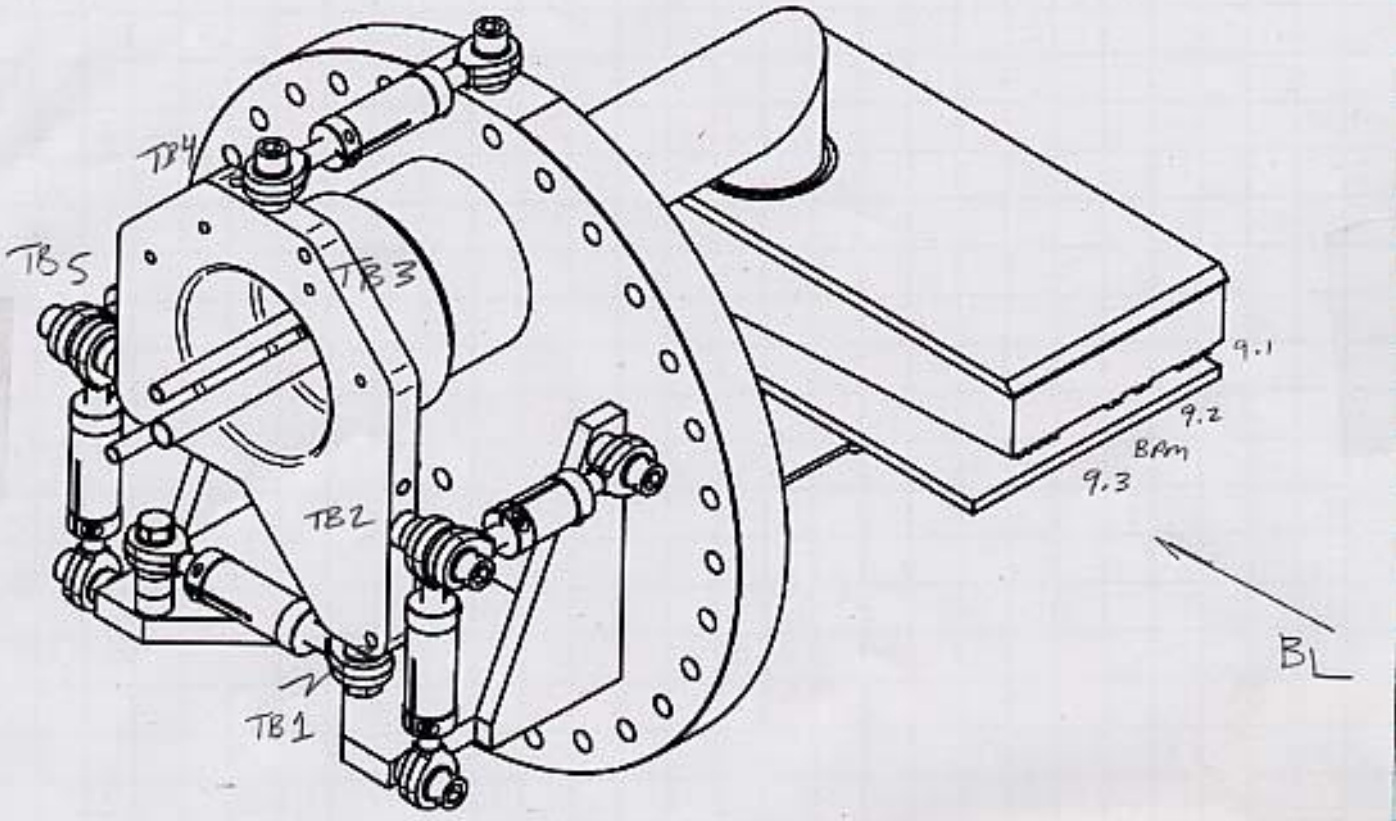
SSRL BL 9 9.2/9.3 SLIT/COMB MASK



TB	X	Y	Z
1	14.704	-.858	-4.986
2	13.385	2.312	-6.375
3	14.724	6.146	-3.257
4	13.414	7.537	-1.317
5	13.417	2.344	2.130

Job # 94 5302-4 997 7340

SSRL ℄ 9

9.2 / 9.3 SLIT / COMB MASK 6/28/04

JMc, FG

Y) CAME OFF TOP FOR STARTING REFERENCE.

