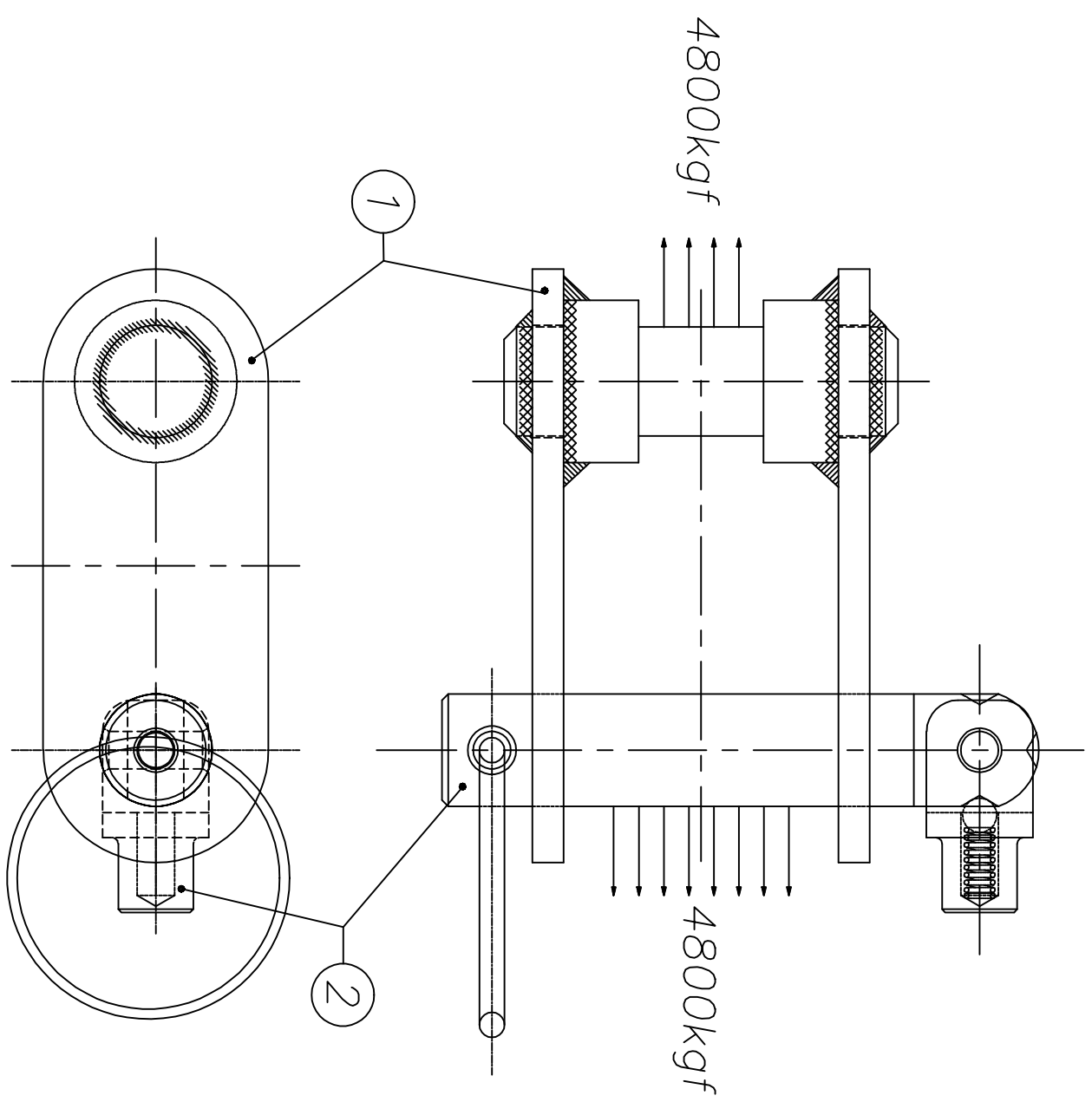


TOLERANCE:- IS:2102(PART-1):1993 MEDIUM EXCEPT WHERE OTHERWISE SPECIFIED.
 PROCESS : MACHINING

Ref.NO.	DATE	ZONE	AUTHORITY	BRIEF RECORD			I/C D&S	HEAD Q.A.	
SCALE:- NTS	QTY:- 1 No.		A D R D E AGRA	DRN..	SK SHARMA		PROJ.DFFR/GP.DFFR.		
DIMENSIONS IN mm			GROUP:- HDS		CHD.	JC DUTTA	APPROVED		
TOL:- AS ABOVE			<p style="text-align: center;">RIVET</p> <p style="text-align: center;">LOCK PIN SUB ASSEMBLY SHACKLE WITH PIN HD SYSTEM FOR AN 32 A/C</p>					PROJ.DIR/GP.DIR.	
