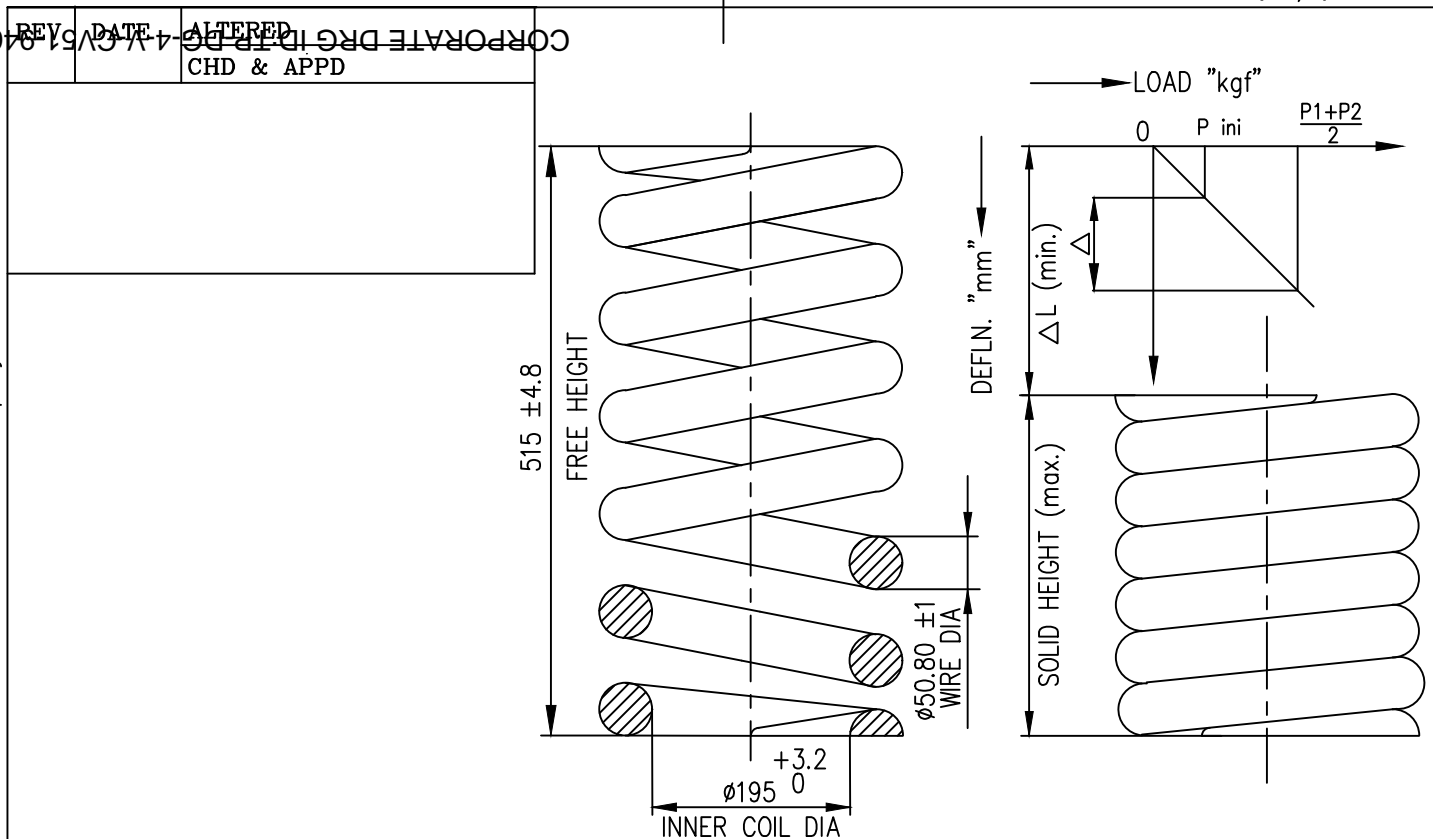


CAUTION: The information on this document is the property of BHARAT HEAVY ELECTRICALS LTD. It must not be used directly or indirectly in any way detrimental to the interest of the company.

FOR TOLERANCES OF UNTOLERANCED DIMENSIONS

DURING MANUFACTURE REFER RELEVANT QCP/QP

ALL DIMENSIONS ARE IN MILLIMETRES.


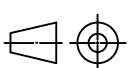



ROW	DESCRIPTION	UNITS	VALUE
01	MATL. CODE.	96 461 367 0000	
02	OUTSIDE DIA.MAX.LIMIT	(mm)	301
03	SPRING RATE ±4%	(Kg/mm)	80.00
04	SOLID DEFLECTION ΔL min.	(mm)	160
05	EFFECTIVE NO.OF COILS	NOS	5.30 ⁰ _{-0.5}

ROW	DESCRIPTION	UNITS	VALUE
06	SPRING WEIGHT	(Kg)	90.0
07	PITCH	(mm)	83.24 ± 2.0
08	PROCESS OF MANUFACTURE	HOT COILING	
09	IN-EFFECTIVE NO.OF COILS	SEE NOTE-7	

NOTES:

1. MANUFACTURE AND WORKMANSHIP SHALL IN ACCORDANCE WITH PROCEDURE APPLICABLE FOR NON-IBR SPRINGS.
2. ACCEPTABLE SPRING MATERIALS TO PRODUCT ATTEST: ASTM A564 - Gr.630 (or) 17-4 PH, HEAT TREATMENT CONDITION SHALL BE SUITABLY DECIDED BY THE VENDOR SUCH THAT STRESS AT SOLID CONDITION DOES NOT EXCEED ALLOWABLE STRESS OF THE MATERIAL.
3. FREE HEIGHT, SPRING RATE, SOLID DEFLECTION AND OUTSIDE DIAMETER ARE CRITICAL PARAMETERS AND SHOULD BE MAINTAINED.
4. THIS SPRING WILL BE CONTINUOUSLY IMMERSSED IN WATER AT 200°C±10°C TEMPERATURE-VENDOR SHALL CONFIRM THE APPLICABILITY.
5. REFER TO LATEST REVISION OF TDC:5:082 AND APPLICABLE MATERIAL STANDARD FOR FURTHER DETAILS.
6. VENDOR SHALL SUBMIT A SPRING DESIGN CALCULATION SHEET ALONG WITH OFFER MEETING THE VALUES MENTIONED ABOVE.
7. END COILS OF THE SPRING SHALL BE CLOSED AND GROUND TO FLAT. NO. OFF IN-EFFECTIVE COILS SHALL BE SUITABLY DECIDED BY VENDOR.

NO OFF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No	ITEM No	
		BHARAT HEAVY ELECTRICALS LTD.,			DRN	NAME		SIGN	DATE	NO.OF VAR
365-122		UNIT: HIGH PRESSURE BOILER PLANT.			CHD	S.DAS		S.D	10.11.2018	
		TIRUCHIRAPALLI 620014.			APPD	M.C.K		M.C.K	10.11.2018	
						M.S.VINOD		M.S.V	10.11.2018	
DEPT VL		SCALE	WEIGHT (KG).		REFERENCE INFORMATION					NO. OF ITEMS
CODE 310		NTS	90		MATERIAL CODE:964613670000					
TITLE				CARD CODE	DRAWING NO.					RE
SPRING				U 01	4-V-CV51-94041					00



Size A4