## Snow Removal and Road Maintenance Products





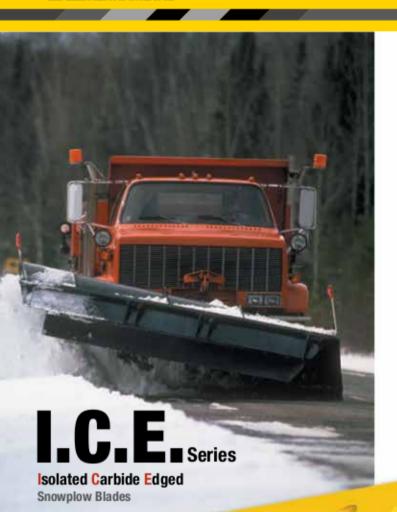




### 







#### Introducing

#### Kennametal I.C.E. Series™ • Isolated Carbide-Edged Blades

Specifically engineered to last exceptionally long in even the most challenging road conditions.

- Especially effective in applications involving imbedded lane markers and rumble strips — greatly reducing blade breakage.
- Ideal for high-speed plowing over roads with excessive joints, cracks, or uneven surfaces.
- Ultra-durable, dome-shaped carbide inserts are securely mounted and strategically isolated from one another to provide optimum fracture resistance throughout the entire blade length.
- Available in 3' and 4' (7/8"-thick; 5"-high) sections that can be easily installed and rotated on the plow for balanced wear throughout a season.
- Patented design.

#### I.C.E. Blades • Ordering Information

blade length	catalog number	material number	blade dimensions	bolt hole distance from top	hole spacing	lbs	
Square Top Edge for Snowplows							
36"	PB-536	1553693	7/8 x 5 x 36"	1-1/2"	3-3-12-12-3-3"	45	
48"	PB-548	1553694	7/8 x 5 x 48"	1-1/2"	3-3-12-12-12-3-3"	62	
Top Edge Beveled for Graders							
36"	PB-636	2035932	7/8 x 5 x 36"	1-1/2"	3-3-12-12-3-3"	45	
48"	PB-648	2035931	7/8 x 5 x 48"	1-1/2"	3-3-12-12-12-3-3"	62	
60"	PB-660	3384812	7/8 x 5 x 60"	1-1/2"	3-3-12-12-12-12-3-3"	72	

Lasts up to three times longer than standard carbide-edged styles in impact conditions!

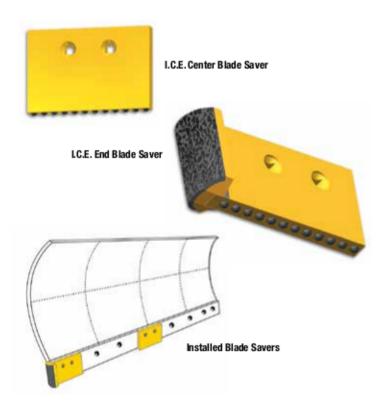
Rounded-tip carbide inserts deliver exceptional penetration performance in even the hardest-packed snow.

#### Presenting

Kennametal I.C.E. Series<sup>™</sup> Center and End Blade Savers featuring genuine Kennametal tungsten carbide at the point of impact — for ultimate wear resistance and moldboard protection.

- Position at the highest wear areas of your moldboard to ensure substantially improved blade performance and a straight edge, in even the hardest-packed ice and snow.
- Simply mount over your blades, on either side of the moldboard, using the same bolt holes.
- Vastly superior to competitive chrome-carbide hardfaced or hardened-steel offerings.
- · Eliminates need for moldboard shoes.
- Dome-shaped (no sharp corners to chip), individually spaced carbide inserts deliver maximum breakage defense.
- End model incorporates KenCast<sup>™</sup> tungsten carbide material to safeguard the blade end from curb contact, saving you on replacement inventory and labor — no matter the cast angle of your plow.
- Available in a wide array of sizes and bolt patterns to fit virtually all plow and blade designs.

