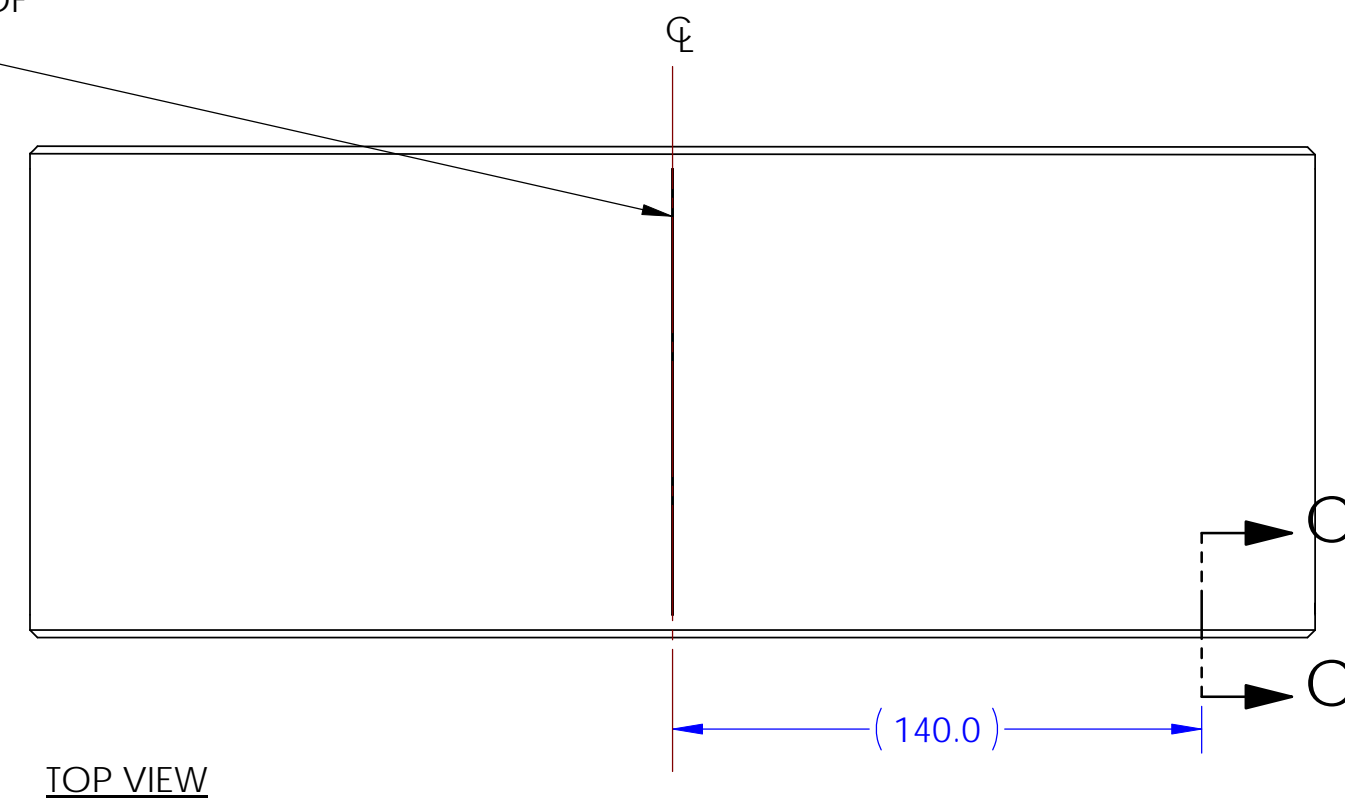


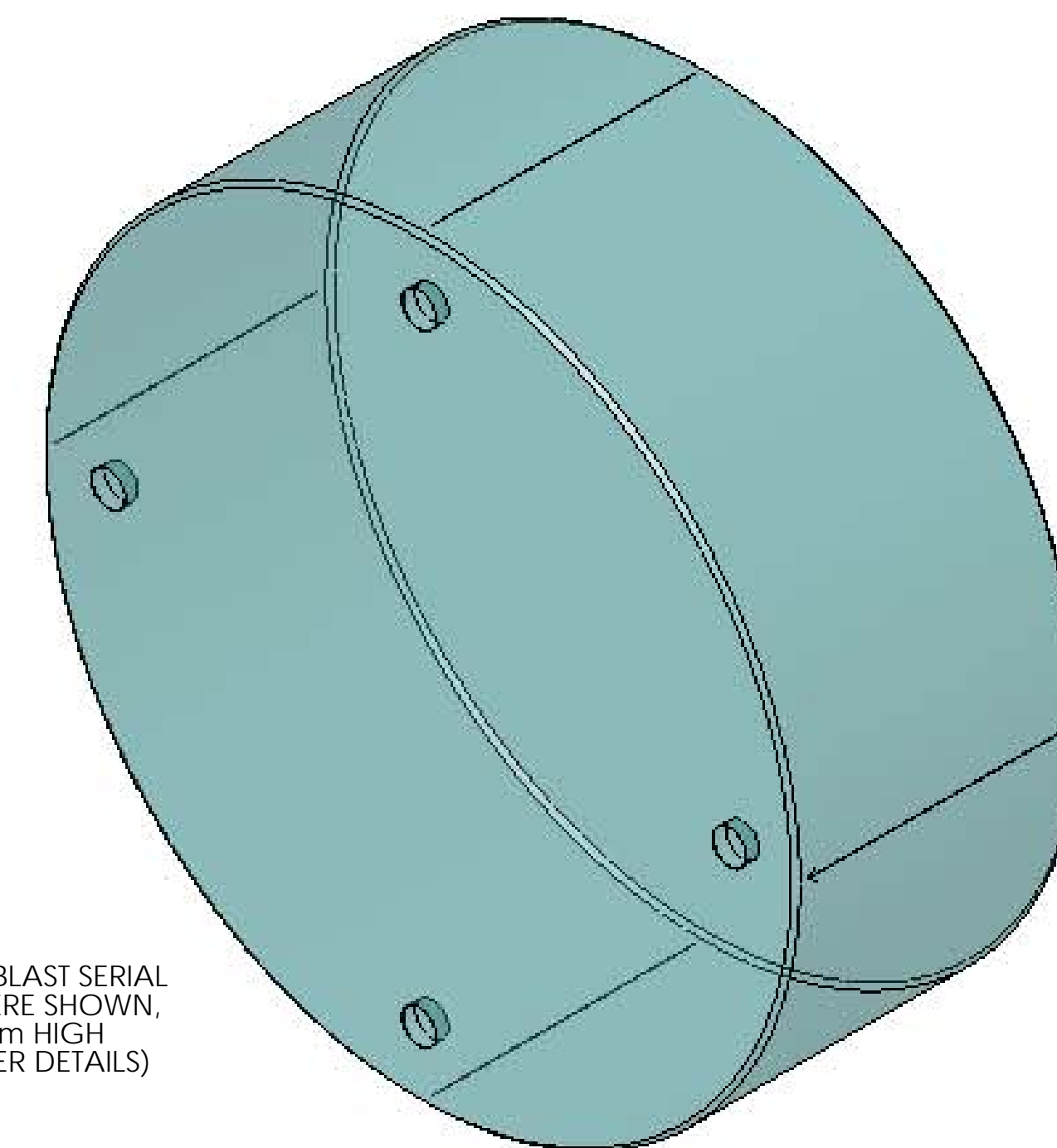
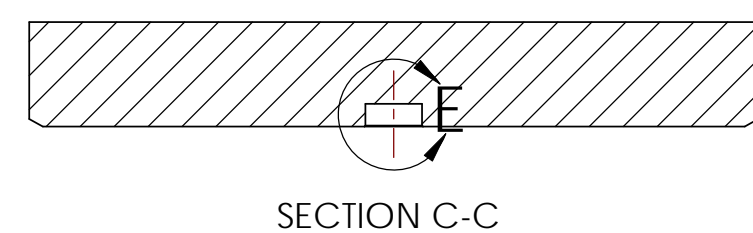
