

# TRANSMITTAL OF CATALOG CUTS

DATE: 1/28/11

FROM: Frank Green

TO: E & EP Materials Lab - Documentation Section; MS47365

Section: Columbia River Bridge Temporary Pile Test Program

Contract No: 008078 SR - 5

Bid Item	Material Description	Manufacturer	FOSSC Appr'l Action
4.01.01	open end cutting shoes	Vancouver Iron & Steel, Inc.	

**INSTRUCTIONS:**

- 1.) This form is the "MASTER" and will need to be copied and used throughout the contract for each catalog cut submitted for approval.
- 2.) The Project Office will fill in the "DATE", "Bid Item", "Material Description" and "Manufacturer". If the Project Office is unable to provide this information, request the additional information from the contractor.
- 3.) Attach TWO(2) copies of the catalog cut for retention at the E & EP - Materials Lab.
- 4.) E & EP will check the catalog cut for compliance with the appropriate section of the Standard Specification, mark the "E & EP Approval Action" and return this transmittal cover sheet to the Project Engineer.

**REMARKS:**

Distribution:

Mat'l File

Proj Engr



CAT - 0001

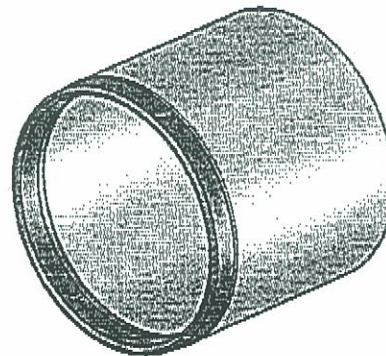
Phone: 1-800-678-0814 / 1-503-287-9822 Fax: 1-800-287-7483 / 1-503-287-7483

# Versa-Steel, Inc.

[www.piletips.com](http://www.piletips.com)

1618 NE 1st Avenue Portland, Oregon 97232-1136

## Open End Cutting Shoe Data Sheet



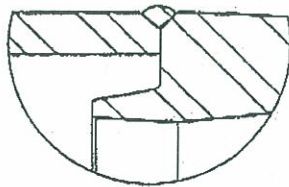
**PROPRIETARY AND CONFIDENTIAL**

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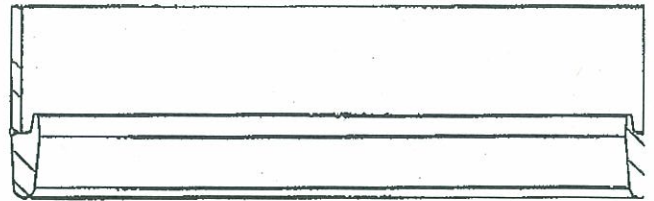
SHEET NO. **A** Equipment Data Sheet **A** REV.  
SCALE: 1:10 WEIGHT: SHEET 1 OF 3

Open End Cutting Shoes

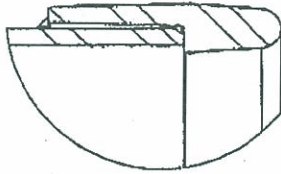
Type Inside Fit  
700 Series



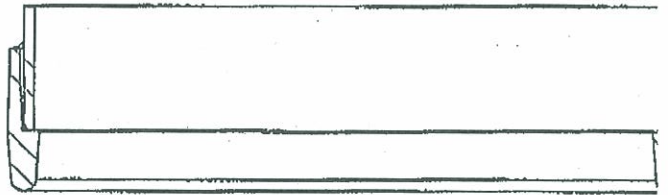
These tips are designed with a weld chamfer built into the casting. Slip shoe inside pipe and using a 70xx series rod weld a 5/16" or larger weld all around.



Type Outside Fit  
200 Series



These slip fit shoes are easily attached with a 5/16" or larger fillet weld at the top of the flange. For best results, weld all around the shoe with a 70xx series rod.



### Product Description

Our inside fit and outside fit cutting shoes are designed to install with a slip-on fit. The design places the cross-sectional area directly below the wall of the pipe for maximum support during penetration. They are a more heavy duty construction than other brands.