u/s +	u/s −	D/S CEN
9.878	9.881	9.877
1	1	1
10.878	10.881	10.877

AVG. = 10.879

1.814

HI = 12.693

℄ TO TOP

REF. BLADE

26.280

12.697

13.587 ℄

Y center between u/s lower edge of crenellation & D/S top edge of crenellation

CHECK BOTTOM 1.884

1.325

Δh = .559

ROLL

BOT. + u/s

5.533

BOT. − u/s

5.535

.002 mils ROLL

GUN 2

REF ℄

8.278

13.587

HI −5.309

PITCH

D/S

FND 4.983

5.534

4.983

.551 FND

.559 S/R

5.534

.559

4.975 S/R

.008 mils Pitch

+.008

y)

U/S (+)

5.533
-.280
5.253

U/S (-)

5.535
-.280
5.255

.559 ÷ 2
= .280

GUN 2
HI = -5.254

D/S

4.983
.280
-5.263 = HI

AVG HI = -5.259

Ref 8.278
-5.259
13.537 ℄ Ref Blade

TALL GUN #1

26.280
13.537
12.744 = HI

12.744
10.879
1.865
.280
2.145 check height

HI HAS TO BE ESTABLISHED FROM THE LOWER GUN, THE TOP GUN IS ONLY TO LEVEL TOP PIECE GET A CLOSE APPROXIMATION SINCE BOTTOM SEES BEAM.

SSRL 9.2/9.3 MASK 6/28/04

B center of 9-2 gap

X) Buck-in on MASK
(-) edge

3.786
3.264
.522 ÷ 2 = .261

3.264 + .261 = 3.525
WIDTH MASK 4.916
1.391

F.V.	1.391
N.V.	1.391
1ST F	18
1ST N	17.843
2ND F	17
2ND N	16.954
S/R	16.585
S/R	16.585

LOS = 17.977

Check Flange

U/S	D/S	TOP	BOT
25.483	25.402	25.460	25.441

SSRL 9.2/9.3 MASK

FG, JMC
6/28/04

Y)

1	2	3	4	5
12.602	9.432	5.598	4.207	9.400
1	1	1	1	1
13.602	10.432	6.598	5.207	10.400
12.744	12.744	12.744	12.744	12.744
[-.858]	[+2.312]	[+6.146]	[+7.537]	[+2.344]

X)

1	2	3	4	5
13.341	13.743	15.082	13.772	13.775
19.340	17.619	17.619	17.619	17.619
32.681	31.362	32.701	31.391	31.394
17.977	17.977	17.977	17.977	17.977
[+14.704]	[+13.385]	[+14.724]	[+13.414]	[+13.417]

Z) 9.751 Length Mark
12.289 W/S edge
-22.040 O/S edge LOS

13.250 dia.

Flange
13.320
6.625
19.945
22.040
2.095

1	2	3	4	5
16.054	14.665	17.783	3.104	6.551
1	1	1	17.619	17.619
17.054	15.665	18.783	20.723	24.170
22.040	22.040	22.040	22.040	22.040
[-4.986]	[-6.375]	[-3.257]	[-1.317]	[+2.130]

BL 09 comb mask alignment requirements (AB 10/18/01)

(Based on drawing SA-451-010-50 c0, 2 pages)

Order of outgoing beam in the beam direction (left to right, SSRL to SPEAR)

=== 09-3 === BPM === 09-2 === 09-1 (open to the right)