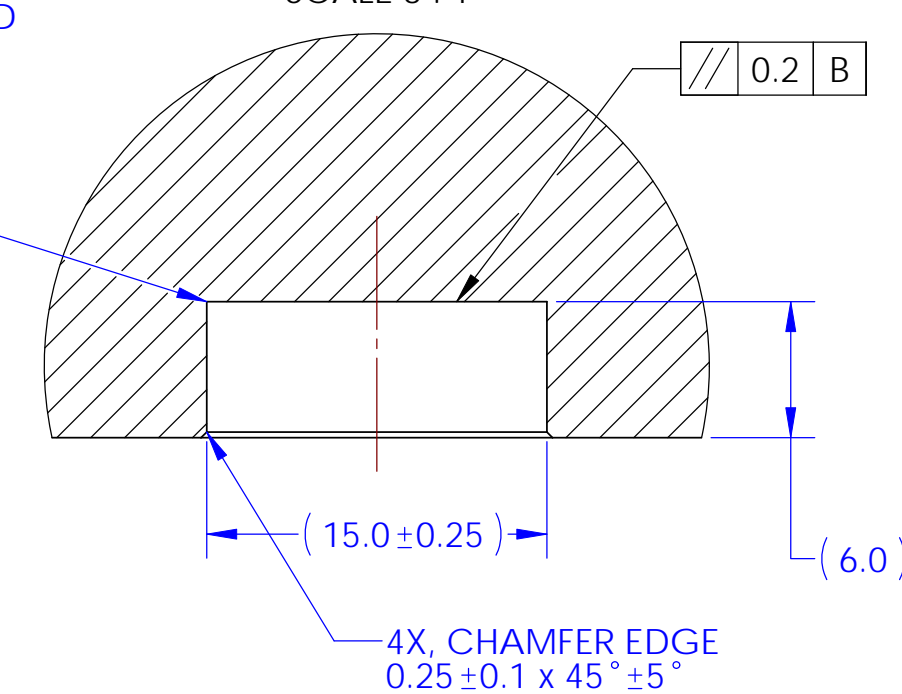
REV.	DATE	DCN #	DRAWING TREE #
B	12/2008	E080171-B	

