



WEAR SOLUTION

KenCast™



KenCast™

Wear Solution

Exclusively from Kennametal

Wear

A small word that describes a big problem. Wear translates to expensive equipment repair and replacement costs and can cause significant downtime.

We understand wear

We understand the importance of preventing wear damage to your equipment. That's why our wear experts developed KenCast.

KenCast helps equipment last longer, whether you're working above ground or underground, on the road or in the pit, crushing rock or pushing snow. With KenCast protection, you can avoid costly repairs and downtime.

Wear protection for every part

KenCast is extremely versatile and can fit nearly any machine for nearly any application. It is easily welded or attached mechanically into position.

WEAR APPLICATIONS



ROAD MAINTENANCE



SURFACE MINING



UNDERGROUND MINING



GRINDING/RECYCLING



AGGREGATES



QUARRIES



HIGHWAY CONSTRUCTION



TUNNELING



AGRICULTURE



RAILROAD



TRENCHING



SURFACE MINER

| | |
|--|-------------|
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Product Versatility

KenCast™ is exceptionally versatile. It can fit nearly any machine for nearly any application, with few limitations on size and shape. It is easily welded or attached mechanically into position.



KenCast Conical



Stabilizer Bar



Shingle Grinder Tip



Corner Protector, Crusher Tip



Weld Bar



Bucket Lip



Curb Guard



Block and Sleeve Protector

What is KenCast?

KenCast is tungsten carbide particles that have been metallurgically bonded to air-hardened steel. The result? A tough, durable, and extremely wear-resistant material — thanks to the combination of steel and carbide.

KenCast wear parts are proven to withstand extreme abrasive and high-impact applications.

KenCast is more than rectangular shapes. It's a versatile material that fits most machines and applications, and is easily welded or attached mechanically into position. Simply put, KenCast is wear protection for your equipment.

How Does KenCast Work?

Carbide granules give KenCast exceptionally long-lasting protection. Various sized tungsten carbide particles are blended to create the right combination of carbide protection for a particular application.

Although KenCast built a reputation on superior wear plates and rectangular bars, it continues to provide wear solutions across challenging environments. Our customer base has grown to include applications in manufacturing, agriculture, and even NASCAR®.

Kennametal produces standard and custom shapes and geometries to solve specific problems. Our KenCast experts are looking for new challenges, and can help you with your most challenging wear issues.

See It in Action



New grinder hammer tip with KenCast is used in horizontal and tub grinders in the recycling industry. The outer surface is smooth prior to use. Cut-away shows the KenCast carbide particles embedded in the steel.



KenCast grinder hammer tip after 40 hours of use in highly abrasive asphalt shingle recycling application. Notice the prominent carbide particles have sustained only moderate wear. This particular hammer tip continued grinding for a total of 90 hours, outperforming and **lasting up to 10 times longer** than competitive tools!

Successful Wear Applications/Proven Solutions

| Machine/Equipment | Component/Part | Type of Wear |
|--------------------------------------|--|--|
| Road Maintenance/Construction | | |
| Snow Plow | Snow Plow Shoes Curb Bumpers | Sliding Impact/Sliding |
| Graders | Plow Blade End Protectors/Guards | Impact/Sliding |
| Street Sweeper | Sweeper Skid Shoes | Sliding |
| Steel Wheel Compactor | Sheepsfoot | Abrasion |
| Railroad | | |
| Tamping Equipment | Tamping Tools Ballast Regulator Z-Bars | Impact/Abrasion Sliding |
| Grinding/Recycling | | |
| Horizontal Grinder | Grinder Hammer Tips | Impact/Abrasion |
| Tub Grinder | Swing Hammer | Impact/Abrasion |
| Aggregates & Quarries | | |
| Track Equipment | Grouser bar | Abrasion sliding |
| Screening | Grizzlies | Impact wear |
| Bucket Loaders | Bucket Lips | Abrasion |
| Crushers/Sizers | Wall Plates Center Feed Disks Weld-On Teeth Conicals Hammers | Impact/Abrasion |
| Mining | | |
| Longwall Miner | Vane Protection | Abrasion |
| Continuous Miner | Block and Pedestal Protection | Abrasion |
| Continuous Loading Arm (CLA) | CLA Tips | Sliding |
| Surface Mining Buckets | Bucket Lips Skid Plates Heel Bands Wing Shrouds | Abrasion |
| Tunneling | | |
| Tunnel Boring Machine | Gage & Cutter Face Protection | Impact/Abrasion |
| Highway Construction | | |
| Road Reclamation | Pedestal Protectors Side Cleaner Bars | Impact/Abrasion |
| Road Planer/Milling Machine | Kicker Plates, End Ring Protection Drag Shoes Block Protectors | Abrasion Sliding Impact/Abrasion |
| Foundation Drilling | | |
| Foundation Drill | KenCast Weld-On Bars Block Protectors Scroll Protection Abrasion Resistance Conical | Cutting (Core Barrels)/Abrasion Impact/Abrasive Abrasion Abrasion |
| Trenching | | |
| Trencher/Surface Miner | Base Plate Protection Block Protectors Pedestal Protectors | Impact/Abrasion |
| Agriculture | | |
| Tillage | Tillage Tools | Abrasion |
| NASCAR® Racing | | |
| Race Car | Underside Wear Plates | Sliding |



Whether it's sliding, gouging, pushing, or impact, abrasive wear can add up to costly equipment repair and replacement costs.