REFERENCE

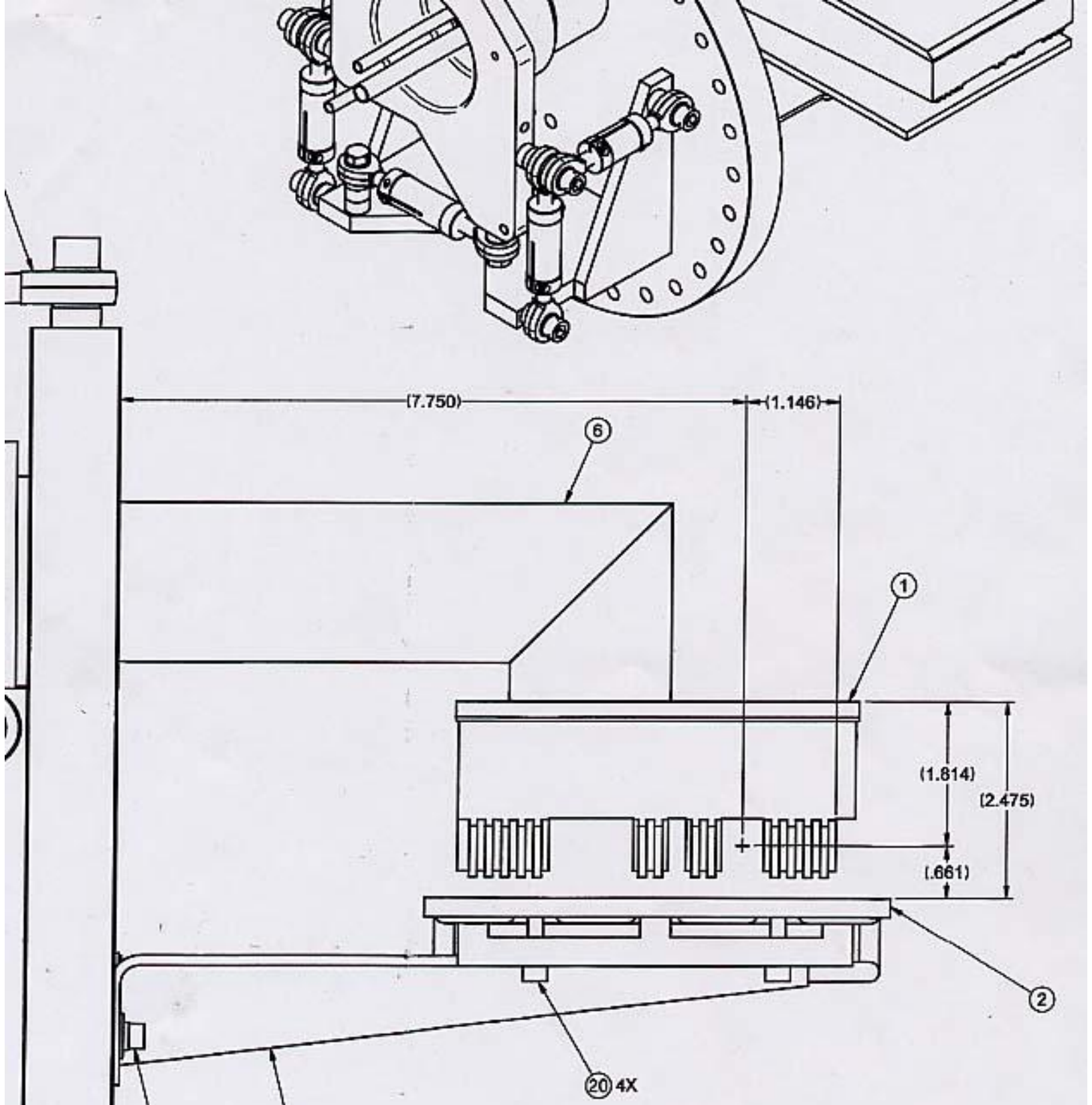
x center of 09-2 gap

y center between u/s lower edge of crenellation and d/s top edge of crenellation

z d/s surface of mask

roll	0.000	+/- 0.002" over whole width	Ref.: crenellation
yaw	0.000	+/- 0.002" over whole length	Ref.: SSRL side of mask
pitch	0.000	+/- 0.005" over whole length	Ref.: 09-2 opening

