Guidelines for Proper Use of Scarifier Blades

These guidelines will help you maximize your Kennametal scarifier blade performance:

1. Kennametal recommends using only Grade 8, No. 3 head plow bolts and matching Grade 8 heavy hex nuts to install our scarifier blades.

2. Position and operate blades at a 90-degree angle to the road surface so cutting tools are at the proper cutting angle (see drawing).

3. Carbide-tipped cutting tools should be used to penetrate a depth no greater than 1.00-inch (25mm).

4. Inspect the blade and cutting tools daily. Replace lost, worn, or broken cutting tools immediately.

5. Kennametal carbide cutting tools are self-rotating and self-sharpening. Inspect cutting tools daily by turning them with your hand to ensure they are rotating properly. Cutting tools that do not turn can usually be freed by several light taps with a soft-headed hammer. Clean cutting tool and block assemblies with a solvent cleaner when necessary to ensure proper rotation of the cutting tool. Do not use oil for this purpose. Oil will cause dirt to adhere to the cutting tool, preventing proper rotation.

6. Do not use these blades to remove large rocks or boulders. These blades are intended for use in scarifying roads to return them to their original aggregate condition. Using Kennametal scarifier blades to remove large rocks or boulders terminates and voids all warranties and obligations from Kennametal as manufacturer and supplier.

7. When transporting scarifier blades fitted with long-retainer cutting tools, be sure to roll the moldboard backward so the blade is horizontal and the cutting tools are pointed upward. This will prevent the cutting tools from vibrating out of the blade while in transit. This procedure is not necessary when using short-retainer cutting tools in the blade.

8. The travel speed of the grader may affect the performance of the blade. When working in heavy-impact applications, use a lower speed (such as second gear). This will reduce the risk of cutting tool breakage or blade damage.

9. “Backdragging” is not recommended. This procedure increases the risk of breakage or loss of cutting tools and puts unnecessary stress on the blade, bolts, and moldboard.

10. Use Kennametal carbide end protectors in applications (like ditching) that subject the side of the blade to wear. End protectors do not interfere with penetration and protect the ends of the blade from excessive wear.

To replace a worn or broken block:

1. Cut out the broken block, if necessary, and clean the recess to remove rust and loose material.

2. Align the new block at the appropriate attack angle and tack weld into position.

3. Weld around the upper part of the block first on the front and back side of the blade.

4. Use Airco 7018M or equivalent welding material.

5. Use a welding rod (stick) with a maximum .125-inch (3mm) diameter or a welding wire with a maximum .052-inch (1mm) diameter.

6. Angle the weld gun or rod to run a root pass along the block base where it meets the .500-inch (13mm) wide steel “tongue” between the blocks. Do not weld back and forth between the blocks. Run one pass on each side of the block in opposite directions to weld it to the blade.