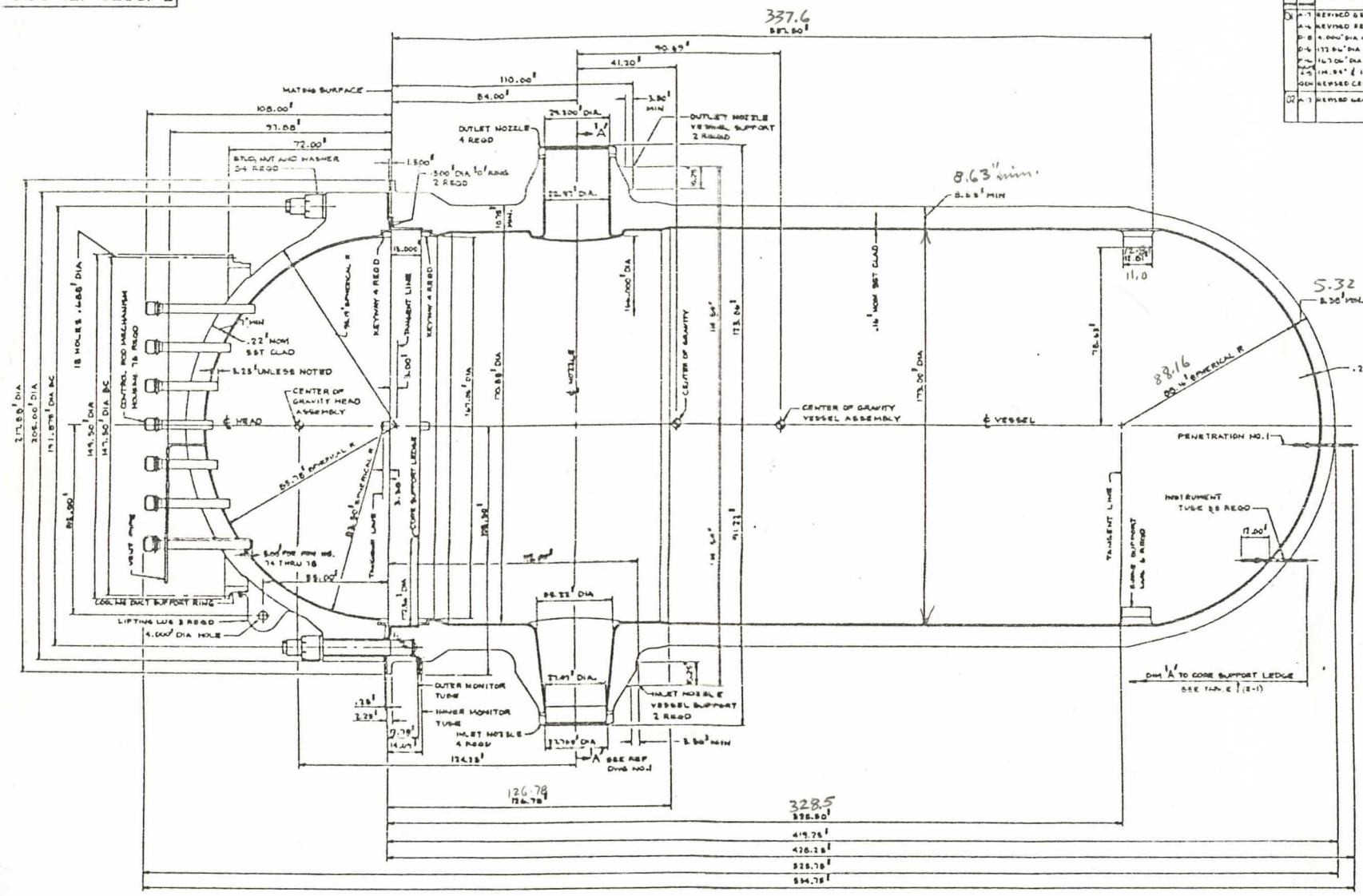
E-12573-171-004



SECTIONAL ELEVATION

REVISIONS			
01	A-7	REVISED G.E.M. NOTE NO. 3 (a)	
	A-8	REVISED REF DWG NO. 4, 6, 7 & 8	
	D-8	4.000" DIA HOLE WAS 4.062"	
	D-9	172.84" DIA WAS 172.80"	
	K-7	167.06" DIA WAS 167.00"	
	L-5	114.84" & 16.28" WERE 114.64" & 16.20"	
	GEN	REVISED CRN#	
02	A-7	REVISED GENERAL NOTE NO. 3 (b)	

TABLE I (D-2)	
PENETRATION NUMBER	DIMENSION 'A'
1	413.75"
2 AND 3	413.56"
4 AND 5	412.89"
6 AND 7	412.22"
8	411.04"
9 AND 10	410.86"
11 AND 12	410.28"
13	408.96"
14 AND 15	408.19"
16 AND 17	407.47"
18 THRU 21	407.06"
22 AND 23	406.28"
24 THRU 27	404.16"
28	403.78"
29 AND 30	403.47"
31	402.16"
32 AND 33	400.28"
34 AND 35	399.41"
36 AND 37	398.97"
38 THRU 40	397.69"
41 AND 42	393.16"
43 AND 44	393.38"
45 THRU 47	392.91"
48 AND 49	391.91"
50 AND 51	391.41"
52 THRU 54	386.91"
55 THRU 58	383.34"

WEIGHT TABLE	
COMPONENT	WEIGHT
VESSEL	661,600 lb
CLOSURE HEAD	165,180 lb
STUDS, NUTS, AND WASHERS	33,152 lb
TOTAL	863,932 lb

GENERAL NOTES

1. ALL DIMENSIONS ARE REFERENCE.
2. ALL FABRICATION SHALL BE IN ACCORDANCE WITH:
   (A) ASME CODE SECTION III THROUGH WINTER 1972 ADDENDA.
   (B) WESTINGHOUSE E-SPECIFICATION 676618, REV. 4 AND ADDENDUM 5026.49 REV. 1 WITH INTERIM REVISIONS 1 THROUGH 10.
3. DESIGN PRESSURE: 2,500 PSI.
4. DESIGN TEMPERATURE: 650° F.

REFERENCE DRAWINGS

NO.	TITLE	DRAWING NUMBER
1	GENERAL ARRANGEMENT - PLAN	12573-171-001
2	UPPER VESSEL MACHINING	12573-181-003
3	INNER VESSEL MACHINING	12573-181-033
4	OUTER VESSEL MACHINING	12573-181-038
5	UPPER VESSEL MACHINING	12573-181-044
6	UPPER VESSEL TO LOWER VESSEL ASSEMBLY	12573-171-001
7	CLOSURE HEAD RADIAL MACHINING	12573-181-058
8	CLOSURE HEAD ASSEMBLY	12573-171-003

