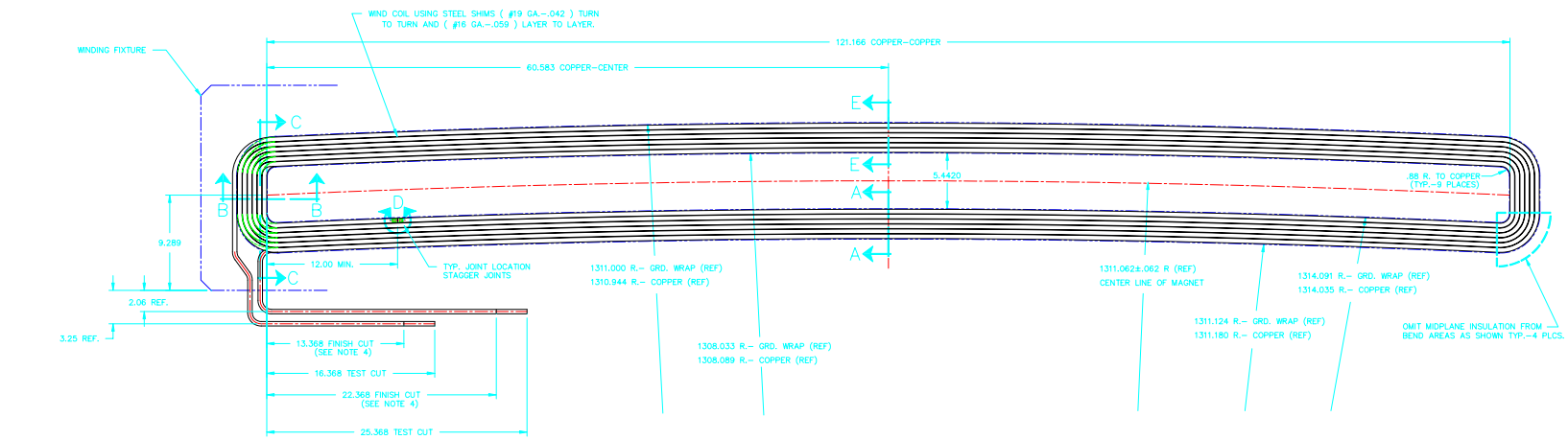
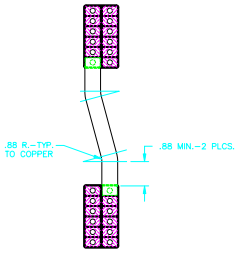
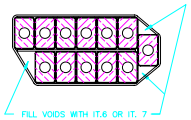
(E) | PLOT SCALE: 1=4.0 | DWG. SCALE: 4.0 | A03818

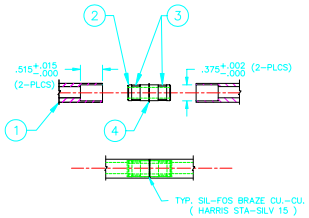




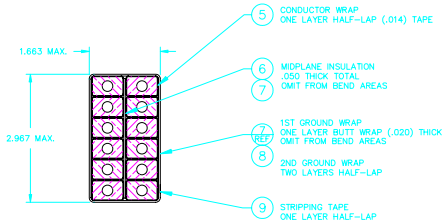
SECTION C–C
SCALE:–1:2



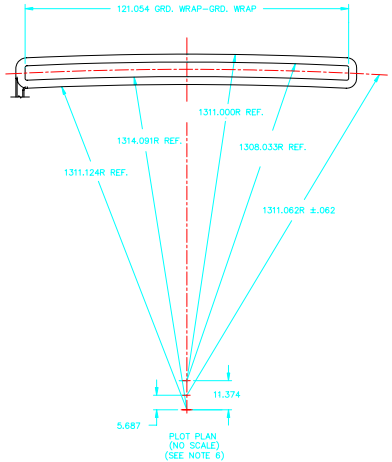
SECTION B–B
SCALE:–1:1



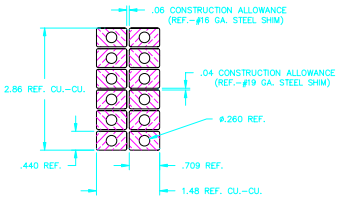
SECTION D
SCALE:–1:1



SECTION E–E
SCALE:–1:1
(SEE NOTE 6)



