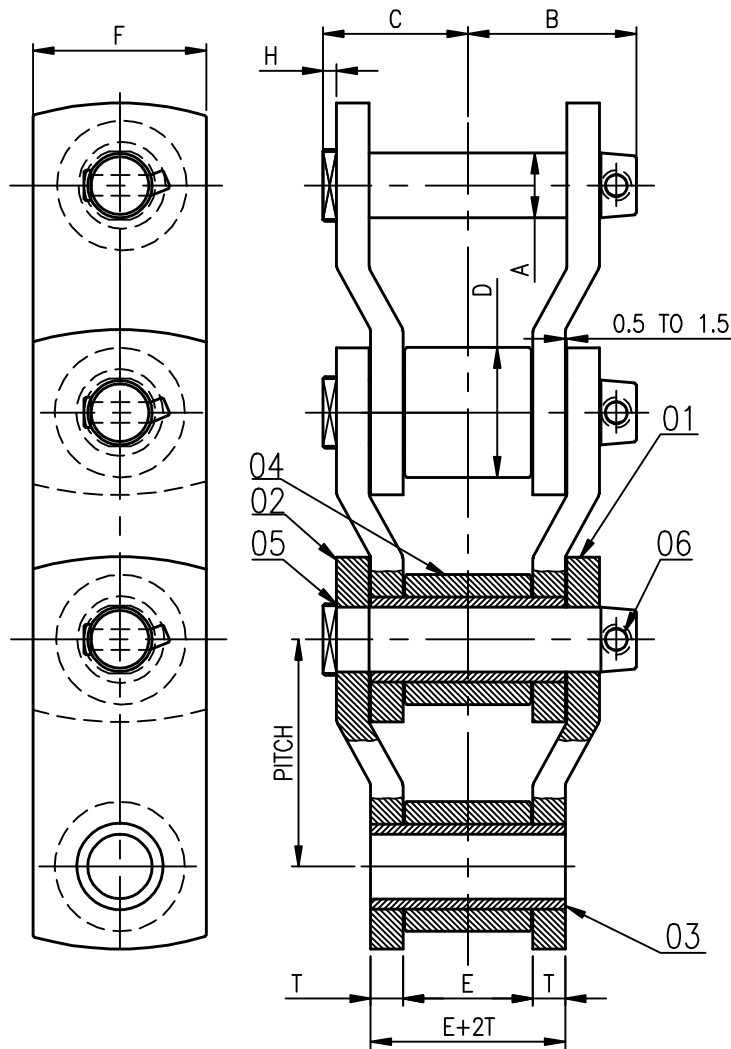


ALL DIMENSIONS ARE IN mm.

NOTES:

01. ROLLER CHAIN IS MEANT FOR HEAVY DUTY SERVICES. IT HAS TO COPE UP WITH SHOCK LOADS IN THE ABRASIVE, HOT & DIRTY ATMOSPHERE. THESE CHAIN ARE USED FOR LIFTING GUILLOTINE GATE BLADES IN THE AIR/HOT AIR & FLUE GAS PATH OF COAL / OIL FIRED POWER PLANTS.
02. MATERIAL AND CONSTRUCTION: SHOULD MEET THE LOADING AND WORKING REQUIREMENTS.
03. THE DIMENSIONS " PITCH, D, E & F " ARE TO BE MAINTAINED BY THE VENDOR.
04. THE DIMENSIONS " A, B, C, H & T" ARE GIVEN FOR REFERENCE ONLY AND VENDOR HAS TO PROVIDE THE DIMENSIONS FOR ENGINEERING APPROVAL.
05. TOTAL BLOCK END CLEARANCE FOR BOTH SIDES TOGETHER SHOULD BE MINIMUM 1.0 MM AND MAXIMUM 3.0 MM.
06. MAXIMUM SIDE BOW SHOULD NOT EXCEED 3MM FOR 10 FEET LENGTH OF CHAIN.
07. THE PIN BUSHINGS AND SIDE BAR PITCH HOLES ARE TO BE FULL ROUNDED DESIGN TO PREVENT SHARP CORNERS, STRESS CONCENTRATION AND POSSIBILITY OF SIDE BAR FATIGUE. PITCH HOLES ARE TO BE ACCURATELY SIZED AND SPACED TO ASSURE INTERFERENCE FIT WITH PINS AND BUSHINGS.
08. OTHER CONNECTED MATING PARTS ARE TO BE UNIFORMLY SIZED TO PROVIDE UNIFORM CLEARANCE BETWEEN LINKS TO ASSURE FREE ARTICULATION.
09. PINS, SIDEBARS, ROLLER & BUSH ARE TO BE HEAT TREATED TO WITHSTAND SHOCK & WEAR LOAD AND ENSURE HIGH STRENGTH & FATIGUE.
10. ROLLERS ARE TO BE PROCESSED TO WITHSTAND SPROCKET TOOTH IMPACT.
11. CHAIN LENGTH MEASURING LOAD  $\frac{1}{50}$  OF MINIMUM BREAKING LOAD.
12. CHAIN PRE LOAD  $\frac{1}{3}$  OF MINIMUM BREAKING LOAD.
13. SUPPLIER HAS TO ENSURE GUARANTEE WITH TEST CERTIFICATE FOR THE CHAIN PRELOAD PULL, MINIMUM BREAKING LOAD/ ULTIMATE TENSILE STRENGTH.
14. SUPPLY BITS OF CHAINS EQUIVALENT TO 10 FEET LONG AND REQUIRED PIN ACCESSORIES TO CONNECT WITH EACH BITS.
15. MARKING: THE CHAIN NUMBER, AND VENDOR'S NAME ARE TO BE PUNCHED IN THE SIDE BAR & PIN HEAD.
16. PACKING: CHAIN SHALL BE NEATLY PACKED TIGHTLY IN SEPARATE POLYTHENE BAGS AND STACKED IN A WOODEN BOX AS PER FIG 78 OF ASTM A 700-05 (LATEST REV) WEIGHT EACH BOX SHOULD NOT EXCEED 500KGS. PACKING SLIP SHOULD CONTAIN P.O. NO., T.C. NO & QUANTITY.
17. VENDOR HAS TO FILL THE BILL OF MATERIALS & OTHER DETAILS IN THE GIVEN TABLE.
18. VENDOR HAS TO PREPARE AND SUBMIT GA DRAWING WITH DIMENSIONAL TOLERANCE AT THE TIME OF ENQUIRING ITSELF.
19. THE INSPECTION & TESTING REQUIREMENT SHALL BE AS PER BHEL QUALITY PLAN QP:NO:SQP:DAM:501 (REFER LATEST REVISION).
20. INWARD INSPECTION: VERIFY THE CORRECTNESS OF CHAIN NUMBER AND CONNECTING ACCESSORIES, APART FROM THE GENERAL INSPECTION AS PER P.O.



SL NO.	CHAIN NUMBER	CHAIN LENGTH MEASURING LOAD (KGF)	CHAIN PRELOAD (KGF)	MINIMUM BREAKING LOAD (KGF)	AVERAGE ULTIMATE STRENGTH (KGF)	DIMENSIONS (MM)								BHEL MATERIAL CODE	
						PITCH (MM)	A	B	C	$\begin{matrix} +0.0 \\ -0.1 \end{matrix}$ D	$\begin{matrix} +0.4 \\ -0.00 \end{matrix}$ E	$\pm 0.5$ F	T		H (MIN)
1.	RO 622	180	3000	9000	9100	$\begin{matrix} +0.11 \\ -0.00 \\ 42.0 \end{matrix}$	11.1	28.7	24.9	22.3	25.4	28.7	4.8	8	96145120
2.	RO 4824	3250	58666	176000	190500	$\begin{matrix} +0.38 \\ -0.00 \\ 152.4 \end{matrix}$	38.1	97.5	85.8	76.2	76.2	101.6	19.0	10	96145266

06	'T' PIN ( $\phi$ )	MILD STEEL		
05	CONNECTING PIN	EN-19 OR BETTER MATERIAL		
04	ROLLER	EN-9 OR BETTER MATERIAL		
03	BUSH	EN-9 OR BETTER MATERIAL		
02	OFFSET PLATE (TYPE-II)	EN-19 OR BETTER MATERIAL		
01	OFFSET PLATE (TYPE-I)	EN-19 OR BETTER MATERIAL		
SL NO	DESCRIPTION	MATERIAL SPECIFICATION	METHOD OF HEATTREATMENT	HADRNESS

BILL OF MATERIALS

REV	DATE	PRD: BALA.L	CHD: VK	REV	DATE	PRD: JK	CHD: VK
02	29/09/10	BOM TABLE ADDED		01	15/06/10	DRG RIVET HEAD REMOVED NOTES: 15 TO 17 & BOM TABLE ADDED	



Bharat Heavy Electricals Ltd  
UNIT: BOILER AUXILIARIES PLANT  
RANIPET - 632 406

DRAWN. BALA.L CHKD J.KUPPAN

TITLE GATE CHAIN ( ROLLER )

APPROVED  
V.KESAVAN

DATE  
11/06/2010

DRG. NO.  
3-48-003-59764

REV  
02