WELD TABLE 2

WELDING DIMENSIONS SPECIFIED

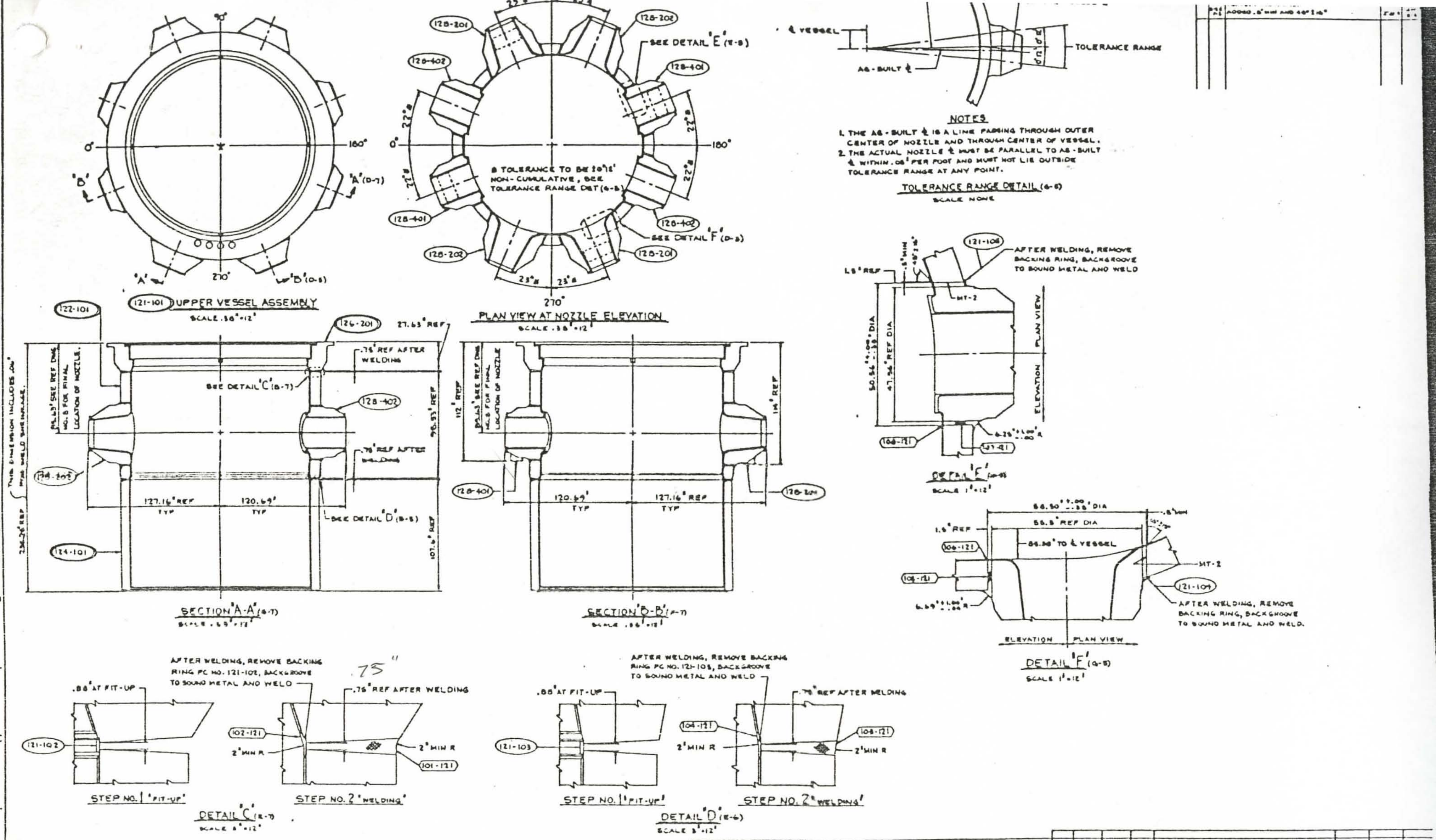
1. DIMENSIONS & TOLERANCES TO UNDERCUT : 1966
2. ALL DIMENSIONS APPLY AT REFERENCE TEMP OF 70° F
3. REF DIMENSIONS ARE FOR INFORMATION ONLY & DO NOT USE FOR FABRICATION
4. MARKING SYMBOLS STAMPED TOGETHER WITH CODE STAMP .005" MIN DEPTH
5. BREAK ALL SHARP EDGES WITH APPROX .05" RADIUS OR CHAMFER
6. MACHINED SURFACES INTERNAL & EXTERNAL SHALL BE 125 RMS OR BETTER
7. SHOWN IN L/R ARE PREFERRED SHOES - NO ALLOWABLE MADE FOR FABRICATION OF SHOES DESIRED HERE
8. TOLERANCE ON ANGLES
9. SEE REF DWG NO. ____ FOR HOT ITEM NO. IN SHOES THAN 5 & NOT CALLOUT ON DWG.
10. SEE DWG. ____ FOR APPLICABLE E-SPECIFICATIONS
11. DOUBLE ARROW INDICATES DIMENSION TO BEING PUT IN FINISHED LINE
12. DEVELOPED LENGTH IN L/R IS GIVEN ON INSIDE CENTERLINE

LIST OF MATERIAL - QUANTITIES PER

GENERAL ARRANGEMENT - ELEVATION - WESTINGHOUSE ELECTRIC CORP 173" ID PWR

E 12573-171-004 02

SCALE .75"=1'-0" DWG 12573



* & IN-PROCESS ULTRASONIC INSPECTION SHALL BE PERFORMED BEFORE FINAL STRESS RELIEF.

Weld Number	DWP Number
108-121	[illegible]
107-121	[illegible]
106-121	[illegible]
105-121	[illegible]
104-121	[illegible]
103-121	[illegible]
102-121	[illegible]
101-121	[illegible]

Assy Dwg	Pc No	No Req'd	Nomenclature
	128-402	2	OUTLET NOZZLE
	128-401	2	OUTLET NOZZLE (SEE REF DWG NO. 6)
	128-202	2	INLET NOZZLE
	128-201	2	INLET NOZZLE (SEE REF DWG NO. 5)
126-301		1	VESSEL FLANGE ASSY (SEE REF DWG NO. 4)
124-101		1	INTERMEDIATE SHELL ASSY (SEE REF DWG NO. 3)
122-101		1	UPPER SHELL ASSY (SEE REF DWG NO. 2)
	121-108	4	.50" THK [illegible]
	121-104	4	.25" THK [illegible]
	121-103	1	.38" THK [illegible]
	121-102	1	BACKING RING .50" THK [illegible]
121-101		1	UPPER VESSEL ASSY CONSISTING OF:

LIST OF MATERIAL - QUANTITIES FOR ONE (1) UNIT

GENERAL NOTES

1. ALL WELDS, WHERE TWO OR MORE ARE REQUIRED HAVING THE SAME NUMBER, WILL BE IDENTIFIED WITH SUFFIX A, B, C ETC STARTING AT THE 0° AXIS AND GOING CLOCKWISE.
2. ALL CLADDING TO BE AS DEPOSITED FINISH UNLESS NOTED AND A MIN THICKNESS OF .13" UNLESS NOTED.

REFERENCE DRAWINGS

NO.	TITLE	DRAWING NUMBER
1	PROCESS SPECIFICATIONS	B-12573-162-002
2	UPPER SHELL	E-12573-122-001
3	INTERMEDIATE SHELL	E-12573-124-001
4	VESSEL FLANGE MACHINING AND CLADDING	E-12573-126-002
5	INLET NOZZLE CLADDING AND MACHINING	D-12573-128-002
6	OUTLET NOZZLE CLADDING AND MACHINING	D-12573-128-004
7	UPPER VESSEL MACHINING	E-12573-121-002
8	UPPER VESSEL MACHINING	E-12573-121-003

