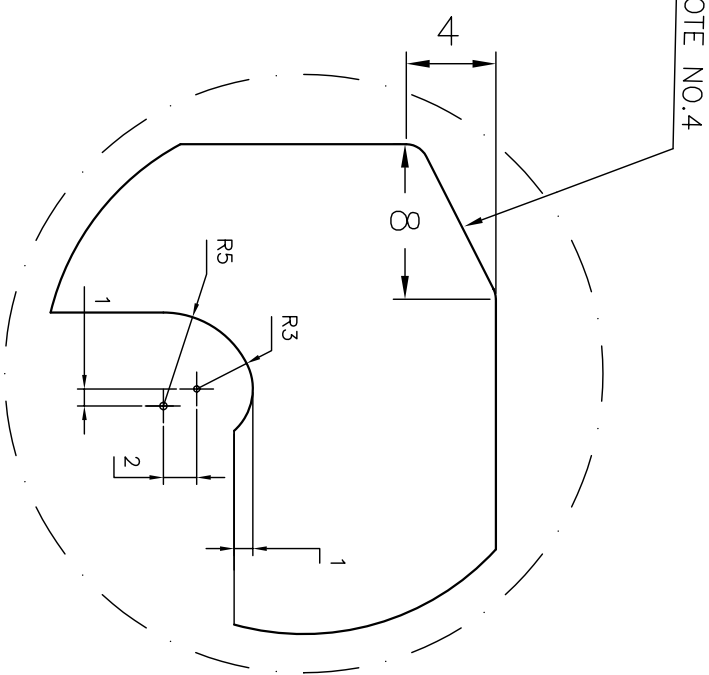
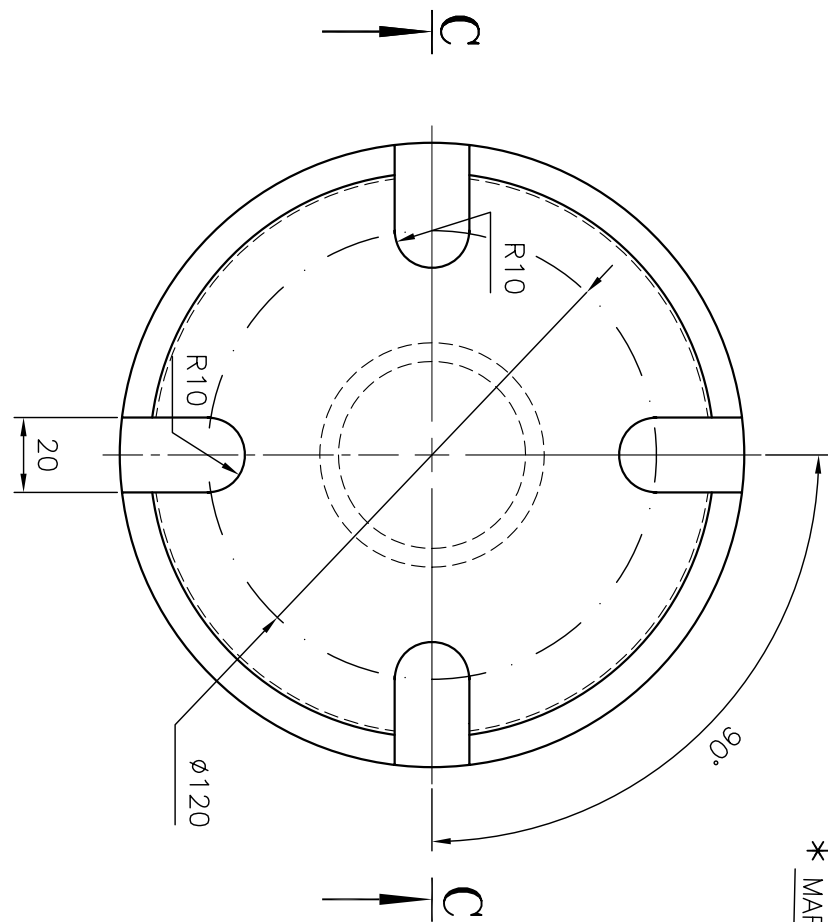