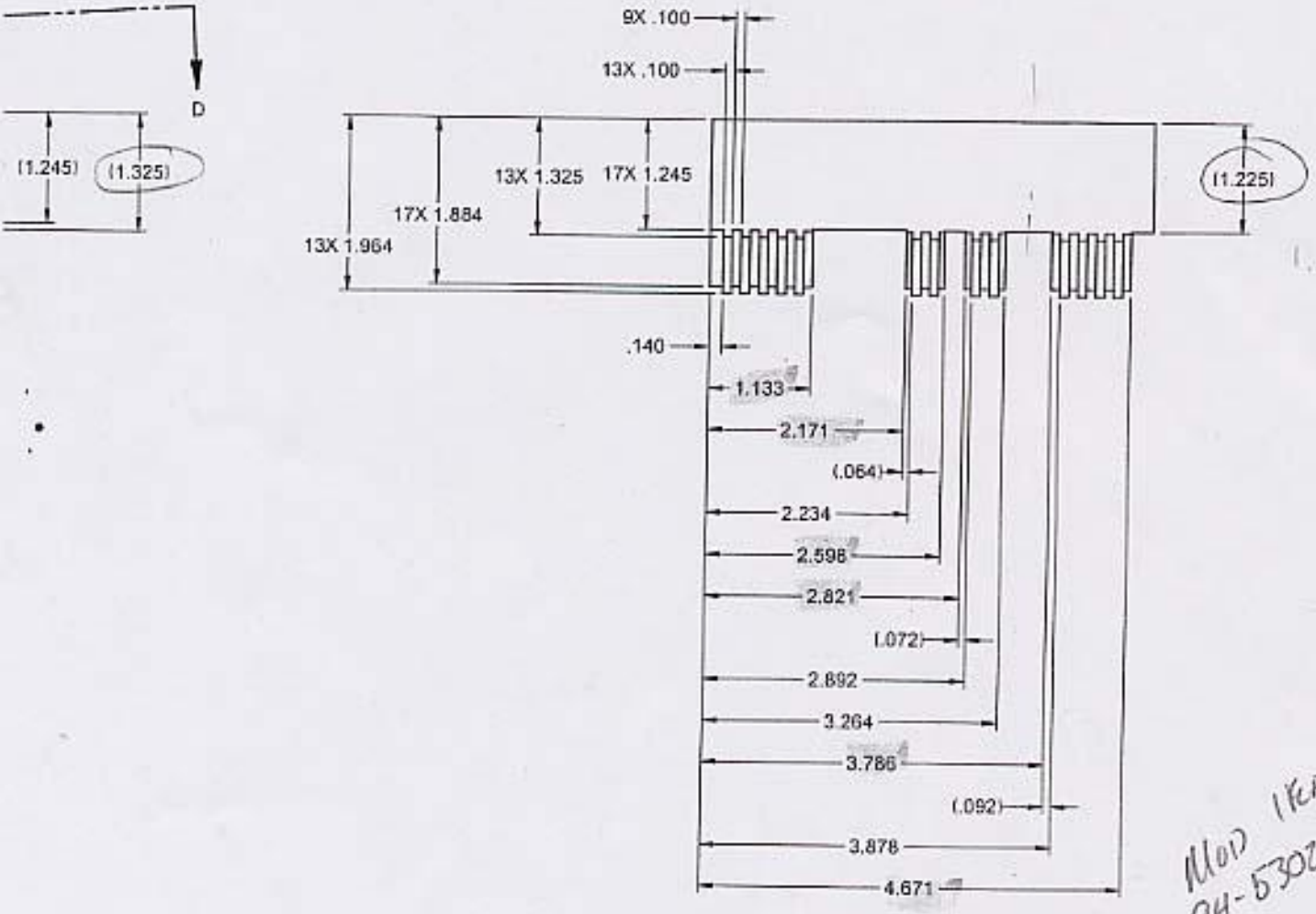
Fiducialize min. four tooling balls.



23		WASHER, LOCK, HLCL SPR, #10, SS 316
22		WASHER, FLAT RGLR #10, SST 316
21		SCREW, CAP, SCH, HEX, #10-32 UN X .5, SST 316
20		SCREW, CAP, SCH, HEX, #10-32 UN X .75, SST 316
19		BOLT, HEX, 3/8-16 UNC-2A X 1.25, S

REFERENCE VIEW OF GLIDCOP BILLET

4X R.125



1.22674

Mod 1 FCA
94-5302-4

SA-451-010-51	DIMENSIONING AND TOLERANCING IS IN ACCORDANCE WITH ASME Y14.5M-1994	SCALE: 1:1	DO NOT SCALE DRAWING	CAD FILE NAME: pf45101055.dft
NEXT ASSEMBLIES:	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES: BREAK EDGES .005-.015; INTERNAL CORNERS R.015 MAX; FRACTIONS ±; DEC XX ± .010, XXX ± .005, XXXX ±; ANGLE ± 1/2°; 63 ALL OVER	STANFORD SYNCHROTRON RADIATION LABORATORY, A DEPARTMENT OF ENERGY, SLAC, STANFORD UNIVERSITY, STANFORD, CALIFORNIA	SSRL BL9 - 2/3 COMB MASK COMB MASK BRAZE ASSY MASK BODY	
		PROPRIETARY DATA OF STANFORD UNIVERSITY AND/OR U.S. DEPARTMENT OF ENERGY. RECIPIENT SHALL NOT PUBLISH THIS INFORMATION WITHIN UNLESS GRANTED SPECIFIC PERMISSION OF STANFORD UNIVERSITY.		
		ENGR: A. BUSSE DATE DWN: S. WEAVER 7-2-01 CHK: A. BUSSE	APPROVED: A. BUSSE 8-3-01	DRAWING NUMBER: PF-451-010-55 REVISION NUMBER: 2 E

