#### **INCLUDED GOODS**

#### **Subcategory C: Cutting Edges with Carbide Insert:**

#### 1. Blade

- a. The blade shall be flat hot-rolled finished steel to meet or exceed specifications for A36 or 1020 type steels.
- b. The groove for the carbide inserts shall be milled in the center of the blade edge.
- c. The center of the bolt holes shall be in line within 1/32 inch of established horizontal centerline and 1/16 inch of established vertical centerline.
- d. Cutting edges to be supplied in 2-, 3- and 4-feet lengths.
- e. Cutting Edges to be supplied in sizes of ¾ inch thick x 6 inches wide and 7/8 inch thick x 5 inches wide.

#### 2. Tungsten Carbide Inserts

a. The inserts shall be a high shock WC grade of tungsten carbide with 11 to 12.5 percent cobalt content.

Hardness: 87.5 minimum to 89.0 Maximum Rc. "A" scale.

Transverse rupture strength (p.s.i.): 350,000 Minimum.

Porosity: (Based on testing in accordance with ASTM designation B276-79)

#### A06 B02 C00

- b. The carbide insert manufacturer to furnish certification to WSDOT that the inserts meet the specifications as set forth in section an immediately above.
- c. The inserts shall be a trapezoid design of the following dimensions:

Height: .635" +/- .005 (long side)

Width: .365" +/- .010 Length: 1" Nominal

Bottom Angle: 25 Degrees with a nose radius of 1/16" minimum

d. A metallurgical evaluation of the carbide insert shall show no evidence of cross grade contamination. Evaluation to be based on a photomicrograph of a polished and etched specimen at 500x magnification.

#### 3. Brazing

- a. The brazing material shall be a high strength alloy type.
- b. The tungsten carbide inserts shall be positioned in the milled groove at approximately .010" between the inserts the entire length of each cutting edge section.
- c. The inserts shall be brazed on all sides consistent with sound brazing practice with no evidence of voids or use of shims.
- d. Each blade section to contain one insert for each inch of blade section. Due to the thickness of the braze joints between inserts it may be necessary for several inserts to be slightly shorter or no longer than the nominal 1" length to ensure the carbide insert runs the entire length of the blade without protruding from the end of the steel body.

#### 4. General

a. The difference between the highest and lowest tip point (on any two adjacent inserts) not to exceed 1/32" on any given blade assembly.

- b. The finished blade section shall be free of any warpage and longitudinal deviation not to exceed 1/8" in a four-foot blade section.
- c. Each blade section shall be identified with manufacturer's identification stamp.
- d. The finished blade sections shall have markings showing the front edge of the blade to avoid improper mounting.

#### **Options**

Provide any additional options that may be available for any items in Category 1 thru 5 in accordance with requirements of *EXHIBIT B-Technical Specifications* with % off catalog price. Provide additional sheet(s) if necessary.

Item	Description	Manufacturer	Catalog Price	% off Catalog Price
	Winter Equipment Manufactures Wear		Catalog Pricing	35% off all alla care parts 40% of
a)	Parts & Systems		Attached	all systems
b)				
c)				
d)				
e)				
f)				
g)				
h)				
i)				
j)				
k)				
I)				
m)				
n)				
o)				
p)				

#### **PRICES FOR GOODS**

#### **CATEGORY 1: CUTTING EDGES FOR TRUCK MOUNTED SNOWPLOWS:**

#### SUBCATEGORY C. CUTTING EDGES WITH CARBIDE INSERT

#### **EXHIBIT-C: Bid Price**

Bidders must fill out manufacturer, American Iron and Steel Institute (AISI) rating, price per foot, and price per foot for 20 ft or more columns completely for each sub-category or category that they are submitting a bid. Bidders that do NOT fill out all columns and all rows per sub-category completely may be deemed non-responsive for that sub-category.

#### Category 1 - Cutting Edges for Truck Mounted Snowplows

Pricing shall include shipping and delivery charges, FOB Destination, Vendor Management Fee (see Master Contract Section 11), but should not include any sales taxes. All items bid shall conform with requirements of *EXHIBIT B-Technical Specifications*. A tiered pricing of \$5.00 per foot may be imposed for any non-WSDOT order under 20 feet. Under no circumstances will this tiered pricing be imposed on any order by WSDOT.

