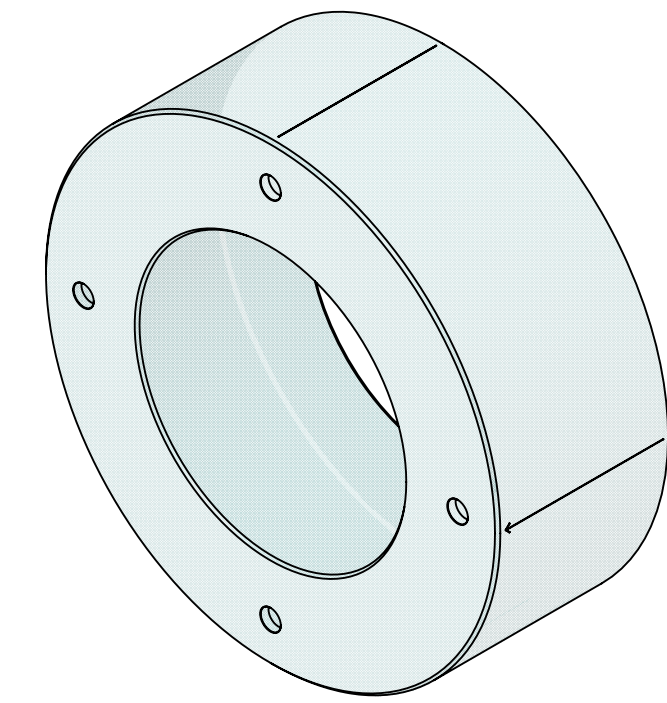
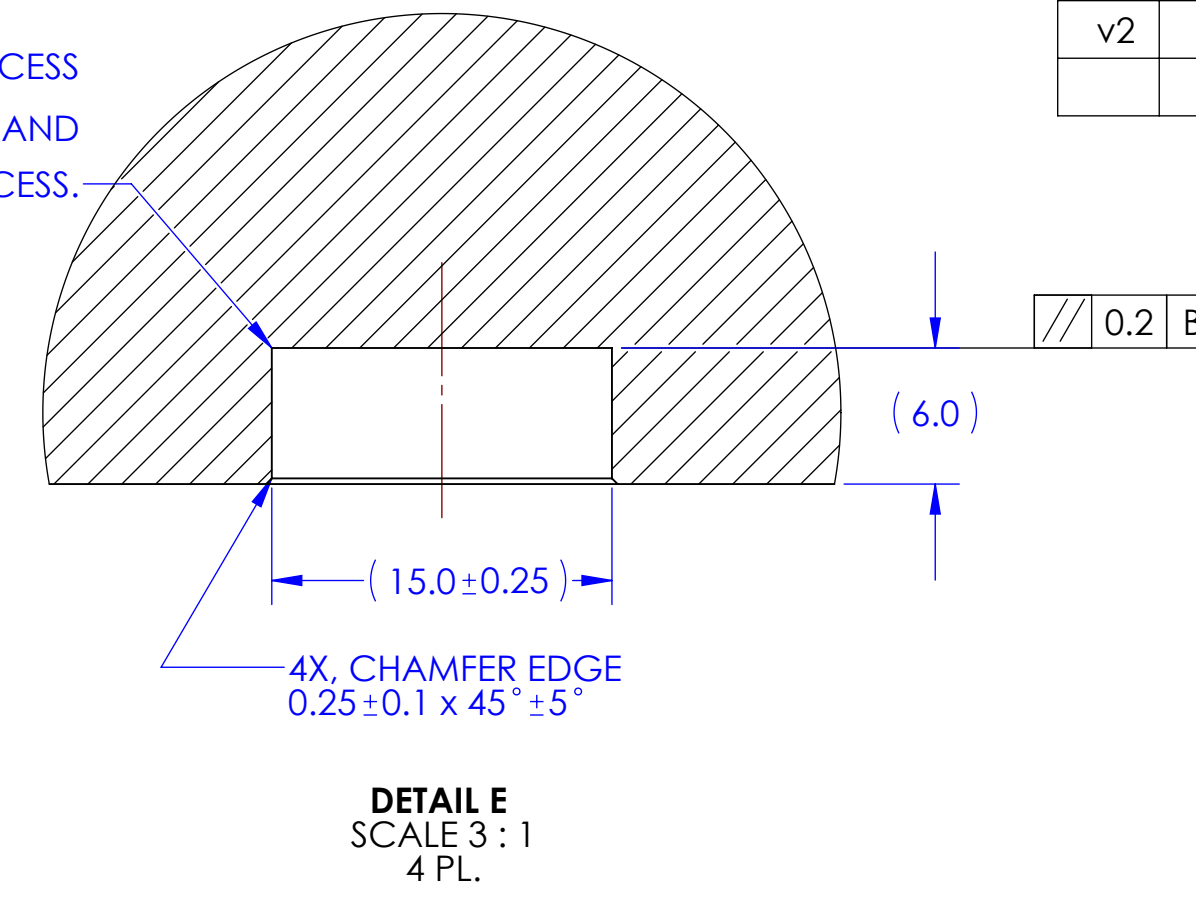
