

ANSTEC
APERTURE
CARD

| WELD END DIMENSIONAL CHECK | | WALL THICKNESS AND WELD JOINT LOCATION | |
|--|---|--|-----------------------------|
| (11) C = 31.200 ± .010 ACTUAL = 31.199 - 3.206 | LIP THICKNESS = .050 ± .015 ACTUAL = .053 - .007 | BEV ITEM | 90° 180° 270° & 0° LOCATION |
| (12) C = 31.200 ± .010 ACTUAL = 31.201 - 31.210 | LIP THICKNESS = .050 ± .015 ACTUAL = .078 - .019 | (1) | 2.7 3/8" |
| (13) C = 2.692 ± .010 ACTUAL = 2.692 - 2.688 | LIP THICKNESS = .050 ± .015 ACTUAL = .055 - .010 | (2) | 2.8 11/16" |
| | | (3) | 1.1 11 3/16" |
| | | (4) | 1.0 9/16" |

EDGE OF HOLE MUST BE CLEAN & SHARP .003" MAX. RADIUS, FREE FROM BURRS, NICKS, EDGES, OR OTHER IRREGULARITIES.

9/16" RADIUS (GRIND SMOOTH)

DRILL THRU & REAM OR GRIND TO DEBURR. (AFTER WELDING) (CPL'G. TO ALL)

DETAIL "X" (TYPICAL 4 PLACES)

HT. # 416CX SER. # 4977-9

HT. # 416CX SER. # 4977-20

SEE DET. "X" (TYP. 4)

HT. # 416CA SER. # 4977-22

HT. # 416CX SER. # 4977-21

NOTE 11: MBE PER SHT. 3G(R) (NOTE 14 & 22)

NOTE 12: 31" I.D.

NOTE 13: 4'-7 1/8" LARGER O.D. THIS END

NOTE 14: 25%

NOTE 15: 12-7 7/8" ± .010 (NOTE 15)

NOTE 16: 4'-6"

NOTE 17: 3'-7 1/8"

NOTE 18: 4'-6"

NOTE 19: 12-7 7/8"

NOTE 20: 12-7 7/8"

NOTE 21: 31" I.D.

NOTE 22: 31" I.D.

NOTE 23: 31" I.D.

NOTE 24: 31" I.D.

NOTE 25: 31" I.D.

NOTE 26: 31" I.D.

NOTE 27: 31" I.D.

APPROVED
DUKE POWER CO.
DATE: FEB 09 1990
D. L. RICHARD
SUPERVISOR
CATAWBA ENGINEERING DIVISION

FOR INFORMATION ONLY

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1. MAKE WITH LOW STRESS STEEL OR STEEL, HEAT AND SERIAL NO. TO BE APPLIED TO EACH PART OF THE FABRICATED ASSEMBLY.

2. SEE ATTACHED MANUFACTURING RECORD SHEET FOR DIMENSIONAL AND PROCEDURAL.

3. INSTALL 3/4" DIA. 3" WELLS PER SHEET 30 (R/2)

4. INSTALL 1" AND LARGER DRILLED PER SHEET 30 (R/2)

5. TYPICAL ROOT PASS OF ALL WELDS.

6. CONTINUOUS GRIND ALL WELDS - 250 RMS MAX. MAXIMUM REINFORCEMENT OF WFT WELDS IS 1/16" PER OUT. "A"

7. ALL TIGHTEN ATTACHMENTS SHALL BE OF A COMPATIBLE AND IDENTIFIED MATERIAL.

8. ALL SURFACE FROM WHICH METAL HAS BEEN GRIND BY THE SHOP, SHALL BE LIQUID PENETRANT EXAMINED PER PROCEDURE.

9. LIQUID PENETRANT EXAMINE FOR PROCEDURE THE ROOT PASS, AND ALL ACCESSIBLE SURFACE OF FINISHED WFT WELDS, WELLS, WELLS, FLANGE WELDS, AND THE HEAT AFFECTED ZONE OF THE BASE METAL ADJACENT TO THE WELD. IN ADDITION, THE WELLS 3" AND SMALLER, LIQUID PENETRANT EXAMINE EACH 1/2" INCLINATION OF WELD SURFACE.

10. REMOVE LEAK FROM 100 & P.T. GROUND SURFACES FOR PROCEDURE.

11. LIQUID PENETRANT EXAMINE FOR PROCEDURE ACCESSIBLE FINISHED RADIUSED HEADS, BOLTS AND GROUND SURFACE INSIDE HEADS AT WELLS WELDS.

12. LIQUID PENETRANT EXAMINE FOR PROCEDURE ALL PIPE WELD BEVELS AND WELD SURFACE CUT IN WALL FOR I.D. INSIDE WELD.

13. RADIOGRAPH 0° AND LARGER WFT WELDS AND WELLS WELDS PER PROCEDURE.

14. CLEAN AND PREPARE FOR SHIPMENT PER PROCEDURE. MARK 0° AND LARGER WFT WELDS DIMENSION INCLUDES 3/16" FIELD WELD SHRINKAGE. (1 - PLACE)

15. DIMENSION INCLUDES - FOR FIELD WELD SHRINKAGE (1 - PLACE).

16. SHOP TO COMPLETE 1/2 SPIR NO. ON PIPE WFT. NAME PLATE TO BE STAMPED WITH WFT NO. AND SERIAL NO. TO BE MEASURED LOCATION OF WFT WELD ON NAME PLATE AND AS PER DETAIL "A"

17. 31" MIN. DESIGN THICKNESS - 2.42"

18. SHOP WELD CUSTOMER FURNISHED NAME 12 IN SPACE INDICATED.

| REV. | DATE | DESCRIPTION | BY | CHK'D. |
|------|-------|--------------|----|--------|
| 1 | 19140 | AS PER 19140 | | |
| 2 | 19140 | AS PER 19140 | | |
| 3 | 19140 | AS PER 19140 | | |
| 4 | 19140 | AS PER 19140 | | |
| 5 | 19140 | AS PER 19140 | | |
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| 29 | 19140 | AS PER 19140 | | |
| 30 | 19140 | AS PER 19140 | | |

TRANSVERSE TENSION TEST @ 250°F

NOTE 1: (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30)

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DUKE POWER COMPANY
PLANT: CATAWBA NUCLEAR STATION
UNITS: 1 & 2
STATUS: AS MANUFACTURED
CERTIFICATION LTR. NO. CATAWBA-3306
AUTHORITY: P. J. 2ND GOOD
REG. LTR. NO. RP/SA-19177

DOCUMENT CONTROL DATE: FEB 05 1990
DESIGN ENGINEERING
DUKE POWER COMPANY

WESTINGHOUSE ELECTRIC CORP.
575 CATAWBA RD. SA
CN-2680-1 (198)

SPIN# DDP-RCPFB-11
ASME III CLASS I
DATE: 19140
19140

PDR RIDS

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