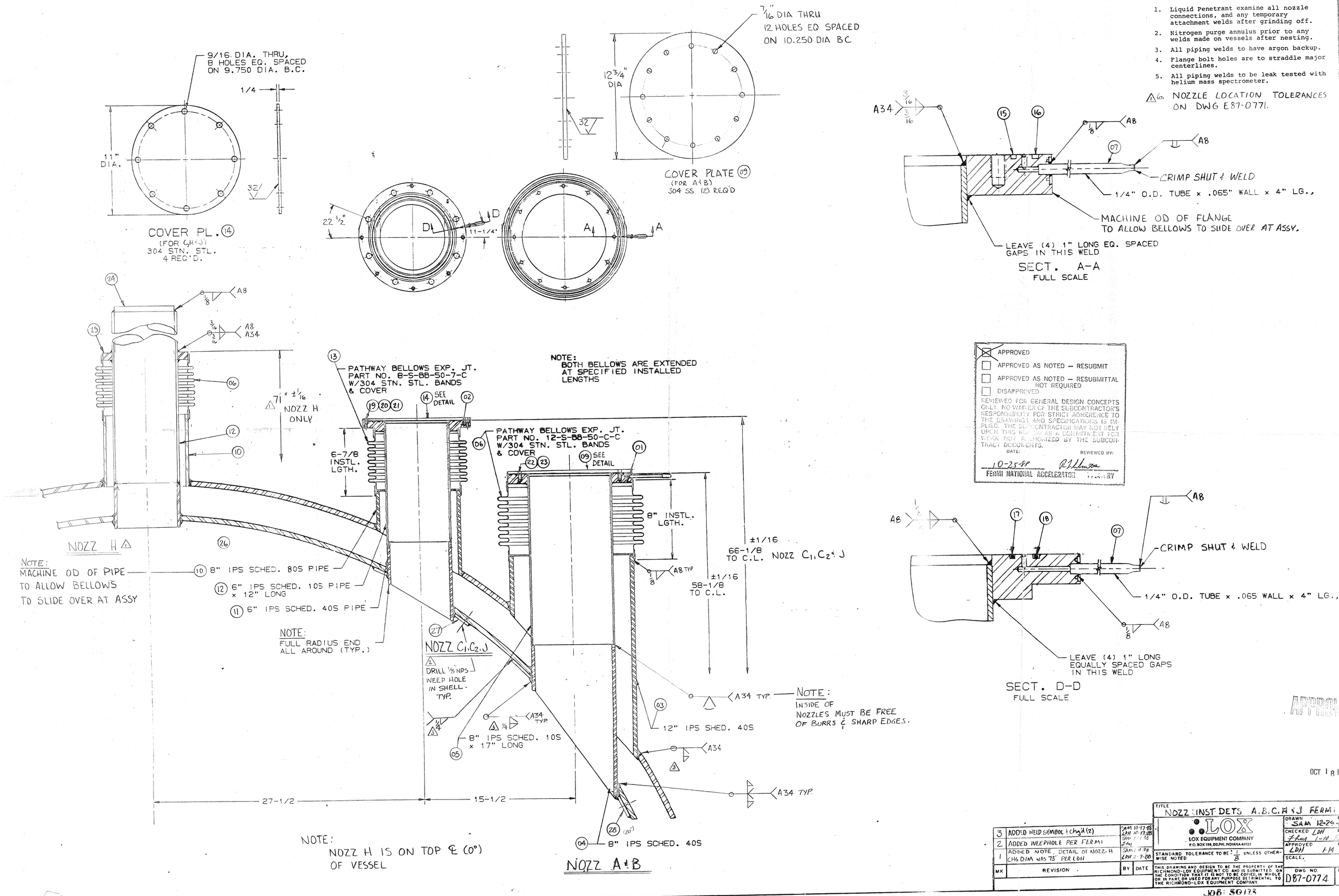
9/16 DIA. THRU, 8 HOLES EQ. SPACED ON 9.750 DIA. B.C.
1/4
11" DIA.
32
COVER PL. (14)
(FOR GH&J)
304 STN. STL.
4 REQ'D.
7/16" DIA THRU
12 HOLES EQ SPACED
ON 10.250 DIA BC
12 3/4" DIA
32
COVER PLATE (09)
(FOR A&B)
304 SS (2) REQ'D
22 1/2°
D
D
11-1/4°
A
A
A34
3/16
3/16
A8
1/8
(07)
A8
CRIMP SHUT & WELD
1/4" O.D. TUBE x .065" WALL x 4" LG.,
MACHINE OD OF FLANGE
TO ALLOW BELLOWS TO SLIDE OVER AT ASSY.
