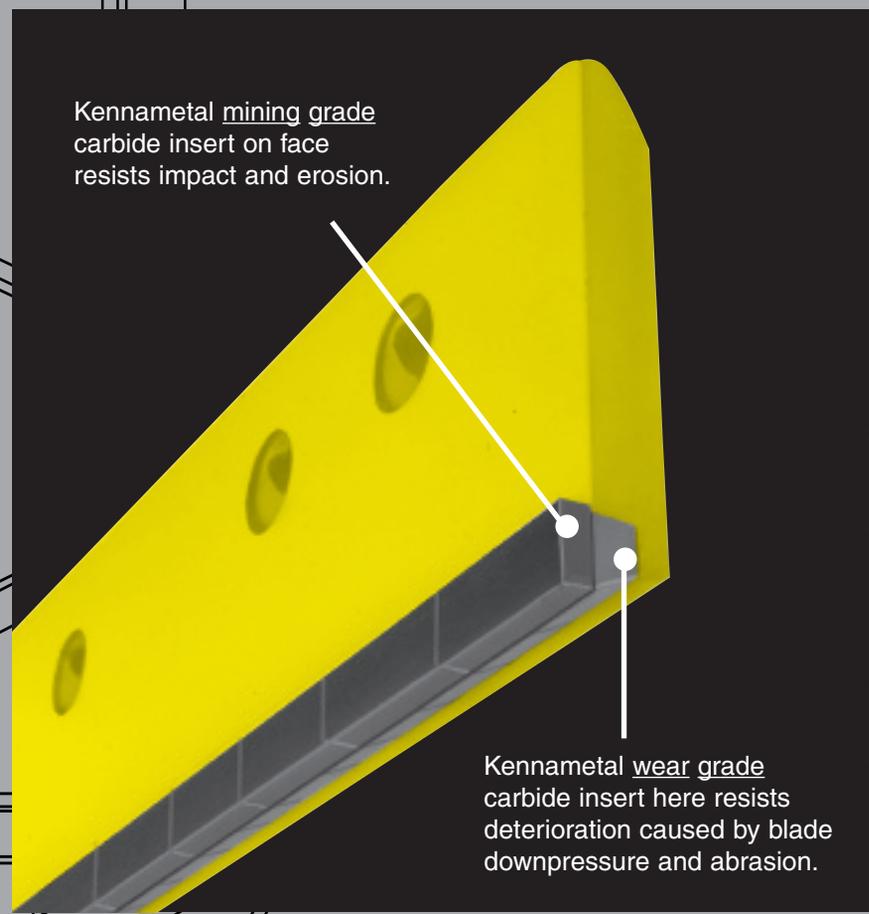