MATERIAL: STAINLESS STEEL (AUSTENITIC) 04Cr18Ni10 AS PER IS:6527-1972								DRG. NO. ADRDE/ 1410-02-05	
FINISH: _____									
HEAT TREATMENT:- _____									

1				
2	ADPDE 1410 02	LOCK PIN SUB ASSEMBLY	1	5-10
1	ADPDE 1410 01	SHACKLE	1	2-4
ITEM NO.	DRG./SPECN NO.	NOMENCLATURE	QTY	SHEET NO.

ITEM LIST



PROOF LOAD TEST :
SHACKLE TO BE TESTED FOR 4800kgf LOAD
AS SHOWN IN DRAWING.

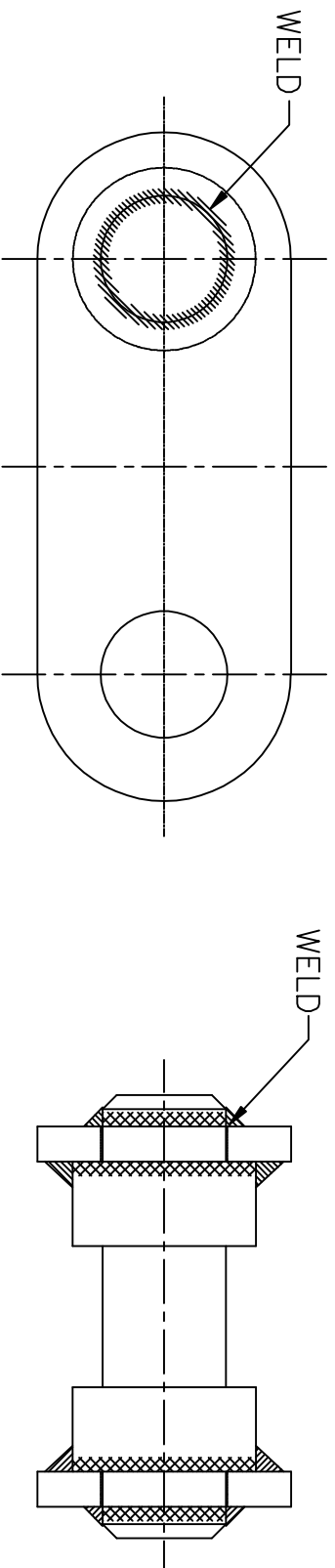
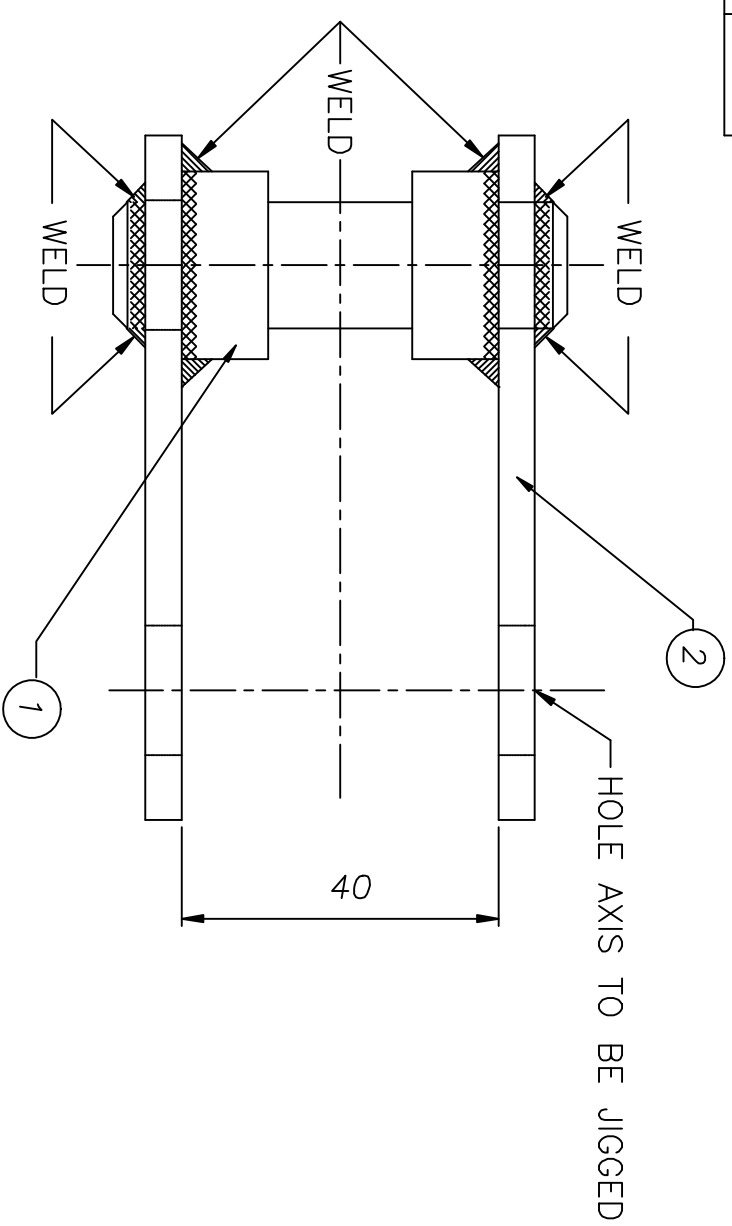
FITMENT TEST :
IT SHOULD BE FITTED TO THE QUICK RELEASE FASTENER
(ADPDE 1409) WITHOUT ANY PROBLEM.

