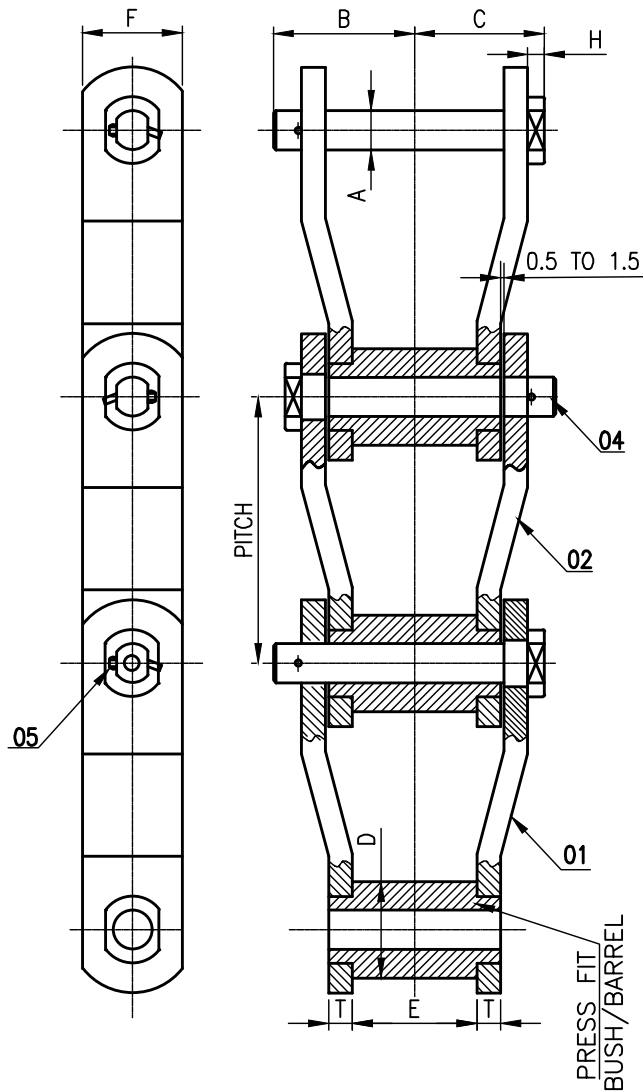


ALL DIMENSIONS ARE IN MILLIMETERS



NOTES:—

01. THIS STAGGERED ARRANGEMENT OF CHAIN HAS TO COPE UP WITH SHOCK LOADS IN THE ABRASIVE, HOT AND DIRTY ENVIRONMENT .
- 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 " A, PITCH, D, E & F " ARE TO BE MAINTAINED BY THE VENDOR.
04. THE DIMENSIONS " B, C, H & T ARE GIVEN FOR REFERENCE ONLY, AND VENDOR HAS TO PROVIDE THE DIMENSIONAL DETAILS FOR BHEL APPROVAL WITH MINIMUM BREAKING LOAD ,CHAIN PRE-LOAD AND CHAIN LENGTH MEASUREMENT LOAD .
05. THE BLOCK END CLEARANCE SHOULD BE UNIFORM BETWEEN LINK TO ASSURE FREE ARTICULATION. TOTAL BLOCK END CLEARANCE FOR BOTH SIDES TOGETHER SHOULD BE MINIMUM 1.00MM AND MAXIMUM 3.00MM .
06. MAXIMUM SIDE BOW SHOULD NOT EXCEED 5MM FOR 10 FEET LENGTH OF CHAIN .
07. SIDE BAR PITCH ARE TO ACCURATELY SPACED TO ASSURE UNIFORM PITCH CONTROL HOLES ARE TO BE CAREFULLY SIDED BAR CONTROLLED PRESS FIT TO PREVENT PIN ROTATION . SIDE BARS AND BARREL ARE TO BE HELD ACCURATE ALIGNMENT TO PREVENT CHAMFER OR TWIST IN ASSEMBLED STRANDS .
08. PINS, SIDE BARS, ROLLER & BUSH ARE TO BE HEAT TREATED TO WITHSTAND SHOCK AND WEAR LOAD AND ENSURE HIGH STRENGTH & FATIGUE.
09. METHOD OF HEAT TREATMENT & HARDNESS VALUES TO BE FURNISHED DURING ENQUIRY STAGE.
10. SUPPLIER HAS TO ENSURE GUARANTEE WITH TEST CERTIFICATE FOR THE ALLOWABLE CHAIN PRELOAD PULL, MINIMUM BREAKING LOAD / ULTIMATE TENSILE STRENGTH.
11. SUPPLY BITS OF CHAINS EQUIVALENT TO 10 FEET LONG AND REQUIRED PIN ACCESSORIES TO CONNECT WITH EACH BITS.
12. MARKING:THE CHAIN NUMBER, AND VENDOR'S NAME ARE TO BE PUNCHED IN THE SIDEBAR AND PINHEAD.
13. 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.
14. THE INSPECTION & TESTING REQUIREMENT SHALL BE AS PER BHEL QUALITY PLAN NO: SQP:DAM:501 (REFER LATEST REVISION)
15. CHAIN LENGTH MEASURING LOAD 1/50 KGF OF MINIMUM BREAKING LOAD.
16. CHAIN PRELOAD 1/3 OF MINIMUM BREAKING LOAD.
17. INWARD INSPECTION: VERIFY THE CORRECTNESS OF CHAIN NUMBER AND CONNECTING ACCESSORIES, APART FROM THE GENERAL INSPECTION AS PER P.O.