Key Benefits of KenCast

- Extreme versatility — Complex parts and geometries can be produced and customized to specific wear issues.
- Excellent wear resistance — Lowering repair costs and downtime.
- Additional protection for your equipment.
- Easy to apply in the field.
- Non-layered material



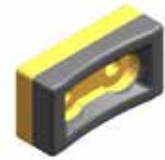
Ski



End Ring Protection



Base Protectors



Kicker Paddle

KenCast vs. Other Wear Protection Methods

KenCast consistently outperforms other wear protection methods:

| Other Methods | KenCast |
|--|--|
| Brazed-on solid carbide tiles | Tougher |
| Hardfacing | Longer lasting More wear resistant Better steel protection |
| Standard or AR-type steels, chocky blocks, and chromium carbide plates | |
| Embedded weld overlays | |



Proven Solution: KenCast

- Machine — Telsmith™ 24-21 HSI RAP Crusher
- Customer — Hawbaker®
 - 8 crushers, with 3 apron plates per crusher.
- Location — Pleasant Gap, PA.
- Competitive solution — Baldwin International has developed Tuffbraz 600 plate for industrial applications requiring the highest levels of strength and fatigue resistance.
 - Processed 10–15K tons of material before end of life.

- **Kennametal solution** — KenCast apron plates
 - Processed **74k tons** of material with minimal wear.
 - **7x life.**



Used apron plate with minimal wear after 74,000 tons



Telsmith 24-21 HSI RAP Crusher

KenCast: Product Versatility and Proven Performance

Bucket Lips | Drill Stabilizers | Grouser Bars
Shovel Protection | Dozer Blade Wear Areas

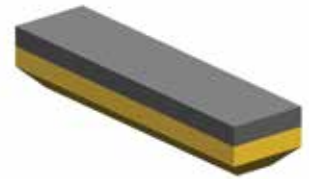
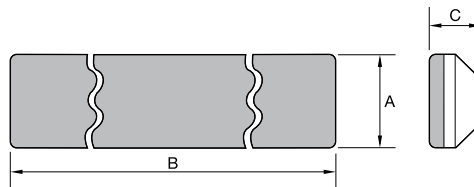
KenCast Hardness Properties

Hardness ranges for composite ingredients:

- Tungsten carbide = 86–91 HRA
- Matrix steel = 52–58 HRC (bonded to carbide)
- Base steel = 38–50 HRC

Wear Bar

- Standard weld bar with weld chamfer.
- Best for impact applications.