Ref. NO.	DATE	ZONE	AUTHORITY	BRIEF RECORD	O/I/C D&S	HEAD O.A.
1						

SCALE:- 1:1	QTY:- 1 NO.	ADPDE AGRA	DRN	SK SHARMA	APPROVED
DIMENSIONS IN mm		GROUP:- HDS	CHD.	JC DUTTA	
TOLERANCE: UNLESS OTHERWISE SPECIFIED IS:2102(PART1) :1993 VERY COARSE MATERIAL:-		FINISH:- AS PER ANNEXURE 'C'; (SHEET No.11) HEAT TREATMENT		ASSEMBLY SHACKLE WITH PIN HD SYSTEM FOR AN 32 A/C	
				PROJ.DIR./GP OFFR	
				DRG. NO. ADPDE/ 1410	
				PROJ.DIR./GP DIR.	

1	2	3	4
ADPDE 1410 01 02	PLATE	2	4
ADPDE 1410 01 01	ROD	1	3
ITEM NO./	DRG./SPECN. NO.	NOMENCLATURE	QTY SHEET NO.

ITEM LIST



NOTE:-

ROUND OFF ALL SHARP CORNERS TO RADIUS R 2

WELDING :

ALL WELDED JOINTS ARE TO BE WELDED WITH ALLOY STEEL ELECTRODE

GRADE E688BM2-29 FeT0 IS:1395 OR TENOCITO-75 OF ADVANI DERLIKON OR

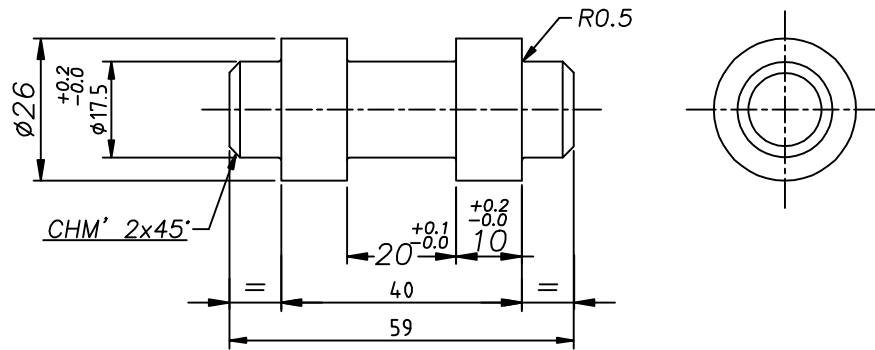
MODI-110 OR EQUIVALENT ALL WELDED JOINTS SHOULD BE TESTED BY DPT

AS PER IS:3658 BEFORE FINISH.

