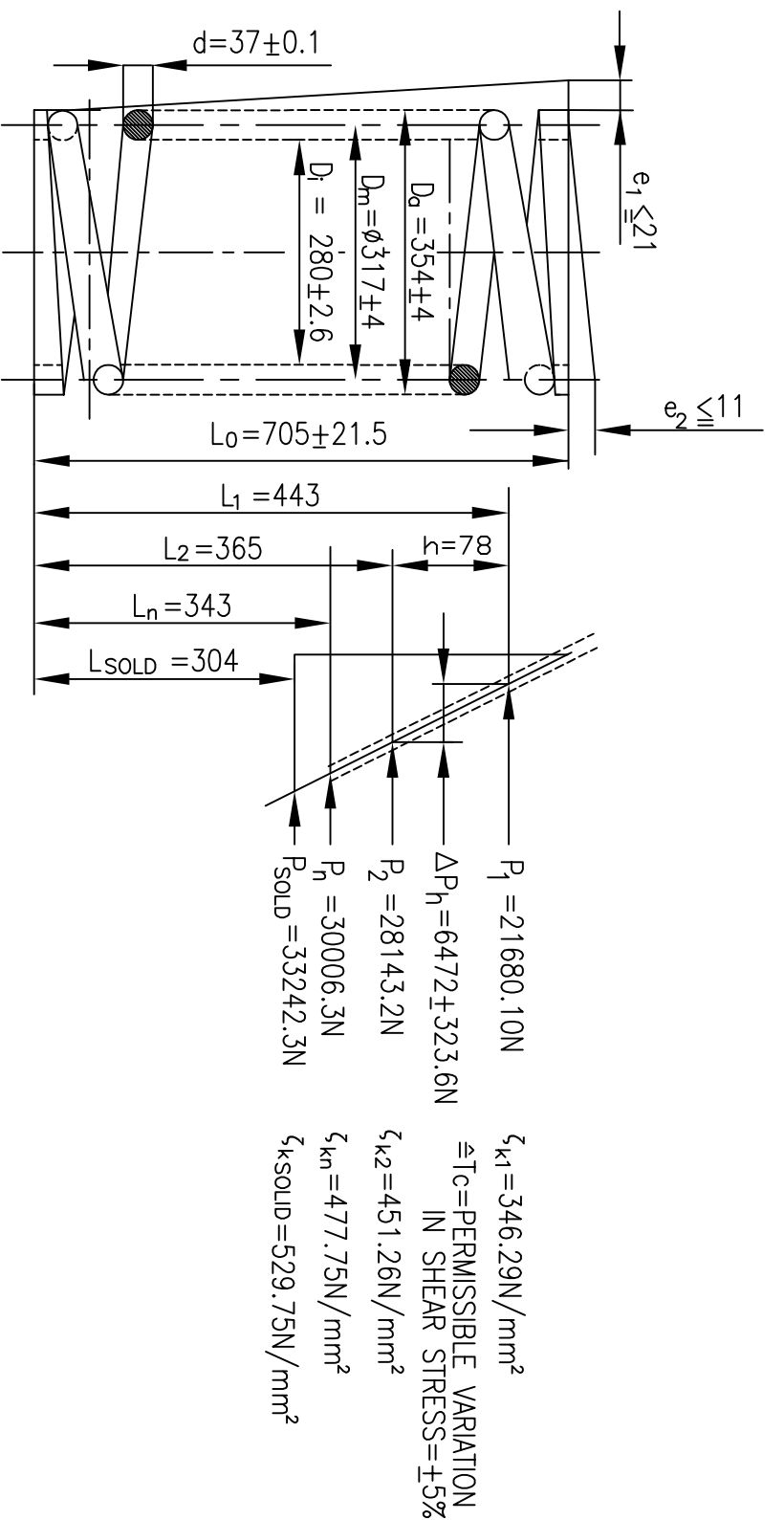


TECH. REQUIREMENTS: -

1. NUMBER OF TURNS
(d) EFFECTIVE (f) = 7
(b) TOTAL (g) = 8.5
2. SPRING RATE
(c) = $82.86 \pm 4N/mm$
3. DIRECTION OF TURNS RIGHT HAND.
4. END OF SPRING IS TO BE DEBURRED
 - a. INTERNAL CHAMFER WIDTH 1mm
 - b. ANGLE OF CHAMFER 45°
5. SPRING IS MADE OF HOT COILED GROUND ROD. ENDS TO BE FORGED ADJOINED AND GROUND FLAT.
6. MAXIMUM WORKING TEMPERATURE 100°C.
7. TO BE CADMIUM PLATED WITH SUBSEQUENT CHROMATE TREATMENT.
8. PERMISSIBLE SHEAR STRESS $725.6N/mm^2$.
9. THE SPRING IS LOADED FIVE TIMES WITH A LOAD OF $P=33242.3N$ TO ENSURE THAT SPRING DOES NOT HAVE ANY PERMANENT SET ONCE THE FINAL DIMENSIONS AS PER DRG ARE ACHIEVED
10. THE SPRING IS SUPPORTED BY MEANS OF TWO SPHERICAL DISC S (CENTRE OF ROTATION OF THE SPRING LIES IN THE PLANE OF SUPPORT) AND THE VALUE OF e_2 AT DIA D_0 WHEN THE SPRING IS COMPRESSED TO $L_2=365$ mm. SHOULD NOT EXCEED 11.0 mm. TO ENSURE THE SAFETY AGAINST BUCKLING.
11. SPRING ENDS SHOULD HAVE FINISHED INTERNAL DIA $D_i=280 \pm 2$ WHICH SHOULD BE ENSURED UP TO THE LENGTH ATLEAST $1d$ (≈ 37 mm.) FROM BOTH THE ENDS.
12. IDENTIFICATION TAG SHALL BE PROPERLY TIED ON EVERY SPRING INDICATING DRG. No. AND ATTAINED VALUE OF L_0, L_1 , & P_1 .
13. TEST CERTIFICATE INDICATING THE VALUE OF $C, P_1, L_1, e_1, e_2, L_0$, if, d, D_i, D_0 , & D_m SHALL BE FURNISHED BY THE SUPPLIER.
14. DESIGN TOLERANCES METHOD OF MANUFACTURING & TESTING OF SPRING NOT COVERED ABOVE SHALL BE ACC. TO IS: 7906.



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4047-05004/14
Ref. Drawing No

Inventory No Sign & Date

REV	DATE	ALTERED	CHECKED

REV	DATE	ALTERED	CHECKED

REV	DATE	ALTERED	CHECKED	S.D.
03	10.8.04	CHECKED	S.K.S	-SD-

GMS No. 01140101000		C B O M		STATUS OF DRG	
AGREED DEPT	NAME	SIGN	DATE		
DRG. SUPERSEDES THE OLD DRG. UNDER THE SAME NO. WITHOUT ANY CHANGE VIDE C/ADVISE No. S.TE-04-F0208 (HARD COPY WITHDRAWN)					

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		STEAM TURBINE	
BHARAT HEAVY ELECTRICALS LTD. RANIPUR, HARDWAR			
DEPT	SCALE	WEIGHT (KG)	REF. TO ASSY. DRG.
4011	N.T.S	60.00	0-11401-01000
DRN	NAME	SIGN	DATE
K.C.RAO		-sd-	12.01.80
B.S.S		-sd-	20.02.80
Appd	M.R.K	-sd-	24.06.80
ITEM No.	NO. OF ITEMS		
010	73		74

TITLE :	CARD CODE	DRAWING NO.	NO. OF SHEETS
COMPRESSION SPRING	3-11401-01029	22	24