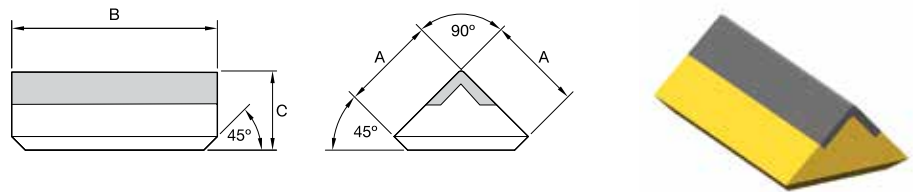
| Description | Order Code | A | | B | | C | |
|--------------|------------|------|--------|-------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0083 | 1012442 | 0.50 | 12.70 | 2.75 | 69.85 | 0.75 | 19.05 |
| KCWB-0201 | 1012504 | 0.63 | 15.88 | 4.00 | 101.60 | 0.75 | 19.05 |
| KCWB-0254 | 1012544 | 0.63 | 15.88 | 2.00 | 50.80 | 0.75 | 19.05 |
| KCWB-0378 | 1155344 | 0.75 | 19.05 | 5.00 | 127.00 | 0.75 | 19.05 |
| KCWB-0084 | 1012443 | 1.00 | 25.40 | 4.00 | 101.60 | 1.00 | 25.40 |
| KCWB-0096 | 1012447 | 1.00 | 25.40 | 10.00 | 254.00 | 0.75 | 19.05 |
| KCWB-0097 | 1012448 | 1.00 | 25.40 | 12.00 | 304.80 | 0.75 | 19.05 |
| KCWB-0246 | 1012536 | 1.00 | 25.40 | 2.00 | 50.80 | 0.50 | 12.70 |
| KCWB-0055-20 | 1012633 | 1.00 | 25.40 | 2.00 | 50.80 | 0.75 | 19.05 |
| KCWB-0055-30 | 1012634 | 1.00 | 25.40 | 3.00 | 76.20 | 0.75 | 19.05 |
| KCWB-0055-35 | 1012635 | 1.00 | 25.40 | 3.50 | 88.90 | 0.75 | 19.05 |
| KCWB-0055-40 | 1012636 | 1.00 | 25.40 | 4.00 | 101.60 | 0.75 | 19.05 |
| KCWB-0055-50 | 1012637 | 1.00 | 25.40 | 5.00 | 127.00 | 0.75 | 19.05 |
| KCWB-0055-60 | 1012638 | 1.00 | 25.40 | 6.00 | 152.40 | 0.75 | 19.05 |
| KCWB-0055-80 | 1012639 | 1.00 | 25.40 | 8.00 | 203.20 | 0.75 | 19.05 |
| KCWB-0367 | 1094287 | 1.00 | 25.40 | 2.00 | 50.80 | 0.50 | 12.70 |
| KCWB-0067 | 1012436 | 1.50 | 38.10 | 5.00 | 127.00 | 0.75 | 19.05 |
| KCWB-0186 | 1012492 | 1.50 | 38.10 | 10.00 | 254.00 | 0.75 | 19.05 |
| KCWB-0362 | 1083967 | 1.50 | 38.10 | 2.00 | 50.80 | 0.75 | 19.05 |
| KCWB-0471 | 1919347 | 1.50 | 38.10 | 6.00 | 152.40 | 1.00 | 25.40 |
| KCWB-0022 | 1012423 | 2.00 | 50.80 | 10.00 | 254.00 | 1.00 | 25.40 |
| KCWB-0105 | 1012452 | 2.00 | 50.80 | 12.00 | 304.80 | 1.00 | 25.40 |
| KCWB-0284 | 1012573 | 2.00 | 50.80 | 13.00 | 330.20 | 1.25 | 31.75 |
| KCWB-0342 | 1012628 | 2.00 | 50.80 | 10.00 | 254.00 | 0.75 | 19.05 |
| KCWB-0056-20 | 1012640 | 2.00 | 50.80 | 2.00 | 50.80 | 0.75 | 19.05 |
| KCWB-0056-35 | 1012641 | 2.00 | 50.80 | 3.50 | 88.90 | 0.75 | 19.05 |
| KCWB-0056-40 | 1012642 | 2.00 | 50.80 | 4.00 | 101.60 | 0.75 | 19.05 |
| KCWB-0056-60 | 1012643 | 2.00 | 50.80 | 6.00 | 152.40 | 0.75 | 19.05 |
| KCWB-0056-80 | 1012644 | 2.00 | 50.80 | 8.00 | 203.20 | 0.75 | 19.05 |
| KCWB-0438 | 1796637 | 2.00 | 50.80 | 12.00 | 304.80 | 1.00 | 25.40 |
| KCWB-0496 | 2036144 | 2.00 | 50.80 | 6.00 | 152.40 | 1.25 | 31.75 |
| KCWB-0206-NH | 1719256 | 2.38 | 60.33 | 9.13 | 231.78 | 0.38 | 9.53 |
| *KCWB-0394 | 1324494 | 2.50 | 63.50 | 8.00 | 203.20 | 0.75 | 19.05 |
| *KCWB-0395 | 1324495 | 2.50 | 63.50 | 12.00 | 304.80 | 0.75 | 19.05 |
| KCWB-0057-20 | 1012645 | 3.00 | 76.20 | 2.00 | 50.80 | 0.75 | 19.05 |
| KCWB-0057-40 | 1012647 | 3.00 | 76.20 | 4.00 | 101.60 | 0.75 | 19.05 |
| KCWB-0057-60 | 1012648 | 3.00 | 76.20 | 6.00 | 152.40 | 0.75 | 19.05 |
| KCWB-0057-80 | 1012649 | 3.00 | 76.20 | 8.00 | 203.20 | 0.75 | 19.05 |
| KCWB-0098 | 1012449 | 5.00 | 127.00 | 8.00 | 203.20 | 1.00 | 25.40 |
| KCWB-0286 | 1012575 | 5.00 | 127.00 | 12.00 | 304.80 | 0.75 | 19.05 |
| KCWB-0484 | 1996381 | 5.00 | 127.00 | 8.00 | 203.20 | 0.75 | 19.05 |
| KCWB-0010 | 1714704 | 7.00 | 177.80 | 13.00 | 330.20 | 2.00 | 50.80 |
| KCWB-0094 | 1083557 | 8.75 | 222.25 | 10.75 | 273.05 | 1.00 | 25.40 |

NOTE: Gray shading indicates carbide location on the part.
* Weld bevels along length only.

Drawings represent popular KenCast sizes. We make sizes to suit nearly any machine or application. Contact your local Kennametal Representative for more information.

Wedge

- Creates a cutting action allowing material flow.
- Application: block protection.

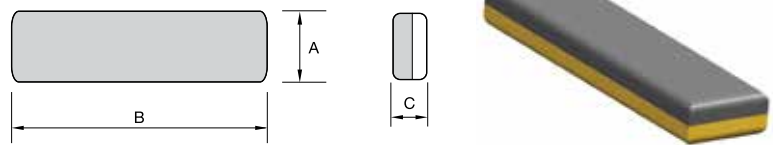


| Description | Order Code | A | | B | | C | |
|-------------|------------|------|-------|------|-------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0243 | 1012534 | 1.50 | 38.10 | 1.50 | 38.10 | 1.25 | 31.75 |
| KCWB-0290 | 1012579 | 1.50 | 38.10 | 3.25 | 82.55 | 1.25 | 31.75 |

NOTE: Gray shading indicates carbide location on the part.

Wear Bar (Thin)

- Thin plate with no weld chamfer.
- Provides maximum clearance.
- Not for impact applications.