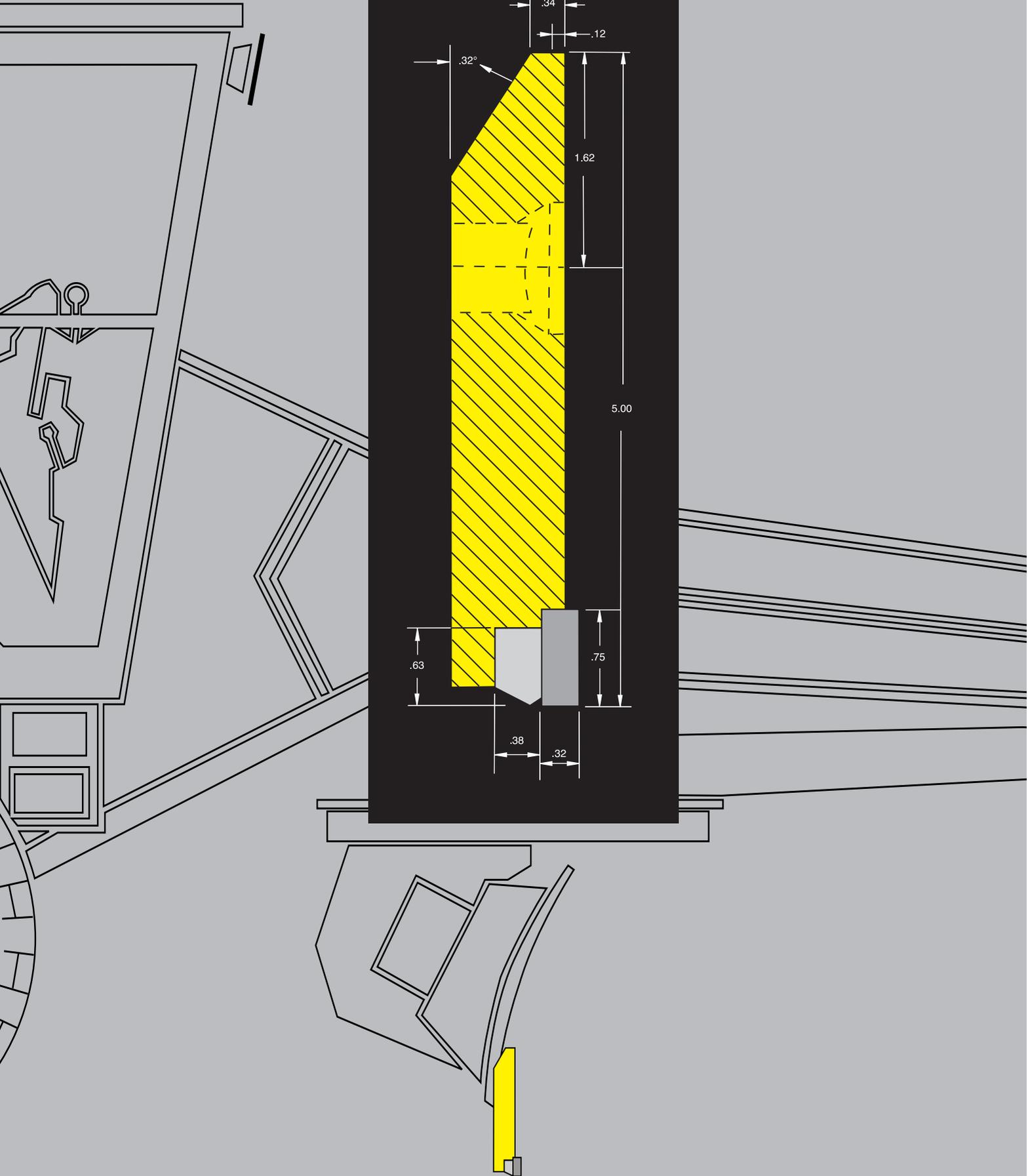