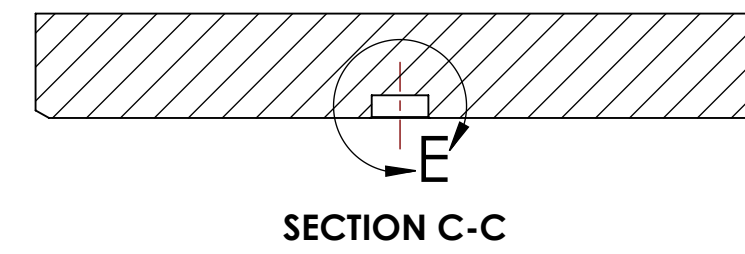
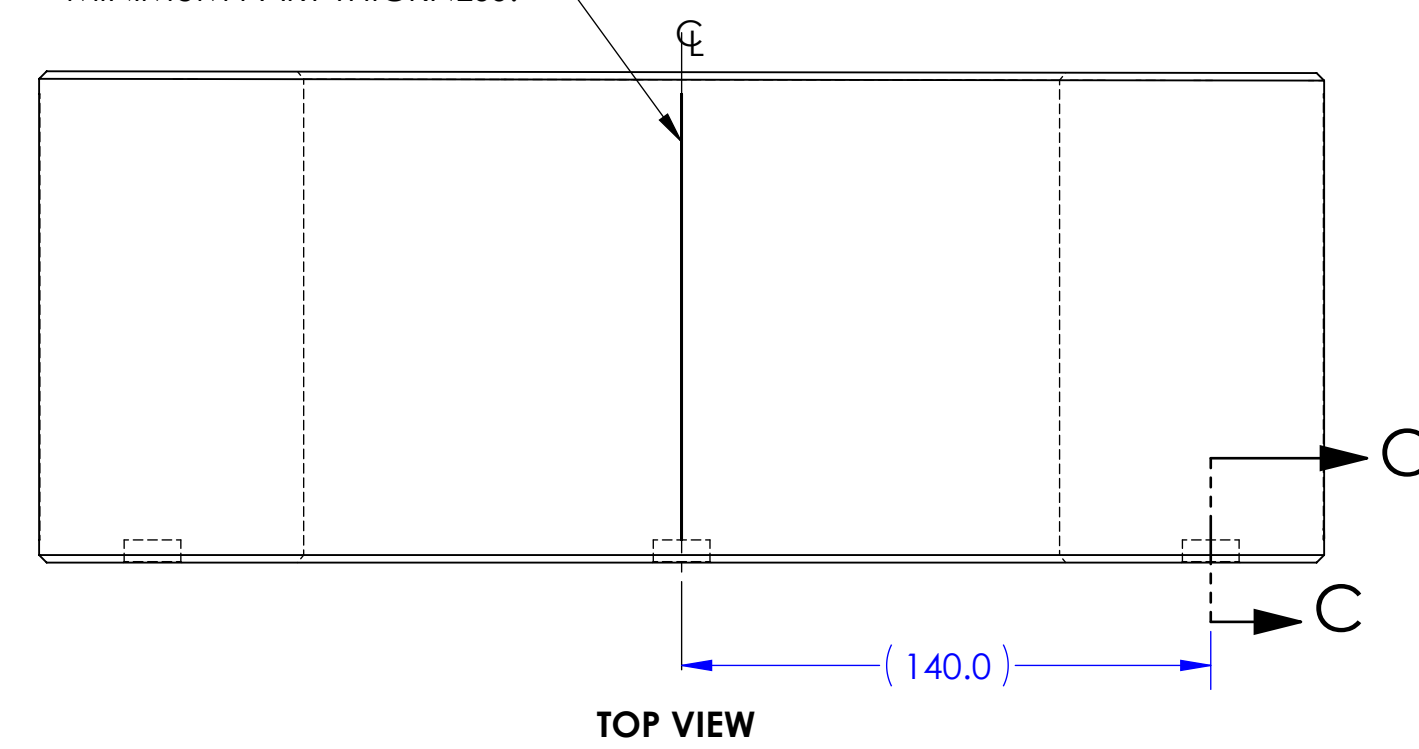