Subcategory A: Standard Snowplow Cutting Edges. State manufaturer, AISI rating of steel and unit price per foot for each of the following items:

Item	Description	Manufacturer	AISI Rating	Price per Foot	Price per Foot for 20 ft or more
a)	½ inch thick x 6 inches wide				
b)	½ inch thick x 8 inches wide				
c)	¾ inch thick x 6 inches wide				
d)	¾ inch thick x 8 inches wide				

Sub-category A Total:

Subcategory B: Special Through Hardened Snowplow Cutting Edges. State manufaturer, AISI rating of steel and unit price per foot for each of the following items:

Item	Description	Manufacturer	AISI Rating	Price per Foot	Price per Foot for 20 ft or more
a)	5/8 inch thick x 6 inches wide				
b)	5/8 inch thick x 8 inches wide				
c)	¾ inch thick x 6 inches wide				
d)	¾ inch thick x 8 inches wide				
!	Sub-category B Total:	_			

Subcategory C: Cutting Edges with Carbide Insert. State manufaturer, AISI rating of steel, and unit price per foot for each of the following items:

Item	Description	Manufacturer	AISI Rating	Price per Foot	Price per Foot for 20 ft or more
a)	¾ inch thick x 6 inches wide	XCAL	1084	\$51.00	\$51.00
b)	7/8 inch thick x 5 inches wide	XCAL	1084	\$51.00	\$51.00
c)	3/4 x 6 carbide insert	XCAL	1084	\$51.00	\$51.00
d)	7/8 x 5 carbide insert	XCAL	1084	\$51.00	\$51.00
	Sub-category C Total: \$294.00		-		

#### **Options**

Provide any additional options that may be available for any items in Category 1 thru 5 in accordance with requirements of *EXHIBIT B-Technical Specifications* with % off catalog price . Provide additional sheet(s) if necessary.

Item	Description	Manufacturer	Catalog Price	% off Catalog Price
-1	Winter Equipment Manufactures Wear		Catalog Pricing	35% off all alla care parts 40% of
a)	Parts & Systems		Attached	all systems
b)				
c)				
d)				
e)				
f)				
g)				
h)				
i)				
j)				
k)				
I)				
m)				
n)				
o)				
p)				







# Washington State Department of Enterprise Services - No. 11421 Effective 08/1/2022

Items Included: Bades, Plow Guards, Cutting Edges & Bolts for Snow Plow Equipment

Winter P/N	Description	Contracted Price
BlockBuster® Hai	nmerhead Systems	
SYS-BBH10	10 ft BlockBuster HammerHead System	\$2,434.65
SYS-BBH11	11 ft BlockBuster HammerHead System	\$2,678.13
SYS-BBH12	12 ft BlockBuster HammerHead System	\$2,921.61

Winter P/N	Description	Contracted Price
BlockBuster® Vic	tory"-' Systems	
SYS-BBV10	10 ft BlockBuster Victory System	\$1,251.78
SYS-BBV11	11 ft BlockBuster Victory System	\$1,377.00
SYS-BBV12	12 ft BlockBuster Victory System	\$1,502.40

Winter P/N	Description	Contracted Price
Razor® XL Syster	ns	
SYS-RZXL 10	10 ft Razor XL System	\$1,898.79
SYS-RZXL 11	11 ft Razor XL System	\$2,032.80
SYS-RZXL 12	12 ft Razor XLSystem	\$2,166.81

Winter P/N	Description	Contracted Price
Razor® Systems		
SYS-RZ10	10 ft Razor System	\$1,350.54
SYS-RZ11	11 ft Razor System	\$1,439.91
SYS-RZ12	12 ft Razor System	\$1,532.16

Winter P/N		Description	Contracted Price
Patriot® Systems			
SYS-PT10	10 ft Patriot System		\$951.00
SYS-PT11	11 ft Patriot System		\$1032.00
SYS-PT12	12 ft Patriot System		\$1110.00

Additional sizes available. Call for more information. NIC Freight, Catalog

1900 Joseph Lloyd Parkway Willoughby, Ohio 44094 PHONE: 440.946.8377 FAX (sales): 888.810.9363







# Washington State Department of Enterprise Services - No. 11421

Effective 08/01/2022

Items Included: Blades. Plow Guards. Cutting Edges & Bolts for Snow Plow Equipment

Winter P/N	Description	Contracted Price
RoadMaxx® Syste	ems, with Bullnose inserts	
SYS-RM10	10 ft RoadMaxx System	\$1,108.26
SYS-RM11	11 ft RoadMaxx System	\$1,198.74
SYS-RM 12	12 ft RoadMaxx System	\$1,288.53
SYS-RM14	14 ft RoadMaxx System	\$1,533.90
Winter PIN	Description	Contracted Price
RoadMaxx <sup>®</sup> Syste	ems, with Bullnose inserts	The second second
SYS-RM 10NG	10 ft RoadMaxx System	\$937.47
SYS-RM 11 NG	11 ft RoadMaxx System	\$1,027.92
SYS-RM12NG	12 ft RoadMaxx System	\$1,117.74
SYS-RM14NG	14 ft RoadMaxx System	\$1,363.08
Winter P/N	Description	Contracted Price
CeramiFlexx® Sy	stems	
SYS-CX10	10 ft CeramiFlexx System	\$1,620.00
The second secon	11 ft CeramiFlexx System	\$1,740.00
SYS-CX12	12 ft CeramiFlexx System	\$1,860.00
Winter P/N	Description	Contracted Price
CeramiFlexx® a k	a Carte	
CX44B10S4	3 ft CeramiFlexx Blade	\$360.00
CX44B10S4	4 ft CeramiFlexx Blade	\$480.00
CX6412Y(L/R)	CeramiFlex Guard (L/R)	\$98.95
Winter P/N	Description	Contracted Price
Common Sense"	System	
SYS-CS1 0C	10 ft Common Sense System	\$576.00
SYS-CS 11 C	11 ft Common Sense System	\$588.00
	12 ft Common Sense System  ole. Call for more information.	\$606.00