#### Drastically reduce downtime by extending blade life!



#### I.C.E. Blade Savers • Ordering Information

part number	blade height	hole spacing	gauge line	length	bolt size			
End Blade Savers 2-Bolt Styles								
2040087	5*	3-3"	1.5"	10.5"	5/8"			
2040088	5"	3-3"	1.5"	10.5"	3/4"			
2040089	6"	3-3"	1.5"	10.5"	5/8"			
2040090	6"	3-3"	1.5"	10.5"	3/4"			
2040091	6"	3-3"	2"	10.5"	5/8"			
2040092	6"	3-3"	2*	10.5"	3/4"			
2040123	8"	3-3"	1.5"	10.5"	5/8"			
2040124	8*	3-3"	1.5"	10.5"	3/4"			
2040125	8"	3-3"	2"	10.5"	5/8"			
2402490	6"	2-8-2"	2*	14.5"	5/8"			
End Blade Savers 3-Bolt Styles								
2402494	6"	3-3-12-2.25"	2"	22.5"	5/8"			
2402495	6"	3-3-12-2.25"	1.5"	22.5"	5/8"			
2402485	6"	3-3-12-2.25"	1.5"	22.5"	3/4"			
2402489	6"	3-3-12-2.25"	2*	22.5"	3/4"			
2457130	8"	3-3-12-2.25"	1.5"	22.5"	5/8"			
3556530	5*	3-3-12-2.25"	1.5"	22.5"	5/8"			
Center Blade Savers								
2038043	6"	3-3-9-3-3"	1.5"	21"	5/8"			
2040864	6"	3-3-9-3-3"	2"	21"	5/8"			
2035512	6"	3-3-12-3-3"	1.5"	24"	5/8"			
2037952	6"	3-3-12-3-3"	2"	24"	5/8"			
2037951	5"	3-3-12-3-3"	1.5"	24"	5/8"			
2038044	6"	3-3-3"	1.5"	9"	5/8"			
2038045	8"	3-3-3"	1.5"	9"	5/8"			
2038046	6"	3-12-3"	1.5"	18"	5/8"			
2042998	8"	3-3-12-3-3"	1.5"	24"	5/8"			

NOTE: End blade saver bolt holes countersunk on both sides of blade to facilitate use as a left-hand or right-hand part.

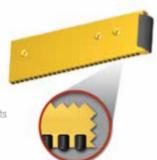
Blade is 1"- thick on all blade savers.

To choose the optimum blade saver for your application, simply match blade height, hole spacing, hole size, and gauge to the cutting edge you need to protect. Blade savers are available in various lengths to enable you to safeguard any size area on your main cutting-edge assembly.

Custom hole-spacing available.

Now available in a 3-bolt-hole design for more secure fastening.

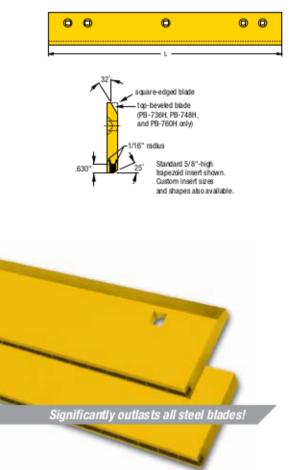
Features I.C.E.-style inserts to resist breakage.





#### Tungsten Carbide-Edged Snowplow Blades and Accessories

- Equipped with genuine Kennametal tungsten carbide inserts.
- Unparalleled hardness and fracture/wear resistance.
- Our brazing expertise ensures that inserts stay firmly in place — dramatically lowering your replacement part inventory and overall operating costs.
- Available in an unmatched variety of styles and sizes — each backed by the road maintenance industry's best quality assurance program.
- Sold in sections preventing the need to replace an entire blade — replace only the damaged segment.



