

For Steel Auto Industries  
Auth. Sign.

- NOTES :-

1. ALL DIMENSIONS ARE IN MM.
2. BOTTOM "T" PLATE AND TOP "U" PLATE SHALL BE OF CAST STEEL CONFORMING TO GRADE 340-570W OF IS:1030
3. SPREADER PLATES SHALL BE OF MILD STEEL CONFORMING TO GRADE B OF IS:2062 & STUD OF FORGED STEEL CL-4 OF IS2004
4. H.T.BOLTS SHALL CONFORM TO GRADE 10.9 OF IS:1367.
5. RAW MATERIAL SHALL BE SAMPLE TESTED FOR PHYSICAL & CHEMICAL PROPERTIES AND STEEL PARTS ULTRASONICALLY TESTED FOR SOUNDNESS.QUALITY OF CASTING SHALL SATISFY LEVEL 3 OF IS:9565
6. SUITABLE TEMPORARY CLAMPS FOR SAFE TRANSPORTATION AND HANDLING ALONGWITH TEMPLATE FOR ALIGNMENT SHALL BE PROVIDED FOR EACH BEARING.
7. MATERIALS, MANUFACTURING ACCEPTANCE, CERTIFICATION, MARKING & INSTALLATION OF BEARINGS SHALL CONFORM TO IRC:83 (PART III)



Harbhajan Singh  
Team Leader  
VSPL, Shivasagar


DETAIL OF PRESET TO BE MARKED ON  
TOP OF BEARING

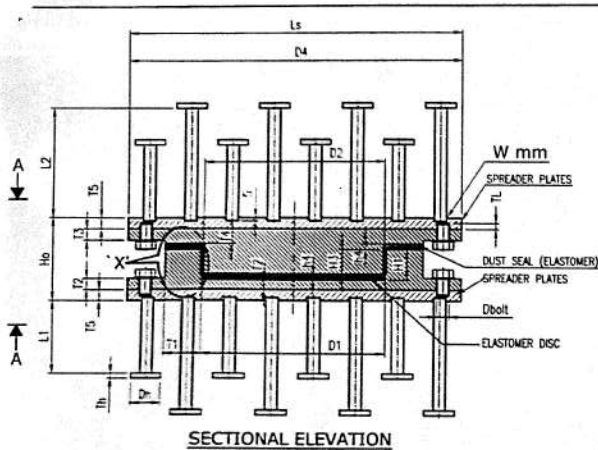
**GOOD FOR CONSTRUCTION**



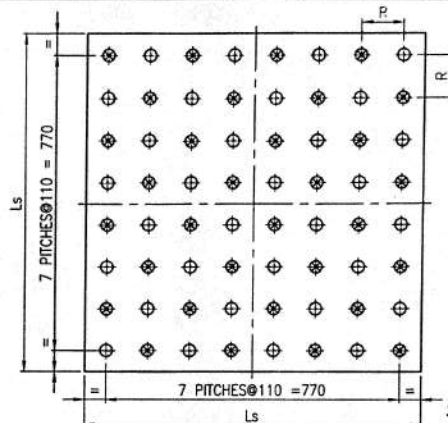
DESIGN DATA	
HORIZ. LOAD (KN)	1783
MOVEMENT (MM)	±27
ROTATION (RAD)	0.01