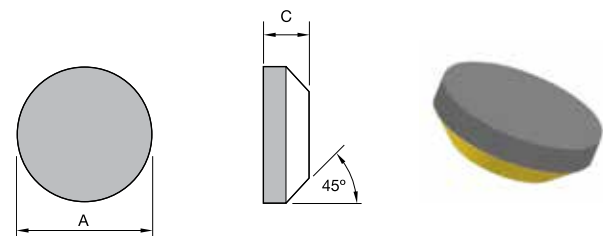


| Description | Order Code | A | | B | | C | |
|-------------|------------|------|-------|-------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0132 | 1012461 | 0.50 | 12.70 | 4.00 | 101.60 | 0.50 | 12.70 |
| KCWB-0300 | 1012586 | 0.75 | 19.05 | 4.00 | 101.60 | 0.50 | 12.70 |
| KCWB-0114 | 1012454 | 1.00 | 25.40 | 4.00 | 101.60 | 0.50 | 12.70 |
| KCWB-0277 | 1012566 | 1.00 | 25.40 | 8.00 | 203.20 | 0.25 | 6.35 |
| KCWB-0301 | 1174410 | 1.00 | 25.40 | 3.00 | 76.20 | 0.50 | 12.70 |
| KCWB-0188 | 1012494 | 1.50 | 38.10 | 5.00 | 127.00 | 0.50 | 12.70 |
| KCWB-0216 | 1012515 | 1.50 | 38.10 | 6.00 | 152.40 | 0.25 | 6.35 |
| KCWB-0091 | 1012444 | 2.00 | 50.80 | 6.00 | 152.40 | 0.50 | 12.70 |
| KCWB-0092 | 1012445 | 2.00 | 50.80 | 3.00 | 76.20 | 0.50 | 12.70 |
| KCWB-0095 | 1012446 | 2.00 | 50.80 | 15.75 | 400.05 | 0.50 | 12.70 |
| KCWB-0100 | 1012450 | 2.00 | 50.80 | 8.00 | 203.20 | 0.50 | 12.70 |
| KCWB-0210 | 1012512 | 2.00 | 50.80 | 2.00 | 50.80 | 0.25 | 6.35 |
| KCWB-0278 | 1012567 | 2.00 | 50.80 | 8.00 | 203.20 | 0.25 | 6.35 |
| KCWB-0329 | 1012614 | 2.00 | 50.80 | 5.25 | 133.35 | 0.50 | 12.70 |
| KCWB-0065 | 1012435 | 3.00 | 76.20 | 4.00 | 101.60 | 0.50 | 12.70 |
| KCWB-0241 | 1012532 | 3.00 | 76.20 | 6.00 | 152.40 | 0.25 | 6.35 |
| KCWB-0249 | 1012539 | 3.00 | 76.20 | 6.00 | 152.40 | 0.50 | 12.70 |

NOTE: Gray shading indicates carbide location on the part.

Round (Tapered Face)

- Applications: drilling, bucket protection.

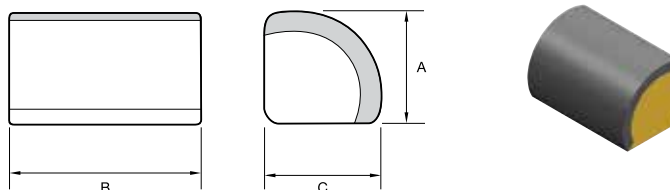


| Description | Order Code | A | | B | | C | |
|-------------|------------|------|-------|----|----|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0127 | 1012457 | 1.50 | 38.10 | — | — | 0.75 | 19.05 |
| KCWB-0279 | 1012568 | 1.50 | 38.10 | — | — | 0.50 | 12.70 |
| KCWB-0280 | 1012569 | 2.00 | 50.80 | — | — | 0.50 | 12.70 |
| KCWB-0281 | 1012570 | 3.00 | 76.20 | — | — | 0.50 | 12.70 |

NOTE: Gray shading indicates carbide location on the part.

Quarter Round

- Protects inside corners.
- Helps material flow.

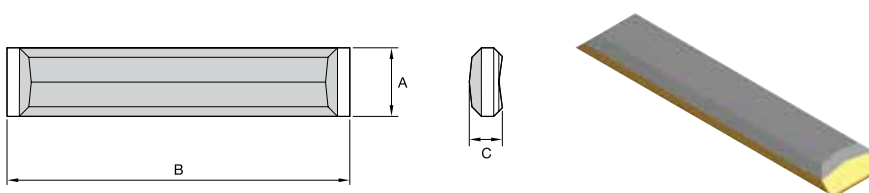


| Description | Order Code | A | | B | | C | |
|------------------|------------|------|-------|------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0285 | 1012574 | 1.75 | 44.45 | 2.88 | 73.03 | 1.75 | 44.45 |
| KCWB-0526 | 2426055 | 1.75 | 44.45 | 8.00 | 203.20 | 1.75 | 44.45 |
| KCWB-0526-4 INCH | 3902019 | 1.75 | 44.45 | 4.00 | 101.60 | 1.75 | 44.45 |
| KCWB-0526-7 INCH | 3902020 | 1.75 | 44.45 | 7.00 | 177.80 | 1.75 | 44.45 |

NOTE: Gray shading indicates carbide location on the part.

Chevron

- Unique geometry.
- Application: stabilizer bar to prevent belt wear.