#### Snowplow Blades • Ordering Information

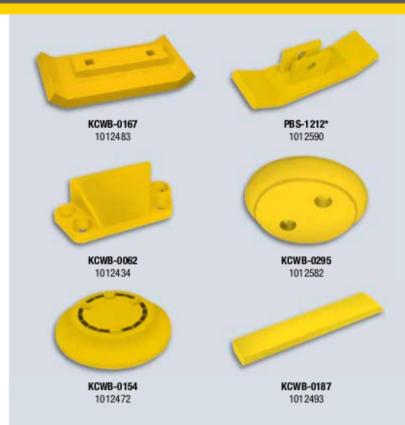
length	catalog number	material number	blade dimensions	bolt hole distance from top	hole spacing	lbs		
Standard-Size 5/8" Carbide Inserts								
24"	PB-124	1011840	3/4 x 6 x 24"	2*	3-3-12-3-3"	31		
28"	PB-128C	1011805	3/4 x 6 x 28"	2"	6-8-8-6"	36		
36"	PB-136	1011807	3/4 x 6 x 36"	2*	3-3-12-12-3-3"	47		
36"	PB-136H	1011848	7/8 x 5 x 36"	1-1/2"	3-3-12-12-3-3"	45		
36"	PB-236	1011842	3/4 x 6 x 36"	1-1/2"	3-3-12-12-3-3"	47		
36"	PB-436	1011859	3/4 x 5 x 36"	1-1/2*	3-3-12-12-3-3"	38		
36"	PB-736H top beveled	1011883	7/8 x 5 x 36"	1-1/2"	3-3-12-12-3-3"	40		
42"	PB-142	1011815	3/4 x 6 x 42"	2"	3-3-12-12-6-3-3"	53		
44"	PB-144E	1011811	3/4 x 6 x 44"	2"	2-8-8-8-8-8-2"	57		
44"	PB-144C	1011809	3/4 x 6 x 44"	2"	6-8-8-8-8-6"	57		
48"	PB-148	1011813	3/4 x 6 x 48"	2"	3-3-12-12-12-3-3"	62		
48"	PB-148H	1011854	7/8 x 5 x 48"	1-1/2"	3-3-12-12-12-3-3"	60		
48"	PB-248	1011844	3/4 x 6 x 48"	1-1/2"	3-3-12-12-12-3-3"	62		
48"	PB-448	1011861	3/4 x 5 x 48"	1-1/2"	3-3-12-12-12-3-3"	51		
48*	PB-748H top beveled	1011885	7/8 x 5 x 48"	1-1/2"	3-3-12-12-12-3-3"	55		
60"	PB-160C	1011819	3/4 x 6 x 60"	2"	6-8-8-8-8-8-6"	77		
60"	PB-760H top beveled	1011887	7/8 x 5 x 60"	1-1/2*	3-3-12-12-12-12-3-3"	70		
Heavy-Du	ty 3/4" Carbide Inserts							
36"	PB-336	1011968	3/4 x 6 x 36"	1-1/2"	3-3-12-12-3-3"	47		
36"	PB-336H	1011924	7/8 x 5 x 36"	1-1/2"	3-3-12-12-3-3"	47		
36"	GDR 36A0138 top beveled	1011928	7/8 x 5 x 36"	1-1/2"	3-3-12-12-3-3"	45		
48"	PB-348	1011970	3/4 x 6 x 48"	1-1/2*	3-3-12-12-12-3-3"	62		
48"	PB-348H	1011926	7/8 x 5 x 48"	1-1/2*	3-3-12-12-12-3-3"	62		
48"	GDR48A0140 top beveled	1011930	7/8 x 5 x 48"	1-1/2*	3-3-12-12-12-3-3"	57		
60"	PB-360	1011972	3/4 x 6 x 60"	1-1/2"	3-3-12-12-12-12-3-3"	77		
72"	PB-372	1011974	3/4 x 6 x 72"	1-1/2"	3-3-12-12-12-12-12-3-3"	92		
.57 " Tall Bullnose Inserts								
36"	PB875362470182	3323727	7/8 x 5 x 36"	1-1/2"	3-3-12-12-3-3"	42		
48*	PB875482470183	3323726	7/8 x 5 x 48"	1-1/2"	3-3-12-12-12-3-3"	55		
60"	PB875603470217	3505710	7/8 x 5 x 60"	1-1/2"	3-3-12-12-12-12-3-3"	72		
Made-To-Order Inserts								
44"	7/8X6X44W/.81X40DEG	1157211	7/8 x 6 x 44"	2"	2-(10) 4" spaces-2	64		
48"	7/8X6X48W/.81X40DEG	1157212	7/8 x 6 x 48"	2"	4-(5) 8" spaces-4	71		
56"	PB876561440148	3007351	7/8 x 6 x 56"	2*	4-(6) 8" spaces-4	79		

#### Tungsten Carbide-Reinforced Snowplow Shoes

- · Improve blade life.
- · Prevent blade dig-ins during road-shoulder work.
- · Protect moldboards against premature failure.
- Kennametal's unique high-hardness KenCast™ material provides unsurpassed wear resistance versus competitive mild-steel/brazed designs.
- Custom shoes also available just provide us your drawing or a sample.

Extend snowplow blade life by as much as 30%!

Use long-life, weldable KenCast bars to rebuild your worn all-steel shoes.

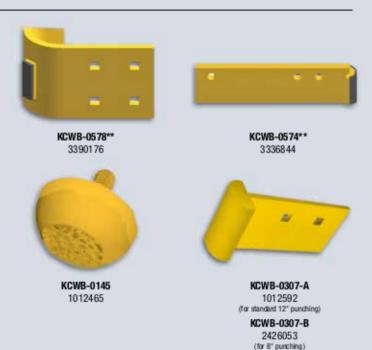


"Please specify hole size, bracket thickness, distance from shoe top to center of hole, and distance between brackets. Other shoes are available upon request. To ensure proper fit, we need to know the specific style, make, model number, hole spacing, and hole size.