MANUFACTURING PROCESS : FABRICATION

Ref. NO.	DATE	ZONE	AUTHORITY	BRIEF RECORD	O/I/C D&S	HEAD O.A.
1						

SCALE:- 1:1	QTY:- 1 NO.	A D R D E AGRA	DRN	SK SHARMA
DIMENSIONS IN mm		GROUP:- HDS	CHD.	JC DUTTA
TOLERANCE: UNLESS OTHERWISE SPECIFIED IS:2102(PART1) :1993 VERY COARSE		SHACKLE SHACKLE WITH PIN HD SYSTEM FOR AN 32 A/C		
MATERIAL:-		APPROVED		
FINISH:- AS PER ANNEXURE 'C' (SHEET No.11)		PROJ.OFFR./GP.OFFR		
HEAT TREATMENT		DRG. NO. ADPDE/ 14-10- 01		
		PROJ.DIR./GP.DIR.		



TOLERANCE:- IS:2102(PART-1)1993 MEDIUM EXCEPT WHERE OTHERWISE SPECIFIED.
 PROCESS : MACHINING

Ref.NO.	DATE	ZONE	AUTHORITY	BRIEF RECORD		O I/C D&S	HEAD Q.A.
SCALE:- NTS		QTY:- 1 NO.		A D R D E AGRA		DRN.. SK SHARMA	
DIMENSIONS IN mm		GROUP:-HDS		CHD.		JC DUTTA	
TOL:- AS ABOVE		<p style="text-align: center;">ROD SHACKLE (SHACKLE WITH PIN) HD SYSTEM FOR AN 32 A/C</p>		PROJ.OFFR./GP.OFFR.			
MATERIAL: STEEL ALLOY 709M40/817M40 (EN19/EN24),AS PER BS:970				APPROVED			
FINISH: AS PER ANNEXURE 'C' (SHEET No.11)				PROJ.DIR/GP.DIR.			
HEAT TREATMENT:- HARDENED & TEMPERED 32±5 HRC				DRG. NO. ADRDE/ 1411- 01- 01			