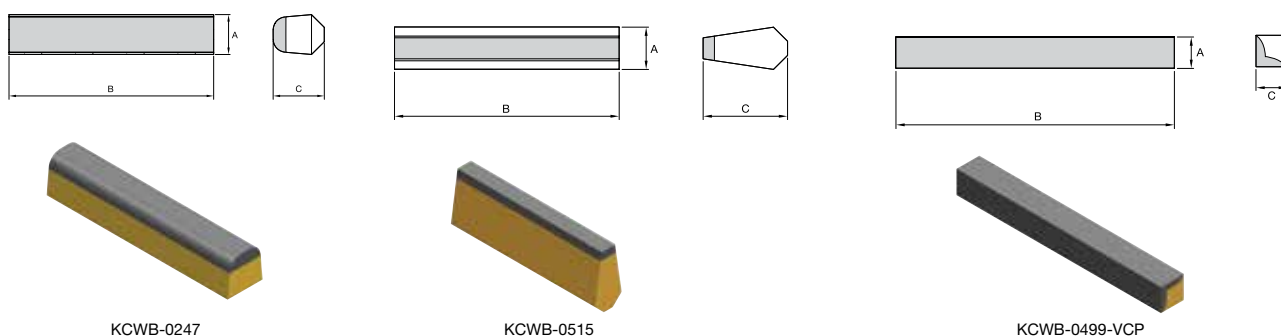


| Description | Order Code | A | | B | | C | |
|-------------|------------|------|-------|-------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0126 | 1012456 | 2.00 | 50.80 | 10.00 | 254.00 | 1.00 | 25.40 |
| KCWB-0128 | 1012458 | 2.00 | 50.80 | 10.00 | 254.00 | 0.75 | 19.05 |

NOTE: Gray shading indicates carbide location on the part.

Grouser

- Track machine applications: extend track pad life, provide extra traction.

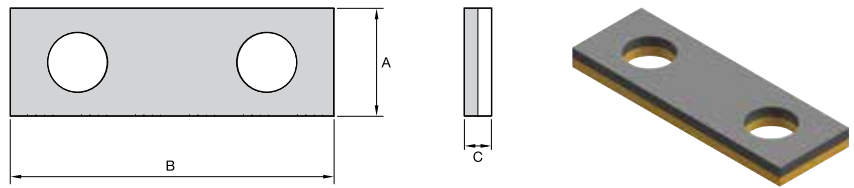


| Description | Order Code | A | | B | | C | |
|---------------|------------|------|-------|-------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0247 | 1012537 | 0.75 | 19.05 | 4.00 | 101.60 | 1.00 | 25.40 |
| KCWB-0515 | 2259012 | 0.75 | 19.05 | 4.00 | 101.60 | 1.50 | 38.10 |
| KCWB-0541 | 2271390 | 1.00 | 25.40 | 1.50 | 38.10 | 0.78 | 19.81 |
| KCWB-0499-VCP | 2039770 | 2.25 | 57.15 | 20.00 | 508.00 | 2.25 | 57.15 |
| KCWB-0389 | 1308317 | 0.62 | 15.75 | 3.00 | 76.20 | 1.00 | 25.40 |

NOTE: Gray shading indicates carbide location on the part.

■ Plate with Holes

- Similar to standard wear bar.
- Holes allow use of plug weld or bolt-on.

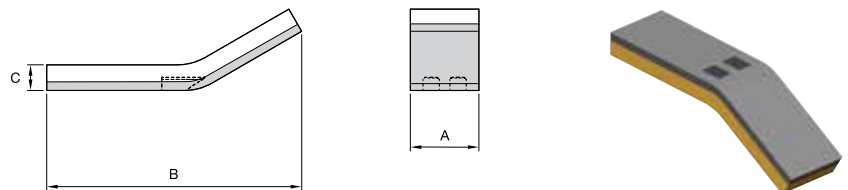


| Description | Order Code | A | | B | | C | |
|---------------------|----------------|------|-------|------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0091-2H | 1012663 | 2.00 | 50.80 | 6.00 | 152.40 | 0.50 | 12.70 |
| KCWB-0570 | 1012494 | 1.00 | 25.40 | 2.00 | 50.80 | 0.50 | 12.70 |

NOTE: Gray shading indicates carbide location on the part.

■ Wear Ski (Weld-On)

- Great for slide abrasion.
- Applications: housings on sweepers and milling machines, plow shoes.

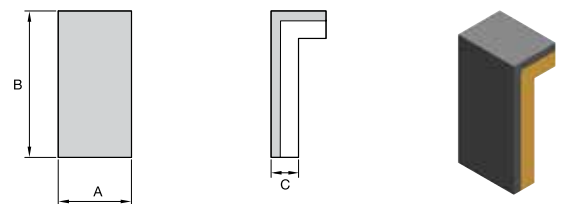


| Description | Order Code | A | | B | | C | |
|------------------|----------------|------|-------|------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0311 | 1012596 | 2.00 | 50.80 | 7.50 | 190.50 | 0.75 | 19.05 |
| KCWB-0312 | 1012597 | 3.00 | 76.20 | 7.50 | 190.50 | 0.75 | 19.05 |

NOTE: Gray shading indicates carbide location on the part.

■ L Shape VCP

- L shape to protect corners.
- Application: weld to face of steel crusher teeth.

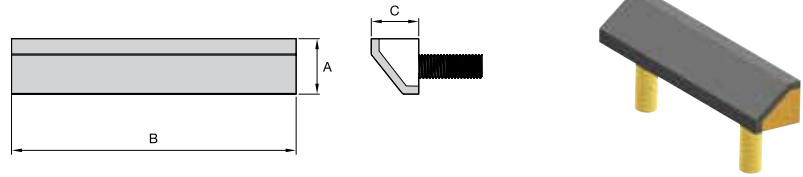


| Description | Order Code | A | | B | | C | |
|-----------------------------|----------------|------|--------|------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0447-VCP CORNER | 1829225 | 2.00 | 50.80 | 4.00 | 101.60 | 0.75 | 19.05 |
| KCWB-0457-VCP | 1850291 | 4.00 | 101.60 | 2.00 | 50.80 | 0.75 | 19.05 |

NOTE: Gray shading indicates carbide location on the part.

