

WAUKESHA FOUNDRY, INC.

M A T E R I A L C E R T I F I C A T I O N

Customer: JP PATTERN  
Customer P.O. #20021186-01A  
Part Number SEL405-003-02  
2A9

Alloy: CF 8M NON MAG  
Spec: WF, PRINCETON  
Part Name: PARTIAL TEE SECTION  
File Number: 53230  
Date: 1-24-03  
Plate Number: 25612

Heat Number: X 955  
Number Pieces: 1  
Serial Nos:

ELEMENTS Minimum Maximum CHEMICAL COMPOSITION PERCENT

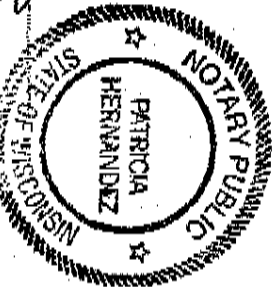
C	.08	.04				
MN	1.50	.38				
SI	1.00	.49				
P	.040	.011				
S	.040	.010				
CR	17.00	17.63				
NI	14.00	14.09				
MO	2.00	2.39				

Tensile Strength, psi	70000	73800				
Yield Strength, psi	30000	37300				
Elongation %, in 2"	30.0	48.0				

We hereby certify that the referenced material has been tested in accordance with the listed specifications and has been found to have the chemical and/or physical properties noted hereon.

Date: 1-24-03  
Subscribed and sworn to before me:

*Patricia Hernandez*  
Notary Public



MY COMMISSION EXPIRES MAY 7, 2006

*Paul Swick*  
Authorized Signature Quality Assurance

## WAUKESHA FOUNDRY, INC.

## M A T E R I A L C E R T I F I C A T I O N

Customer: JP PATTERN  
 Customer P.O. # P20021186-01A  
 Part Number SE1405-003-02  
 289

Alloy: CF 8M NON MAG  
 Spec: WF, PRINCETON  
 Part Name PARTIAL TEE SECTION

File Number: 53231  
 Date: 1-24-03  
 Plate Number: 25612

Heat Number: \_\_\_\_\_  
 Number Pieces: \_\_\_\_\_  
 Serial Nos. \_\_\_\_\_

Elements	Minimum	Maximum	C H E M I C A L C O M P O S I T I O N				P E R C E N T
C	.08	.04	1	1	1	1	1
MN	1.50	.38	1	1	1	1	1
SI	1.00	.49	1	1	1	1	1
P	.040	.011	1	1	1	1	1
S	.040	.010	1	1	1	1	1
CR	17.00	17.63	1	1	1	1	1
NI	14.00	14.09	1	1	1	1	1
MO	2.00	2.39	1	1	1	1	1

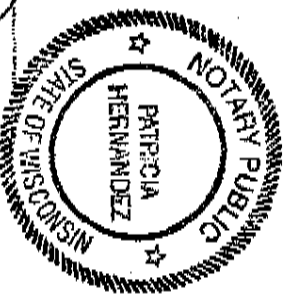
Tensile Strength, psi 70000  
 Yield Strength, psi 30000  
 Elongation %, in 2" 30.0

73800  
 37300  
 48.0

Date: 1-24-03  
 Subscribed and sworn  
 to before me:

We hereby certify that the referenced  
 material has been tested in accordance  
 with the listed specifications and has  
 been found to have the chemical and/or  
 physical properties noted hereon.

*Patricia Hernandez*  
 Notary Public



MY COMMISSION EXPIRES MAY 7, 2006

*Paul Sanchez*  
 Authorized Signature

Quality Assurance



File Number:	03252
Date	1-24-03
Plate Number	35611


 UNIVERSITY OF THE PACIFIC  
 Graduate School  
 1000 University Ave.  
 Stockton, CA 95211-8800  
 (209) 941-6000  
 Fax: (209) 941-6001  
 Email: [gradschool@upac.edu](mailto:gradschool@upac.edu)  
 Website: <http://www.upac.edu/gradschool>

Elements		Minimum	Maximum	CHEMICAL COMPOSITION				PERCENT			
C			.08	.04							
MN			1.50	.38							
SI			1.00	.49							
P			.040	.011							
S			.040	.010							
CR		17.00	18.50	17.63							
NI		14.00	18.00	14.09							
MO		2.00	3.00	2.39							
Tensile Strength, psi		70000		73800							
Yield Strength, psi		30000		37300							
Elongation %, in 2"		30.0		48.0							

We hereby certify that the referenced material has been tested in accordance with the listed specifications and has been found to have the chemical and/or physical properties noted herein.

*Paul Kunkin*  
Authorized Signature      Quality Assurance

MY COMMISSION EXPIRES MAY 7, 2006

## WAUKESHA FOUNDRY, INC.

## M A T E R I A L C E R T I F I C A T I O N

Customer: JP PATTERN  
 Customer P.O. #20021186-01A  
 Part Number SE1405-003-01  
 2A9

Alloy: CF 6H NON MAG  
 Spec: WF, PRINCETON  
 Part Name PARTIAL TEE SECTION

File Number: 53233  
 Date 1-24-03  
 Plate Number 25611

Heat Number  
 Number Pieces  
 Serial Nos.

X 955  
 1

## Elements Minimum Maximum

C .08  
 MN 1.50  
 SI 1.00  
 P .040  
 S .040  
 CR 17.00  
 NI 14.00  
 MO 2.00

## CHEMICAL COMPOSITION

.04  
 .38  
 .49  
 .011  
 .010  
 17.63  
 14.09  
 2.39

## PERCENT

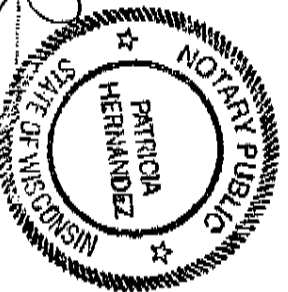
Tensile Strength, psi 70000  
 Yield Strength, psi 30000  
 Elongation %, in 2" 30.0

73800  
 37300  
 48.0

Date: 1-24-03  
 Subscribed and sworn  
 to before me:

TOTAL P. 05

Notary Public



MY COMMISSION EXPIRES MAY 7, 2005

We hereby certify that the referenced material has been tested in accordance with the listed specifications and has been found to have the chemical and/or physical properties noted hereon.

Authorized Signature

Quality Assurance