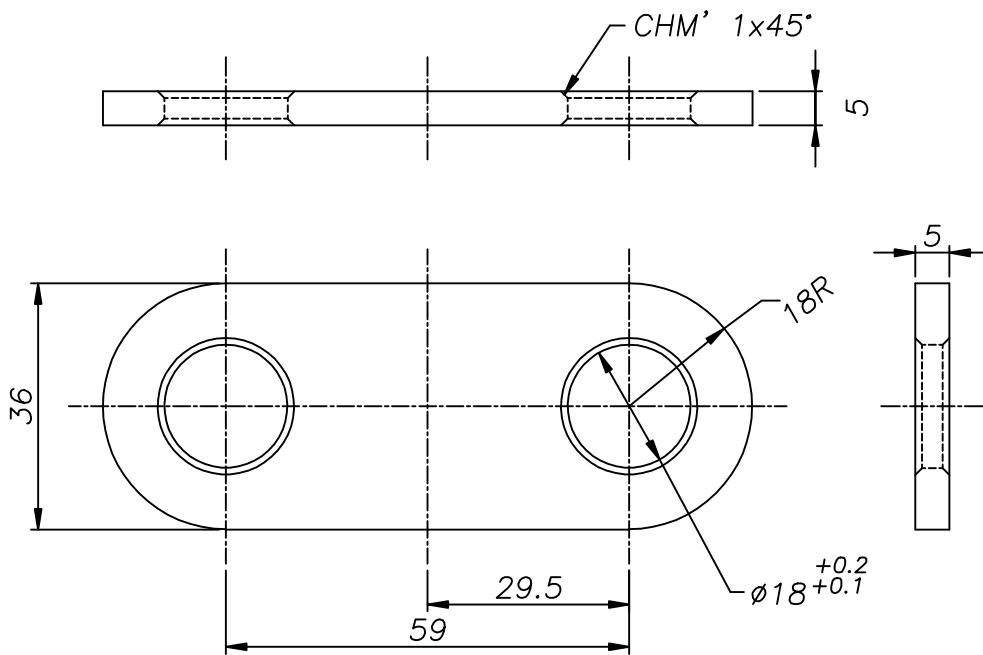
A

B

C

D

E



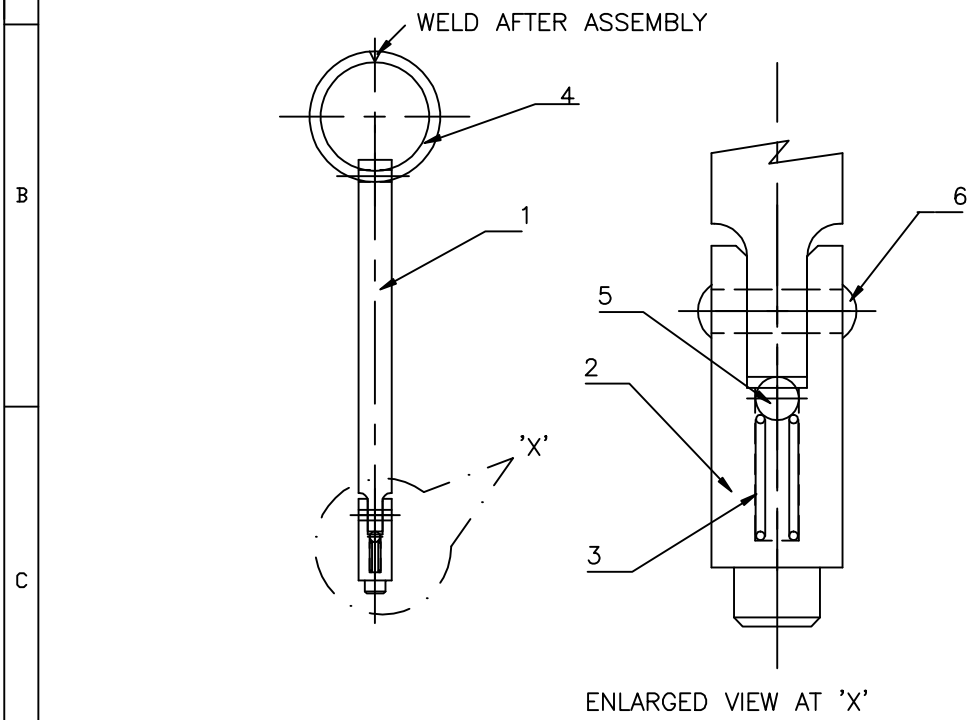
TOLERANCE:- IS:2102(PART-1):1993 MEDIUM EXCEPT WHERE OTHERWISE SPECIFIED.
 PROCESS : MACHINING

Ref.NO.	DATE	ZONE	AUTHORITY	BRIEF RECORD	O I/C D&S	HEAD Q.A.
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SCALE:- NTS	QTY:- 2 Nos.	A D R D E AGRA	DRN..	SK SHARMA	PROJ.OFFR./GP.OFFR.		
DIMENSIONS IN mm		GROUP:-HDS	CHD.	JC DUTTA	APPROVED		
TOL:- AS ABOVE		<p style="text-align: center;">PLATE</p> <p style="text-align: center;">SHACKLE (SHACKLE WITH PIN)</p> <p style="text-align: center;">HD SYSTEM FOR AN 32 A/C</p>				PROJ.DIR./GP.DIR.	
MATERIAL: STEEL ALLOY 709M40/817M40, (EN19/EN24),AS PER BS:970						DRG. NO.	ADRDE/ 14-10- 01- 02
FINISH: AS PER ANNEXURE 'C' AS PER SHEET No.11							
HEAT TREATMENT:- HARDENED & TEMPERED 32±5 HRC							

1		2			3		4	
6	ADRDE 1410 02 05	RIVET	1	10	SHEET 5 OF 10			
5	STAINLESS STEEL BALL COMMERCIAL QUALITY	BALL Ø 5.5	1					
4	ADRDE 1410 02 04	RING	1	9				
3	ADRDE 1410 02 03	SPRING	1	8				
2	ADRDE 1410 02 02	FORK	1	7				
1	ADRDE 1410 02 01	PIN	1	6				
ITEM No.	DRG. NO.	NOMENCLATURE	QTY	SHEET No.				

