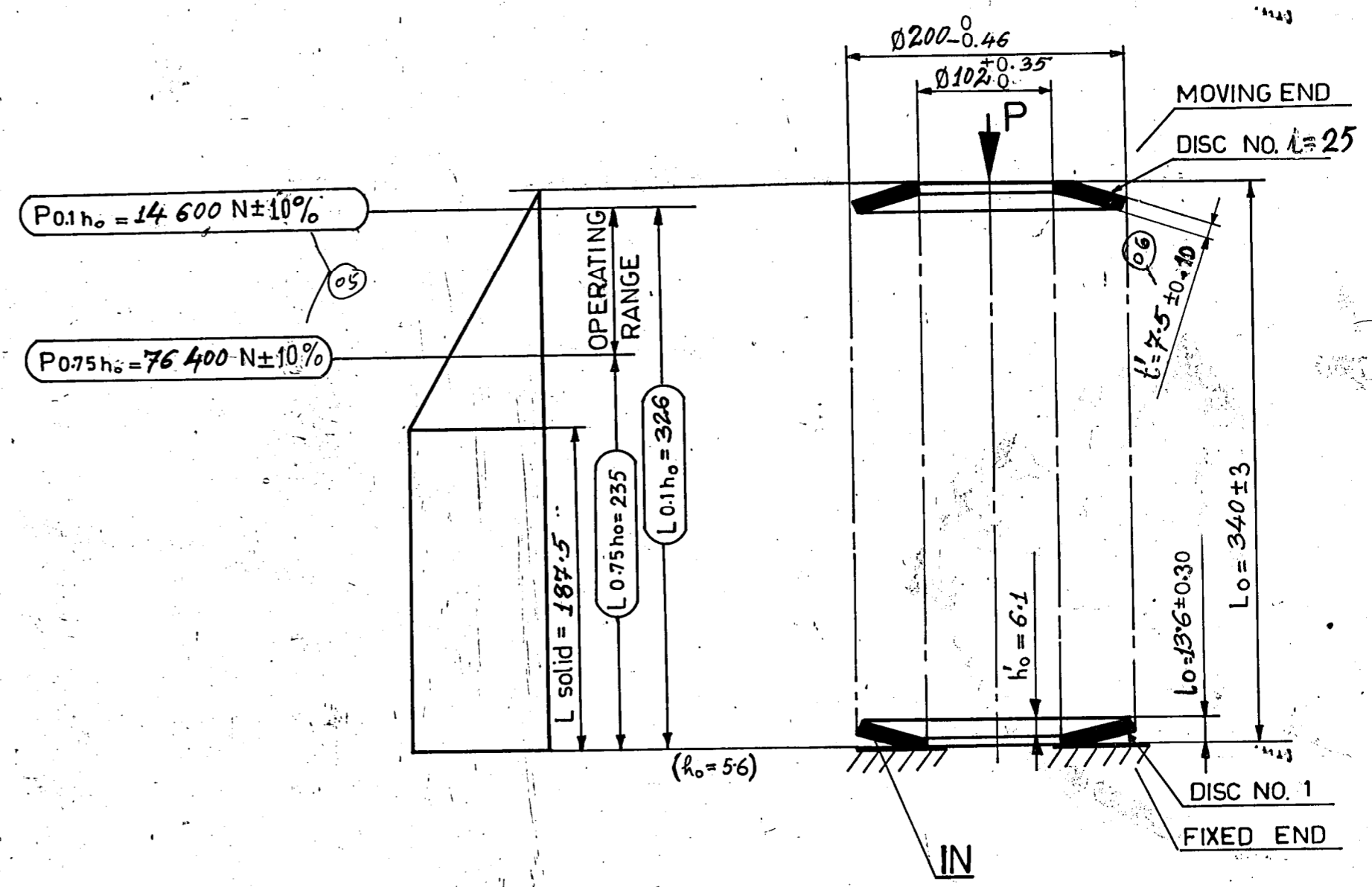


2-11402-01021
DRAWING NO.

