

RoadMAXX® Product Specification

**A carbide inserted snowplow blade system.
References and case studies can be provided.**

Product Description:

The RoadMaxx® carbide insert blade system is an engineered system comprised of high impact structural steel carbide insert blades with $\frac{3}{4}$ " tall full radius tungsten carbide inserts, an optional bevel, and heavy-duty Winter Carbide Matrix® welded across the bottom edge of the entire length of the blade to prevent carbide washout. The RoadMAXX® carbide blade system also includes (2) Universal CurbRunner® guards that have an A-22 steel casting welded to the end to prevent damage from curbs, all mounting hardware (with thread locking fasteners), and installation instructions. All components are crated together in a palletized package.

Product Specification Details:

1. REFERENCES

- 1.1 Manufacturer shall provide references for the system upon request validating performance.

2. PACKAGING

- 2.1 All blade system components are to be provided in a single box or crate comprising of:
- a. All blade sections manufactured per specifications.
 - b. (2) Universal CurbRunners®
 - c. (1) Grade 8 hardware kit including thread locking fasteners, flat washers, and plow bolts.
- 2.2 Installation instructions included in package
- 2.3 The blade system package is to be securely banded to a pallet providing adequate protection for common freight carrier handling, transportation, and receiving.
- 2.4 Packaging will provide adequate protection from the elements incurred during normal transportation and storage.

3. MAIN BLADE

- 3.1 The blade shall be high strength structural grade hot rolled flat steel.
- 3.2 Dimensions: 5" or 6" high x 7/8" thick x 3' or 4' length
- 3.3 Tolerance between hole spacing is +/- 1/16", non-accumulative, from center to center across full length of blade.
- 3.4 The groove for the carbide inserts shall be milled in the center of the blade edge.
- 3.5 Hole size and location of holes shall be per customer's requirements.
- 3.6 Blade to have a 25° bevel on the top of the backside

4. TUNGSTEN CARBIDE INSERTS

- 4.1 The tungsten carbide insert shall comprise the following total dimensions:
 - a. Length: 1" nominal
 - b. Width: 0.36" min.
 - c. Height: 0.75" max.
 - d. Shape: Hammerhead (full radius)
- 4.2 Tungsten carbide insert shall be of a grade containing approximately 89% tungsten and approximately 11% cobalt binder by weight.
- 4.3 Original compounding specific gravity equal to 14.35-14.6
- 4.4 The insert hardness shall be 87.5-88.8 Rockwell A scale
- 4.5 Transverse rupture strength of 351,000 PSI minimum.

5. BRAZING

- 5.1 Each blade shall contain an approximate 1" length of carbide insert for each 1" length of blade.
- 5.2 The carbide inserts shall be placed in line within the center-milled groove.
- 5.3 The carbide inserts shall be brazed on all sides using sound brazing practice, having no evidence of voids, shims, or fillers providing approximately 70,000 PSI shear strength.

6. WINTER CARBIDE MATRIX®

- 6.1 Winter Carbide Matrix® weld to be applied on front bottom edge of blade.
- 6.2 Winter Carbide Matrix® protects the inserts in the blade.
- 6.3 2 weld passes totaling 7/8" high x 3/16" max thickness on entire length of blade.
- 6.4 Carbide will be dispersed throughout the entire weld, not just on top layer.

7. UNIVERSAL CURBRUNNER®

- 7.1 4" high x 3/4" thick high impact, structural grade hot rolled steel bar.
- 7.2 Drilled and square punched with countersink to accept 5/8" plow bolt flush with front mounting blade surface.
- 7.3 A-22 steel casting is welded on the end for curb protection. Steel casting weighs 6.5 lbs and is 6.5" tall.
- 7.4 Universal CurbRunner® has a label on the front mounting blade surface identifying the manufacturer and contact information.
- 7.5 Universal CurbRunner® will be Class 7 Orange™ texture powder coated to provide corrosion resistance and safer handling.

8. MOUNTING HARDWARE

- 8.1 The mounting hardware will consist of high-quality thread locking components consisting of Grade 8 plow bolts, all metal lock nuts and flat washers. All items to be pre-counted and sealed for corrosion resistance.

9. FINISHED PRODUCT

- 9.1 Finished blade will be Class 7 Orange™ texture powder coated to provide corrosion resistance and safer handling.
- 9.2 Front edge of blade will be identified to avoid improper installation.
- 9.3 Finished blade shall comply with standard blade manufacturing tolerances.
- 9.4 Manufacturer's literature shall be furnished as required.

Example of an 11 ft. system:

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	CB3131531ACM	Blade	1
2	CB3141531ACM	Blade	2
3	CR463U	Curb Guard	2
Not Shown	KT-RM-12	Bolt Kit	1

KT-RM-12 includes:
 (12) 5/8" x 3" Plow Bolts
 (6) 5/8" x 3-1/2" Plow Bolts
 (19) Lock Nuts
 (19) Washers