ETCH OR GRIND REGISTRATION MARKS  
 0.25mm ± 0.05mm WIDE x  
 118mm ± 3mm LONG MINIMUM LEGIBLE  
 DEPTH LINE ALONG  $\phi$ , 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.



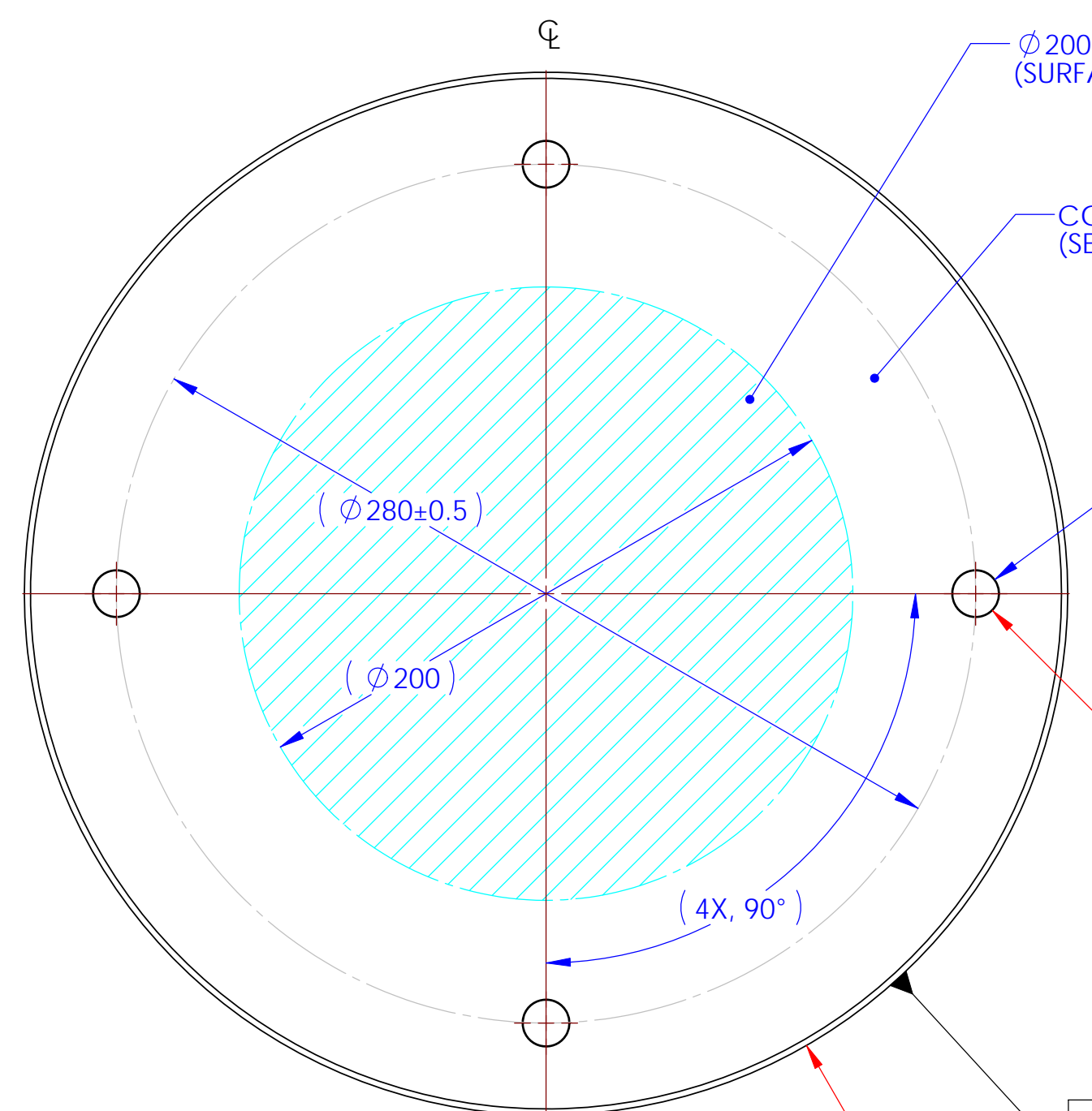
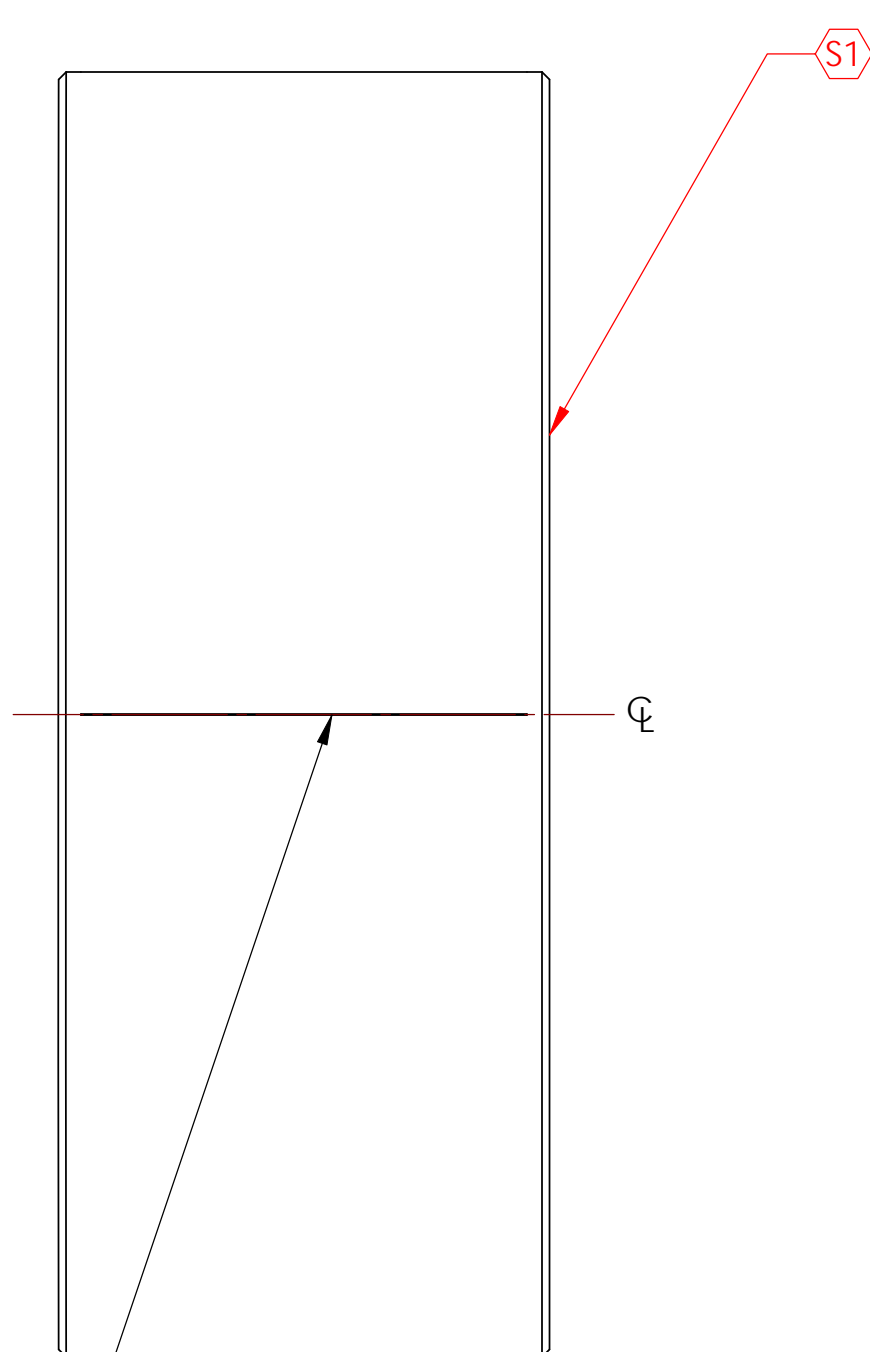
RADIUS AROUND BOTTOM OF RECESS  
 $R1 \begin{matrix} +0 \\ -0.5 \end{matrix}$  GROUND FINISH ACCEPTABLE FOR BASE AND  
 SIDES OF RECESS.