UPPER VESSEL ASSEMBLY

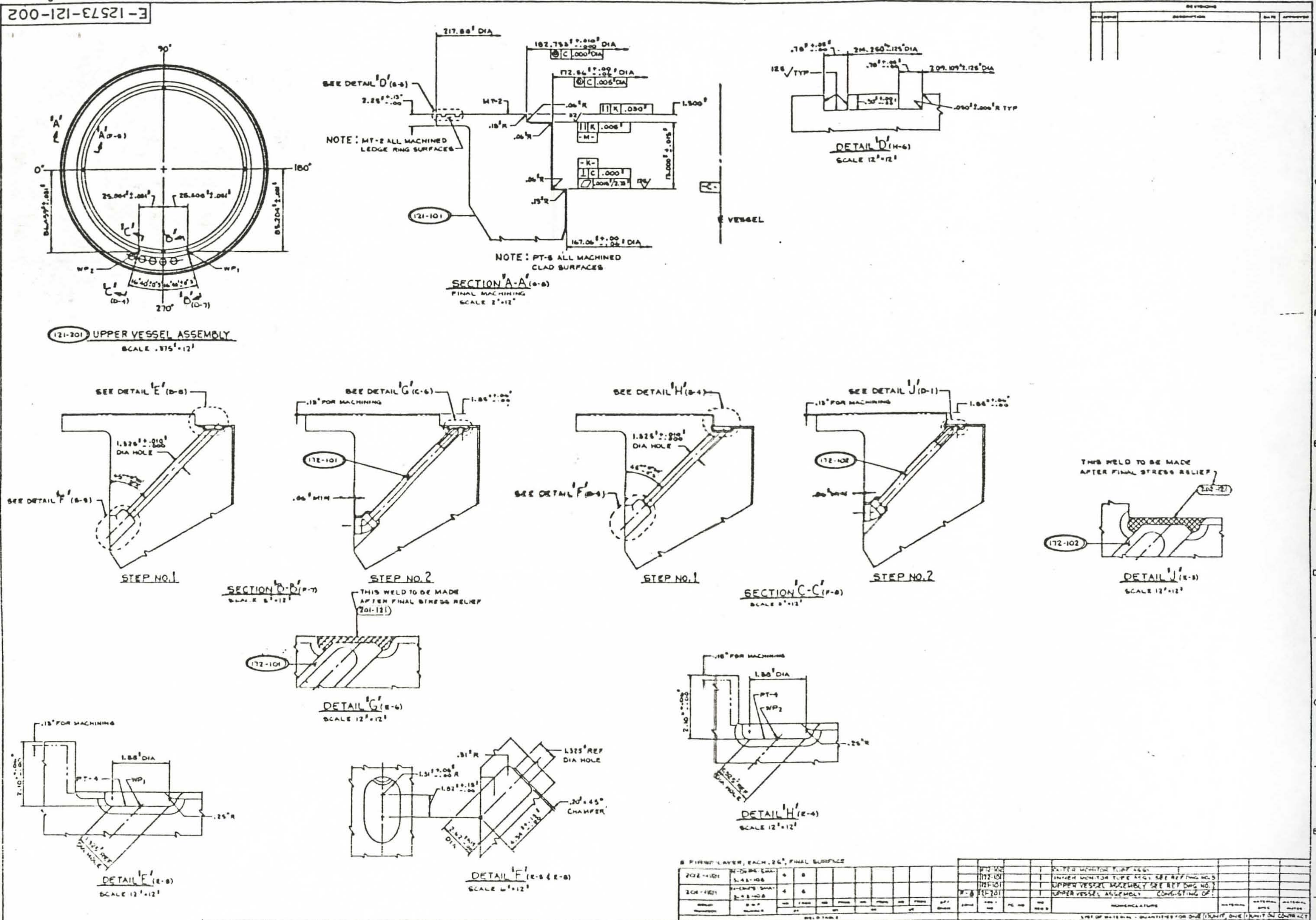
WESTINGHOUSE ELECTRIC CORP
173"ID PWR

E 12573-121-001 REV 01

SCALE AS NOTED CONT 12573

CE CHATTANOOGA

E-12573-121-002



GENERAL NOTES

1. ALL CLADDING TO BE AS DEPOSITED FINISH UNLESS NOTED AND A MINIMUM THICKNESS OF .13" UNLESS NOTED.

REFERENCE DRAWINGS

NO	TITLE	DRAWING NUMBER
1	PROCESS SPECIFICATIONS	A-12573-142-007
2	UPPER VESSEL ASSEMBLY	E-12573-121-001
3	MONITOR TUBE	C-12573-172-001
4	UPPER VESSEL MACHINING	E-12573-121-005

172-102	1	OUTER MONITOR TUBE ASSY
172-101	1	INNER MONITOR TUBE ASSY SEE REF DWG NO. 3
121-201	1	UPPER VESSEL ASSEMBLY SEE REF DWG NO. 2
121-301	1	UPPER VESSEL ASSEMBLY CONSISTING OF:

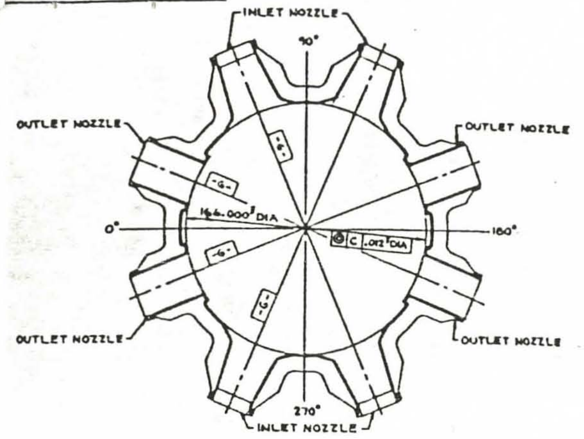
LIST OF MATERIAL - QUANTITIES FOR ONE (1) UNIT, ONE (1) UNIT ON CONTRACT

UPPER VESSEL MACHINING

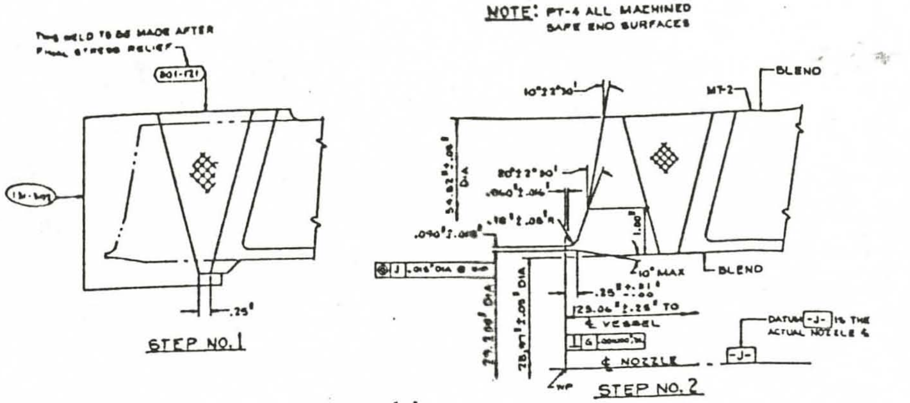
WESTINGHOUSE ELECTRIC CORP
173" ID PWR

E 12573-121-002 00

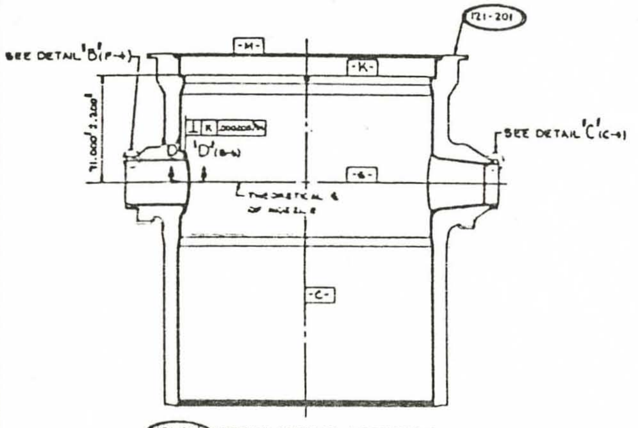
SCALE AS NOTED CONT 12573



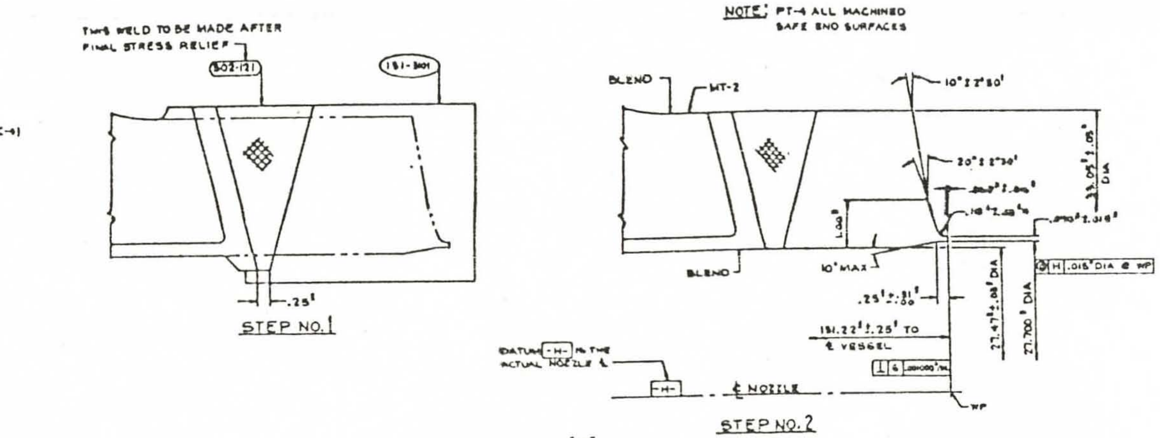
PLAN VIEW AT NOZZLE ELEVATION
SCALE .375"=12"