MG	1	01	CH-516+938-27.49 M
BEARING TYPE	TYPE	QTY.	LOCATION

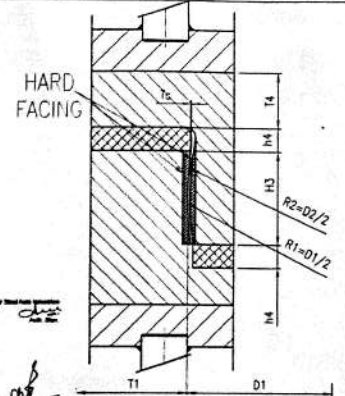
<div style="display: flex; justify-content: space-between;"> <div> <p>CLIENT: </p> <p>NATIONAL INSTITUTE OF INFRA-STRUCTURE DEVELOPMENT CORPORATION LTD. 17th FLOOR, 17th MAIN STREET, CHENNAI - 600 008</p> </div> <div> <p>PROJECT: FOUR LANNING OF JAWAHAR TO DESIGN SECTION OF NH-37 PROBLEMS TINAI CHIR 681160 TO NH-37-2000000 CH/AM 681160 TO NM 681160 IN THE STATE OF KARNATAKA UNDER BPC MADE</p> </div> <div> <p>FOR APPROVAL DATE: 30-05-2020</p> </div> </div>									
<div style="display: flex; justify-content: space-between;"> <div> <p>DESIGN CONSULTANT: </p> <p>M/S. C. S. S. &amp; CO. LTD. BANGALORE, KARNATAKA 7th FLOOR, 17th MAIN STREET, CHENNAI - 600 008</p> </div> <div> <p>CONTRACTOR: </p> <p>GANNON ENGINEERING &amp; CO. LTD. BANGALORE, KARNATAKA 7th FLOOR, 17th MAIN STREET, CHENNAI - 600 008</p> </div> <div> <p>DESIGN CONSULTANT: </p> <p>M/S. C. S. S. &amp; CO. LTD. BANGALORE, KARNATAKA 7th FLOOR, 17th MAIN STREET, CHENNAI - 600 008</p> </div> </div>									
<div style="display: flex; justify-content: space-between;"> <div> <p>DESIGNED BY: A.JAY</p> <p>CHECKED BY: SANCHIT WALLIA</p> </div> <div> <p>DRAWN BY: K.P. YADAV</p> <p>CHECKED BY: SANCHIT WALLIA</p> </div> <div> <p>TITLE: DETAILS OF METALLIC GUIDE BEARING</p> <p>SCALE: N.T.S.</p> <p>DRAWING NO: SAI-VSD-7500</p> </div> </div>									



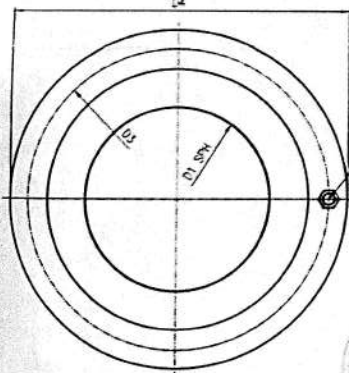
SECTIONAL ELEVATION



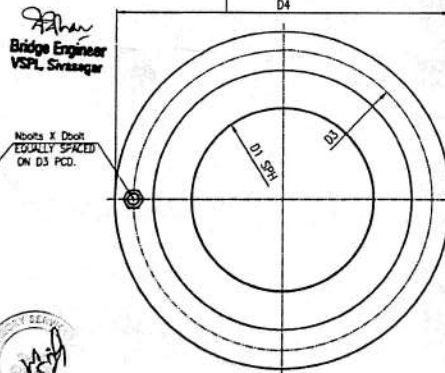
VIEW A-A



ENLARGED DETAIL - 'X'