- MANUFACTURING NOTES:**
1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. DO NOT SCALE FROM DRAWING.
 3. INSPECTION POLISH ALL FACES, EDGES AND CHAMFER. SURFACES SHALL APPEAR TRANSPARENT WITH NO GREY, SCUFFS OR SCRATCHES VISIBLE TO THE NAKED EYE WHEN VIEWED IN NORMAL ROOM LIGHT AGAINST A BLACK BACKGROUND.
 4. ETCH, GRIND OR SANDBLAST THE SERIAL NUMBER "ERM X", APPROX. WHERE SHOWN, LETTERING APPROX. 4mm HIGH, WHERE "XX" IS INCREMENTAL STARTING WITH "1".
 5. APPLY ESD GOLD COATING PER E0900138

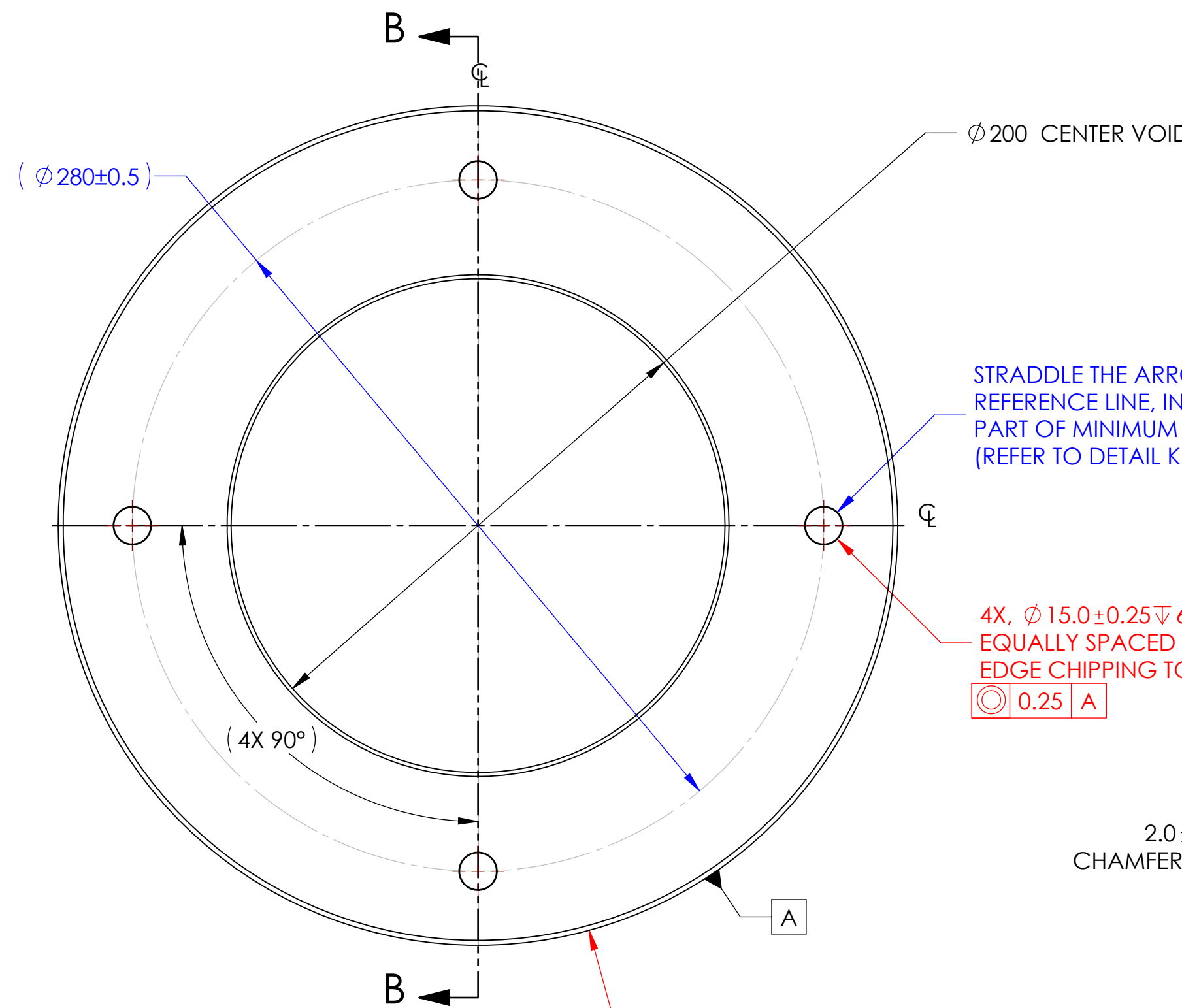
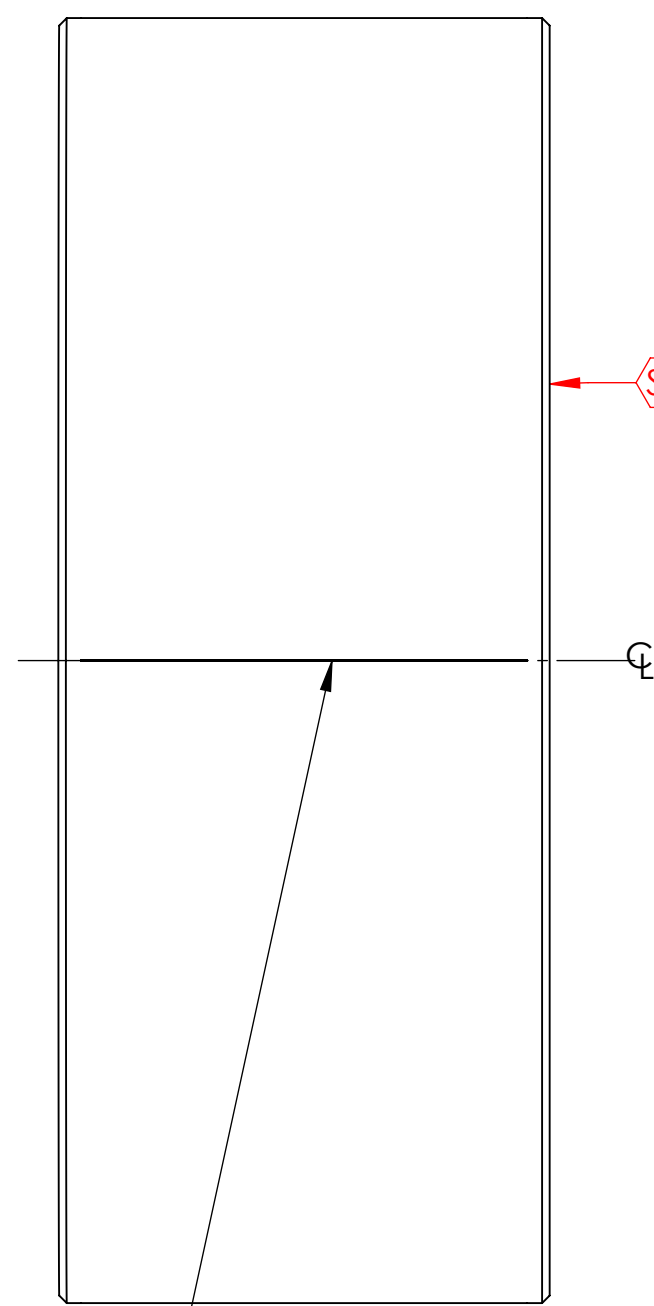
ETCH,GRIND, OR SANDBLAST REGISTRATION MARKS
 0.25mm±0.05mm WIDE x
 118mm±3mm LONG MINIMUM LEGIBLE
 DEPTH LINE ALONG ϕ , CENTERED
 BETWEEN SURFACES 'S1' AND 'S2', PARALLEL
 TO THE CYLINDRICAL AXIS
 (DEFINED BY DATUM FEATURE -A-)
 WITHIN ±0.1mm AND
 90° FROM SCRIBE LINE AT LOCATION OF
 MINIMUM PART THICKNESS.

