



**NOTES:**  
1. MATERIAL : ASTM A 668 CLASS F (FORGING)  
2. THE FORGING SHALL BE ULTRASONICALLY TESTED AS PER ASTM-A-388M.  
3. FINISH MACHINING AFTER COMPLETION OF HEAT TREATMENT SHALL BE SUBJECTED TO FLUORESCENT DYE PENETRATION TEST AND MAGNETIC PARTICLE TEST (AS PER ASTM-A-275M).  
4. THE FORGING SHALL BE NORMALISED, QUENCHED, & TEMPERED TO ACHIEVE A HARDNESS OF 180-215 BHN & OTHER MECHANICAL PROPERTIES AS PER ASTM A 668.  
5. ALL DIMENSIONS SPECIFIED IN THIS DRAWING ARE FINAL DIMENSIONS WHICH ARE TO BE ACHIEVED SUBSEQUENT TO FINISH MACHINING.  
6. ALL MATING SURFACES, BORES & THREADED HOLES SHALL BE GREASED. THE REMAINING EXPOSED SURFACES SHALL BE PAINTED AS PER SITE CONDITION.

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3. THE DIMENSION 'L' TO BE DECIDED DURING ASSEMBLY SO AS TO ACHIEVE A CLEARANCE OF 0.2MM (MAX) BETWEEN BEARING COVER AND SPHERICAL ROLLER BEARING (ITEM NO IN OUR GA) MOUNTED INSIDE THE YOKE.

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3. FINISH MACHINE SURFACE 'A' OF THE BEARING RETAINER OF REQUIRED LENGTH FOR FITMENT AT ASSEMBLY.

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STATUS	SIGN	DATE
DISCUSSION / REVIEW		
TENDER PURPOSE		
FABRICATION		
UNRESTRICTED	RESTRICTED	CONFIDENTIAL

DO NOT SCALE THE DRAWING  
ASK IF IN DOUBT  
UNLESS OTHERWISE SHOWN  
ALL DIMENSIONS ARE IN MILLIMETERS  
REMOVE SHARP EDGES & BURRS  
CHAMFER 1 M.M. X 45°  
MACHINING FINISH IN MICRONS :-  
▽ 8 - 25    ▽ 1.6 - 8  
▽▽ 0.025 - 1.6    ▽▽▽ < 0.025

DEVIATION FOR NON TOLERANCED DIMENSIONS (IS -2102)	
DIAMETERS & LENGTHS UPTO & INCL. 6 ±0.1	LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL.
6 - 30 ±0.2	1 - 6 ± 1'-00
30 - 120 ±0.3	6 - 30 ± 0'-30
120 - 315 ±0.5	30 - 120 ± 0'-20
315 - 1000 ±0.8	120 - 400 ± 0'-10
1000 - 2000 ±1.2	
2000 - 4000 ±2.0	
4000 & ABOVE ±3.0	

**SCEND**  
SHAR CENTRAL DESIGNS  
DESIGNED: [Signature]  
DES.CHRD: [Signature]  
DRAWN: V. V. R 11.01.24  
DRG.CHRD: [Signature]  
APPROVED: [Signature]  
SIGN. DATE

S.NO	DESCRIPTION	MATERIAL	QTY	W.T	REMARKS
	HINGE PIN, SPACERS, LOCKING PLATE & BEARING COVERS FOR WHEEL BOGIE SYSTEM OF SLC PROJECT				

**GOVERNMENT OF INDIA**  
**INDIAN SPACE RESEARCH ORGANISATION**  
**SATISH DHAWAN SPACE CENTRE SHAR**  
**SRIHARIKOTA**

SCALE: 1 : 5    DRG. NO. 10-MECH-12-8-31/A1/R1    SHEET 1 OF 1