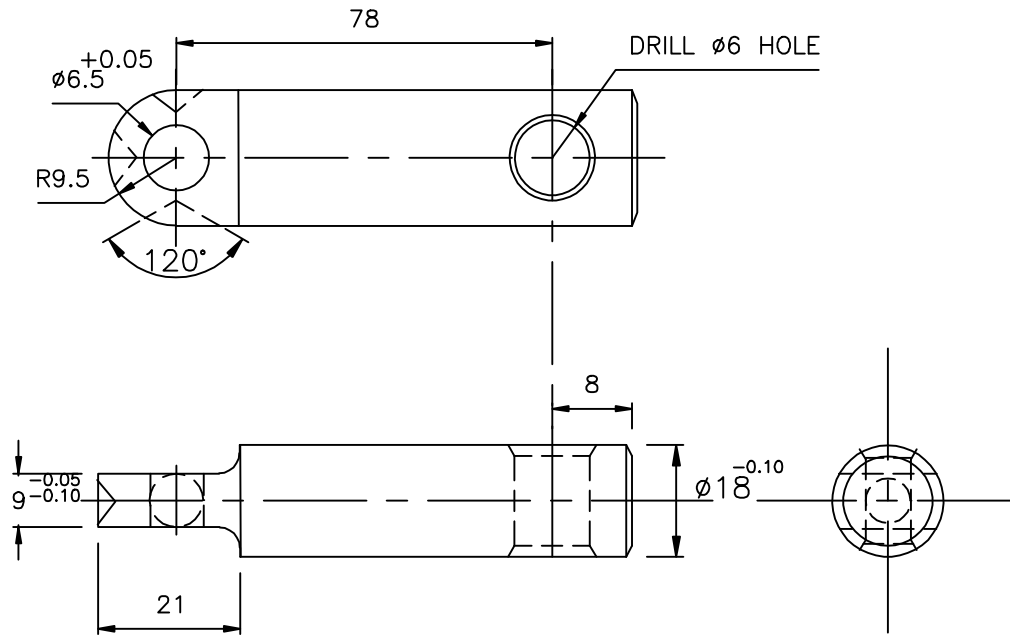
DETAIL INDEX



WELDING :
ALL WELDED JOINTS SHOULD BE WELDED BY ELECTRODES CONFORMING TO ADVANI OERLIKON SUPERCITO AWS/SFA 5.1-E7018 ISEB-5426 H3Jx OR ITS EQUIVALENT.

TOLERANCE:- IS:2102(PART-1):1993 MEDIUM EXCEPT WHERE OTHERWISE SPECIFIED.
PROCESS : FABRICATION

Ref.NO.	DATE	ZONE	AUTHORITY	BRIEF RECORD			□ I/C D&S	HEAD Q.A.
SCALE:- NTS	QTY:- 1 No.	A D R D E AGRA	DRN.	SK SHARMA	PROJ.DFFR/GP.DFFR.			APPROVED
DIMENSIONS IN mm	GROUP:-HDS	CHD.	JC DUTTA					
TOL:- AS ABOVE	LOCK PIN SUB ASSEMBLY SHACKLE WITH PIN HD SYSTEM FOR AN 32 A/C			PROJ.DIR/GP.DIR.				
MATERIAL:				DRG. NO. ADRDE/ 1410 -02				
FINISH: SHEET No.11 AS PER ANNEXURE 'C'								
HEAT TREATMENT:-								