RADIUS AROUND BOTTOM OF RECESS
 $R1 \begin{matrix} +0 \\ -0.5 \end{matrix}$ GROUND FINISH ACCEPTABLE FOR BASE AND
 SIDES OF RECESS.

REV.	DATE	DCN #	DRAWING TREE #
v1	06 MAY 2015	-	-
v2	10 JUN 2015	-	-



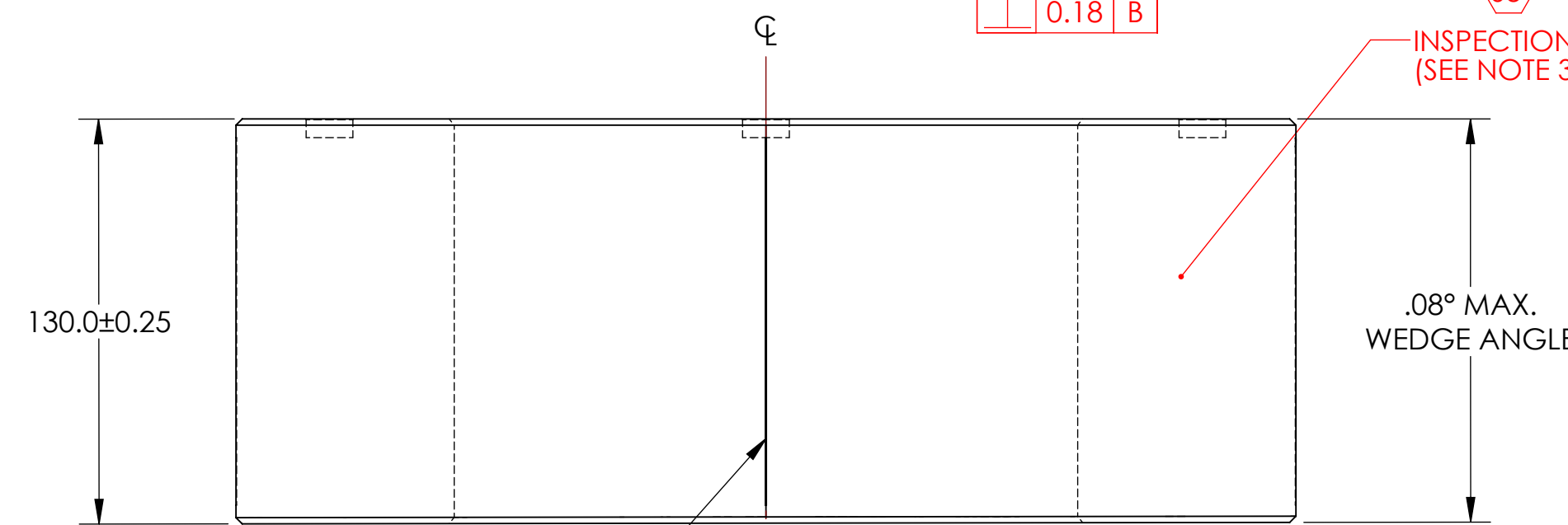
ISO VIEW
SCALE 1:4



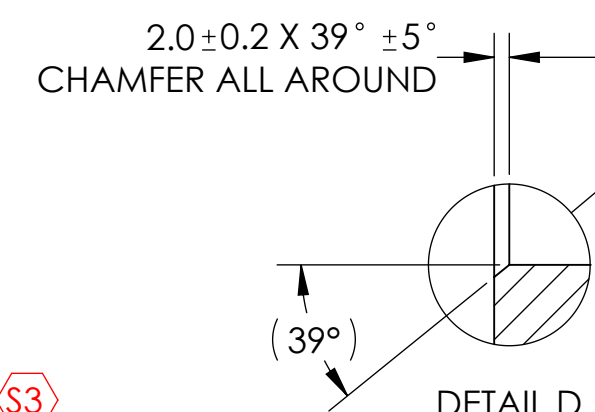
STRADDLE THE ARROWED
 REFERENCE LINE, INDICATING
 PART OF MINIMUM THICKNESS
 (REFER TO DETAIL K.)

