

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

NONCONFORMANCE REPORT

Project No. 20.06002.01.081

NCR No. 2003-01

PART 1: DESCRIPTION OF NONCONFORMANCE:

Alloy 22 weld specimens CNWRA Drawing 20-06002-01-081-001 machined by Industrial Mechanical are not within the tolerances. Modifications to the dimensions specified on the drawing were necessary because the Alloy 22 plate supplied to Industrial Mechanical was bowed. Part of the bow was removed by pressing and part was removed by machining the plate surfaces. A detailed description of the non conformance items is provided below:

1. Thickness of machined specimens was reduced by 0.005 to 0.030" to remove bow in plate. Final thickness after machining has been provided in documentation provided by Industrial Mechanical. *(all 4 specimens)*
2. Plate C: The 0.090" land thickness measures 0.090 to 0.097"
3. Plate D: The 0.090" land thickness measures 0.093 to 0.100"

meo 1/24/03

Initiated by: Darrell S. Dunn *D.S.D.*

Date: 1/23/2003

PART 2: PROPOSED DISPOSITION AND CORRECTIVE ACTION

Disposition:

Accept specimens as is.

Basis of Disposition:

The variation in the thickness of the land will not affect weldability of the plate. Integrity of the weld joint will be assessed by non destructive examination including penetrant testing of the root pass and radiographic testing of the completed weld. .

Action to Correct Nonconformance:

None.

Target date for completion: 2/28/2003

Proposed by: Darrell S. Dunn *D.S.D.*

Date: 1/23/2003

PART 3: APPROVAL

Element Manager: *[Signature]*

Date: 1/28/03

Director of QA: *[Signature]*

Date: 1/28/2003

Comments/Instructions:

PART 4: CLOSE OUT

Comments: *No further action required.*

Distribution:

Verified by: *[Signature]*

Date: 2/6/03

IMC Machine Shop (210)662-1690
IMC Machine Shop Manager (210)662-1696
IMC Machine Shop Superintendent (210)662-4596

Part Name ALLOY 22 WELD SPECIMEN	Part Number A	Dwg. No. 20-06002-01-081-001
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Heat No. 2277-J-3/64 ASM 5B-575-98-NO. 022 27-34147-01	P.O. No. 3828945	IMC Job No. 1173	Inspection Date 1-15-03
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[illegible]

CHECKED BY: JESUS TORRES DATE: 1-15-03 PAGE 1 OF 1

IMC Machine Shop (210)662-1690
IMC Machine Shop Manager (210)662-1696
IMC Machine Shop Superintendent (210)662-4596

Part Name <i>ALLOY 22 WELD SPECIMEN</i>	Part Number <i>B</i>	Dwg. No. <i>20-06002-01-081-001</i>
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Heat No. 2277-1-3164 ASME SB-575-78-No6022 27-341417-01	P.O. No. 3828945	IMC Job No. 1173	Inspection Date 1-15-03
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[illegible]

CHECKED BY: JESUS TORRES DATE: 1-15-03 PAGE 1 OF 1

IMC Machine Shop (210)662-1690
IMC Machine Shop Manager (210)662-1696
IMC Machine Shop Superintendent (210)662-4596

Part Name ALLOY 22 WELD SPECIMEN	Part Number C	Dwg. No. 20-06002-01-081-001
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Heat No. 2277-1-3164 ASME SB-575-98-N06022 27-341417-01	P.O. No. 3828945	IMC Job No. 1173	Inspection Date 1-15-03
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PAGE / OF

IMC Machine Shop (210)662-1690
IMC Machine Shop Manager (210)662-1696
IMC Machine Shop Superintendent (210)662-4596

Part Name <i>ALLOY 22 WELD SPECIMEN</i>	Part Number <i>D</i>	Dwg. No. <i>20-06002-01-081-001</i>
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Heat No. 2277-1-3164 ASME SB-575-98-N06022 27-341417-01	P.O. No. 3828945	IMC Job No. 1173	Inspection Date 1-15-03
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CHECKED BY: Jesús Torres DATE: 1-15-03 PAGE 1 OF 1

Darrell S. Dunn
SwRI-CNwRA
Phone: (210) 522-6090
Fax: (210) 522-5184
e-mail: ddunn@swri.org

Alloy 22 Weld Specimen
CNwRA wing 20-06002-01-081-001
Dimensional tolerances as specified
Note: Detail A on Page 2

Page 1 of 2

To be completed at time of order:

Mat# _____

Heat# _____

Specimen Orientation: _____

Other: _____

24.00" +/-
0.06"

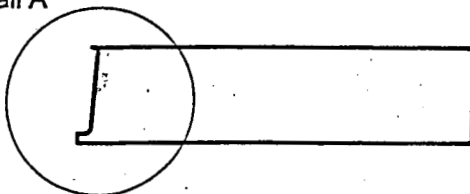
①

3.00" +/-
0.03"

②

1" ③
nominal
thickness

Detail A



Darrell Dunn 10/7/2002
Initiated by: D. Dunn Date

Vijay Jain 10/7/2002
Reviewed by: V. Jain Date

B. Mabrito 10/7/2002
QA Approval B. Mabrito Date

Darrell S. Dunn
SwRI-CNWRA
Phone: (210) 522-6090
Fax: (210) 522-5184
e-mail: ddunn@swri.org

Alloy 22 Weld Specimen
CNWRA Drawing 20-06002-01-081-001
All Dimensions $\pm 0.005"$
unless otherwise specified
Detail A identified on Page 1

Page 2 of 2

To be completed at time of order.