NEW & IMPROVED
NOW AVAILABLE IN 5 FOOT LENGTHS!!

Kennametal Dual-Carbide-Insert grader blades **with new improved braze**





Kennametal's *improved* Dual-Carbide-Insert grader blades

provide exceptional wear resistance to substantially reduce your replacement-part inventory costs. Unlike high-carbon, through-hardened, or flame-hardened steel blades, Kennametal's patented dual-carbide blade design stays straight, maintains a sharp, clean cutting edge, and stops crowning. These blades will significantly outlast imbedded carbide granule-style blades, as well.

new

Now 70% stronger with improved blade material!

We've strategically located the blade's two inserts. The front insert is 3/4"-high and formulated from a Kennametal mining grade carbide and our exclusive macrocrystalline tungsten powder for extreme impact resistance. Directly behind it is a 5/8"-high insert made of a Kennametal carbide grade that provides maximum resistance to wear caused by blade downpressure and abrasion. These adjoining inserts ensure there's carbide - not steel, as on traditional carbide models - at the blade face. Our holder **STAYS** well protected...and the inserts **STAY** in!

Kennametal blades are sold in a variety of lengths and utilize a "universal" bolt hole pattern so they fit all makes and models of motor graders. Using shorter-length blades in combination to cover the entire moldboard length enables you to replace just a worn section, rather than the entire blade. Shorter lengths of blades also make possible rotation of the sequence of the blades on the moldboard, so the blade arrangement stays straighter longer. And one person can easily change these shorter, lighter blade sections. That means significantly reduced replacement downtime, labor and overall operating costs.

Our Dual-Carbide blades are manufactured using state-of-the-art technology and are backed by a comprehensive warranty program. Try them and see for yourself why they are the most cost-effective blades on the road.

Dual-Carbide Blade Sizes/Ordering Information

(blades beveled at top to fit grader moldboard)

new part number	old part number	bolt diameter	thickness	width	length	weight
1011871	904981999	5/8"	7/8"	5"	24"	32 lbs.
1011872	904982000	5/8"	7/8"	5"	36"	48 lbs.
1011875	904982001	5/8"	7/8"	5"	48"	63 lbs.
1011879	904982003	3/4"	7/8"	5"	36"	48 lbs.
1011877	904982002	3/4"	7/8"	5"	48"	63 lbs.
new size 1311238	N/A	5/8"	7/8"	5"	60"	77 lbs.

When ordering, please give part number. Also specify hole size and moldboard length.

specifications

steel holder: SAE 1020-1045, hot-rolled

carbide inserts:

- front- 3/4"-high, impact resistant
- rear- 5/8"-high, wear-resistant

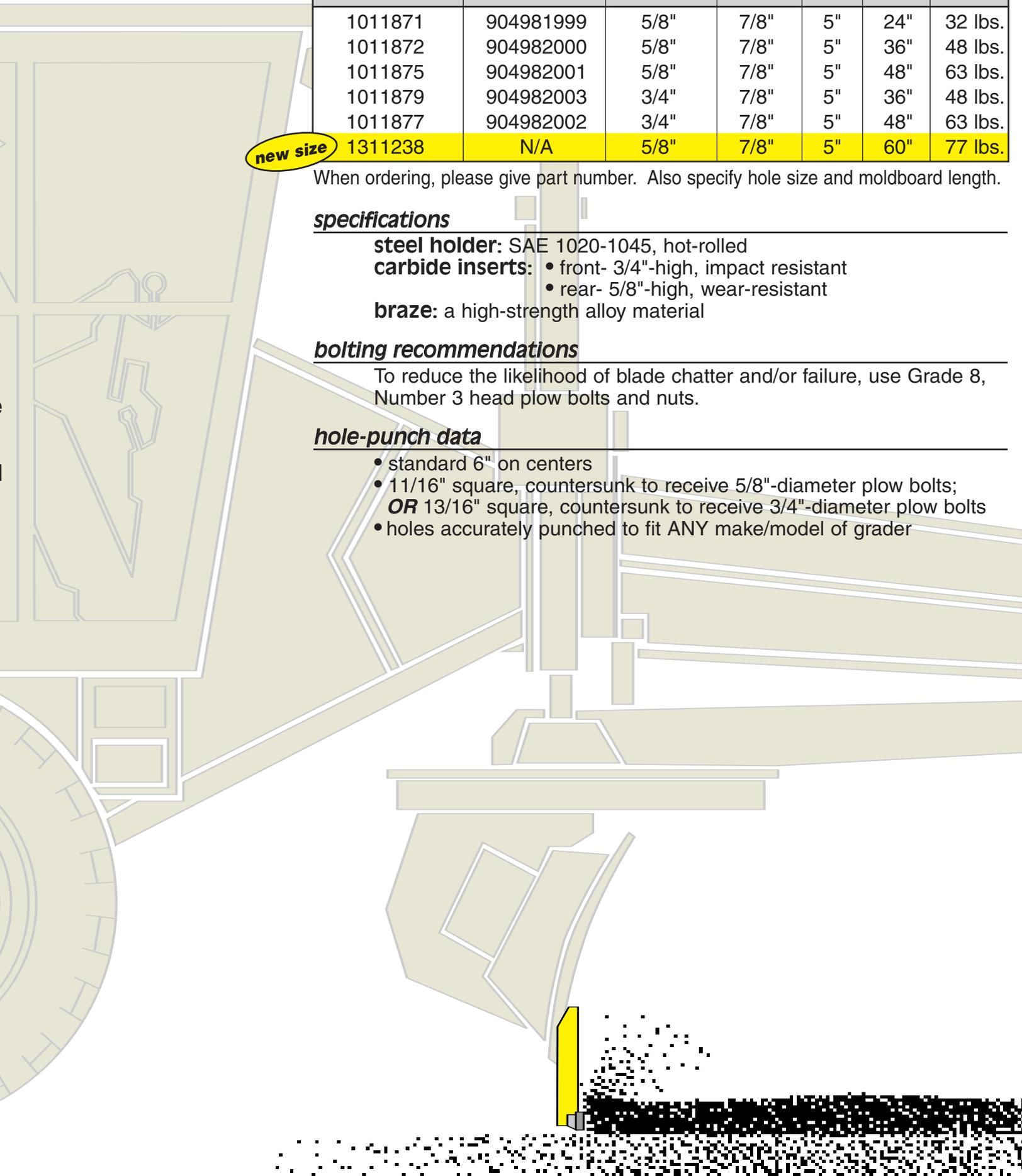
braze: a high-strength alloy material

bolting recommendations

To reduce the likelihood of blade chatter and/or failure, use Grade 8, Number 3 head plow bolts and nuts.

hole-punch data

- standard 6" on centers
- 11/16" square, countersunk to receive 5/8"-diameter plow bolts;
OR 13/16" square, countersunk to receive 3/4"-diameter plow bolts
- holes accurately punched to fit ANY make/model of grader



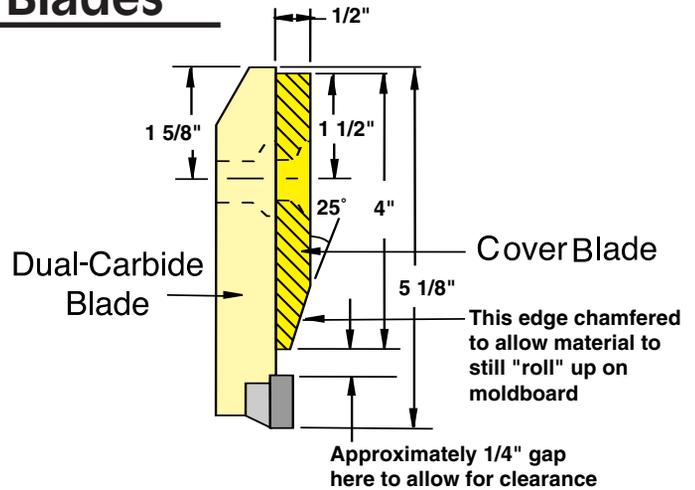
Dual-Carbide Blade Accessories



New!!! Kennametal DCI Cover Blades

Our optional cover blades provide added wear resistance for the non-carbide portion of the blade, when operating in extremely abrasive conditions. The chamfered bottom edge prevents any interruption of the rolling action of bladed road material. They are attached using the same bolts used for attaching the dual carbide blade below it, just by utilizing 1/2" longer bolts through the same bolt holes.