■ Reclaimer Bar

- Application: wear protection for drums.
- Bolt-on parts, eliminates welding.

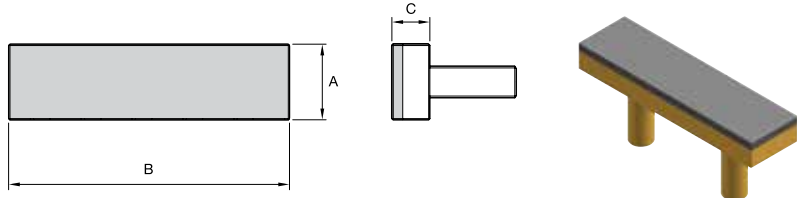


| Description | Order Code | A | | B | | C | |
|------------------|----------------|------|-------|------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0420 | 1731649 | 1.75 | 44.45 | 9.00 | 228.60 | 1.50 | 38.10 |

NOTE: Gray shading indicates carbide location on the part.

■ Bolt-On Wear Protection

- Threaded studs on back of casting.
- Can be bolted vs. welded.

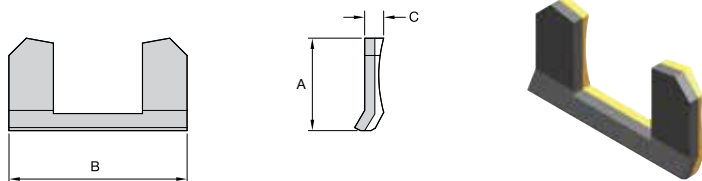


| Description | Order Code | A | | B | | C | |
|------------------|----------------|------|-------|------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0406 | 1542508 | 1.75 | 44.45 | 6.50 | 165.10 | 0.88 | 22.23 |

NOTE: Gray shading indicates carbide location on the part.

■ Base Protector

- Protect Kennametal quick-change bases.

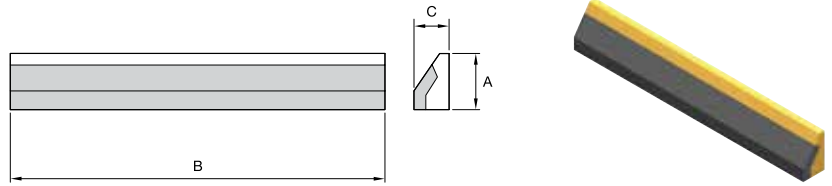


| Description | Order Code | A | | B | | C | |
|------------------|----------------|------|-------|------|-------|------|------|
| | | in | mm | in | mm | in | mm |
| KCWB-0464 | 1858536 | 1.91 | 48.51 | 3.50 | 88.90 | 0.38 | 9.53 |
| KCWB-0413 | 1621388 | 2.12 | 53.85 | 2.75 | 69.85 | 0.38 | 9.53 |
| KCWB-0412 | 1621288 | 2.19 | 55.63 | 3.50 | 88.90 | 0.38 | 9.53 |

NOTE: Gray shading indicates carbide location on the part.

Ramp

- Wedge shape helps deflect material.
- Application: prevent wear on chute liners.

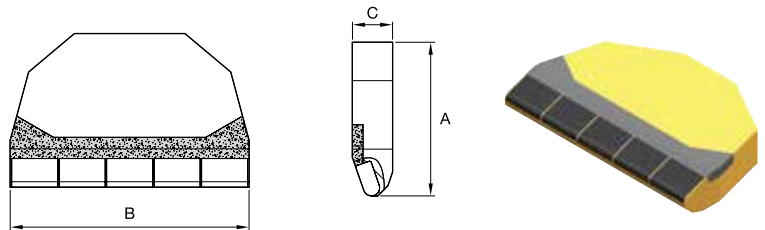


| Description | Order Code | A | | B | | C | |
|------------------|----------------|------|-------|-------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0191 | 1012496 | 1.19 | 30.16 | 8.00 | 203.20 | 0.75 | 19.05 |
| KCWB-0591 | 1012503 | 3.00 | 76.20 | 12.00 | 304.80 | 1.00 | 25.40 |

NOTE: Gray shading indicates carbide location on the part.

Tamper

- Solid inserts cast into part for extended life.
- Application: tamping railroad ballast.

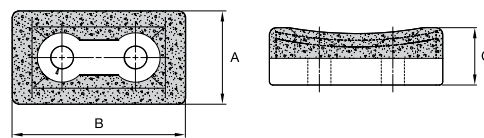


| Description | Order Code | A | | B | | C | |
|--------------------|----------------|------|-------|------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0001-3 | 1012650 | 3.00 | 76.20 | 4.50 | 114.30 | 0.75 | 19.05 |
| KCWB-0766 | 6360017 | 3.62 | 91.95 | 5.63 | 143.00 | 0.94 | 23.88 |

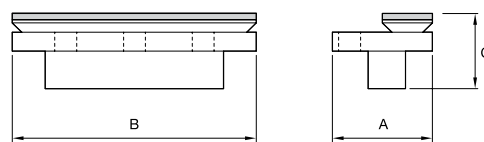
NOTE: Gray shading indicates carbide location on the part.