(15)
(16)
LEAVE (4) 1" LONG EQ. SPACED
GAPS IN THIS WELD
SECT. A-A
FULL SCALE
GENERAL NOTES
1. Liquid Penetrant examine all nozzle connections, and any temporary attachment welds after grinding off.
2. Nitrogen purge annulus prior to any welds made on vessels after nesting.
3. All piping welds to have argon backup.
4. Flange bolt holes are to straddle major centerlines.
5. All piping welds to be leak tested with helium mass spectrometer.
6. NOZZLE LOCATION TOLERANCES ON DWG E87-0771.
(24)
A8
1/8
(25)
3/16
3/16
A8
A34
(06)
71" ±1/16
NOZZ H
ONLY
(12)
(10)
NOZZ H
(26)
NOTE:
MACHINE OD OF PIPE
TO ALLOW BELLOWS
TO SLIDE OVER AT ASSY
(10) 8" IPS SCHED. 80S PIPE
(12) 6" IPS SCHED. 10S PIPE x 12" LONG
(11) 6" IPS SCHED. 40S PIPE
NOTE:
FULL RADIUS END
ALL AROUND (TYP.)
(13)
PATHWAY BELLOWS EXP. JT.
PART NO. 8-S-BB-50-7-C
W/304 STN. STL. BANDS
& COVER
(19)(20)(21)
(14) SEE DETAIL
(02)
6-7/8
INSTL.
LGTH.
(06)
PATHWAY BELLOWS EXP. JT.
PART NO. 12-S-BB-50-C-C
W/304 STN. STL. BANDS
& COVER
(22)(23)
(09) SEE DETAIL
(01)
NOTE:
BOTH BELLOWS ARE EXTENDED
AT SPECIFIED INSTALLED
LENGTHS
8" INSTL.
LGTH.
A8 TYP
1/8
±1/16
66-1/8
TO C.L. NOZZ C1,C2 & J
±1/16
58-1/8
TO C.L.
(27)
NOZZ C1,C2,J
DRILL 1/8 NPS
WEEP HOLE
IN SHELL.
TYP.
1/4
A34 TYP.
1/4
A34
TYP.
(05)
8" IPS SCHED. 10S
x 17" LONG
(03)
12" IPS SHED. 40S
A34 TYP.
NOTE:
INSIDE OF
NOZZLES MUST BE FREE
OF BURRS & SHARP EDGES.
A34
(3)
A34 TYP.
27-1/2
15-1/2
(28) (180°)
(04) 8" IPS SCHED. 40S
NOZZ A&B
NOTE:
NOZZ H IS ON TOP ℄ (0°)
OF VESSEL
APPROVED
APPROVED AS NOTED – RESUBMIT
APPROVED AS NOTED – RESUBMITTAL NOT REQUIRED
DISAPPROVED
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DATE: 10-25-88
REVIEWED BY:
FERMI NATIONAL ACCELERATOR LABORATORY
A8
(17)
(18)
(07)
CRIMP SHUT & WELD
1/4" O.D. TUBE x .065 WALL x 4" LG.,
A8
1/8
LEAVE (4) 1" LONG
EQUALLY SPACED GAPS
IN THIS WELD
SECT. D-D
FULL SCALE
APPROVAL
OCT 18 1988
3 ADDED WELD SYMBOL & Chg'd (2) SAM 10-17-88 LDH 10-17-88
2 ADDED WEEPHOLE PER FERMI SAM 2-9-88 JHy
1 ADDED NOTE, DETAIL OF NOZZ-H CHG DIM WAS 73" PER LDH SAM 2-4-88 LDH 2-7-88
MK REVISION BY DATE
TITLE NOZZ: INST DETS A.B.C.H & J FERMI DØ
LOX
LOX EQUIPMENT COMPANY
P.O. BOX 198, DELPHI, INDIANA 46923
DRAWN SAM 12-29-87
CHECKED LDH 1-10-88
APPROVED LDH 1-14-88
STANDARD TOLERANCE TO BE ± 1/8 UNLESS OTHERWISE NOTED
SCALE
DWG NO. D87-0774
REV. 3
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JOB: 80173