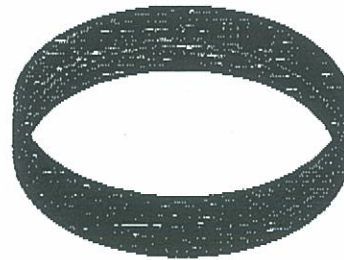
The inside fit cutting shoe has a weld prep chamfer built into the casting. Slip shoe inside pipe and using a 70xx series rod weld a 5/16" or larger weld all around.

The outside fit cutting shoe has a natural fillet on top for easy welding. These slip fit shoes are easily attached with a 5/16" or larger fillet weld at the top of the flange. Weld all around the shoe with a 70xx series rod.

**Type Inside Fit  
700 Series**



**Type Outside Fit  
200 Series**



**Versa Steel Open End Cutting Shoe and Pipe Cross-Section View**



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DIMENSIONS ARE IN INCHES TOLERANCES:		NAME	DATE
1/X	± 1/16"	DRAWN	JML 12/27/2007
XX	± .01	CHECKED	
XXX	± .003	ENG APPR	
XXXX	± .0005	MTG APPR	
MATERIAL	Steel Alloy	QA	
FINISH	None	COMMENTS	
NEXT ASSY	USED ON	Description: Open End Cutting Shoes Part Number:	
APPLICATION	DO NOT SCALE DRAWING	SIZ	DWG. NO.
		A: Equipment Data Sheet A	
		SCALE:1:5	WEIGHT:
			SHEET 2 OF 3

*Drive Shafts*



**Vancouver Iron & Steel, Inc.**

MATERIAL CERTIFICATE

Customer: Versa Steel Inc. Date: 9-Mar-09  
 PO Number: 2947 Part Number: VS748  
 Heat Number: \_\_\_\_\_ Total Quantity: 3  
 Specification: ASTM A148 Gr. 80-50  
 Heat Treatment: NORMALIZE

<u>CHEMICALS</u>		<u>MECHANICAL</u>		<u>LOT NUMBER</u>	
Carbon	<u>0.21</u>	Tensile	<u>85,500</u> psi	Julian Date	Qty.
Silicon	<u>0.58</u>	Yield	<u>54,500</u> psi	_____	_____
Manganese	<u>0.68</u>	Elong.	<u>25</u> %	_____	_____
Phosphorus	<u>0.01</u>	Reduc.	<u>42</u> %	_____	_____
Sulfur	<u>0.01</u>	Brinell	<u>179</u> BHN	_____	_____
Chromium	_____				
Nickel	_____				
Molybdenum	_____				
Copper	_____	Notch:	_____	Temp:	_____
Vanadium	_____				
Aluminum	<u>0.04</u>	Test 1:	_____		
Magnesium	_____	Test 2:	_____		
		Test 3:	_____		
		Average:	_____		

CHARPY TEST:

We certify that the above items have been melted and manufactured in the United States in accordance with, and conform to, the applicable specifications, standards, requirements, instructions and/or drawings referenced on the above purchase order, subject to our acknowledgment of said purchase order.

Vancouver Iron and Steel, Inc  
  
 \_\_\_\_\_  
 Quality Assurance Department

1200 West 13th Street  
 866 N. Columbia Blvd.

Vancouver, WA 98080  
 Portland, OR 97217

Phone: 360-805-3914  
 Phone: 503-821-8100  
 Fax: 503-821-8121

Dec. 20. 2010 12:22PM Vancouver Iron & Steel

No. 7267 P. 2



# VANCOUVER IRON & STEEL, INC

## MATERIAL CERTIFICATE

Customer: Versa Steel Inc. Date: 12/20/2010  
 PO Number: 2907 Part Number: VS724-80/50  
2888  
 Heat Number: \_\_\_\_\_ Total Quantity: 78  
 Specification: ASTM A148 Gr. 80-50  
 Heat Treatment: NORMALIZE