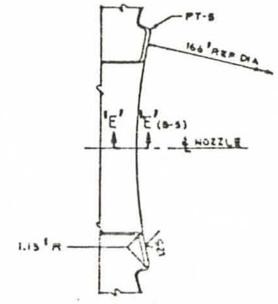
DETAIL 'B' (E-8)
TYPICAL ALL OUTLET NOZZLES
SCALE 12"=12"



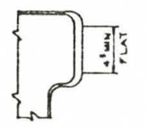
121-301 UPPER VESSEL ASSEMBLY
SCALE .375"=12"



DETAIL 'C' (E-6)
TYPICAL ALL INLET NOZZLES
SCALE 12"=12"



SECTION 'D-D' (E-8)
TYPICAL ALL OUTLET NOZZLES
SCALE 1.5"=12"



SECTION 'E-E' (C-6)
SCALE 3"=12"

MATERIAL NOTES

"A" AS SUPPLEMENTED BY CE PURCHASED SPECIFICATION N-PBC3(8) AND ADDENDA 1(a) & 2(a) AND CONTRACT SUPPLEMENT 12573-1(b).

GENERAL NOTES

1. ALL CLADDING TO BE AS DEPOSITED FINISH UNLESS NOTED AND A MINIMUM THICKNESS OF .15" UNLESS NOTED.
2. ALL WELDS, WHERE TWO OR MORE ARE REQUIRED HAVING THE SAME NUMBER, WILL BE IDENTIFIED WITH SUFFIX A, B, C ETC STARTING AT THE 0° AXIS AND GOING CLOCKWISE.

REFERENCE DRAWINGS

NO.	TITLE	DRAWING NUMBER
1	PROCESS SPECIFICATIONS	B-12573-162-002
2	UPPER VESSEL ASSEMBLY	E-12573-121-001
3	NOZZLE SAFE ENDS	E-5404-181-031
4	UPPER VESSEL MACHINING	E-12573-121-002
5	UPPER VESSEL MACHINING	E-5404-121-033
6	UPPER VESSEL MACHINING	E-5404-121-034

LIST OF MATERIAL

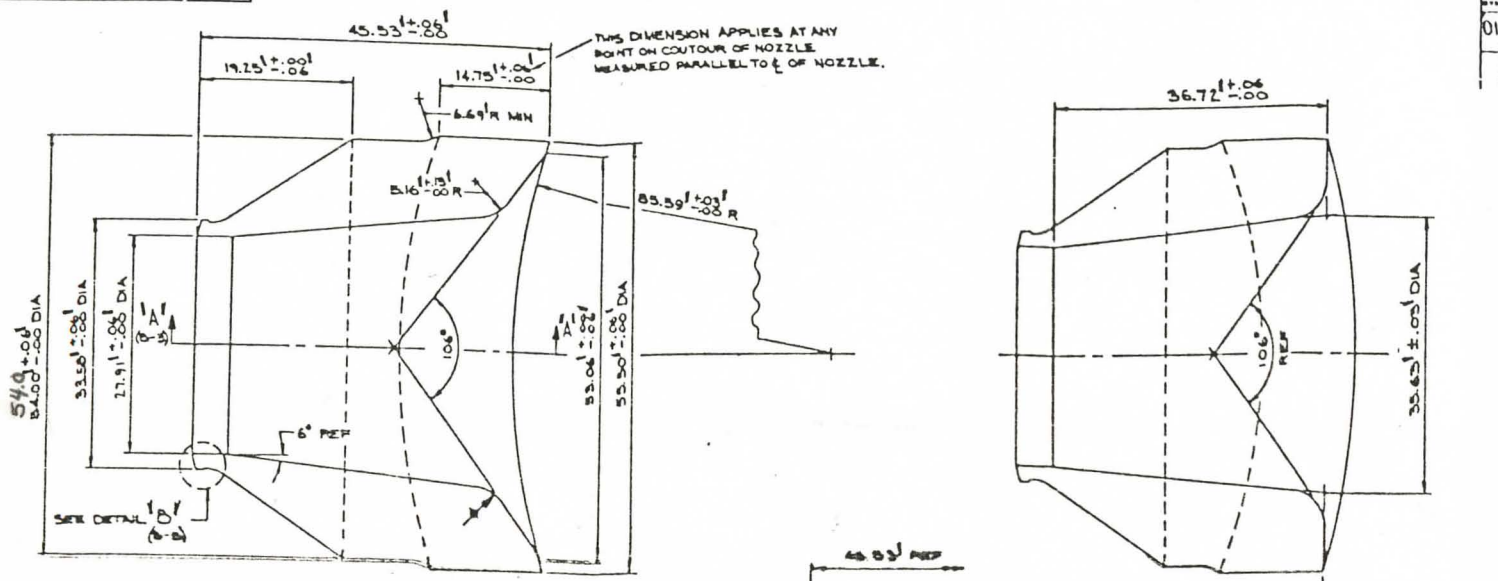
	PC NO.	QTY	NOMENCLATURE	MATERIAL		
	181-301	4	OUTLET NOZ SAFE END			
	181-301	4	INLET NOZ SAFE END FOR REF DWG NO. 3	SST		"A"
	121-201	1	UPPER VESSEL ASSY SEE REF DWG NO. 4			
D-8	121-301	1	UPPER VESSEL ASSEMBLY CONSISTING OF:			

UPPER VESSEL MACHINING
WESTINGHOUSE ELECTRIC CORP
173" ID PWR

CHATTANOOGA
E 12573-121-003 REV 0
SCALE AS NOTED
CONT 12573

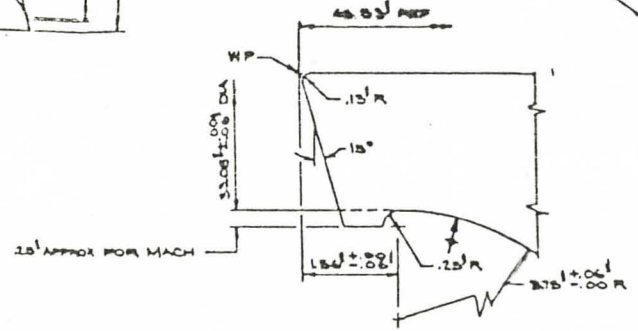
D-12573-128-001

REVISIONS				
BY	SYMB	DESCRIPTION	DATE	APPROVED
01	0-3	REV MATL NOTE 'A'.	3/27/74	J. HELDON
	A-3	REV MATL SPEC ON PC NO. 128-101	4 JUN 74	Y 4/30 C.D. RIGGS



PLAN VIEW
(128-101) INLET NOZZLE
SCALE 1.5'=12'
WEIGHT=14,360 lbs

SECTION 'A-A' (C-D)
SCALE 1.5'=12'



DETAIL 'B' (C-D)
SCALE 12'=12'

MATERIAL NOTES

'A' = AS SUPPLEMENTED BY 3E PURCHASE SPECIFICATION N-P3C16(b) & ADDENDA 2(a), 4(a), 5(a) & 6(b).

WELD NUMBER	D W P NUMBER	NO PT	PROC PT	NO MT	PROC MT	NO UT	PROC UT	NO ET	PROC ET	APP CHECK

WELD TABLE

B-7		128-101	4	INLET NOZZLE (SEE DETAIL)	ALLOY STL	SA-533-GR.3	'A'
DWG	ADD'L NO	PC NO	NO REQ'D	NOMENCLATURE	MATERIAL	MATERIAL SPEC	MATERIAL NOTES

LIST OF MATERIAL - QUANTITIES FOR ONE (1) UNIT, ONE (1) UNIT ON CONTRACT

GENERAL NOTES

1. ——— DENOTES 63 μ MACHINING.
2. -+- DENOTES HIGH STRESS AREA.

