



# CERTIFICATE OF SPECIFICATION

128637 I ITEM NUMBER	12441E CUST. NO.	7111 TERR.	ASDSAZ SALES CLASS	CON	22205 OUR ORDER NUMBER
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**CUSTOMER**

BROWN METALS COMPANY  
 8635 WHITE OAK AVENUE  
 RANCHO CUCAMONGA, CA  
 91730

**CONSIGNEE**

BROWN METALS COMPANY  
 8635 WHITE OAK AVENUE  
 RANCHO CUCAMONGA, CA  
 91730

CUST ORD DATE 092507	CUSTOMER ORDER NUMBER 20496	CONSIGNEE ORDER NUMBER
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THICKNESS .01000	WIDTH IN INCHES 36.0000	TEMPER ANNL	ALLOY 304M
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CERTIFICATE OF: <input checked="" type="checkbox"/> TEST <input type="checkbox"/> COMPLIANCE (1) <input checked="" type="checkbox"/> CHEMICAL ANALYSIS	CUSTOMER SPECIFICATION NUMBER AMS 5513H AND 5516N; ASTM 666-03 AND A240-07
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DATE 11/13/07	DATE SHIPPED	CUSTOMER PART NAME AND NUMBER WELDED TUBES 302/304ANN010-2BA
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MECHANICAL PROPERTIES						
QUANTITY (LBS)	% IACS	HARDNESS RB	AVERAGE GRAIN DIAMETER (MM) X75 ASTM X100	YIELD STRENGTH (KSI)(2)	TENSILE STRENGTH (KSI)(2)	% ELONG IN 2 INCHES
NORTH AMERICAN STAINLESS MELTED IN THE USA / DEARS COMPLIANT						
TRANS. 11688		72	8.5	42	100	60.0

MATERIAL PASSES 180 DEG. BADWAY .010 DIAMETER BEND TEST---  
 GAUGE READINGS: .01002----

SURFACE RA T:6/11 UIN P:3/6 UIN

EMBRITTEMENT TEST - CONFORMS TO SPECIFICATION

HEAT	CHEMICAL ANALYSIS PERCENTAGES										
COIL NUMBER	C	MN	CO	S	SI	CU	NI	CR	N	P	MO
2VW3 S079607	.057	1.811	.16	.001	.378	.175	9.678	18.192	0.039	.029	.133
	FE REM										

- IF THIS REPORT IS A "CERTIFICATE OF COMPLIANCE", THE MATERIAL FURNISHED ON ORDER SHOWN ON THIS REPORT COMPLIES WITH REQUIREMENTS OF THE SPECIFICATION SHOWN AS FOLLOWS: CHEMICALLY (BASED ON LADLE ANALYSIS) AS LISTED AND MECHANICALLY (BASED ON AVAILABLE PRODUCTION DATA).
- 0.2% OFFSET.
- UNLESS OTHERWISE SHOWN % NI INCLUDES SMALL AMOUNT OF COBALT.

4. LADLE ANALYSIS

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED IN THIS REPORT HAS BEEN INSPECTED, AND HAS BEEN FOUND TO CONFORM WITH THE ABOVE SPECIFICATIONS AND DESCRIPTION, AND THAT SAID MATERIAL HAS BEEN FOUND TO HAVE THE ABOVE COMPOSITION AND PROPERTIES.

ASSISTANT FOREMAN

INSPECTION DEPARTMENT

NOTARY PUBLIC

SWORN TO AND SUBSCRIBED BEFORE ME

THIS DAY OF

19

Certificate: 372283 03

Mail To:  
SOMERS THIN STRIP  
BRASS DIVISION OLIN CORP.  
BALDWIN AVENUE GATE 2  
WATERBURY, CT 06720

Ship To:  
SOMERS THIN STRIP  
BRASS DIVISION OLIN CORP.  
BALDWIN AVENUE GATE 2  
WATERBURY, CT 06720

Date: 10/02/2007 Page: 1

Customer: 0085 001

Steel: 304DDQ

Finish: 2D

Your Order: 3103

NAS Order: AN 0377774 01

Corrosion: ASTM A262/02aE;180Bend-OK

**PRODUCT DESCRIPTION:**

STAINLESS STEEL COIL, COLD ROLLED, ANNEALED AND PICKLED.  
ASTMA240/07,480/06b,666/03,ASMESA240/04-A05,480/04-A05,SA666/04  
QQS766D-A X MG PERM,AMS5513G X MRK,MIL5059D,AMD3,X CRWN MEAS  
Somers Spec 304OH Rev B; Number #2009

**REMARKS:**

Mat'l Free of Mercury Contamination. No weld repairs.  
QQS763F Cond A; RoHS Compliant  
\* Melted & Manufactured in the USA

Product ID #	Coil #	Thickness	Width	Weight	Length	Mark	Pieces	REQ. NO.
022VW3 B	* 022VW3 B	.0350	36.0000	14,570	COIL	3381.1	11	1 spec 2009; rev d

**CHEMICAL ANALYSIS** CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa)

Heat	CM	C	CO	CR	CU	MN	MO	N	NI	P	S	SI
2VW3	US	.057	.160	18.192	.175	1.811	.133	.039	9.678	.029	< .001	.378

**MECHANICAL PROPERTIES**

Product ID #	Coil #	l d o i c r	UTS KSI	.2% YS KSI	ELONG %-2"	Hard RB	Tail Hard	Grain No.	A 262 Pr A
022VW3 B	022VW3	F L	99.00	42.34	47.84				
022VW3 B	022VW3	F T	91.89	41.07	55.12	79.00	79.00	8.500	OK