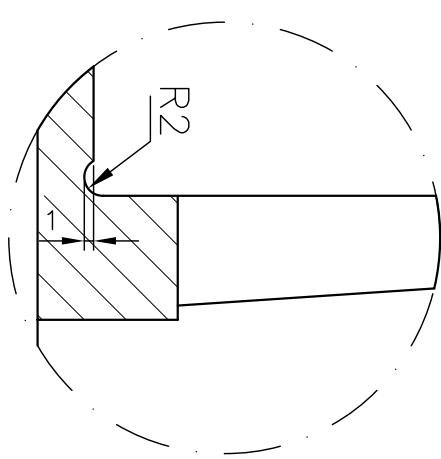
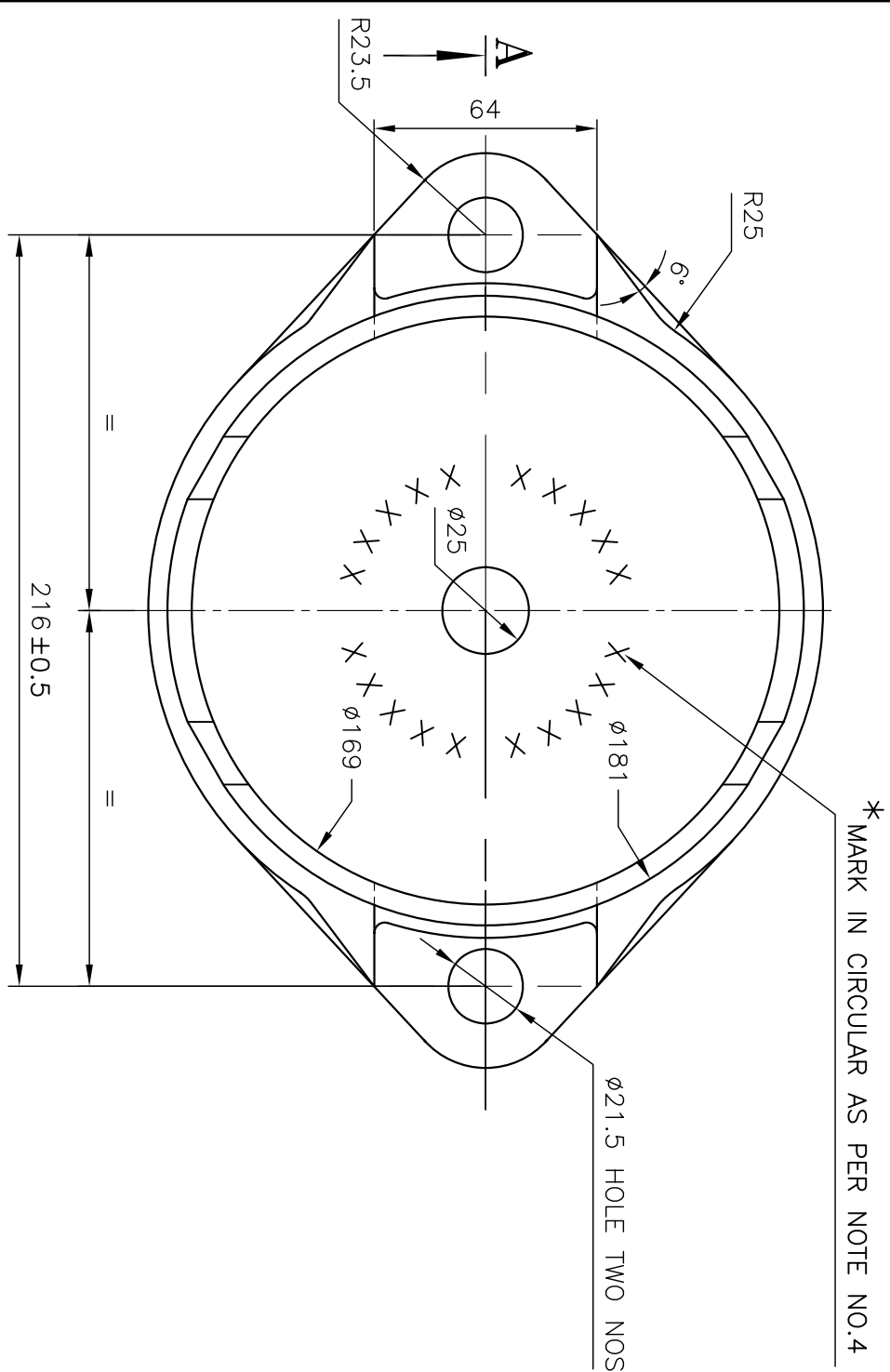