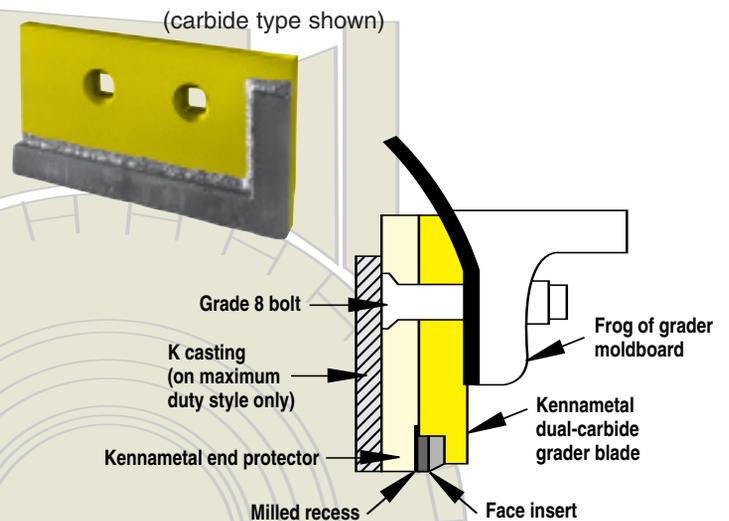
It's not necessary to use end protectors when cover blades are used. These cover blades are fabricated from wear resistant steel and are available in the following sizes:



blade size	bolt hole size	part number
1/2" x 4" x 36"	5/8" bolt	1156908
1/2" x 4" x 48"	5/8" bolt	1156910
1/2" x 4" x 36"	3/4" bolt	1156911
1/2" x 4" x 48"	3/4" bolt	1156912

End Protectors

Kennametal highly recommends the use of our carbide or standard steel end protectors. They prevent impact damage by covering the last 9" of each of the end blades on either side of the moldboard. They are installed over the dual carbide blade, using the same bolt holes (as shown in the diagram). An installation guide is available by request.

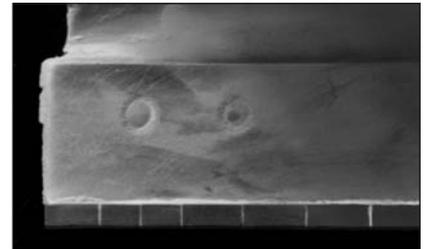


standard steel type			carbide type		
new part number	old part number		new part number	old part number	
1011918	904009820	standard for 5/8" bolts	1012555	909260265	maximum duty right for 5/8" bolts
1011919	904009821	standard for 3/4" bolts	1012556	909260266	maximum duty right for 3/4" bolts
			1012560	909260270	maximum duty left for 5/8" bolts
			1012561	909260271	maximum duty left for 3/4" bolts

Kennametal dual-carbide-insert grader blade.



Same Kennametal blade
after 130 hours use on
country roads in
Oklahoma.
Virtually no wear.



Here's what some of our customers have to say about our dual-carbide grader blades:

From a county in Iowa:

"We've been using Kennametal dual-carbide blades for all our normal gravel road maintenance for almost seven years now. We had been using 3/4" x 8" hardened-steel blades which at best lasted only 60 hours in ideal conditions; and as little as 30 hours in dry conditions. Our dual-carbide blades have consistently lasted 500-700 hours with little-to-no "crowning". Our operators fight over the new sets when they are delivered, to make sure they have dual-carbide on their machine the next time they are ready to change."

From a county in Minnesota:

"We use dual-carbide on our graders for compacted snow and ice removal all winter long. We can't imagine going back to changing blades in the middle of storms like we did with the steel blades. With dual-carbide, we can run throughout the storm and not worry about the moldboard becoming the blade."

From a county in Michigan:

"We've tested every type of blade imaginable on our underbodies over the last few years. Nothing quite compares to Kennametal's dual-carbide style. Steel blades last only a few days, and other versions of carbide grader blades just don't get the job done. Dual-carbide blades only get changed once or twice per year, while we had to change other types of carbide blades a *MINIMUM* of three times."

From a state Department of

Transportation in the Midwest:

"We've been using dual-carbide blades on our underbodies for snow and ice removal. We had been using flame-hardened and through-hardened cutting edges. Now changes occur only several times a year instead of several times each storm."

Proud member of:



National Association of County Engineers



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