



Washington State
Department of Transportation

RAM - 0002

Request for Approval of Material

Contract	8078	FA Number		SR	I-5	Date	2/1/11
Section	I-5 COLUMBIA RIVER BRIDGE (WA 0.3 to OR MP318)			County	WA AND OR states		
Contractor	American Construction Company, Inc.		Subcontractor	YN BEST AND COMPANY, INC.			

This form shall be completed prior to submittal. If this form is not complete at time of submittal it may be returned for information that was omitted.

For assistance in completing, see Instructions and Example

For WSDOT Use Only
RAM # 2

Bid Item No.	Material or Product/Type	Name and Location of Fabricator, Manufacturer or Pit Number	Specification Reference	PE/QPL Code	Hdqr./QPL Code
4.01	FURNISHING & INSTALLING DRIVE SHOES FOR PILING	NP 2/3/11 VERSA-STEEL, INC. 1618 NE 1st Avenue Portland, OR 97232 www.piletips.com Farwest Fabrication	SPECIAL PROVISIONS PP-103	7,3	

Project Engineer	<i>Ricki Peppers for Frank Green</i>	Date	2/1/2011	State Materials Engineer		Date	
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Acceptance Action Codes for use by Project Engineer and State Materials Laboratory

- Acceptance Criteria: Acceptance based upon 'Satisfactory' Test Report for samples of materials to be incorporated into project.
- Acceptance Criteria: Mfg. Cert. of Compliance for 'Acceptance' prior to use of material.
- Acceptance Criteria: Catalog Cuts for 'Acceptance' prior to use of material. Catalog Cut Approved Yes No
- Acceptance Criteria: Submit Shop Drawings for 'Approval' prior to fabrication of material.
- Acceptance Criteria: Only 'Approved for Shipment', 'WSDOT Inspected' or 'Fabrication Approved Decal' material shall be used.
- Acceptance Criteria: Submit Certificate of Materials Origin to Project Engineer Office.
- Acceptance Criteria: Request Transmitted to State Materials Laboratory for Approval Action.
- Source Approved:
- Approval Withheld: Submit samples for preliminary evaluation.
- Approval Withheld:
- Miscellaneous Acceptance Criteria.

Remarks:

CAT CUT 0001 sent to EQEP Material Lab, waiting for approval on 1/23/11

* cc: American Construction, Peppers

Project Engineer Distribution

- Contractor Region Materials
 Region Operations Engineer State Materials Lab
 Fabrication Inspection M/S 47365

State Materials Engineer Distribution

- General File Signing Inspection
 Other _____



CAT - 0001

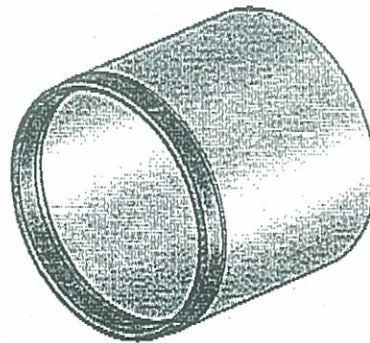
Phone: 1-800-678-0814 / 1-503-287-9822 Fax: 1-800-287-7483 / 1-503-287-7483

Versa-Steel, Inc.

www.piletips.com

1618 NE 1st Avenue Portland, Oregon 97232-1136

Open End Cutting Shoe Data Sheet

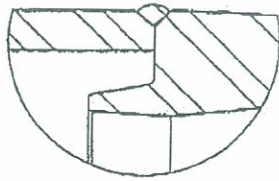


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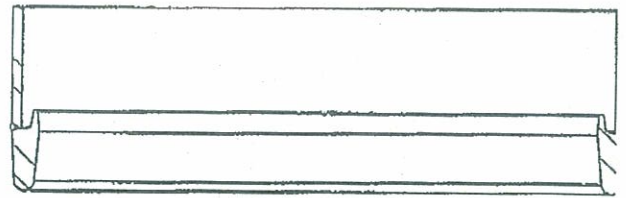
SHEET NO. **A** DWG. NO. **Equipment Data Sheet** REV. **A**
 SCALE: 1"=1'-0" WEIGHT: SHEET NO. 3

Open End Cutting Shoes

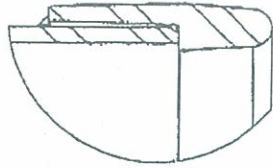
Type Inside Fit
700 Series



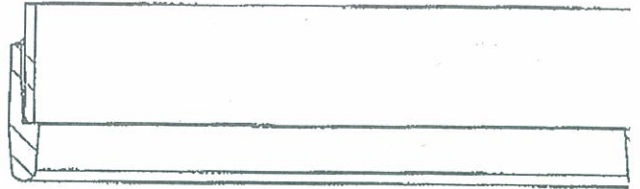
These tips are designed with a weld chamfer built into the casting. Slip shoe inside pipe and using a 70xx series rod weld a 5/16" or larger weld all around.



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.



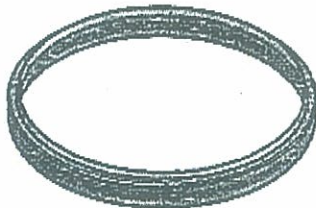
Product Description

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.

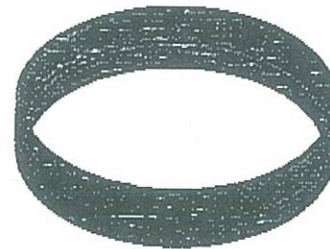
The inside fit cutting shoe has a weld prep chamfer built into the casting. Slip shoe inside pipe and using a 70xx series rod weld a 5/16" or larger weld all around.

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.

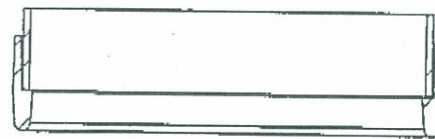
Type Inside Fit
700 Series



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	MFG APPR	
MATERIAL	Steel Alloy	G.A.	
FINISH	None	COMMENTS:	
NEXT ASSY	USED ON	Description: Open End Cutting Shoes Part Number:	
APPLICATION	DO NOT SCALE DRAWING	SRE 17WGS, HQ A: Equipment Data Sheet 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

<u>CHEMICALS</u>		<u>MECHANICAL</u>		<u>LOT NUMBER</u>	
Carbon	<u>0.21</u>	Tensile	<u>85,600</u> psi	Julian Date	<u>Qty.</u>
Silicon	<u>0.58</u>	Yield	<u>54,500</u> psi	_____	_____
Manganese	<u>0.66</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

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: 75

Specification: ASTM A148 Gr. 80-50

Heat Treatment: NORMALIZE

CHEMICALS		MECHANICAL		LOT NUMBER	
Carbon	<u>0.28</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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Vancouver Iron and Steel, Inc

 Quality Assurance Department

Vancouver Iron Steel, Inc
 603-821-8100

1200 West 13th Street
 Fax: 509-821-8138

Vancouver, WA 98660

QD10.04.01A Rev D