REFERENCE DRAWINGS

NO.	TITLE	DRAWING NO.
1	INLET NOZZLE CLADDING AND MACHINING	D-12573-128-002

UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS & TOLERANCES TO USASI Y14.5 - 1966
2. ALL DIMENSIONS APPLY AT REFERENCE TEMP. OF 68° F
3. REF. DIMENSIONS ARE FOR INFORMATION ONLY DO NOT USE FOR FABRICATION.
4. MARKING SYMBOLS VT-VIBRO TOOL LSS-LOW STRESS STAMP, .03" MAX. DEPTH
5. BREAK ALL SHARP EDGES WITH APPROX. .03" RADIUS OR CHAMFER
6. MACHINED SURFACES INTERNAL - 250AA OR BETTER EXTERNAL-500AA OR BETTER
7. SIZES IN L/M ARE FINISHED SIZES - NO ALLOWANCE MADE FOR FABRICATION OR WELD SHRINKAGE.
8. TOLERANCE ON .X' = ±.06', .XX' = ±.010', ANGLES ± 0° - 30'
9. SEE REF. DWG. NO. ___ FOR NOT ITEM NO. IN WELD TABLE & NOT CALL OUT ON DWG.
10. SEE DWG. ——— FOR APPLICABLE EQUIPMENT SPECIFICATIONS.
11. DOUBLE ARROW INDICATES DIMENSION TO GIVEN REFERENCE LINE.
12. DEVELOPED LENGTH IN L/M IS GIVEN ON MEAN CENTERLINE.

GEOMETRIC TOLERANCES FOR MACHINED SURFACES UNLESS SPECIFIED ON DRAWING

SYM	GEOMETRY	TOL
⏥	FLATNESS	.001"/IN
⏤	STRAIGHTNESS	.001"/IN
○	ROUNDNESS	SEE DWG
⌭	CYLINDRICITY	SEE DWG
⌓	SURFACE FINISH	SEE DWG
⌓	PROFILE OF SURFACE	SEE DWG
//	PARALLELISM	.001"/IN
⊥	PERPENDICULARITY	.001"/IN
∠	ANGULARITY	SEE DWG
⌖	RUNOUT	SEE DWG
⌖	TRUE POSITION	SEE DWG
⌭	CONCENTRICITY	SEE DWG
⌯	SYMMETRY	SEE DWG

DWN BY ANTHONY A. SIMS DATE 7-15-74
CKD BY [illegible] DATE 7-16-74
APPD ENGR [illegible] DATE 7-16-74
PROJ ENGR [illegible] DATE 7-16-74
APPROVAL

COMBUSTION ENGINEERING, INC. WINDSOR, CONN.

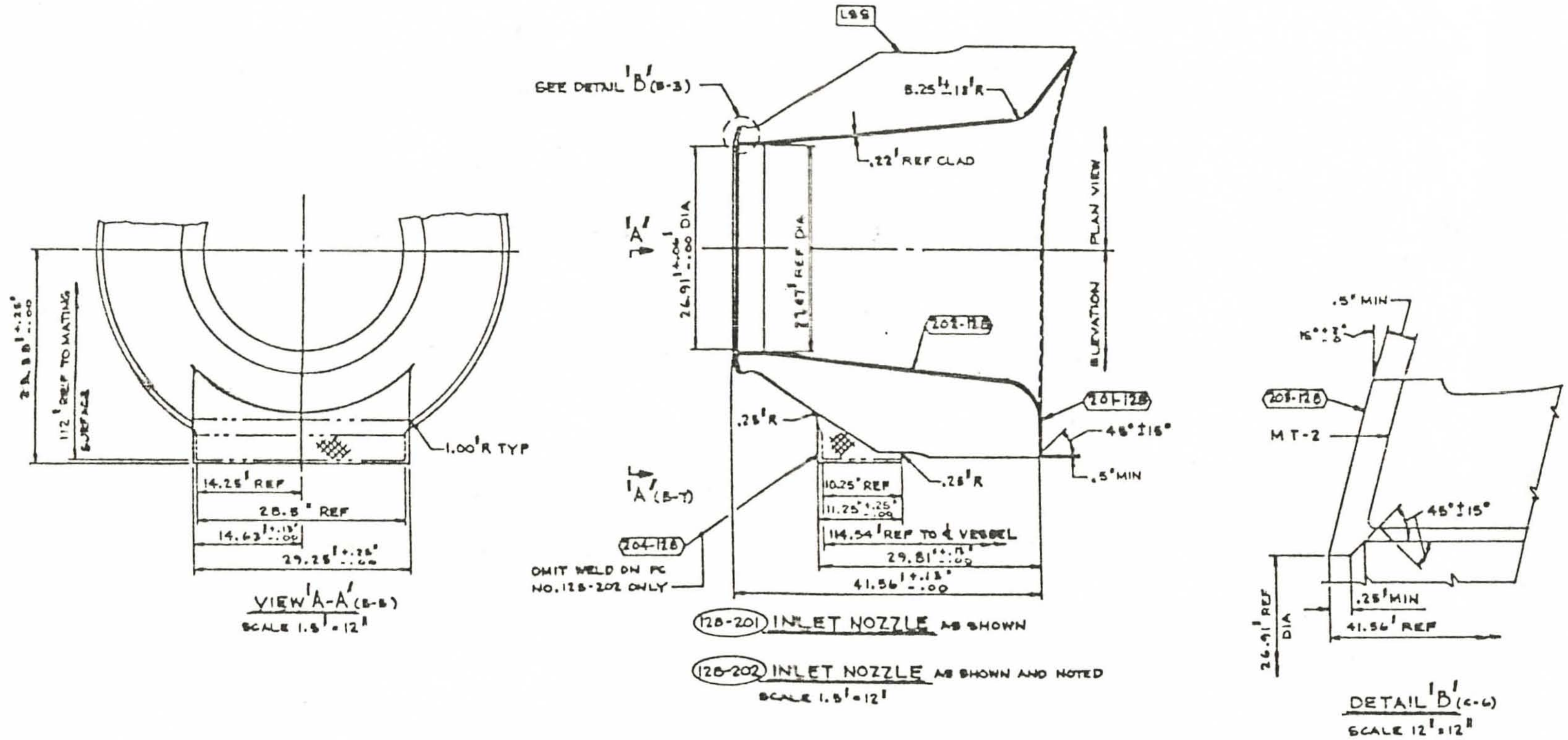
INLET NOZZLE

WESTINGHOUSE ELECTRIC CORP.
178" ID PWR

CHATTANOOGA

SIZE D | 12573-128-001 | REV 01

SCALE AS SHOWN | CONT 12573 | SHEET



WELD TABLE

WELD NUMBER	DWP NUMBER	PT NO	PT FREQ	MT NO.	MT FREQ.	RT NO.	RT FREQ.	UT NO.	UT FREQ.	AF/ CHEM.
204-128	N-DWPS-SMA-3.3-148-1			2	F			26	F	
203-128	N-DWPS-SMA-3.43-104-1	4	F			1	F	27	F	
202-128	N-DWPS-SAA-3.8-111-0	5	F					8	F	23
201-128	N-DWPS-SMA-3.6-101-0	5	F					8	F	

LIST OF MATERIAL - QUANTITIES FOR ONE (1) UNIT, ONE (1) UNIT ON CONTRACT

ZONE	ASS'Y NO	PC NO	NO REQ'D	NOMENCLATURE	MATERIAL	MATERIAL SPEC	MATERIAL NOTES
B-5		128-202	2	INLET NOZZLE			
B-8		128-201	2	INLET NOZZLE SEE REF DWG NO. 2			

GENERAL NOTES

1. ALL CLADDING TO BE AS DEPOSITED FINISH UNLESS NOTED AND A MINIMUM THICKNESS OF .13" UNLESS NOTED.

REFERENCE DRAWINGS

NO.	TITLE	DRAWING NUMBER
1	PROCESS SPECIFICATIONS	B-12573-162-002
2	INLET NOZZLE	D-12573-128-001
3	UPPER VESSEL ASSEMBLY	E-12573-121-001

UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS & TOLERANCES TO USASI Y14.5 - 1966
2. ALL DIMENSIONS APPLY AT REFERENCE TEMP. OF 68° F.
3. REF. DIMENSIONS ARE FOR INFORMATION ONLY, DO NOT USE FOR FABRICATION.
4. MARKING SYMBOLS VT=VIBRO TOOL; LSS=LOW STRESS STAMP. .03" MAX. DEPTH
5. BREAK ALL SHARP EDGES WITH APPROX. .03" RADIUS OR CHAMFER
6. MACHINED SURFACES INTERNAL - 250AA OR BETTER. EXTERNAL-500AA OR BETTER
7. SIZES IN L/M ARE FINISHED SIZES - NO ALLOWANCE MADE FOR FABRICATION OR WELD SHRINKAGE
8. TOLERANCE ON .X"=±.1", .XX"=±.06", .XXX"=±.010" ANGLES ±0° 30'
9. SEE REF. DWG NO. 1 FOR NDT ITEM NO. IN WELD TABLE & NDT CALL-OUT ON DWG.
10. SEE DWG. E-12573-171-004 FOR APPLICABLE EQUIPMENT SPECIFICATIONS.
11. DOUBLE ARROW INDICATES DIMENSION TO GIVEN REFERENCE LINE.
12. DEVELOPED LENGTH IN L/M IS GIVEN ON MEAN CENTERLINE.

GEOMETRIC TOLERANCES FOR MACHINED SURFACES UNLESS SPECIFIED ON DRAWING

SYM	GEOMETRY	TOL
	FLATNESS	.001/IN
	STRAIGHTNESS	.001/IN
	ROUNDNESS	SEE DWG
	CYLINDRICITY	SEE DWG
	PROFILE OF LINE	SEE DWG
	PROFILE OF SURFACE	SEE DWG
	PARALLELISM	.001/IN
	PERPENDICULARITY	.001/IN
	ANGULARITY	SEE DWG
	RUNOUT	SEE DWG
	TRUE POSITION	SEE DWG
	CONCENTRICITY	.010 DIA
	SYMMETRY	SEE DWG

DWN. BY J.B. Stewart, Jr. DATE 1-25-77
CKD. BY T. MCDOWELL DATE 1-18-77
ANAL. ENGR. J. HALLMAN DATE 2-1-77
PROJ. ENGR. J.W. Brown Jr. DATE 2-4-77
APPROVAL

THIS DRAWING IS THE PROPERTY OF COMBUSTION ENGINEERING, INC., WINDSOR, CONN.

INLET NOZZLE CLADDING AND MACHINING
WESTINGHOUSE ELECTRIC CORP
173" ID PWR

CE CHATTANOOGA

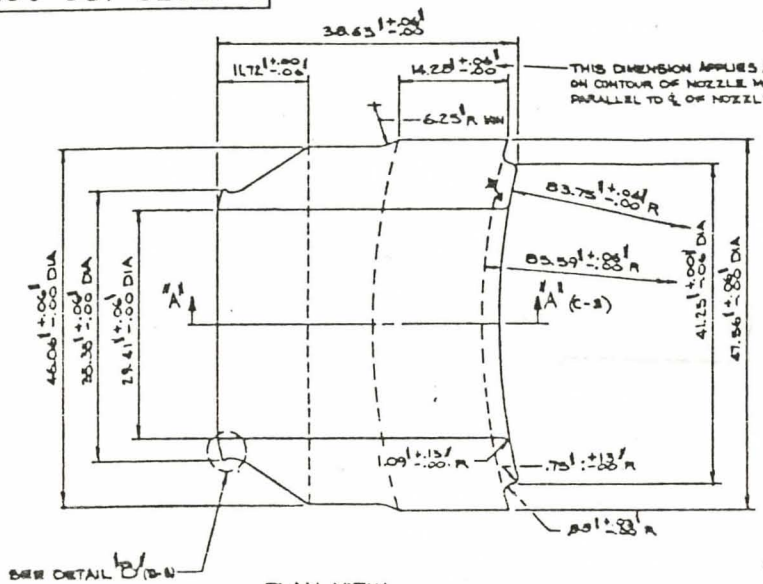
SIZE D 12573-128-002 REV 00

SCALE AS NOTED CONT 12573 SHEET

750128

D-12573-128-002

D-12573-128-003

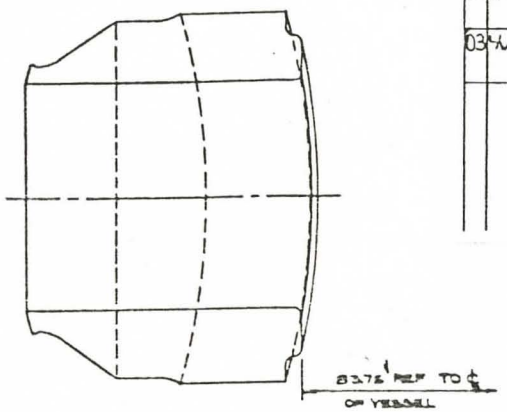


PLAN VIEW

(128-301) OUTLET NOZZLE

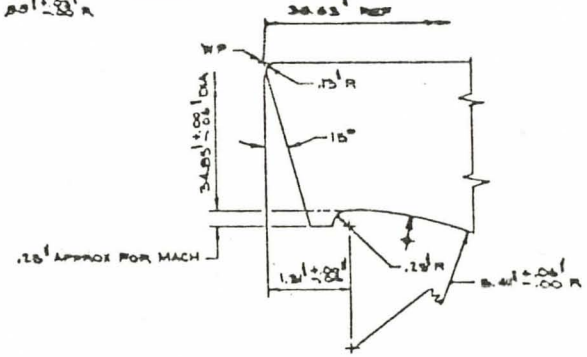
SCALE 1.5" = 12"

WEIGHT = 7,651 #



SECTION "A-A" (C-4)

SCALE 1.5" = 12"



DETAIL "B" (C-4)

SCALE 12" = 12"

MATERIAL NOTES

"A" = AS SUPPLEMENTED BY GE PURCHASE SPECIFICATION N-PS C16(B) AND ADDENDA 2(a), 4(a), 5(a) AND 6(b).

REVISIONS				
BY	ZONE	DESCRIPTION	DATE	APPROVED
01	D-6	DIM 83.75 +.04 -.03 R WAS 83.84 +.04 -.03 R	10/10/74	
	D-7	DIM 38.63 +.00 -.05 WAS 39.70 +.00 -.05	A. Sims	
	B-7	REVISED WEIGHT.	J.J.	Rogers
	C-6	ADDED TOL TO .75 R & 1.09 R		
	D-7	DIM 14.28 WAS 14.09 & 6.25 WAS 5.30.		
02	C-6	DIM .80 R WAS 1.09 R	11/26/74 A. Sims	T. Hattoni 12-31-74 P.O.R. 1-6-75
03	M	REVISED MATL SPEC & MATL NOTE "A" ON PC NO. 128-301	9/26/76 A. Sims	J. Hall (for) 9-27-76 J.J.R. 9-30-76

ZONE	ADD'L NO.	PC NO.	NO. REQ'D	NOMENCLATURE	MATERIAL	MATERIAL SPEC	MATERIAL NOTES
C-6		128-301	4	OUTLET NOZZLE (SEE DETAIL)	ALLOY STL	SA-508 CL 3	"A"

LIST OF MATERIAL - QUANTITIES FOR ONE UNIT, ONE UNIT ON CONTRACT

GENERAL NOTES

1. ——— DENOTES GE MACHINING.
2. ←→ DENOTES HIGH STRESS AREA.

