



P.O. BOX 977
 SYRACUSE
 NEW YORK 13201

CERTIFICATE OF TEST

COPPER & BRASS SALES INC
 CORPORATE SERVICES DIV
 400 RENAISSANCE CTR SUITE 1700
 DETROIT MI 48243

SHIP TO
 COPPER & BRASS SALES
 415 STATE PARKWAY
 SCHAUMBURG IL 60173 12

OUR ORDER NO.
 PS-15252-3-01
 DATE
 01/25/04

CUSTOMER ORDER # & DATE: C48037
 CUSTOMER REQ #:
 DISTRICT: B PARSONS
 SHIPPED FROM: SYRACUSE

DESCRIPTION OF MATERIAL: CRU 316/316L RTA F/N 399456-3
 SIZE: 13 RD
 ASTH-A276-03 ANS-5648K ANS-5653F ASTM A479-03

HEAT NO.	CHEMICAL ANALYSIS										
	C	MN	P	S	SI	NI	CR	MO	CU	N	
A15200	.018	1.83	.022	.026	.56	10.19	16.62	2.07	.22	.086	

QUANTITY	HEAT NO	MECHANICAL PROPERTIES				
		YLD. 2%FSI	TENSILE FSI	ELONG2IN	RED/AREA%	HARDNESS
5519 # 6319 # MCO 1/29/04	A15200	34.252	78.321	58.1	67.2	BHN 179

MACRO TEST OK
 INTERGRANULAR CORROSION TEST OK.
 GRAIN SIZE # 3.5

COPPER AND BRASS SALES
 SOLD TO: C & B
 DATE: 9/15 QTY: 516 lbs
 CUSTOMER PO: Dacto
 SHIPPER NO: 478081
 BY: [Signature]

MATERIAL FREE FROM MERCURY CONTAMINATION AT TIME OF SHIPMENT
 NO WELD REPAIR PERFORMED
 MATERIAL MELTED IN U.S.A
 THANK YOU FOR SELECTING A QUALITY PRODUCT
 MANUFACTURED BY THE EMPLOYEES OF CRUCIBLE SPECIALTY METALS JW

SWORN TO AND SUBSCRIBED BEFORE ME THIS
 _____ DAY OF _____, 20____

 NOTARY PUBLIC

THE ABOVE MATERIAL WAS MANUFACTURED AND TESTED IN ACCORDANCE WITH ABOVE SPECIFICATIONS AND IS IN CONFORMANCE WITH THOSE SPECIFICATION REQUIREMENTS.
 CRUCIBLE MATERIALS CORPORATION
 ACTING BY AND THROUGH ITS SPECIALTY METALS DIVISION
 CERTIFIED BY [Signature]
 QUALITY ASSURANCE REPRESENTATIVE
 WILLIAM E. MASTROE MANAGER QUALITY ASSURANCE