SECTION – ‘AA’

SECTION – ‘BB’

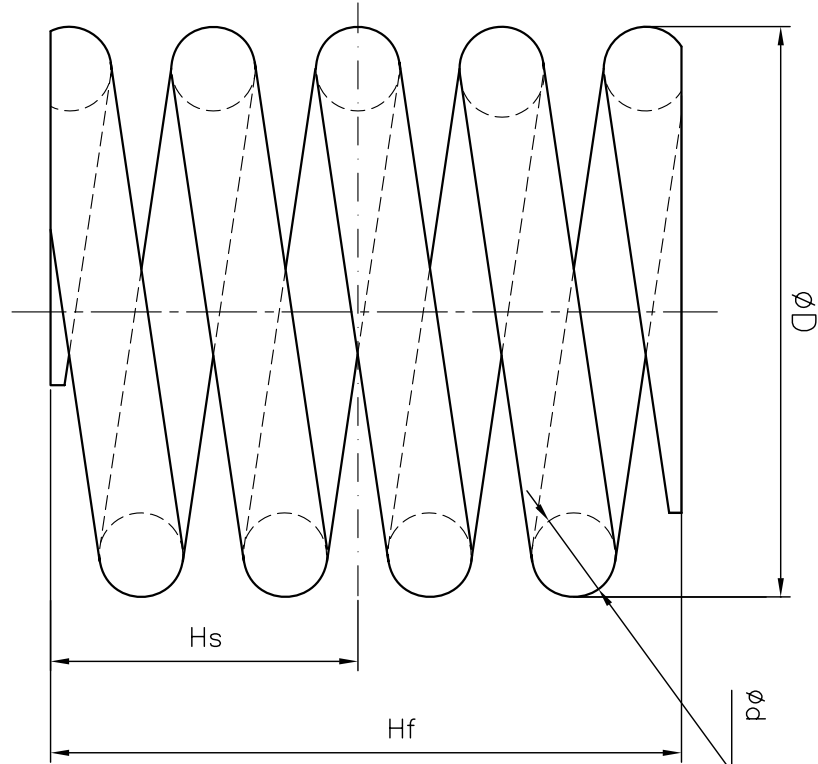
SECTION – ‘CC’



ENLARGED DETAIL AT-'A'

SPRING DESIGN DATA TABLE

DESCRIPTION	OUTER SPRING	INNER SPRING
FREE HEIGHT (Hf) (mm)	143±1	143±1
SOLID HEIGHT (Hs) (mm)	86.50	86.50
DEFLECTION FREE TO SOLID (mm)	56.50	56.50
WIRE DIA (d) (mm)	21.00	15.00
OUTER DIA OF COILS (D) (mm)	144.5	97.5
NO. OF EFFECTIVE COILS	3.02	4.66
SOLID CAPACITY (kg)	1930	1090
SCRAG TEST LOAD (Kg)	1930	1090
VERTICAL STIFFNESS (Kg/mm)	34.22	19.33
WINDING	R.H.	L.H.
WORKING HEIGHT (mm)	108.5	108.5



PARAMETERS	VALUE
FREE HEIGHT	163±1.5 mm
TEST SET UP HEIGHT	126.5 mm
SOLID HEIGHT	112.5 mm
PRE LOAD	1850±100 Kg
WEIGHT OF ASSEMBLY	16.4 kg (Approx)

DESIGN PARAMETERS OF CCSB

PARAMETERS	VALUE
FREE HEIGHT	163±1.5 mm
TEST SET UP HEIGHT	126.5 mm
SOLID HEIGHT	112.5 mm
PRE LOAD	1850±100 Kg
WEIGHT OF ASSEMBLY	16.4 kg (Approx)

9. SOLID HEIGHT OF THE SPRINGS SHOULD NOT BE MORE THAN AS SPECIFIED IN THIS DRAWING.
10. FIRM SHALL BE MANUFACTURING AT LEAST SPRINGS OR HOUSINGS. TESTING FACILITIES OF MANUFACTURED COMPONENTS ALONG WITH ASSEMBLED COSB SHALL BE AVAILABLE WITH THE FIRM. INSPECTION AND TESTING OF MANUFACTURED COMPONENTS SHALL BE DONE AT FIRM'S PREMISE.
11. THE SPRINGS AND OUTER SURFACE OF SIDE BEARER ASSEMBLY SHALL BE PAINTED IN SYNTHETIC ENAMEL MIDDLE BRUNSWICK GREEN ISC 226 TO IS:8662 (NO MATING SURFACES OF HOUSING SHALL BE PAINTED).