TECHNICAL REQUIREMENTS:-

- DISC SPRINGS WITH BEARING SURFACES SHALL CONFORM TO GROUP 3, DIN 2093.
- DISC SPRING STACK CONSISTS OF L NO. OF DISC SPRINGS ASSEMBLED IN SINGLE SERIES.
- INDIVIDUAL DISC SPRING IS TO BE TESTED WITH SPRING FORCE $P_{0.75h_0}$ AT DISC HEIGHT $L_{0.75h_0}$ AND COMBINED TESTING OF THE SPRING STACK IS TO BE DONE AS PER SPRING DIAGRAM.
- THE TEST SHALL BE DONE WITH THE HELP OF TWO PRESURE PLATES PROVIDED ON BOTH SIDES, WHICH SHALL BE HARDENED, GROUND AND POLISHED, USING SUITABLE LUBRICANT.
- VALUES ENCIRCLED AS () SHALL BE MEASURED AND RECORDED BY SUPPLIER ON TEST CERTIFICATE. VALUES OF $L_{0.1h_0}$, $L_{0.75h_0}$ AND L_{solid} ARE FOR REFERENCE ONLY.
- MANUFACTURING METHODS:
 - DISCS ARE TO BE MANUFACTURED BY HOT FORMING.
 - DISCS ARE TO BE MACHINED ALL OVER AND SHARP EDGES TO BE ROUNDED OFF.
 - CONCENTRICITY OF DIAMETERS SHOULD BE WITHIN 0.5 mm.
- HARDNESS, SURFACE AND SCRAGGING:
 - THE DECARBURIZATION OF DISC SPRINGS AFTER HEAT TREATMENT SHOULD NOT EXCEED 3% OF DISC THICKNESS.
 - HARDNESS OF EACH DISC SHOULD BE WITHIN 42 TO 52 HRC.
 - AFTER HEAT TREATMENT DISC SPRINGS MUST BE SUBJECTED TO SCRAGGING, TO ENSURE THAT AFTER BEING LOADED AT TWICE THE FORCE $P_{0.75h_0}$ THE FREE HEIGHT L_0 OF DISC DOES NOT VARY.
 - THE SURFACE MUST BE FREE FROM DEFECTS VIZ. CRACKS, PITS, RUST SPOTS ETC.
 - ANTI-CORROSIVE COATING ON DISC SPRINGS CAN BE PHOSPHATISING, Zn-OR Cd-PLATING AS PER SUPPLIER'S CHOICE WITH PRIOR APPROVAL OF BHEL.
 - MATERIAL TEST CERTIFICATE SHOULD INCLUDE CHEMICAL PROPERTIES AND HARDNESS OF DISC SPRINGS.
 - IDENTIFICATION OF SPRINGS AS PER HW 0400397 AT A PLACE MARKED WITH IN. IDENTIFICATION MARKING SHOULD NOT DISSOLVE IN TURBINE OIL AND FIRE-RESISTANT-FLUID (PHOSPHATE ESTERS). IN ADDITION EACH DISC SPRING SHALL BE MARKED WITH STACK NO. AND DISC NO. e.g. DISC NO.2 OF STACK NO.1 SHALL BE MARKED AS 1/2.
 - DISC SPRINGS SHALL BE PROPERLY TIED TOGETHER AND PACKED, TO AVOID INTERMIXING AND DAMAGE DURING TRANSIT AND STORAGE.



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INVENTORY NO. 51/13033
SIGN & DATE 19.10.93
REF. DRG. NO. 2209101

001	DISC SPRING STACK (200x102x8)	2-11402-01021	W973114 02026	33 75
VAR. 00	REMARKS	ITEM NO.	DESCRIPTION	DRAWING NO.
59	64 65	75 25 27 29	58 69 60	77

SUPERSEDES OLD TRACING UNDER SAME NUMBER.		GMS NO./GR-SP NO. GMS 0-11402-01000	STATUS OF DRG.	TYPE OF PRODUCT STEAM TURBINE OR NAME OF CUSTOMER / PROJECT	
GRADE OF UNTOL DIM -		M/CG-Z/M/F AA 0230208	WELDING-A/B/C/DAA0621104	BHARAT HEAVY ELECTRICALS LTD HARDWAR	
GAS CUTTING T3 AA 0621101		DRN O.P. DHIMAN	CHD A. SHAH	APD B.S.S.	NO. OF VAR. 7-10-93 9.10.93 31/10/93
REV 07	DATE 11-04-08	ALTD. UKH	CHD. N.NIRALA	REV 06	DATE 26/11/02
ZONE	CHANGED AS PER C.I.A. NO. STE-08-F0104.	CHANGED AS PER C.I.A. NO. STE-02-F 2056	DRG. SUPERSEDES UNDER THE SAME DRG. NO CHANGE ADVICE NO. STE-93-531	CHANGED AS PER CHANGE ADVICE NO. STE-95-589	NO. OF ITEMS 11
DEPT STE		SCALE N.T.S.	WEIGHT (kg) 33.75	REF TO ASSY DRG. 0-11402-01000	
CODE 4014		DRAWING NO. 2-11402-01021		SHEET NO. 1 NO. OF SHEETS 1	