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Winter P/N	Description	Contracted Price
JOMA Initial Syst	tems	
SYS-JM 10	10 ft JOMA System, Carbide	\$3,110.31
SYS-JM 11	11 ft JOMA System, Carbide	\$3,393.81
SYS-JM12	12 ft JOMA System, Carbide	\$3,677.46
JQMA Rep_ce_i:nx	ent Systems	
SYS-JMR10	10 ft JOMA Replacement	\$2,101.08
SYS-JMR11	11 ft JOMA Replacement	\$2,286.69
SYS-JMR12	12 ft JOMA Replacement	\$2,472.30
JOMA <u>Perforn:,an</u>	e Pack Ca!bi e yst e'll	
SYS-JMPP10	10 ft JOMA Performance Pack	\$1,489.38
SYS-JMPP11	11 ft JOMA Performance Pack	\$1,578.00
SYS-JMPP12	12 ft JOMA Performance Pack	\$1,669.50

Winter PIN	Description	Contracted Price
JOMA a la Carte	THE PARTY OF THE SECOND STREET, STREET	
JM20315	3 ft blade	\$596.26
JM20315-S	3 ft clamp bar	\$30.00
JM20415	4 ft blade	\$794.99
JM20415-S	4 ft clamp bar	\$40.01
CR6312FL	6" JOMA CurbRunner®, left	\$93.49
CR6312FR	6' JOMA CurbRunner®, right	\$93.49
KT-JMR-12	12 ft Replacement hardware kit	\$53.41
KT-WFA-12	12 ft Initial hardware kit	\$49.74
CB3031523JAB	Carbide Adapter Blades	\$313.74
CB3041523JAE		\$418.32

Additional sizes available. Call for more information. NIC Freight, Catalog

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# Washington Department of Enterprise Services - No. 11421

Effective 08/01/2022

Items Included: Blades. Plow Guards. Cutting Edges & Bolts for Snow Plow Equipment

scription	Contracted Price
	\$874.32
	\$961.80
PAT Name and American and Ameri	\$1,049.19
	\$1,575.27
	\$1,696.80

Winter PIN	Description	Contracted Price
WinterFlex® Repla	acement Systems	
SYS-WFR10	10 ft WinterFlex Replacement System	\$469.77
SYS-WFR11	11 ft WinterFlex Replacement System	\$516.72
SYS-WFR12	12 ft WinterFlex Replacement System	\$563.73

Winter P/N	Description	Contracted Price
Vulcan V-plow Systems with 5/8" blades		
SYS-XTSVP85	8.6 ft V-plow guard system	\$880.95
SYS-XTSVP95	9.6 ft V-plow guard system	\$910.95

<sup>\*</sup>Designed to fit Fishe/FJ and Western® model plows

Winter P/N	Description	Contracted Price
Plow Marker Kits hardware included		
KT-PM24	24" Plow Marker Kit	\$23.52
KT-PM30	30" Plow Marker Kit	\$27.75
KT-PM36	36" Plow Marker Kit	\$29.75
KT-PM48	48" Plow Marker Kit	\$49.00

Additional sizes available. Call for more information.

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Winter P/N	Description	Contracted Price
CurbRunner®, S	Standard Curb Guards	
Guage Specific	c 5" CurbRunner Universal 3/4" bolt hole	\$103.95
Guage Specific	5" CurbRunner Universal 5/8" bolt hole	\$88.90
Guage Specit	fic 6" JOMA CurbRunner	\$93.49
6" PlowGuards		Maria de la companya
Guage Specific	6" PlowGuard CurbCast	\$181.83
Guage Specific	6" PlowGuard Straight	\$149.28
Guage Specific	6" PlowGuard CurbRunner	\$188.02
8" PlowGuards left or right		
Gauge Specific	8" PlowGuard CurbCast	\$220.33
Gauge Specific	8" PlowGuard Straight	\$155.26
Gauge Specific	8" PlowGuard CurbRunner	\$194.71

Additional sizes available. Call for more information. NIC Freight, Catalog

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