REFERENCE DRAWINGS

NO.	TITLE	DRAWING NO.
1	OUTLET NOZZLE CLADDING AND MACHINING	0-12573-128-002

WELD TABLE

UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS & TOLERANCES TO USAS Y14.5 - 1966
2. ALL DIMENSIONS APPLY AT REFERENCE TEMP. OF 68° F.
3. REF. DIMENSIONS ARE FOR INFORMATION ONLY. DO NOT USE FOR FABRICATION.
4. MARKING SYMBOLS V1+VIBRO TOOL 1.28 HOT STROKE STAMP .03 MAX. DEPTH
5. BREAK ALL SHARP EDGES WITH APPROX .03 RADIUS OR CHAMFER
6. MACHINED SURFACES: INTERNAL - 250AA OR BETTER EXTERNAL 500AA OR BETTER
7. SIZES IN U/M ARE FINISHED SIZES - NO ALLOWANCE MADE FOR FABRICATION OR WELD SHRINKAGE
8. TOLERANCE ON .XX = ±.03, .XXX = ±.010, ANGLES ±0°-30'
9. SEE REF. DWG. NO. ___ FOR HOT ITEM NO. IN WELD TABLE & HOT CALL-OUT ON DWG.
10. SEE DWG. ___ FOR APPLICABLE EQUIPMENT SPECIFICATIONS.
11. DOUBLE ARROW INDICATES DIMENSION TO GIVEN REFERENCE LINE.
12. DEVELOPED LENGTH IN U/M IS GIVEN ON MEAN CENTERLINE.

DRAWN BY Anthony A Sims DATE 7-12-74
CKD. BY [illegible] DATE 7-16-74
ANAL. ENGR. [illegible] DATE 7-16-74
PROJ. ENGR. [illegible] DATE 7-16-74
APPROVAL

COMBUSTION ENGINEERING, INC. WINDSOR, CONN.

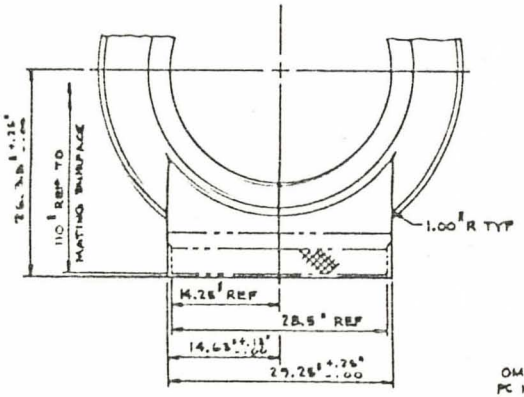
OUTLET NOZZLE

WESTINGHOUSE ELECTRIC CORP. 1751D PWR

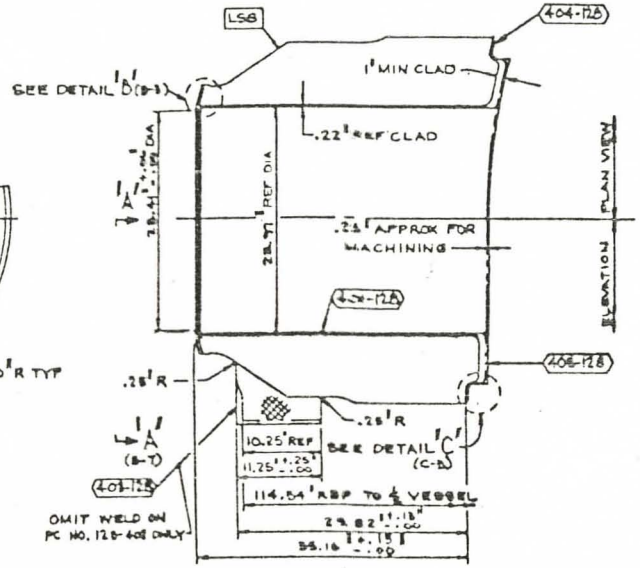
SIZE D | 12573-128-003 | REV 03

CHATTANOOGA | SCALE AS SHOWN | CONTR 12573 | SHEET

D-12573-128-004



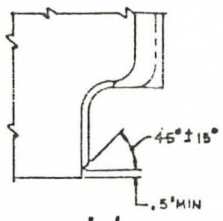
VIEW 'A-A' (B-C)
SCALE 1.5'=12'



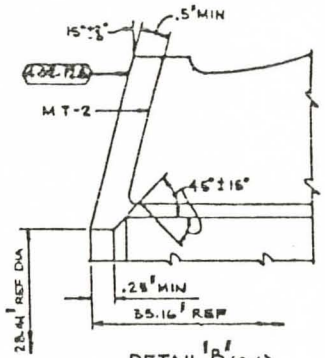
128-401 OUTLET NOZZLE AS SHOWN

128-402 OUTLET NOZZLE AS SHOWN AND NOTED

SCALE 1.5'=12'



DETAIL 'C' (B-B)
SCALE 6'=12"



DETAIL 'B' (C-C)
SCALE 12'=12'

WELD NUMBER	DWP NUMBER	UT NO	UT FINDS	UT NO	UT FINDS	UT NO	UT FINDS	UT NO	UT FINDS	AFT CHANGE
		FT		MT		ET		UT		
405-128	N-DWPS-SMA-3.43-104-1	8	F					28	F	
404-128	N-DWPS-SMA-3.8-104-0	5	F					8	F	
403-128	N-DWPS-SMA-3.3-116-1			2	F			26	F	
402-128	N-DWPS-SMA-3.43-104-1	4	F			1	F	27	F	
401-128	N-DWPS-SAA-3.8-111-0	3	F					8	F	23

WELD TABLE

B-B		128-402	2	OUTLET NOZZLE
B-B		128-401	2	OUTLET NOZZLE SEE REF DWG NO. 2

ZONE	ADD'T NO	PC NO	NO REQ'D	NOMENCLATURE	MATERIAL	MATERIAL SPEC	MATERIAL NOTES

LIST OF MATERIAL - QUANTITIES FOR ONE (1) UNIT, ONE (1) UNIT ON CONTRACT

GENERAL NOTES

1. ALL CLADDING TO BE AS DEPOSITED FINISH UNLESS NOTED AND A MINIMUM THICKNESS OF .13' UNLESS NOTED.

REFERENCE DRAWINGS

NO.	TITLE	DRAWING NUMBER
1	PROCESS SPECIFICATIONS	B-12573-141-002
2	OUTLET NOZZLE	B-12573-128-003
3	UPPER VESSEL ASSEMBLY	E-12573-121-001

UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS & TOLERANCES TO USASI Y14.5 - 1966
2. ALL DIMENSIONS APPLY AT REFERENCE TEMP. OF 68° F.
3. REF. DIMENSIONS ARE FOR INFORMATION ONLY, DO NOT USE FOR FABRICATION.
4. MARKING SYMBOLS: VT = VIBRO TOOL; LSB = LOW STRESS STAMP, .03' MAX. DEPTH
5. BREAK ALL SHARP EDGES WITH APPROX. .03' RADIUS OR CHAMFER
6. MACHINED SURFACES INTERNAL - 250AA OR BETTER EXTERNAL-500AA OR BETTER
7. SIZES IN L/H ARE FINISHED SIZES - NO ALLOWANCE MADE FOR FABRICATION OR WELD SHRINKAGE.
8. TOLERANCE ON .X" = ±.1', .XX" = ±.06', .XXX" = ±.010' ANGLES ±0°30'
9. SEE REF. DWG. NO. 1 FOR HOT ITEM NO. IN WELD TABLE & HOT CALL-OUT ON DWG.
10. SEE DWG. E-12573-121-002 FOR APPLICABLE EQUIPMENT SPECIFICATIONS.
11. DOUBLE ARROW INDICATES DIMENSION TO GIVEN REFERENCE LINE.
12. DEVELOPED LENGTH IN L/H IS GIVEN ON MEAN CENTERLINE.