PLAN OF BOTTOM POT



PLAN OF UNDER SIDE OF TOP PISTON

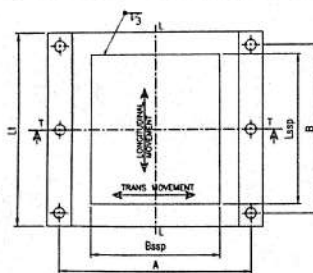
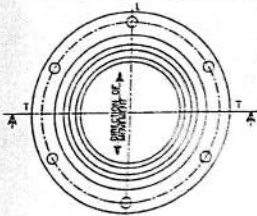
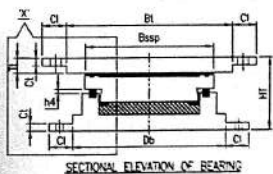
LEGEND		NOTES :-	
D1	CYLINDER BORE DIA.	1.	ALL DIMENSIONS ARE IN MM.
D2	PISTON DIA.	2.	TOP PLATE AND BASE PLATE SHALL BE OF CAST STEEL CONFORMING TO GRADE 340-570W OF IS.1030
L1	LENGTH SMALL STUD	3.	STUDS ARE FORGED STEEL OF CL-3A OF IS.2004 AND SPREADER PLATE OF MILD STEEL CONFORMING TO GRADE B OF IS.2062
L2	LENGTH BIG STUD	4.	H.T.BOLTS SHALL CONFORM TO GRADE 10.9 OF IS.1364 & IS.1367.
Dh	DIA. STUD HEAD	5.	RAW MATERIAL SHALL BE SAMPLE TESTED FOR PHYSICAL & CHEMICAL PROPERTIES AND STEEL PARTS ULTRASONICALLY TESTED FOR SOUNDNESS. QUALITY OF CASTING SHALL SATISFY LEVEL 3 OF IS.9565
Th	THICKNESS STUD HEAD	6.	DIMENSIONAL TOLERANCE SHALL CONFORM TO IRC 83 (PART II)
L3	PLAN SPREADER PLATE	7.	UPPER PORTION OF INNER VERTICAL FACE OF POT AND LOWER CURVE EDGE OF PISTON SHALL HARD FACED BY METALLURGICAL PROCESS TO SURFACE HARDNESS OF MINIMUM 300 BHN AND MACHINED TO FINISHED
T5	THICKNESS SPREADER PLATE	8.	SUITABLE TEMPORARY CLAMPS FOR SAFE TRANSPORTATION & HANDLING ALONGWITH TEMPLATE FOR ALIGNMENT SHALL BE PROVIDED FOR EACH BEARING.
W	STUD WELD SIZE	9.	MATERIALS, MANUFACTURING ACCEPTANCE, CERTIFICATION, MARKING & INSTALLATION OF BEARINGS SHALL CONFORM TO IRC-83 (PART II) WORTH SPECIFICATION (4TH REVISION)/TENDER SPECIFICATIONS.
T2	POT BASE/EDGE THIK.		
T4	TOP PLATE THICKNESS		
T3	TOP PLATE EDGE THIK.		
D3	PCD OF BOLTS		
H0	TOTAL HEIGHT		
R0	ROW SPACING		
Tc	CURVED DEPTH		
T6	PISTON CONTACT		
Dstud	DIA. OF STUD		
Nstud	NO. OF STUD		
Dbolt	DIA. OF BOLT		
Nbolt	NO. OF BOLT		
h4	GAP BETWEEN POT & PISTON		

340 TON	485	78	113	24	897	483	66	-	50	18	28	64+64	110	27	897	168	252	70	11.2	12	22	12	218	30	26+26	801
Capacity	D1	H1	T1	T2	D4	D2	H3	-	T4	T3	Dstud	Nstud	R	T5	Ls	L1	L2	Dh	Th	W	TL	h4	Ho	Dbolt	Nbolt	D3

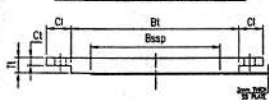
CLIENT:	DESIGNER:	CONTRACTOR:	DESIGN CONSULTANT:	PROJECT:	DRAWN BY:	DATE:	TITLE:

DESIGN DATA:-			
NO. OF LANE	344	UNIT	MM
NO. OF LANE	344	UNIT	MM
NO. OF LANE	344	UNIT	MM
NO. OF LANE	344	UNIT	MM

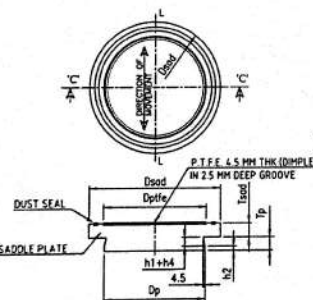
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NO. OF LANE	344	UNIT	MM
NO. OF LANE	344	UNIT	MM
NO. OF LANE	344	UNIT	MM



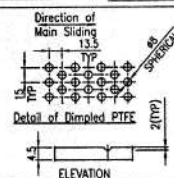
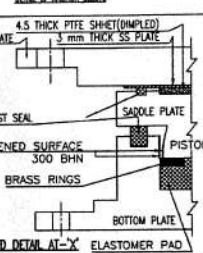
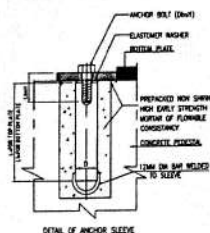
PLAN OF TOP PLATE WITH S.S. PLATE



SECTIONAL ELEVATION OF TOP PLATE -AT 'T'



ELEVATION OF PISTON WITH P.T.F.E. & SADDLE PLATE -AT 'CC'



DESCRIPTION	MATERIAL
DUST SEAL	ELASTOMER
INTERNAL SEAL	BRASS
PISTON	PISTON
S.S. PLATE	S.S.
PRESSURE SEAL	ELASTOMER
CHL. & BOTTOM PLATE	C.S.
SADDLE PLATE & PISTON	C.S.
TOP PLATE	C.S.
DESCRIPTION	MATERIAL