CHEMICALS		MECHANICAL		LOT NUMBER	
Carbon	<u>0.26</u>	Tensile	<u>82,600</u> psi	Julian Date	Qty.
Silicon	<u>0.55</u>	Yield	<u>53,000</u> psi	_____	_____
Manganese	<u>0.86</u>	Elong.	<u>28</u> %	_____	_____
Phosphorus	<u>0.01</u>	Reduc.	<u>30</u> %	_____	_____
Sulfur	<u>0.01</u>	Brinell	<u>174</u> BHN	_____	_____
Chromium	<u>0.13</u>				
Nickel	<u>0.05</u>				
Molybdenum	<u>0.10</u>				
Copper	<u>0.13</u>	Notch:	_____	Temp:	_____
Vanadium	_____				
Aluminum	<u>0.04</u>			Test 1:	_____
Magnesium	_____			Test 2:	_____
				Test 3:	_____
				Average:	_____

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Vancouver Iron and Steel, Inc  
*Allen Smith*  
 \_\_\_\_\_  
 Quality Assurance Department

Vancouver Iron Steel, Inc  
 603-821-8100

1200 West 13th Street  
 Fax: 503-821-8138

Vancouver, WA 98660



CAT - 0001

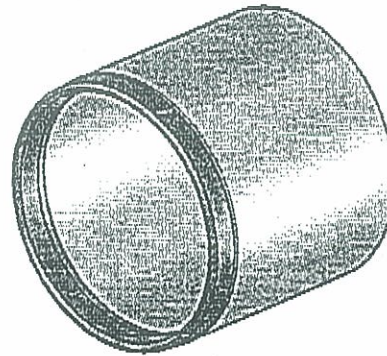
Phone: 1-800-678-0814 / 1-503-287-9822 Fax: 1-800-287-7483 / 1-503-287-7483

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## Open End Cutting Shoe Data Sheet

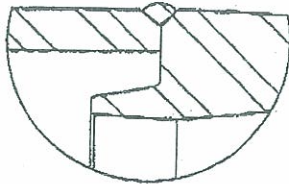


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VERSA-STEEL, INC. IS PROHIBITED.

SHEET NO. **A** Equipment Data Sheet REV. **A**  
SCALE: 1:10 WEIGHT: SHEET 1 OF 3

Open End Cutting Shoes

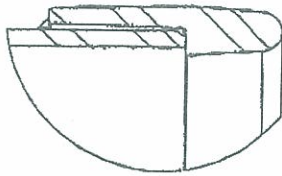
Type Inside Fit  
700 Series



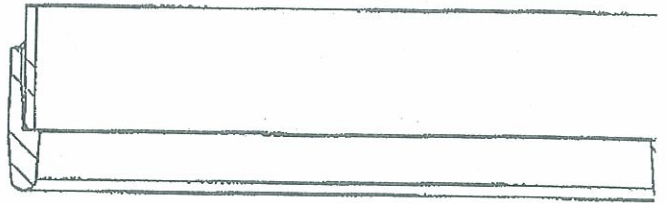
These tips are designed with a weld chamfer built into the casting. Slip shoe inside pipe and using a 70xx series rod weld a 5/16" or larger weld all around.



Type Outside Fit  
200 Series



These slip fit shoes are easily attached with a 5/16" or larger fillet weld at the top of the flange. For best results, weld all around the shoe with a 70xx series rod.





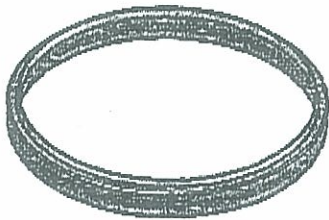
### Product Description

Our inside fit and outside fit cutting shoes are designed to install with a slip-on fit. The design places the cross-sectional area directly below the wall of the pipe for maximum support during penetration. They are a more heavy duty construction than other brands.

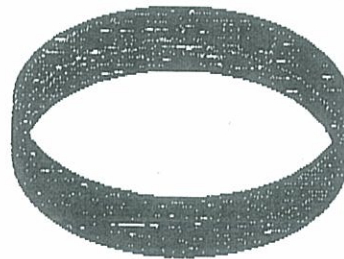
The inside fit cutting shoe has a weld prep chamfer built into the casting. Slip shoe inside pipe and using a 70xx series rod weld a 5/16" or larger weld all around.

The outside fit cutting shoe has a natural fillet on top for easy welding. These slip fit shoes are easily attached with a 5/16" or larger fillet weld at the top of the flange. Weld all around the shoe with a 70xx series rod.