PLOT PLAN
(NO SCALE)
(SEE NOTE 6)



SECTION A–A
SCALE:–1:1

VIEW OF COIL BEFORE INSULATION & GROUND WRAP IS APPLIED

NOTES:

1.) INSPECTION PRIOR TO INSULATION:
- A.) REMOVE ALL BURRS & SURFACE IMPERFECTIONS BY POWER OR HAND SANDING.
- B.) GRIT BLAST COIL TO CLEAN UP.
- C.) COIL TO BE INSPECTED FOR LEAKS, CLEANLINESS, BURRS & SHARP CORNERS PRIOR TO INSULATING.
- D.) HELIUM LEAK CHECK ALL JOINTS @ 150 PSIG. THERE SHALL BE NO DETECTABLE LEAK ON THE MOST SENSITIVE SCALE. THE LEAK DETECTOR MUST HAVE A SENSITIVITY OF 2 x 10 –10 ATM. CC/SEC. He.
- E.) FLOW CHECK @ 100 & 150 PSIG.
- F.) HYDROSTATIC TEST WITH NO DETECTABLE LEAK AT 1000 PSIG. FOR 15 MINUTES.

2.) INSPECTION AFTER INSULATION:
- A.) RING COIL (SHORTED TURN TEST)
- B.) PLACE COIL BACK IN FIXTURE THEN HIPOT COIL TO FIXTURE @ 500 V. WITH LEAK RATE LESS THAN 50 MICRO–AMPS.
- C.) RING COIL IN FIXTURE.

3.) AFTER INSPECTION:
- A.) CURE COIL IN FIXTURE P/N:P220101–00132–00 FOR FOUR TO SIX HOURS AT 300° TO 325° F.

4.) INSPECTION AFTER CURING:
- A.) ALLOW COIL/FIXTURE ASSEMBLY TO COOL TO 100° F, THEN HIPOT COIL TO FIXTURE @ 2500 V. WITH LEAK RATE LESS THAN 50 MICRO–AMPS.
- B.) FLOW CHECK COIL @ 100 & 150 PSIG.
- C.) VISUALLY INSPECT COIL FOR IMPERFECTIONS

5.) AFTER INSPECTION:
- A.) CUT COIL TO THE PROPER LENGTH (FINISH CUT DIM'S). REF. DWG. P/N.– P220101–00116–00 FOR PROPER FITTING APPLICATION.

6.) THESE DIM'S. ARE DETERMINED BY WINDING & CURING FIXTURE P/N:P220101–00132–00

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY.
9	.002 x 1" WIDE	DUPONT TEDLAR TAPE	PUR.	AR
8	.007 x 1" WIDE	POLY/SHRINK B–STAGE TAPE	PUR.	AR
7	.020 THICK	SCOTCH–PLY TAPE	PUR.	AR
6	.030 THICK	SCOTCH–PLY TAPE	PUR.	AR
5	.007 x 1" WIDE	B–STAGE MICA TAPE	PUR.	AR
4	P220101–00131–00	SLEEVE WASHER	SEE DETAIL	1
3	P220101–00130–00	SLEEVE RING	SEE DETAIL	2
2	P220101–00129–00	COIL SLEEVE	SEE DETAIL	1
1	220101–00002–00	COPPER CONDUCTOR	SEE DETAIL	AR

PARTS LIST

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
	REVISIONS			

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS ±.005 FRACTIONS ±.INF
X ±.005
XX ±.005
XXX ±.005
SURFACE ROUGHNESS 125
DO NOT SCALE DRAWING

LOG NUMBER A03818
DRAWN BY G.CHERRY DATE 3-14-96
CHECKED BY
DESIGNER
MECHANICAL ENGINEER
MATERIAL SEE PARTS LIST

THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY

TITLE ADVANCED PHOTON SOURCE
INJECTOR SYNCHROTRON
DIPOLE MAGNET
COIL ASSEMBLY

SCALE 1:4 SHEET 1 of 1 SIZE E DRAWING NUMBER P220101–00128–00