GEOMETRIC TOLERANCES FOR MACHINED SURFACES UNLESS SPECIFIED ON DRAWING

SYM	GEOMETRY	TOL
	FLATNESS	.001/IN
	STRAIGHTNESS	.001/IN
	ROUNDNESS	SEE DWG
	CYLINDRICITY	SEE DWG
	PARALLEL OF LINE	SEE DWG
	PROFILE OF SURFACE	SEE DWG
	PARALLELISM	.001/IN
	PERPENDICULARITY	.001/IN
	ANGULARITY	SEE DWG
	RUNOUT	SEE DWG
	TRUE POSITION	SEE DWG
	CONCENTRICITY	.010 DIA
	SYMMETRY	SEE DWG

DWN. BY L.B. Steward, Jr. DATE 1-25-77
CKD. BY T.H. Russell DATE 1-28-77
ANAL. ENGR. L. Williams DATE 2-1-77
PROJ. ENGR. J.W. Rawson Jr. DATE 2-2-77
APPROVAL

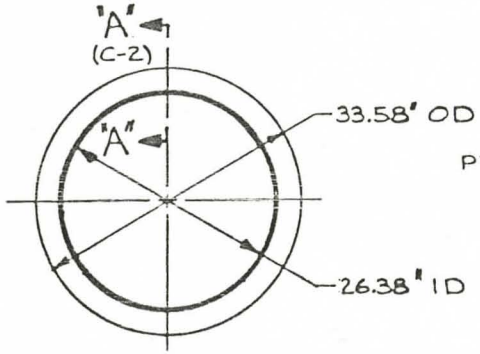
COMBUSTION ENGINEERING, INC. WINDSOR, CONN.

OUTLET NOZZLE CLADDING AND MACHINING
WESTINGHOUSE ELECTRIC CORP
173"ID PWR

CHATTANOOGA | SIZE D | 12573-128-004 | REV 00 | SCALE AS NOTED | CONT 12573 | SHEET

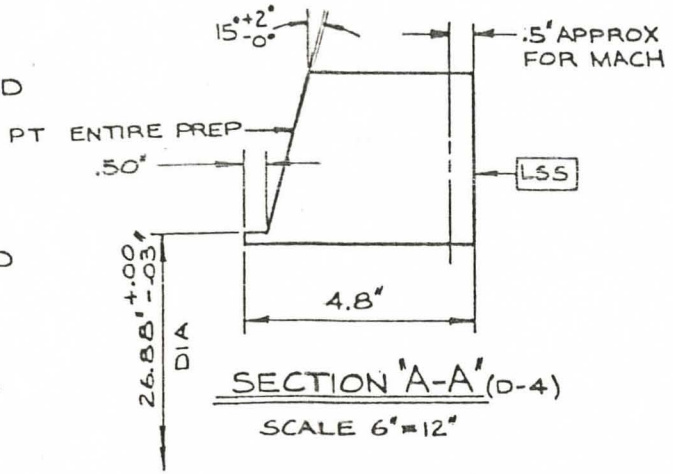
C-STD11-131-031

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVED
01	D-3 & C-3	ADDED "PT ENTIRE PREP."	10/26/76	J. HALLIDAY 10-26-76 W. MANNING 10-26-76



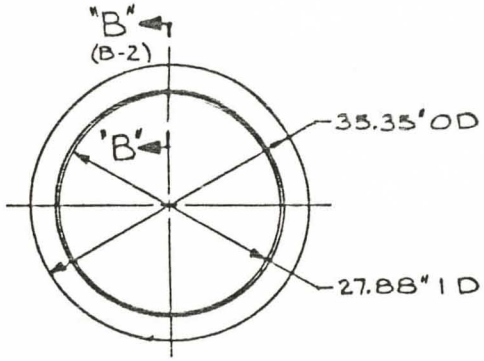
(131-3101) INLET NOZZLE SAFE END

SCALE 1"=12"



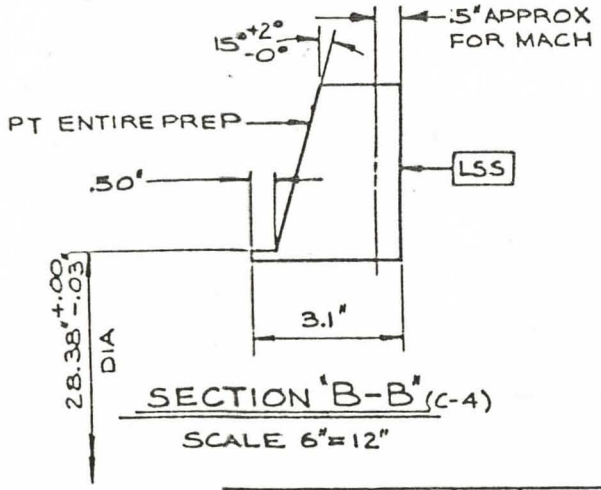
SECTION "A-A" (D-4)

SCALE 6"=12"



(131-3102) OUTLET NOZZLE SAFE END

SCALE 1"=12"



SECTION "B-B" (C-4)

SCALE 6"=12"

WELD NUMBER	D.W.P. NUMBER	NO.	FREQ.	NO.	FREQ.	NO.	FREQ.	NO.	FREQ.	ΔF/ CHEM.
		PT		MT		RT		UT		

WELD TABLE

ZONE	ASS'Y NO.	PC. NO.	NO. REQ'D	NOMENCLATURE	MATERIAL	MATERIAL SPEC	MATERIAL NOTES
B-4		131-3102	4	OUTLET NOZZLE SAFE END			
C-4		131-3101	4	INLET NOZZLE SAFE END			

LIST OF MATERIAL – QUANTITIES FOR ONE (1) UNIT

UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS & TOLERANCES TO USASI Y14.5 – 1966.
2. ALL DIMENSIONS APPLY AT REFERENCE TEMP. OF 68°F.
3. REF. DIMENSIONS ARE FOR INFORMATION ONLY. DO NOT USE FOR FABRICATION.
4. MARKING SYMBOLS: VT=VIBRO TOOL; LSS=LOW STRESS STAMP .03" MAX DEPTH.
5. BREAK ALL SHARP EDGES WITH APPROX. .03" RADIUS OR CHAMFER.
6. MACHINED SURFACES: INTERNAL – 250AA OR BETTER: EXTERNAL – 500AA OR BETTER
7. SIZES IN L/M ARE FINISHED SIZES – NO ALLOWANCE MADE FOR FABRICATION OR WELD SHRINKAGE.
8. TOLERANCE ON .X"=±.1", .XX=±.06", .XXX=±.010" ANGLES ± 0°30'.
9. SEE REF. DWG. NO. _____ FOR NDT ITEM NO. IN WELD TABLE & NDT CALL-OUT ON DWG.
10. SEE DWG. _____ FOR APPLICABLE EQUIPMENT SPECIFICATIONS.
11. DOUBLE ARROW INDICATES DIMENSION TO GIVEN REFERENCE LINE.
12. DEVELOPED LENGTH IN L/M IS GIVEN ON MEAN CENTERLINE.

GEOMETRIC TOLERANCES FOR MACHINED SURFACES UNLESS SPECIFIED ON DRAWING

SYM.	GEOMETRY	TOL
▱	FLATNESS	001/IN
—	STRAIGHTNESS	001/IN
○	ROUNDNESS	SEE DWG
⌭	CYLINDRICITY	SEE DWG
⌒	PROFILE OF LINE	SEE DWG
⌓	PROFILE OF SURFACE	SEE DWG
//	PARALLELISM	001/IN
⊥	PERPENDICULARITY	001/IN
∠	ANGULARITY	SEE DWG
↗	RUNOUT	SEE DWG
⌖	TRUE POSITION	SEE DWG
◎	CONCENTRICITY	DIO DIA
⌯	SYMMETRY	SEE DWG

APPROVALS

ANAL. ENGR. J. HALLIDAY
DATE 4-30-76
PROJ. ENGR. T.N. FAZIO
DATE 4-30-76

POWER SYSTEMS
COMBUSTION ENGINEERING, INC.

NOZZLE SAFE ENDS

WESTINGHOUSE ELECTRIC CORP 173" ID PWR

DWN. BY ANTHONY SIMS
DATE APRIL 12, 1976
CKD. BY T. McDOWELL
DATE 4-26-76

C-STD11-131-031-01

SCALE AS NOTED
CONT. STANDARD