#### Tungsten Carbide-Reinforced Curb Guards

- Guard moldboard ends and blades from extensive impact and abrasion.
- Feature the same tough KenCast material as on our I.C.E. Series<sup>™</sup> blade guards.
- Offered in easy-to-attach, easy-to-change wrap-around and mushroom-cap styles.

Inexpensive insurance against major moldboard repair!



"Used with blades punched 1-1/2" from blade top to center of hole. Our curb bumpers fit most snowplow makes and models.



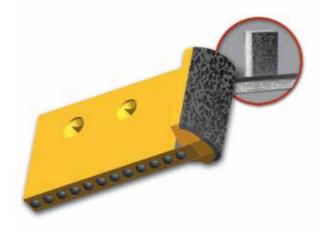
#### Tungsten Carbide Pick-Up Plow Blades

- Specially engineered for your Meyer,™ Western,™
  The Boss,™ or Fisher™ snowplow regardless
  of the hole pattern.
- Sold in sections for economical and convenient installation and replacement.
- Use the same square-hole style carriage bolts as your original plow blade.



#### KenCast™ Tungsten Carbide Wear Material

- Specially engineered to guard against premature and costly wear on your valuable heavy equipment — saving you on downtime and replacement parts.
- Made with tungsten carbide particles metallurgically bonded in air-hardening steel to withstand extremes of abrasion and impact.
- · Easy to weld.
- Particularly effective on curb bumpers, snowplow shoes, moldboard shoes, and plow blade end protectors.



#### Pick-Up Plow Blades • Ordering Information

plow type and length	material number	replacement blade length	bolt size	lbs	quantity replacement blades needed			
Straight Plows								
7-6" (90") Meyer/Fisher*	1826114	45"	1/2"	62	2			
8'-0" (96") Meyer/Fisher*	1826115	48"	1/2"	63	2			
OL OF HOOSE Married (Figh and	1826116 end blade	34"	1/2"	50	2			
8'-6" (102") Meyer/Fisher*	1826117 center blade	34"	1/2"	50	1			
7'-6" (90") Western Pro Series	2401740	45"	1/2"	60	2			
7'-6" (90") Western Pro Plus Series	3381745	45"	5/8"	60	2			
8'-0" (96") Western	1826118	48"	1/2"	66	2			
8'-6" (102") Western	1826124	51"	1/2"	68	2			
8'-6" (102") Western Plus Series	3577996	51"	5/8"	68	2			
9'-0" (108") Western	2415564	54"	1/2"	70	2			
9'-0" (108") Western Pro Plus	3017373	54"	5/8"	70	2			
01.01.140001.53.5	3336769 end blade	31-3/8"	3/4"	40	1			
9'-0" (108") Fisher MC (3 pc set)	3336770 center blade	45"	3/4"	60	2			
10'-0" (120") Fisher MC	3277933	60"	3/4"	77	2			
9'-6" (120") Western-MVP	2604937	55-3/4"	1/2*	65	2			
Discount Martin 2014 12 and a fi	3041839	39-1/2"	5/8"	51	1			
Blizzard Model 8611 (2 pc set)	3048141	55"	5/8"	64	1			
7'-6" (90") The Boss	2263063	45"	1/2"	56	2			
8'-0" (96") The Boss	2263064	48"	1/2*	62	2			
8'-6" (102") The Boss	2263065	51"	1/2"	64	2			
9'-0" (108") The Boss	2263066	54"	1/2"	68	2			
401.02.14002.75	1011842 end blade	36"	5/8"	47	2			
10'-0" (120") The Boss	1011844 center blade	48"	5/8"	62	1			
V Plows								
7'-6" (90") The Boss VRTII	2263008	44"	1/2"	47	2			
7'-6" (90") The Boss VRT3	2402074	44"	5/8"	47	2			
8'-2" (98") The Boss VRTII	2263009	48"	1/2"	60	2			
8'-2" (98") The Boss VRT3	1961521	48"	5/8"	60	2			
9'-2" (110") The Boss VRTII	2263010	54"	1/2*	66	2			
9'-2" (110") The Boss VRT3	2263011	54"	5/8"	66	2			
10' (120") The Boss VRT3	2263012	59"	5/8"	72	2			
9-1/2' Western-MVP	2604937	55-3/4"	1/2"	65	2			

\*old style Fisher

#### Snowplow Blades and Shoes Operating Tips

To significantly reduce blade chatter and bolt failure, we highly recommend Grade 8, Number 3 head plow bolts with self-locking nuts for mounting our blades.