4X, $\phi 15.0 \pm 0.25 \nabla 6.0$
 EQUALLY SPACED ON A 280 ± 0.5 BOLT CIRCLE.
 EDGE CHIPPING TO BE MINIMISED.
 0.25 A

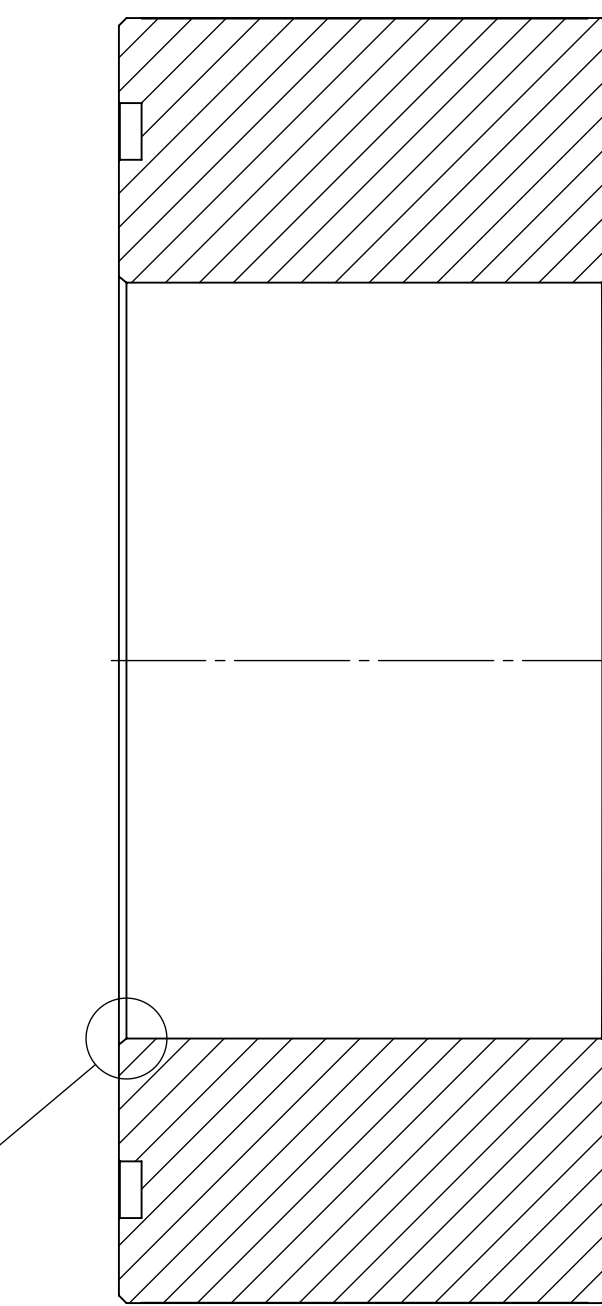
ETCH,GRIND, OR SANDBLAST REGISTRATION MARKS
 0.25mm±0.05mm WIDE x
 118mm±3mm LONG MINIMUM LEGIBLE
 DEPTH LINE ALONG ϕ , CENTERED
 BETWEEN SURFACES 'S1' AND 'S2', PARALLEL
 TO THE CYLINDRICAL AXIS
 (DEFINED BY DATUM FEATURE -A-)
 WITHIN ±0.1mm AND
 180° FROM SCRIBE LINE AT LOCATION OF
 MINIMUM PART THICKNESS.