05	SPLIT PIN	MILD STEEL		
04	CONNECTING PIN	EN-19 OR BETTER MATERIAL		
03	BUSH	EN-9 OR BETTER MATERIAL		
02	OFFSET PLATE (TYPE-II)	EN-9 OR BETTER MATERIAL		
01	OFFSET PLATE (TYPE-I)	EN-9 OR BETTER MATERIAL		
SL NO	DESCRIPTION	MATERIAL SPECIFICATION	METHOD OF HEAT TREATMENT	HADRNESS

BILL OF MATERIALS

SL NO.	CHAIN NUMBER	PITCH (MM)	CHAIN LENGTH MEASURING LOAD (KGF)	CHAIN PRELOAD (KGF)	MINIMUM BREAKING LOAD (KGF)	AVERAGE ULTIMATE STRENGTH (KGF)	DIMENSIONS (MM)								BHEL MATERIAL CODE
							 -0.10 -0.05 A	B	C	+0.0 -0.1 D	 +1.0 -0.0 E	 ±1.0 F	T	H (MIN)	
1.	W78	+0.16 -0.00 66.3	208	3467	10400	10900	12.7	41.9	36.8	22.3	28.7	28.7	6.3	6	96145123
2.	W82	+0.19 -0.00 78.1	225	3753	11260	11800	14.3	45.2	40.6	31.0	31.8	31.8	6.3	6	96145126
3.	W124	+0.25 -0.00 101.6	384	6400	19200	20900	14.1 13.0	58.7	51.8	36.6	41.4	38.1	9.1	8	96145155
4.	W132	+0.38 -0.00 153.7	700	11667	35000	38100	18.5 25.4	83.3	78.5	44.5	76.2	50.8	12.7	10	96145156

REV	DATE	ALTERED : AKILESH
03	09.03.12	CHD & APPD: V.KESAVAN
ZONE	TOLERANCE OF 'E & F' ALTD. VALUES OF 'A' ALTERED FOR W124 & W132,TOLERANCE FOR 'A' ADDED.MATLSPEC OF 01,02 ALTERED NOTE 03 ALTERED AND NOTE 09 ADDED	
REV	DATE	ALTERED : B.S
02	29.09.10	CHD & APPD: V.K
ZONE	BOM TABLE ADDED	
REV	DATE	ALTERED : B.S
01	9.03.09	CHD & APPD: V.K
ZONE	WELDED TYPE CHAIN IS REPLACED WITH BUSHED TYPE CHAIN AND DIMENSIONS B, C & W ARE REMOVED NOTES REVISED	

					Bharat Heavy Electricals Ltd		DRAWN	NAME BALAL	SIGN	DATE 09.03.09	No. OF VAR.
UNIT: BOILER AUXILIARIES PLANT					RANIPET — 632 406		CHKD.	J.KUPPAN		09.03.09	
							APPD.	V KESAVAN		09.03.09	
DEPT. DP			GRADE OF UNTOL.DIM. PR:QA 500	SCALE SCALE	WEIGHT (KG.) WEIGHT	REF. TO ASSY. / OLD DRG. REFDRG				ITEM No.	No.OF ITEM
CODE. 877											
TITLE GATE CHAIN (BUSH)						CARD CODE U 01	DRAWING No. 3-48-003-59763				REV. 03