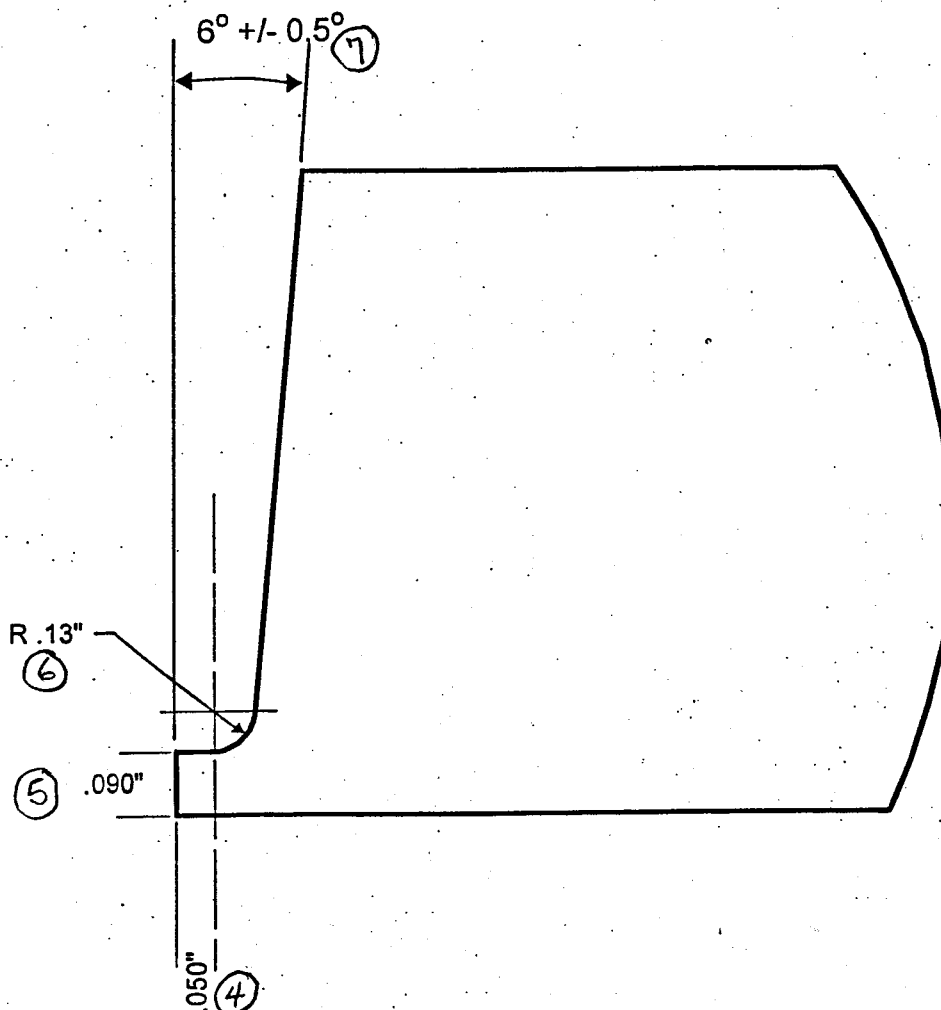
Mat'l: _____

Heat: _____

Specimen Orientation: _____

Other: _____

Detail A



HEAT NO:

2277-1-3164

ASME SB-575-98-N06022

27-341417-01

Darrell Dunn 10/7/2002
Initiated by: D. Dunn Date

V. Jain 10/7/2002
Reviewed by: V. Jain Date

B. Mabrito 10/7/2002
QA Approval B. Mabrito Date



INDUSTRIAL MECHANICAL COMPANY
A DIVISION OF CCC GROUP, INC.

5797 Dietrich Road
San Antonio, Texas 78219
Phone: 210-662-1690, 662-4596
Fax: 210-662-4503, 661-6060

Modifications to (4ea.) Alloy 22 Plates

Amount of bow in plates prior to straightening: A) .096
(The bow is along the 24" length) B) .060
(Plates are identified A thru D) C) .030
D) .020

Procedure used to straighten plates: Plates were straightened on a small hydraulic press (80-ton). As each plate was supported @ each end on press plates, pressure was applied to the center with a piece of aluminum under the push rod for no marring.

Amount of bow taken out after straightening: A) .081
B) .050
C) .030
D) .020

Amount machined from bottom face for flatness: A) .005 - .015
B) .010 - .015
C) .030
D) .020

Final thickness after machining: A) 1.020 - 1.025
B) .993 - 1.030
C) .975 - 1.000
D) 1.020 - 1.030

NOTE: This necessary work was not included in the quote.
Approval to proceed was given by Darrell Dunn via a
phone conversation 1/10/03. A.E. "Sonny" Rogers Jr.