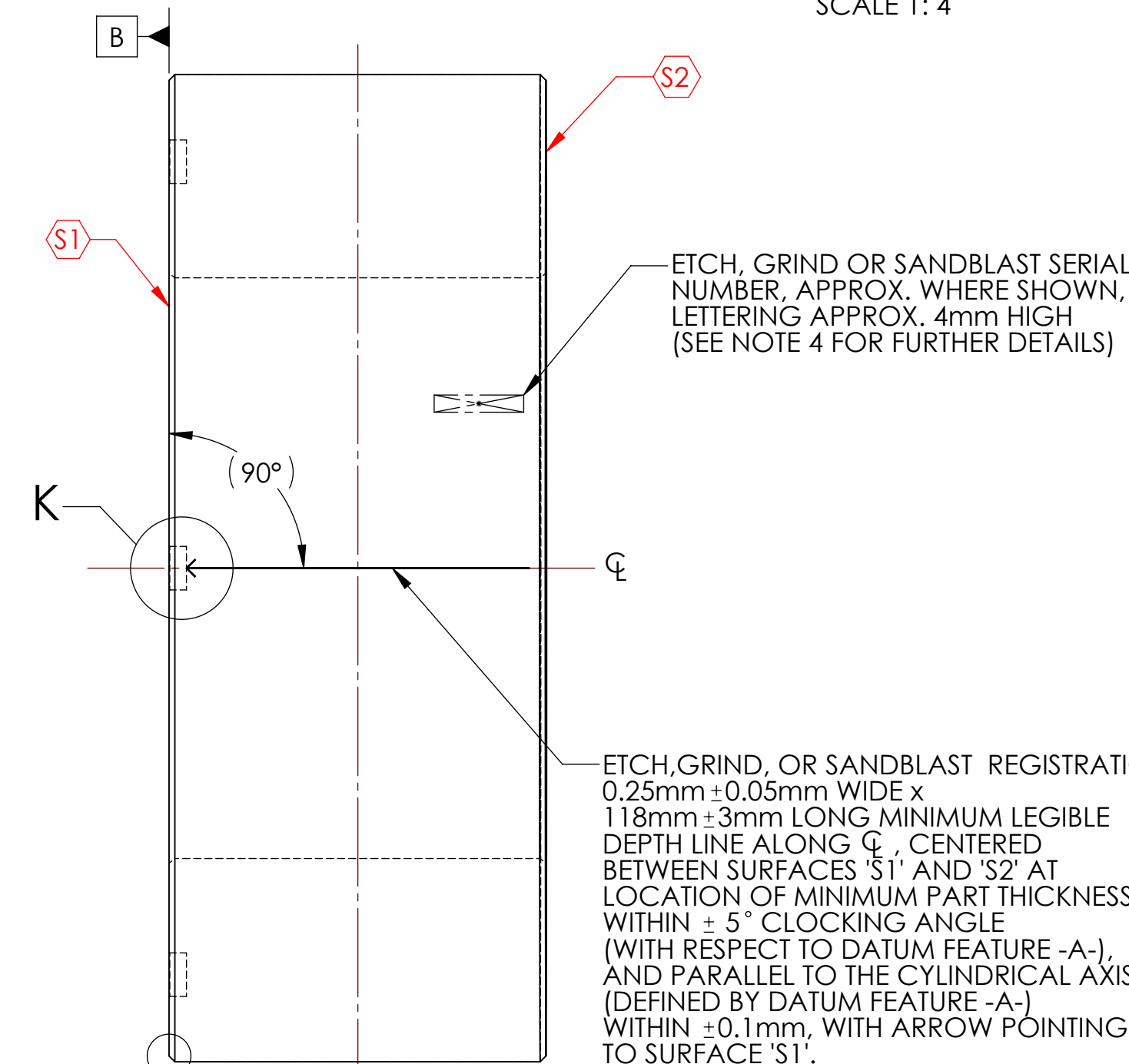
ETCH,GRIND, OR SANDBLAST REGISTRATION MARKS
 0.25mm±0.05mm WIDE x
 118mm±3mm LONG MINIMUM LEGIBLE
 DEPTH LINE ALONG ϕ , CENTERED
 BETWEEN SURFACES 'S1' AND 'S2', PARALLEL
 TO THE CYLINDRICAL AXIS
 (DEFINED BY DATUM FEATURE -A-)
 WITHIN ±0.1mm AND
 90° FROM SCRIBE LINE AT LOCATION OF
 MINIMUM PART THICKNESS.



DETAIL D
SCALE 1:1
2 PL.

