

MAIN SUPPLIER BHEL-PIPING CENTRE 	MANUFACTURER'S NAME AND ADDRESS	TENDER QUALITY PLAN		ITEM : CONDENSATE TRANSFER PUMP		QP NO. PC-CP-K-QP00 REV.NO.:00 DATE: 27/09/2016		PROJECT : KOTHAGUDEM (1X800 MW) TPS			
				CUSTOMER : TSGENCO							
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SL No	COMPONENT & OPERATIONS	CHARACTERISTICS	CLAS S	TYPE OF CHECK	QUANT UM OF CHECK	REFERENCE DOCUMENT #	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY			REMARKS
1	2	3	4	5	6	7	8	9	*				
									D	M	C	N	
1.0 MATERIAL													
1.1	CASTING, SUCTION COVER, DELIVERY COVER, CHAMBER, IMPELLER, SHAFT, NECK RING, SHAFT/SLEEVE	CHEMICAL PROPERTIES	B	CHEMICAL ANALYSIS	100%	APPROVED DRAWING / DATASHEET / MATERIAL SPECIFICATION		MTC	√	P	V	V	
		MECHANICAL PROPERTIES	B	MECH ANALYSIS	100%	APPROVED DRAWING / DATASHEET / MATERIAL SPECIFICATION			√	P	V	V	
1.2	SHAFT	SOUNDNESS	B	UT FOR Φ ≥ 40 MM	100 %	ASTM A 388	ASME Sec VIII Div II Cl 3.3.4	MTC	√	P	V	V	
1.3	MECHANICAL SEAL & COUPLING	CHEMICAL & MECHANICAL TEST	B	VERIFICATION	100 %	APPROVED DRAWING / DATASHEET / MATERIAL SPECIFICATION		MTC	√	P	V	V	
1.4	MOTOR	ELECTRICAL CHARACTRISTIC	B	ROUTINE TEST	100 %	IS 325 & MOTOR DATASHEET		TEST REPORT	√	P	V	V	
				TYPE TEST	1 per type								
2.0 INPROCESS INSPECTION													
2.1	ALL ITEMS UNDER 1.0 ABOVE	CASTING DEFECTS	B	VISUAL	100 %	CASTING WILL BE FREE FROM CRACKS, SHRINKAGE, COLD SHUTS, INJURIES, POROSITY, SAND FUSION ETC		-	√	P	V	V	
2.2	CASING, CASING COVER	PR.TIGHTNESS	B	HYDRO TEST	100 %	APPROVED DRAWING / DATASHEET		IR	√	P	V	V	
2.2	IMPELLERS	SURFACE DEFECTS	A	LPI ON MACHINED SURFACES	100 %	ASTM E 165	ASME SEC VIII DIV 1	IR	√	P	V	V	
2.3	SHAFT	DIMENSION	B	MEASUREMENT	100 %	APPROVED DRAWING / DATASHEET		IR	√	P	V	V	
		LPI	A	NDT		ASTM E 165	ASME SEC VIII DIV 1	IR	√	P	V	V	
2.4	IMPELLER	BALANCING	A	DYNAMIC BALANCING	100 %	ISO 1940		BALANCIN G REPORT	√	P	V	V	
3.0 FINAL INSPECTION													
3.1	COMPLETE PUMP	VISUAL OVERALL DIMENSION	B	VISUAL & MEASUREMENT	100 %	APPROVED DRAWING / DATA SHEET		IR	√	P	W	V	

		LEGEND: * RECORDS, IDENTIFIED WITH “TICK” (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION. CLASS : A-CRITICAL B-MAJOR C-MINOR ** M: MANUFACTURER/SUB-SUPPLIER C: MAIN SUPPLIER(BHEL/BHEL AIA) N : CUSTOMER/CONSULTANT P: PERFORM W: WITNESS V: VERIFICATION. AS APPROPRIATE	DOC. NO.:		REV..... CAT.....	
MANUFACTURER/ SUB-SUPPLIER	MAIN-SUPPLIER					
SIGNATURE			REVIEWED BY	APPROVED BY	APPROVAL SEAL	

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3.2	PERFORMANCE TEST WITH INDIVIDUAL JOB MOTOR	1) Q Vs HEAD 2) Q Vs POWER 3) Q Vs EFFICIENCY 4) VIBRATION 5) NOISE LEVEL 6) BEARING TEMPERATURE RISE	A	PERFORMANCE TEST	100 %	APPROVED DATA SHEET	TEST REPORT / PLOTTED CURVES / IR	IR	√	P	W	V	
		NPSH @	B	NPSH TEST AT RATED FLOW	100%	APPROVED DATA SHEET		IR	√	P	W	V	NOTE 2
3.3	STRIP TEST	STRIP DOWN TEST	A	VISUAL	100 %	APPROVED DATASHEET	NO WEAR / TEAR/ DAMAGE	IR	√	P	W	V	NOTE 3
4.0	PAINTING												
	PAINTING	SURFACE PREPARATION, APPEARANCE & DFT & SHADE, ADHESION TEST	B	VISUAL & MEASUREMENT	100 %	MANUFACTURER'S STANDARD / PURCHASE SPECIFICATION / PURCHASE ORDER		IR	√	P	V	V	
5.0	PACKING & PRESERVATION												
	PACKING & MARKING	SURFACE CONDITION, CLEANLINESS, MARKING, END CAP	B	VISUAL	100 %	MANUFACTURER'S STANDARD / PURCHASE SPECIFICATION / PURCHASE ORDER		IR	-	P	V	V	

NOTE :

1. FOR MOTOR TEST, SEPARATE QP SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.
2. NPSH TEST WILL BE CONDUCTED AS PER APPROVED DATASHEET.
3. STRIP TEST WILL BE DONE ONLY INCASE OF ABNORMAL NOISE & VIBRATION DURING THE PERFORMANCE TESTING OF PUMP.

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