DETAIL E  
 SCALE 3 : 1



TOP VIEW

SECTION C-C



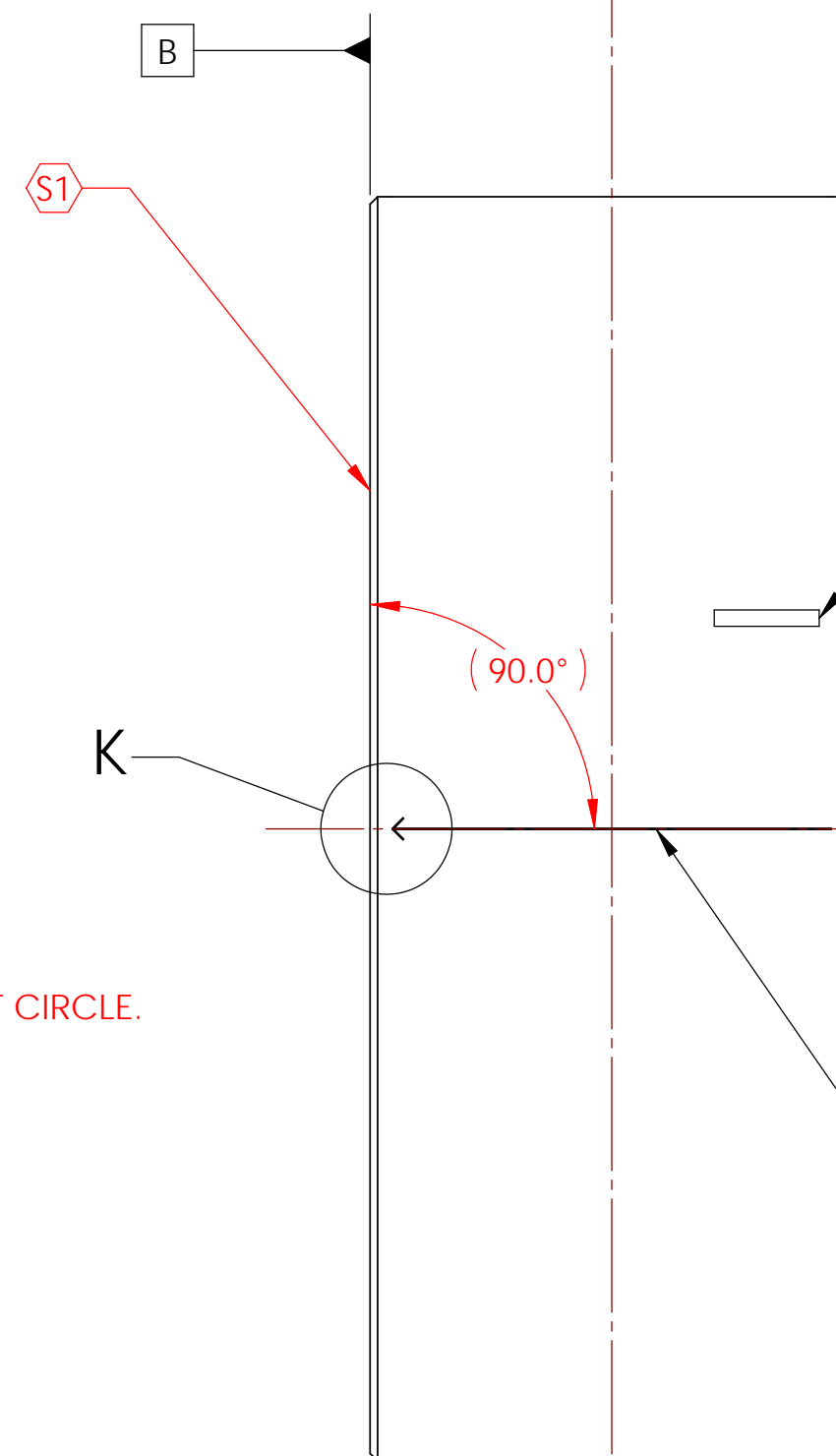
$\phi 200$ mm CLEAR APERTURE  
 (SURFACE 'S1' AND SURFACE 'S2')