ITEM	DESCRIPTION & DIMENSIONS	NO. OF PER BOLT	REF.: DRG.	UNIT WEIGHT (KG)	MAT.&SPEC.	REMARKS
8	Ø4 SPLIT PIN	4	—	—	IS:549	—
7	M20 CASTLE NUT	4	—	0.1	IS:2232	—
6	SPRING WASHER	4	—	0.03	IS:2016	—
5	HIGH TENSILE BOLT M20X80—8.8	4	—	0.3	IS:1363	—
4	INNER SPRING	2	—	2.1	IS:3195 GR.52C4M2V	—
3	OUTER SPRING	2	—	4.5	IS:3195 GR.52C4M2V	—
2	TOP HOUSING	2	—	4.9	**	SEE NOTE 6
1	BOTTOM HOUSING	2	—	4.5	**	SEE NOTE 6

SUPERSEDED BY		DATE	FOR INDIAN RAILWAY FREIGHT BOGIES
SUPERSEDES			
SCALE PASSED	0 P.M.O.	08/14	
1-2 CHECKED	S.S. SHARMA	08/14	
1-1 DRAWN	WUESH	08/14	
1-1 TRACED			
J.SHEET	WD-12008	02/12	
B.G.		R.D.S.O. (W)	WD-12008-S/1

LOAD (TONNES)	HEIGHT (mm)		TEST LOAD
	OUTER SPRING	INNER SPRING	
0.25	128.39	117.14	86.5
0.5	121.09	104.21	
0.75	113.78	91.28	86.5
1.00	106.48	–	
1.25	99.18	–	86.5
1.5	–	–	

TEST TABLE FOR SPRINGS

LOAD (TONNES)	HEIGHT (mm)		TEST LOAD
	OUTER SPRING	INNER SPRING	
0.25	135.69	130.07	86.5
0.5	128.39	117.14	
0.75	121.09	104.21	
1.00	113.78	91.28	
1.25	106.48	–	
1.5	99.18	–	86.5

ASSEMBLY OF SIDE BEARER

NOTE:

1. SURFACE ROUGHNESS VALUES TO IS:3073.
2. UNSPECIFIED TOLERANCE ON CASTING DIMENSIONS SHALL BE AS PER IS:4897 CLASS-I CATEGORY.
3. UNSPECIFIED TOLERANCE ON MACHINED DIMENSIONS SHALL BE AS PER IS:2102 MEDIUM CLASS. ALL SHARP CORNERS TO BE ROUNDED OFF.

4. MARKING ON BOTH (TOP & BOTTOM) HOUSINGS SHALL BE "WD-62-MISC-17".
- "MANUFACTURER'S INITIAL" AND "MONTH & YEAR OF MANUFACTURE" IN DEPRESSED (1-2 mm AFTER MACHINING) LETTERS OF AT LEAST 5mm HEIGHT AT LOCATIONS AS INDICATED.
5. SIDE BEARER ASSEMBLY SHALL ALSO BE TESTED AT THE VERTICAL FORCE OF 94.8t THROUGH TOP SURFACE OF THE TOP HOUSING FOR ABOUT ONE MINUTE WITHOUT EXPERIENCING ANY CATASTROPHIC FAILURE OR PERMANENT SET.

- *** 6. ITEM NO. 1 & 2 SHALL BE ADI CASTING AS PER ASTM SPECIFICATION A897/A897M GRADE-1050/750/7 OR ONE GRADE HIGHER AND SOURCED FROM R.D.S.O. APPROVED VENDOR. FORGE HOUSINGS OF EQUIVALENT PROPERTIES CAN BE USED WITH PRIOR APPROVAL OF R.D.S.O.

7. FOR FORGED HOUSINGS, FIRM SHALL SUBMIT THEIR OWN DRAWING INDICATING RAW MATERIAL SPECIFICATION, FINAL PROPERTIES OF THE FINISHED HOUSINGS AND TEST METHODS. 8. THE SPRINGS SHALL BE MANUFACTURED & INSPECTED AS PER RD SO SPECIFICATION WD-01-HLS-94 (LATEST) WITH REQUIREMENTS OF THIS DRAWING AND SOURCED FROM R.D.S.O. APPROVED VENDOR.