Bolt-On Wear Protection

- Weldment made with KenCast.
- Application: kicker plate for milling machine.



KCWB-0750-VCP
KCWB-0741-VCP



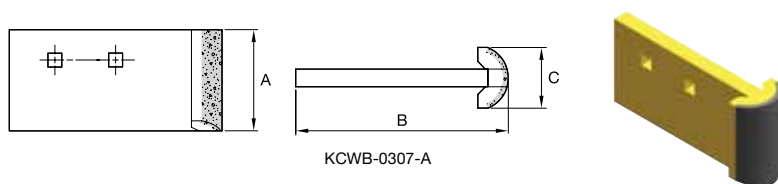
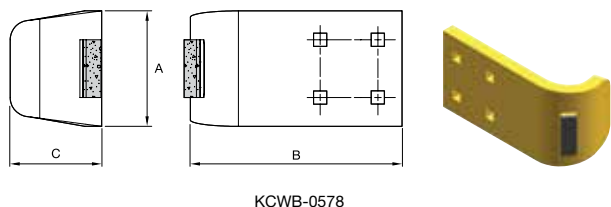
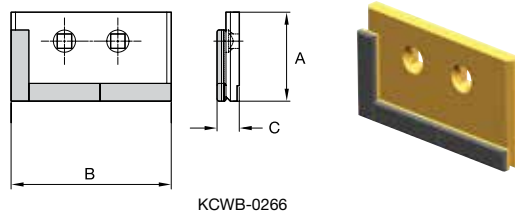
KCWB-0540
KCWB-0556

| Description | Order Code | A | | B | | C | |
|----------------------|----------------|------|--------|------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0750-VCP | 6167313 | 3.50 | 88.90 | 6.50 | 165.10 | 2.15 | 54.60 |
| KCWB-0741-VCP | 6134828 | 3.50 | 88.90 | 9.50 | 241.30 | 2.15 | 54.60 |
| KCWB-0540 | 2243688 | 4.00 | 101.60 | 9.75 | 247.65 | 3.00 | 76.20 |
| KCWB-0556 | 3033385 | 4.00 | 101.60 | 5.53 | 140.67 | 3.00 | 76.20 |

NOTE: Gray shading indicates carbide location on the part.

■ **Plow Blade Guard**

- Weldment made with KenCast.
- Application: protects end of snow plows and grader blades.



| Description | Order Code | A | | B | | C | |
|-------------|------------|------|--------|-------|--------|------|--------|
| | | in | mm | in | mm | in | mm |
| KCWB-0266 | 1012556 | 5.00 | 1.27 | 9.0 | 228.60 | 1.25 | 31.75 |
| KCWB-0578 | 3390176 | 6.00 | 152.40 | 12.20 | 309.88 | 4.50 | 114.30 |
| KCWB-0307-A | 1012592 | 5.00 | 127.00 | 10.51 | 266.95 | 3.00 | 76.20 |
| KCWB-0574 | 3336844 | 6.00 | 152.40 | 22.51 | 571.75 | 3.00 | 76.20 |

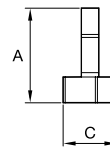
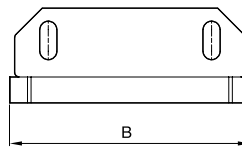
NOTE: Gray shading indicates carbide location on the part.



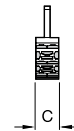
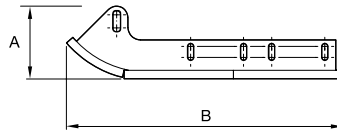
For more information, please visit kennametal.com to access the Snow Removal Catalog.

■ Wear Ski (Bolt-On)

- Solid inserts prevent gouging of road surface.
- Application: bolt-on wear protection for milling machines.



KCWB-0638



KCWB-0639

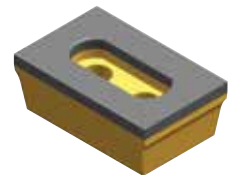
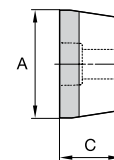
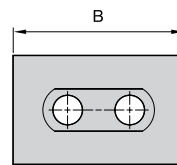


| Description | Order Code | A | | B | | C | |
|------------------|----------------|------|--------|-------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0638 | 4099269 | 1.50 | 38.10 | 7.00 | 177.80 | 0.75 | 19.05 |
| KCWB-0639 | 4110656 | 6.50 | 165.10 | 24.66 | 626.36 | 2.03 | 51.60 |

NOTE: Carbide inserts embedded in the bottom of the ski.

■ Grinder Tip

- Applications: asphalt shingle, waste material grinding/recycling.



| Description | Order Code | A | | B | | C | |
|------------------|----------------|------|-------|------|--------|------|-------|
| | | in | mm | in | mm | in | mm |
| KCWB-0480 | 1981905 | 3.50 | 88.90 | 5.50 | 139.70 | 2.00 | 50.80 |

NOTE: Gray shading indicates carbide location on the part.



Grinder Tips
...for Tilt and Horizontal Machines



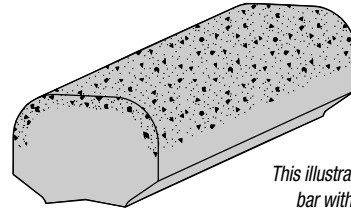
For more information, please visit kennametal.com to access the Grinder Tips Catalog.