COMMERCIAL POLISH SURFACE 'S1'  
 (SEE NOTE 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  $280 \pm 0.5$  BOLT CIRCLE.  
 EDGE CHIPPING TO BE MINIMISED.

$\text{C} \begin{matrix} 0.25 \\ A \end{matrix}$



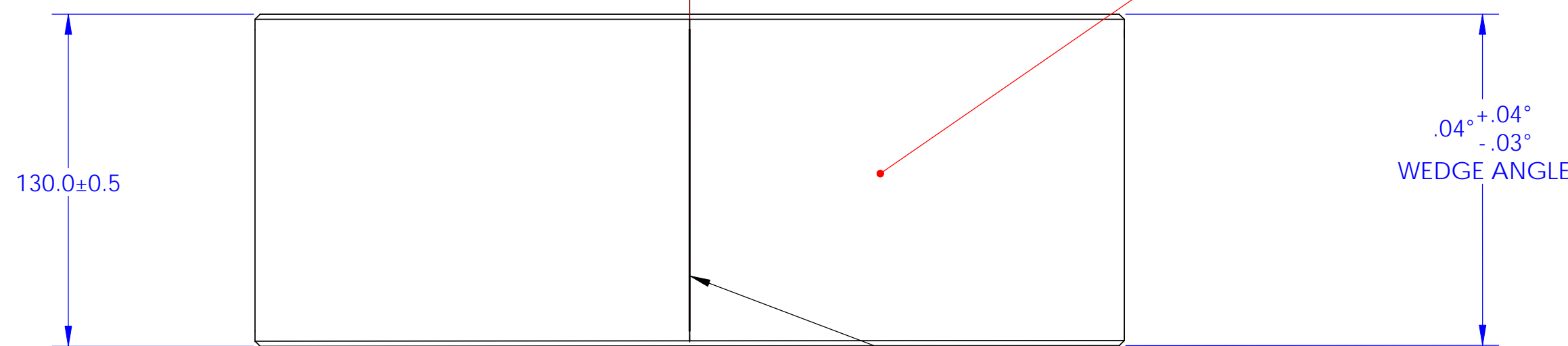
ETCH, GRIND OR SANDBLAST SERIAL  
 NUMBER, APPROX. WHERE SHOWN,  
 LETTERING APPROX. 4mm HIGH  
 (SEE NOTE 5 FOR FURTHER DETAILS)

$\text{S}2$  POLISH SURFACE 'S2'  
 (SEE NOTE 4)

ETCH OR GRIND REGISTRATION MARKS  
 0.25mm ± 0.05mm WIDE x  
 118mm ± 3mm LONG MINIMUM LEGIBLE  
 DEPTH LINE ALONG  $\phi$ , CENTERED  
 BETWEEN SURFACES 'S1' AND 'S2' AT  
 LOCATION OF MINIMUM PART THICKNESS  
 WITHIN ± 5° CLOCKING ANGLE  
 (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'.

