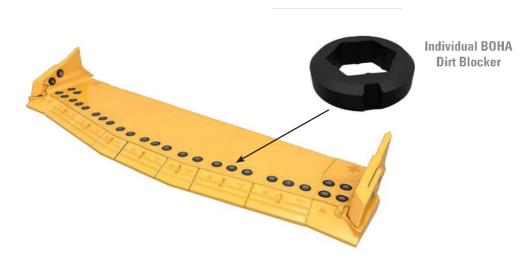
The BOHA system includes a base edge specific to your bucket, which includes cast corners (R1700-3000) and butter bead, reducing installation times by 75%.



50% more contact area reduces stress and impact, which will extend the service life of your base edge system.



Reduce clean-out times from minutes to seconds. Dirt blocker rings compresses for easy installation and removal with a common pick or flat screw driver.



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.

LAMINATED WEAR PRODUCT (LWP)



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.



Tear Drop Wear Button fits in with the existing line of circular Wear Buttons. The tear drop shape can extend into corners or follow natural tapers on the protected surface.



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.



Wear Lugs are for the use on earth moving equipment in the sidebar and leading edge of the bucket. The profile shape of the top of the Wear Lug allows this product to be utilized in TTT applications for further traction on track shoes.



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.

LAMINATED WEAR PRODUCT (LWP)

Wear Blocks are used in areas where a single piece needs to cover a large or specific surface area. There are several new Wear Blocks in the portfolio that give more flexibility and options for coverage.



6x8" Wear Blocks are versatile and long lasting. They 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.



3x4"Wear Patch Blocks can be plug welded in tight areas. They can also be grouped together where no gaps are desired between parts.



11" Trapezoidal Wear Blocks can fill a tapered area or be staggered in a pattern to avoid straight-line channels. They 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.



4x8.5" Skid Wear Blocks are rectangular shaped and perimeter welded in place.

MANGANESE WEAR PRODUCTS

MANGANESE WEAR PRODUCTS



Cat Manganese Wear Bar is the first to market product and is designed for the most impact prone applications, including mining shovel heels and lips, and in fixed plant applications including primary and secondary crushers.



Cat Manganese Wear Block are designed for the most impact prone applications.

BI-METALLIC WEAR PRODUCTS



Cat Bi-Metallic Wear Blocks use a unique mechanical bonding process for the highest impact applications. The mild steel jacket and fingers create a strong bond to the chrome white iron.



Cat Tungsten Sidebars are designed to be installed on the bucket wings of any HMS, ERS, or LHEX bucket. These are an alternative method of protection over OEM cast wing shroud systems. The tungsten carbide sidebars strengthen the bucket sidewall and provide a shadowing effect that can protect the sidewall from wear.

WEAR PRODUCTS STANDS

The specially designed stands are engineered to support over 2,500 pounds of wear products. They can be placed at the point of use parts store, warehouse, weld shop, fabrication shop for easy storage or consignment plans.

See PEBJ0031 for more information.



Full Stand



Half Stand