# NOTES:-

1. ALL DIMENSIONS ARE IN MM

2. BEARING LOADS & MOVEMENTS

	NORMAL	SEISMIC	UNIT
A. LOAD CAPACITY VERTICAL (MAX)	1305	1267	KN
B. LOAD CAPACITY VERTICAL (MIN)	836	1140	KN
C. HORIZONTAL (MAX) LONGITUDINAL	130	129	KN
HORIZONTAL (MAX) TRANSVERSE	00	00	KN
MOVEMENT	427/27		MM
LONGITUDINAL	25		MM
LATERAL	0.0100		RAD
ROTATION	616/716		MM
TOP/BOTTOM DISP.			

## 3. MATERIAL

- CONCRETE AT TOP BEARING SHALL BE OF M-50 CONCRETE AT BOTTOM BEARING SHALL BE OF M-35
- CAST STEEL IN POT CYLINDER AND BASE PLATE, PISTON, SADDLE PLATE, TOP PLATE SHALL CONFORM TO I.S.-1030 GRADE 340-570W
- MILD STEEL IN ANCHOR SLEEVE (WHERE WELDING IS INVOLVED) SHALL CONFORM TO I.S.-2062 GRADE B
- ELASTOMER SHALL BE OF RMD 50 ± 5 FOR PAD
- HT BOLTS SHALL CONFORM TO GRADE 8.8 OF IS 1567
- PTFE SHALL CONFORM WITH GRADE "A" OF IS 3784
- G.COLLARS SHALL BE INTEGRALLY CASTED IN TOP & BOTTOM PLATE
- HSS PLATE SHALL CONFORM TO IS 6911
- TWO BRASS RINGS CONFORMING TO IS 410 OF EQ. THICKNESS SPLIT AT 90° & PLACED STAGGERED BELOW 400 MM DIA & AND THREE ABOVE DIA & ABOVE
- NORMINAL SHEET
- RAW MATERIAL SHALL BE SAMPLE TESTED FOR PHYSICAL AND CHEMICAL PROPERTIES AS PER CODE
- QUALITY OF CASTING SHALL SATISFY LEVEL 3 OF IS 9585
- RECTIFICATION OF CASTINGS BY WELDING SHALL BE DONE AS PER IS 1030 AND IS 5530
- MANUFACTURING TOLERANCES FOR ALL PARTS SHALL BE AS PER PER CLAUSE 327.1 OF IRC:83(PTR)-2002
- ALL BEARING SHALL BE TESTED AS PER IRC 83 PT.-II
- FINISHING
- ALL NON WORKING SURFACE OF PLATES AND POT CYLINDER SHALL BE GIVEN TWO COATS OF EPOXY PRIMER AND ONE COAT EACH OF EPOXY INTERMEDIATE AND PAINT ALTOGETHER MAKING NOT LESS THAN 160 MICRON THICK
- SUITABLE CLAMPS FOR SAFE TRANSPORTATION, HANDLING AND ALIGNMENT SHALL BE PROVIDED FOR EACH BEARING
- SILICON GREASE TO BE ADDED BETWEEN PTFE/SS INTERFACE AFTER TESTING
- WELDING
- ALL WELDING WILL BE AS PER IS 814 & IS 9585 WITH ELECTRODES AS PER IS 814
- WELDING SS PLATE WILL BE DONE WITH ELECTRODES AISI 308

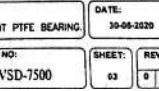
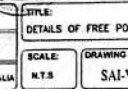
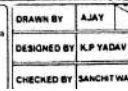
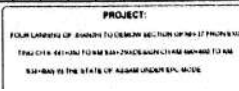
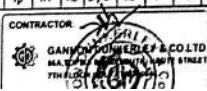
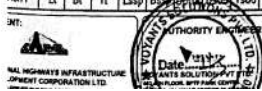
GOOD FOR CONSTRUCTION

FREE	FR	OR	27 49 M - CH-5164338
BEARING TYPE	TYPE	QTY	LOCATION

For Steel Auto Inspection  
Auth. Sign.



6 T	378	321	20	360	303	240	290	12	248	23	8	5	250	24	28	27	37	358	10	111	16	50	6+6	374	325	411	53	12	40	140	200	00 mm
ACTY	LI	BI	TI	Lasp	Base	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top



DATE: 30-09-2020

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