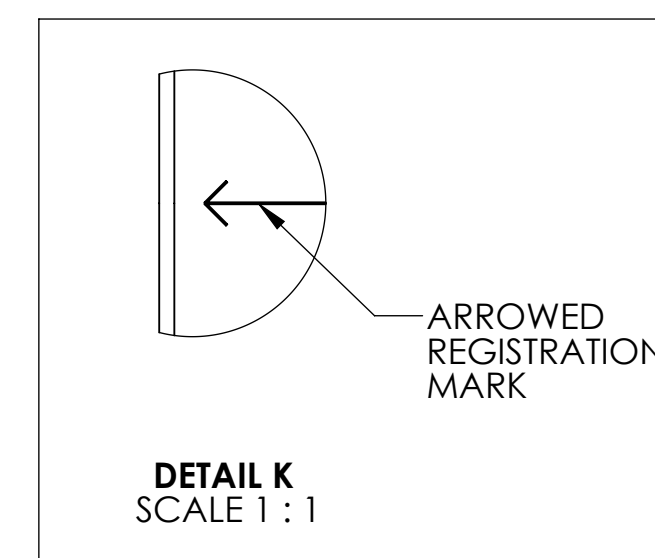


SECTION B-B

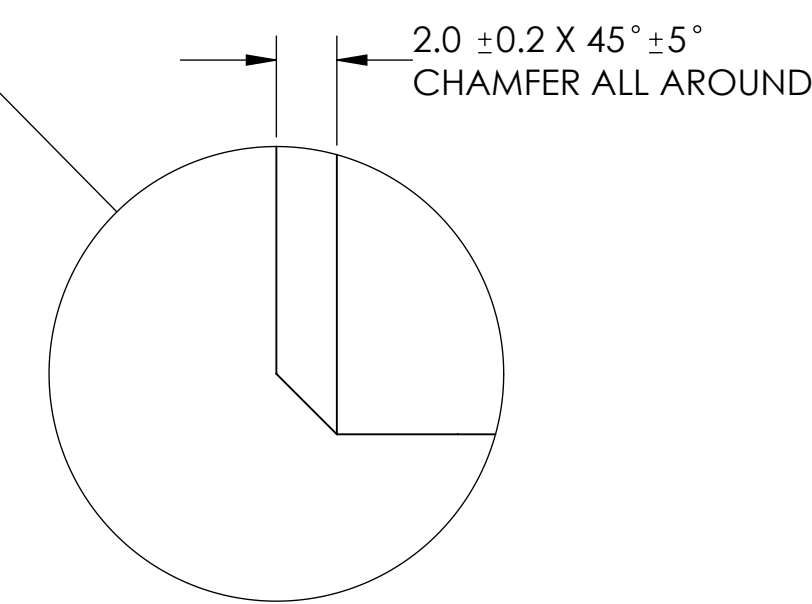


ETCH, GRIND OR SANDBLAST SERIAL
 NUMBER, APPROX. WHERE SHOWN,
 LETTERING APPROX. 4mm HIGH
 (SEE NOTE 4 FOR FURTHER DETAILS)

ETCH,GRIND, OR SANDBLAST REGISTRATION MARKS
 0.25mm±0.05mm WIDE x
 118mm±3mm LONG MINIMUM LEGIBLE
 DEPTH LINE ALONG ϕ , CENTERED
 BETWEEN SURFACES 'S1' AND 'S2', PARALLEL
 TO THE CYLINDRICAL AXIS
 (WITH RESPECT TO DATUM FEATURE -A-),
 AND PARALLEL TO THE CYLINDRICAL AXIS
 (DEFINED BY DATUM FEATURE -A-)
 WITHIN ±0.1mm, WITH ARROW POINTING
 TO SURFACE 'S1'.



DETAIL K
SCALE 1:1



DETAIL A
SCALE 4:1
2 PL.

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN MILLIMETERS	
TOLERANCES: .X ± 0.1 .XX ± 0.05	
ANGULAR ± 0.1°	
MATERIAL	SF2 GLASS
FINISH	SEE NOTES μinch
NEXT ASSY	N/A

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SYSTEM	ADVANCED LIGO
SUB-SYSTEM	-

PART NAME		Annular End Reaction Mass (AERM)	
DESIGNER	G. Billingsley	DATE	05 MAY 2015
DRAFTER	E. SANCHEZ	DATE	06 MAY 2015
CHECKER	SEE DCC	SCALE	D
APPROVAL	SEE DCC	PROJECTION	1:2
DWG. NO.		D1500163	
REV.		v2	
SHEET 1 OF 1			

D1500163 RED, End Reaction Mass (ERM), PART PDM REV: X.001, DRAWING PDM REV: X.001