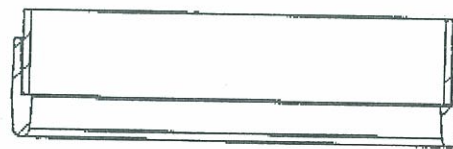
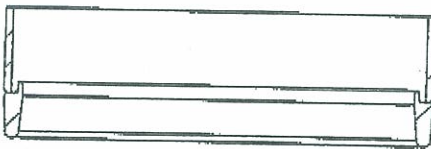
**Type Inside Fit  
700 Series**



**Type Outside Fit  
200 Series**



**Versa Steel Open End Cutting Shoe and Pipe Cross-Section View**



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DIMENSIONS ARE IN INCHES TOLERANCES:		NAME	DATE
1/X	± 1/16"	JML	12/27/2007
.XX	± .01	CHECKED:	
.XXX	± .003	ENG APPR:	
.XXXX	± .0005	MTG APPR:	
MATERIAL	Steel Alloy	Q.A.	
NCX1 ASSY	USED ON	COMMENTS:	
FINISH	None		
APPLICATION	DO NOT SCALE DRAWING		

Description:  
**Open End Cutting Shoes**  
Part Number:

SIZE: 1 PWS, HQ  
**A: Equipment Data Sheet** REV. A  
SCALE: 1:5 WEIGHT: SHEET 2 OF 3

Drive shoes



# Vancouver Iron & Steel, Inc.

## MATERIAL CERTIFICATE

Customer: Versa Steel Inc. Date: 9-Mar-09  
 PO Number: 2947 Part Number: VS748  
 Heat Number: \_\_\_\_\_ Total Quantity: 3  
 Specification: ASTM A148 Gr. 80-50  
 Heat Treatment: NORMALIZE

CHEMICALS		MECHANICAL		LOT NUMBER	
Carbon	<u>0.21</u>	Tensile	<u>85,500</u> psi	Julian Date	Qty.
Silicon	<u>0.58</u>	Yield	<u>54,500</u> psi	_____	_____
Manganese	<u>0.68</u>	Elong.	<u>25</u> %	_____	_____
Phosphorus	<u>0.01</u>	Reduc.	<u>42</u> %	_____	_____
Sulfur	<u>0.01</u>	Brinell	<u>179</u> BHN	_____	_____
Chromium	_____				
Nickel	_____				
Molybdenum	_____				
Copper	_____	Notch:	_____	Temp:	_____
Vanadium	_____				
Aluminum	<u>0.04</u>	Test 1:	_____		
Magnesium	_____	Test 2:	_____		
		Test 3:	_____		
		Average:	_____		

### CHARPY TEST:

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Fax: 503-821-8121

Dec. 20. 2010 12:22PM Vancouver Iron & Steel

No. 7267 P. 2



**VANCOUVER IRON & STEEL, INC**  
**MATERIAL CERTIFICATE**

Customer: Versa Steel Inc. Date: 12/20/2010  
 PO Number: 2907 Part Number: VS724-80/50  
2888  
 Heat Number: \_\_\_\_\_ Total Quantity: 76  
 Specification: ASTM A148 Gr. 80-50  
 Heat Treatment: NORMALIZE

CHEMICALS		MECHANICAL		LOT NUMBER	
Carbon	<u>0.25</u>	Tensile	<u>82,600</u> psi	Julian Date	Qty.
Silicon	<u>0.55</u>	Yield	<u>53,000</u> psi	_____	_____
Manganese	<u>0.86</u>	Elong.	<u>28</u> %	_____	_____
Phosphorus	<u>0.01</u>	Reduc.	<u>30</u> %	_____	_____
Sulfur	<u>0.01</u>	Brinell	<u>174</u> BHN	_____	_____
Chromium	<u>0.13</u>				
Nickel	<u>0.06</u>				
Molybdenum	<u>0.10</u>				
Copper	<u>0.13</u>	Notch:	_____	Temp:	_____
Vanadium	_____				
Aluminum	<u>0.04</u>			Test 1:	_____
Magnesium	_____			Test 2:	_____
				Test 3:	_____
				Average:	_____

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