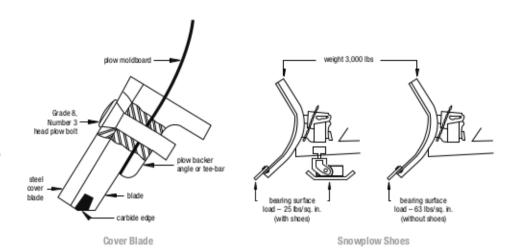
We also recommend use of a "cover blade"

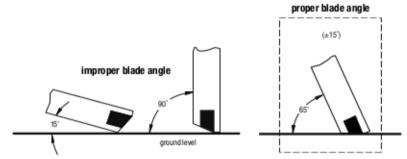
— a steel section bolted to the front of the carbide blade — to reinforce your moldboard, absorb shock, and greatly diminish steel erosion around the carbide insert area.

Cover blades can improve blade life by as much as 30%.

Snowplow shoes can be employed with our snowplow blades to provide uniform plow frame weight distribution.

Lastly, we strongly suggest that you set your snowplow blade attack angle at 65° from the ground. A higher or lower angle can result in increased vibration and decreased wear life.





Snowplow Blade Attack Angles

# For unparalleled service life on underbody plows! Kennametal wear grade carbide insert resists deterioration caused by blade down pressure and abrasion. Kennametal mining grade carbide insert on face resists impact and erosion. Unsurpassed in ice removal! Long-life Kennametal carbide-tipped conicals rotate as they cut — sharpening themselves and providing a uniform wear pattern. Worn teeth can be quickly changed onsite by one person.

#### Tungsten Carbide Grader and Scarifier Blades

- Our proprietary dual carbide-edge grader blades stay straight, maintain a clean/sharp cutting edge, and stop crowning.
- Kennametal scarifier blades feature replaceable carbide tools that rotate as they cut, easily penetrating ice and hard-packed gravel roads — enabling you to quickly bring embedded rock back to the surface.

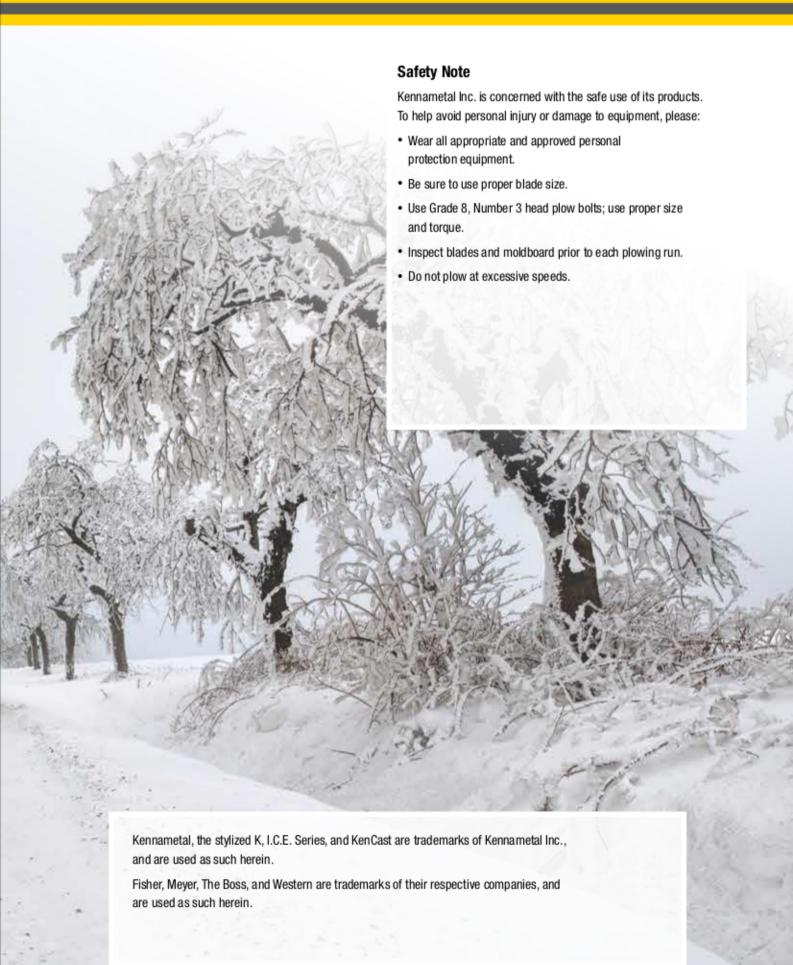


#### You can't do a job — and do it right — without tools that are up to the challenge.

Kennametal is continually engineering products that will provide exceptional performance on snow and ice removal. Our blades come in a wide variety of styles and sizes each backed by the road maintenance industry's best quality assurance program.

Kennametal uses the best in engineering to give you unsurpassed quality and performance.





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