Product Versatility

KenCast™ is exceptionally versatile. It can fit nearly any machine for nearly any application, with few limitations on size and shape. It is easily welded or attached mechanically into position.

Standard part sizes and shapes available:

- Thickness – minimum 1/4" (6mm) to a maximum of 8" (200mm)
- Width – up to a maximum of 20" (500mm)
- Length – up to a maximum of 20" (500mm)



This illustration shows a crusher bar with KenCast carbide particles on three sides

Attachment Guidelines

These are general guidelines on how to apply KenCast to your equipment. However, weld applications may vary substantially, depending on the material to which KenCast is applied. Consult a local welding representative or contact your Kennametal Representative for recommendations on your particular application.

Weld Material

| | |
|--|---|
| .052" (13,2mm) wire (flux cored) | <ul style="list-style-type: none"> • 7100 ESAB or equivalent, shielded with carbon dioxide • 22–24 volts and 200–235 amps |
| 1/8" (3,1mm) weld rod | <ul style="list-style-type: none"> • 7018M or equivalent, low hydrogen • 21–33 volts/135–185 amps |
| <p><i>These specifications are for welding to low- to medium-carbon steels. When welding to specialty steels, such as stainless and manganese, contact your Kennametal Representative for welding recommendations.</i></p> | |

Welding Instructions

KenCast parts must be welded properly to achieve optimum performance:

- Always attach castings with the steel side against the surface to be protected.
- The carbide surface side, painted black to identify the wear side, faces outward.
- Welding the carbide surface can cause cracking and is detrimental to carbide particles.

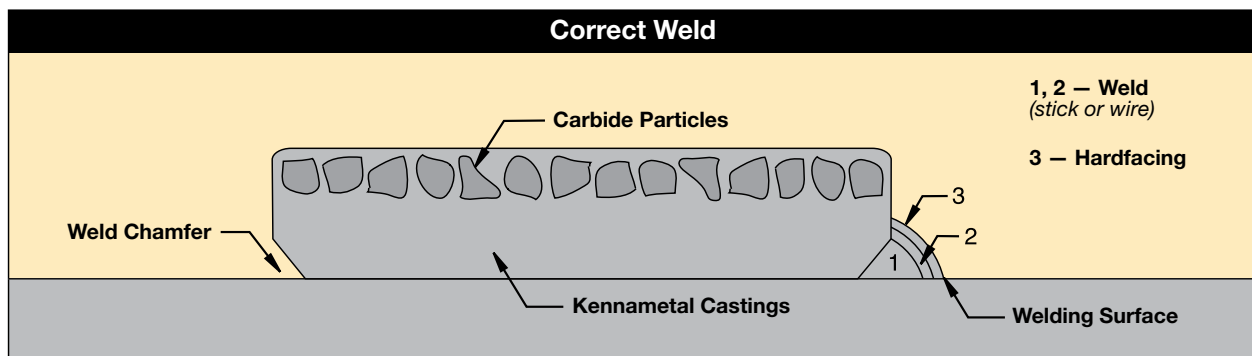
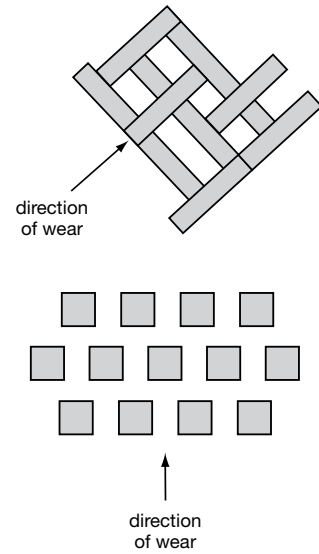
Cutting Instructions

There are two ways to cut KenCast:

- Option #1** Score the steel side with an angle grinder or chop saw with corundum wheel, then strike with a hammer.
- or*
- Option #2** Plasma or waterjet.

Recommendations

- Protect welds by using weld chamfers, hardfacing over the welds, or positioning the KenCast part to avoid wear on the welds.
- When using KenCast parts to cover large areas, create a “dead-bed” effect by positioning the castings so that the work material packs between the KenCast pieces (see illustrations).
- Stagger the placements of the KenCast parts to avoid wearing troughs between the parts.
- Parts to be welded should be about 70°F (21°C).
- The KenCast part should not exceed 600°F (315°C) at any time during welding.
- First tack weld parts lightly to ensure proper placement before total welding is done.
- Pre-heating and post-heating of KenCast parts is not usually necessary. However, if the material to which the KenCast part is being applied requires heating, then pre-heat the KenCast part up to 600°F (315°C) (do not exceed 600°F [315°C]). Our KenCast parts have been welded to 4130 and 4140 steel with no pre- or post-heating. Pre-heating is recommended to prevent underbead cracking when KenCast parts are applied to oil-and-gas string components and to high-manganese steels.
- If weld washout is a concern, we recommend applying hardface material over the welds.
- **Do not weld** on the carbide layer of the KenCast part.
- For identification, the carbide wear surface of the KenCast part is painted black. This is especially helpful for small or irregular shaped KenCast parts. If the KenCast part is marked with a part number, that number is always cast into the steel side of the part.







KenCast™

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