TOLERANCE ZONE COMPLETELY
OUTSIDE BASIC DIMENSIONS

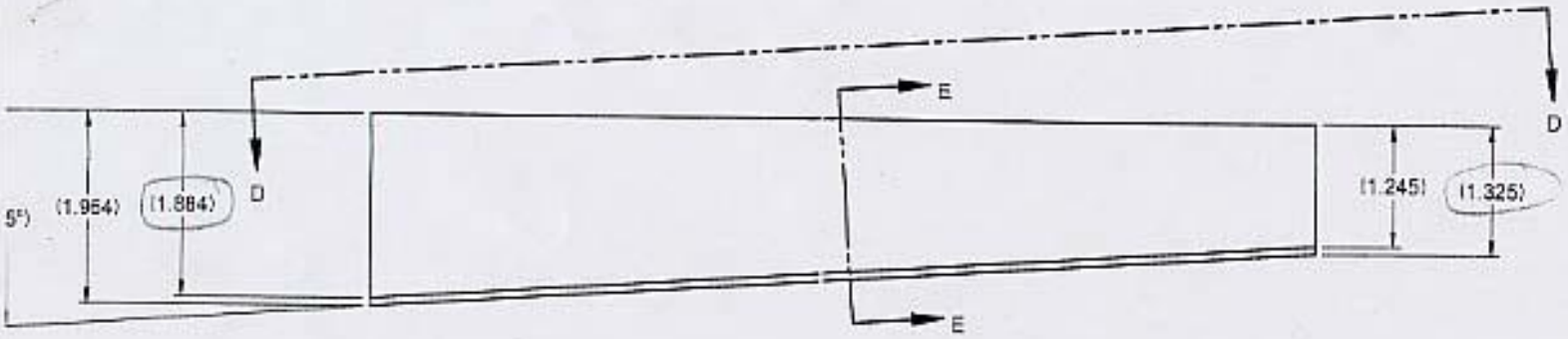
.125

12.963

9.75

9.95063

4X R.125

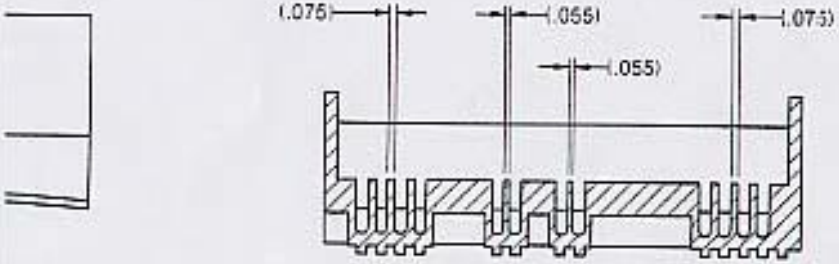


9X .100

13X .100

13X 1.325
17X 1.245
17X 1.884
13X 1.964

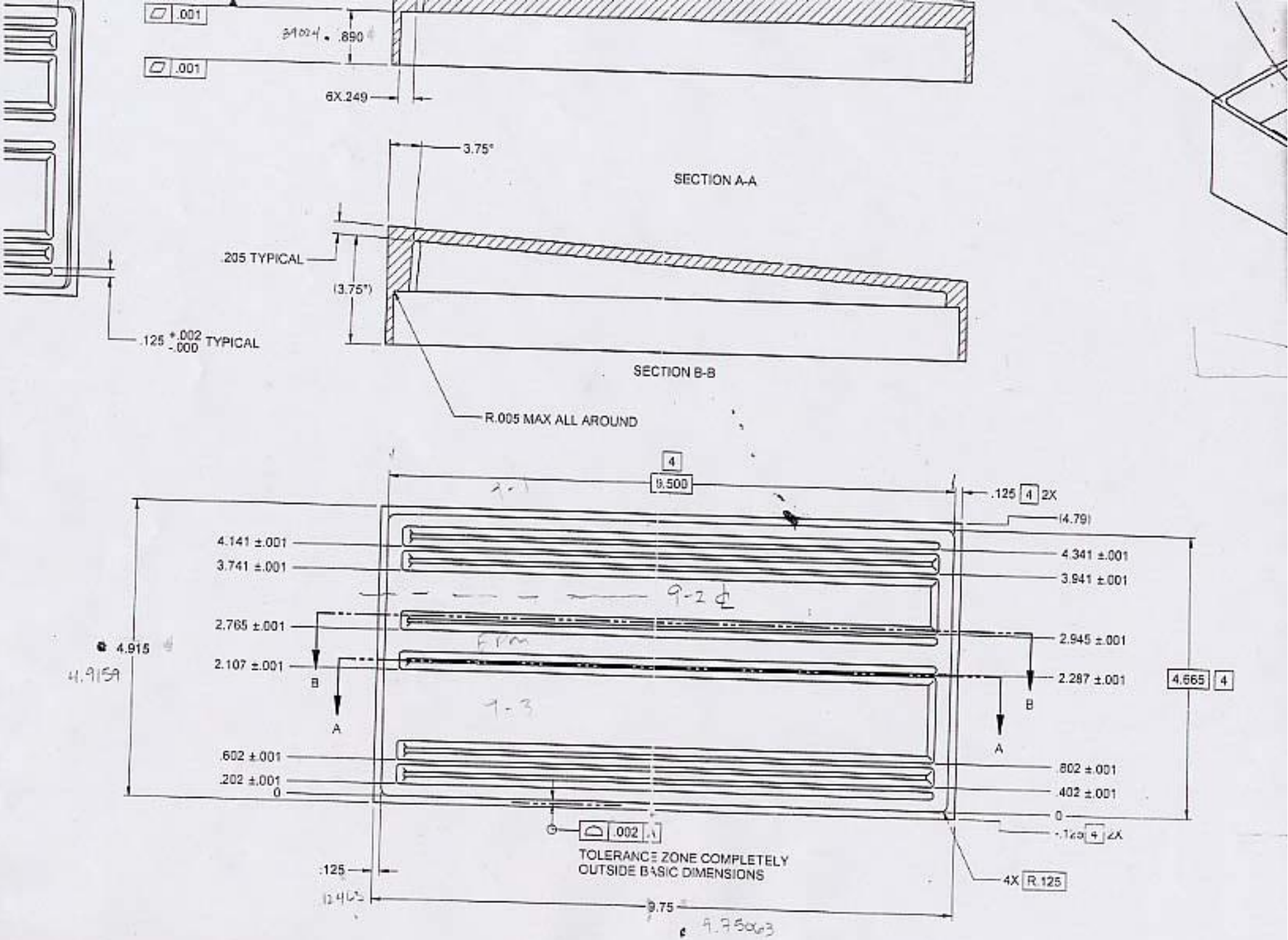
.140



SECTION E-E
ROTATED 3.75° CW

---	DIMENSIONING AND TOLERANCING IS IN ACCORDANCE WITH ASME Y14.5M-1994.	SCALE: 1:1
---	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES BREAK EDGES .005-.015 INTERNAL CORNERS R.015 MAX FRACTIONS ± --- DEC XX ± .010 .XXX ± .005 .XXXX ± --- ANGLE ± 1/2° ALL OVER 63	STANFORD SYNCHRO LCLS SLAC, STANFORD UNIVERSI
---		PROPRIETARY DATA OF STANFO ENERGY. RECIPIENT SHALL NOT P GRANTED SPECIFIC PERMISSION
---		DRAWN A. BUSSE CHKD S. WEAVER 7-2-01 APPR A. BUSSE
SA-451-010-51		
NEXT ASSEMBLIES		

6 5 4 3


.001
.890
.001
6X.249
3.75"
SECTION A-A
.205 TYPICAL
(3.75")
.125 +.002 -.000 TYPICAL
SECTION B-B
R.005 MAX ALL AROUND
4
9.500
.125 4 2X
(4.79)
4.141 ±.001
3.741 ±.001
4.341 ±.001
3.941 ±.001
2.765 ±.001
2.107 ±.001
2.945 ±.001
2.287 ±.001
4.915
4.665 4
B
A
.602 ±.001
.202 ±.001
0
.802 ±.001
.402 ±.001
0
.002 A
TOLERANCE ZONE COMPLETELY
OUTSIDE BASIC DIMENSIONS
4X R.125
.125
9.75