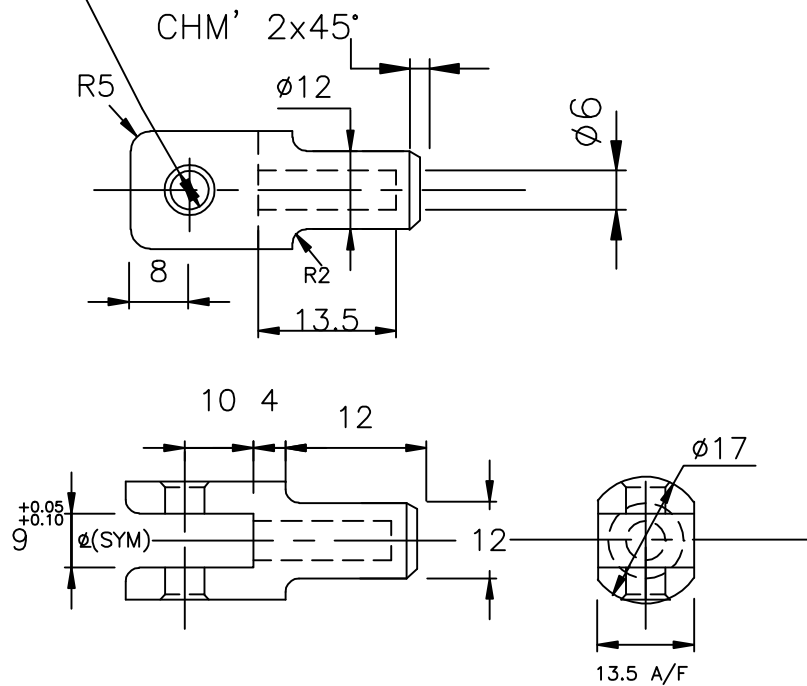


TOLERANCE:- IS:2102(PART-1):1993 MEDIUM EXCEPT WHERE OTHERWISE SPECIFIED.
 PROCESS : MACHINING

Ref.NO.	DATE	ZONE	AUTHORITY	BRIEF RECORD	I/C D&S	HEAD Q.A.
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SCALE:-NTS	QTY:- 1 No.	A D R D E AGRA	DRN..	SK SHARMA	PROJ.OFFR/GP.OFFR.	
DIMENSIONS IN mm		GROUP:-HDS	CHD.	JC DUTTA	APPROVED	
TOL:- AS ABOVE		PIN LOCK PIN SUB ASSEMBLY SHACKLE WITH PIN HD SYSTEM FOR AN 32 A/C				PROJ.DIR/GP.DIR.
MATERIAL: STEEL ALLOY 709M40/817M40, (EN19/EN24),AS PER BS:970						DRG. NO. ADRDE/ 1410 -02- 01
FINISH: AS PER ANNEXURE 'C' (SHEET No.11)						
HEAT TREATMENT:- HARDENED & TEMPERED 32±5 HRC						

* ± 0.05
 $\phi 6.4$ (CSK' ON BOTH SIDES)



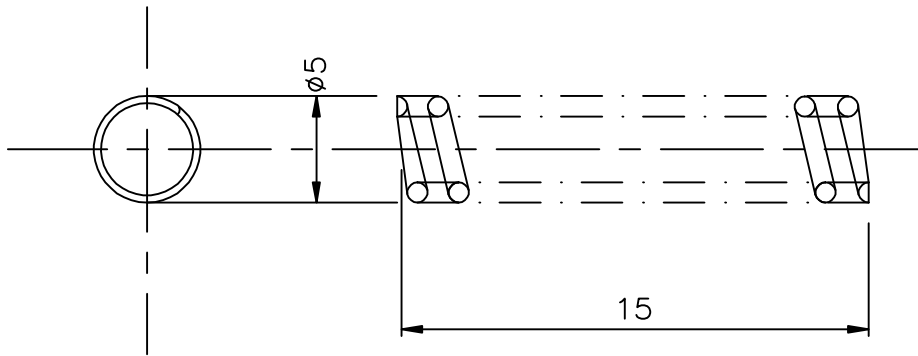
* DRILL $\phi 6.4$ TO MATCH RIVET CSK' ON BOTH SIDES

TOLERANCE:- IS:2102(PART-1):1993 MEDIUM EXCEPT WHERE OTHERWISE SPECIFIED.

PROCESS : MACHINING

Ref.NO.	DATE	ZONE	AUTHORITY	BRIEF RECORD	I/C D&S	HEAD Q.A.
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E	SCALE:- NTS	QTY:- 1 No.	A D R D E AGRA	DRN..	SK SHARMA	PROJ.DFFR/GP.DFFR. APPROVED PROJ.DIR/GP.DIR. DRG. NO. ADRDE/ 1410 -02- 02
	DIMENSIONS IN mm		GROUP:-HDS	CHD.	JC DUTTA	
	TOL:- AS ABOVE					
	MATERIAL: STEEL ALLOY 709M40/817M40, (EN19/EN24),AS PER BS:970		FORK LOCK PIN SUB ASSEMBLY SHACKLE WITH PIN HD SYSTEM FOR AN 32 A/C			
	FINISH: AS PER ANNEXURE 'C' (SHFFT No.11)					
	HEAT TREATMENT:- HARDENED & TEMPERED 32 \pm 5 HRC					