2X,  $\pm 0.2 \times 45^\circ \pm 5^\circ$  CHAMFER,  
 ALL AROUND

ETCH OR GRIND REGISTRATION MARKS  
 0.25mm ± 0.05mm WIDE x  
 118mm ± 3mm LONG MINIMUM LEGIBLE  
 DEPTH LINE ALONG  $\phi$ , 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.

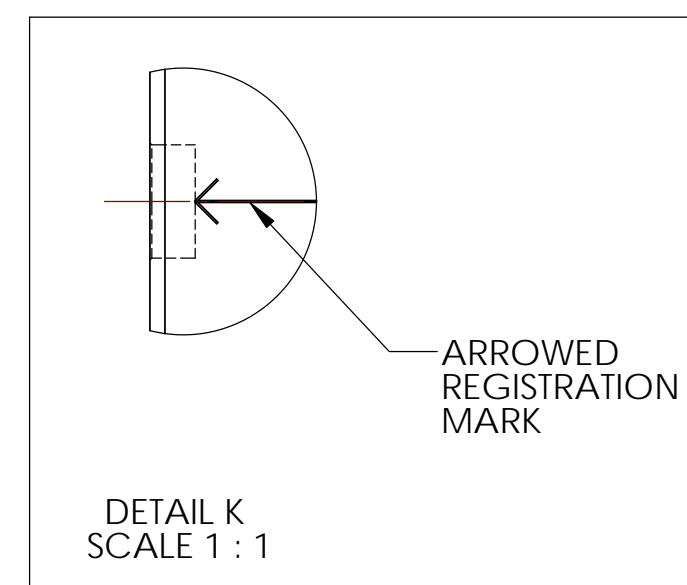


$\phi 340.0 \pm 0.25$   
 $\text{A} \begin{matrix} 0.1 \\ 0.18 \\ B \end{matrix}$

$\text{S}3$  INSPECTION POLISH  
 (SEE NOTE 3)

ETCH OR GRIND REGISTRATION MARKS  
 0.25mm ± 0.05mm WIDE x  
 118mm ± 3mm LONG MINIMUM LEGIBLE  
 DEPTH LINE ALONG  $\phi$ , 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.

BOTTOM VIEW



DETAIL K  
 SCALE 1 : 1

MANUFACTURING NOTES:	
1.	DO NOT SCALE FROM DRAWING.
2.	THIS DRAWING IS ACCOMPANIED BY LIGO COMPONENT SPECIFICATION 'E080089'. [REFER TO E080089 FOR MATERIAL AND INSPECTION NOTES.]
3.	INSPECTION POLISH ALL FACES, EDGES AND CHAMFERS. 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.	SURFACE QUALITY ON SURFACE 'S1' AND THE CLEAR APERTURE ON SURFACE 'S2' TO BE 80/50 SCRATCH/DIG (AS PER MIL-PRF-13830B). REFER TO E080089 FOR FURTHER INFORMATION.
5.	ETCH, GRIND OR SANDBLAST THE SERIAL NUMBER 'ERM XX', APPROX. WHERE SHOWN, LETTERING APPROX. 4mm HIGH, WHERE 'XX' IS INCREMENTAL STARTING WITH '01'.

PARTS LIST	
NOTES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN MILLIMETERS (mm)	
TOLERANCES:	
X ± 0.1	
XX ± 0.05	
ANGULAR ± 0.1°	
MATERIAL:	
AS PER LIGO-E080089	
FINISH:	
SEE NOTES	
DRAWN:	
CHECKED:	
APPROVED:	

NAME	DATE	PART NAME	END REACTION MASS (ERM)
JANOB			
SIZE	DWG. NO.	REV.	B
D	D080116		
SCALE: 1:2	PROJECTION:		SHEET 1 OF 1