NOTE :

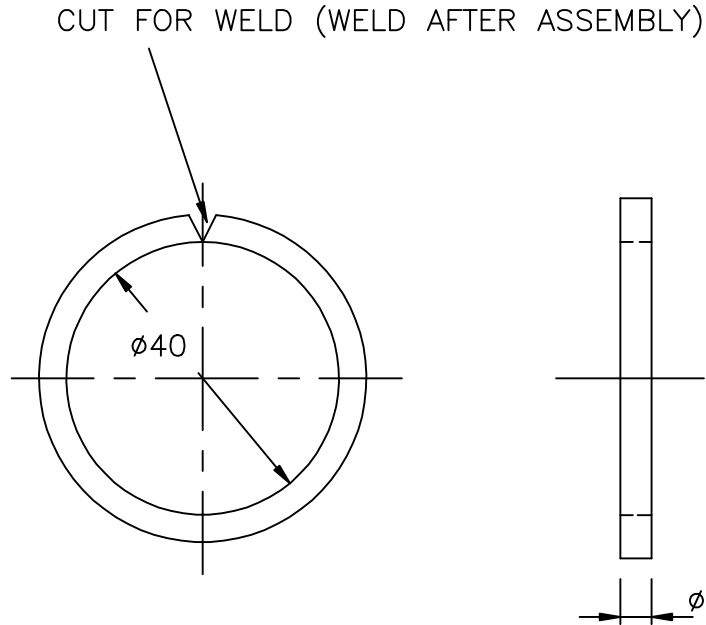
1. WIRE DIAMETER = 0.8
2. TOTAL No. OF COILS = 9
3. TOTAL No. OF EFFECTIVE COILS = 7
4. ENDS ARE GROUND SQUARE TO AXIS
5. STIFFNESS OF SPRING = 0.729kg/mm

TOLERANCE:-

IS:2102(PART-1) : 1993 VERY COARSE EXCEPT WHERE OTHERWISE SPECIFIED.

PROCESS : FABRICATION

REF.NO.	DATE	ZONE	AUTHORITY	BRIEF RECORD			I/C D&S	HEAD Q.A.
SCALE:-NTS	QTY:- 1 No.		A D R D E AGRA	DRN..	SK SHARMA		PROJ.DFFR/GP.DFFR.	
DIMENSIONS IN mm			GROUP:-HDS	CHD.	JC DUTTA		APPROVED	
TOL:- AS ABOVE			<p style="text-align: center;">SPRING.</p> <p style="text-align: center;">LOCK PIN SUB ASSEMBLY SHACKLE WITH PIN HD SYSTEM FOR AN 32 A/C</p>			PROJ.DIR/GP.DIR.		
MATERIAL: STEEL ALLOY 709M40/817M40 , (EN19/EN24),AS PER BS:970						DRG. NO. ADRDE/ 1410- 02- 03		
FINISH: _____								
HEAT TREATMENT:- HARDENED & TEMPERED 32±5 HRC								



TOLERANCE:- IS:2102(PART-1):1993 MEDIUM EXCEPT WHERE OTHERWISE SPECIFIED.
 PROCESS : FABRICATION

Ref.NO.	DATE	ZONE	AUTHORITY	BRIEF RECORD			I/C D&S	HEAD Q.A.
SCALE:-NTS		QTY:- 1 No.		ADRDE AGRA	DRN.	SK SHARMA	APPROVED	
DIMENSIONS IN mm		GROUP:-HDS		CHD.	JC DUTTA			
TOL:- AS ABOVE		MATERIAL: MILD STEEL ST-42 S ,AS PER IS:226		RING LOCK PIN SUB ASSEMBLY SHACKLE WITH PIN HD SYSTEM FOR AN 32 A/C			PROJ.DFFR/GP.DFFR.	
FINISH: AS PER ANNEXURE 'C' (SHEET No.11)		HEAT TREATMENT:- NORMALISING					PROJ.DIR/GP.DIR.	
							DRG. NO. ADRDE/ 1410- 02- 04	