



MANUFACTURER'S NAME
& ADDRESS:

BHARAT HEAVY ELECTRICALS
LIMITED
R.C.PURAM, HYDERABAD

MANUFACTURING QUALITY PLAN

ITEM: LUBE OIL SYSTEM FGD
(800 MW)
SUB SYSTEM: TG & AUX PKG

QP No HYQA/SSMQP/HE/505/FGD/00
Rev. No.:00
DATE: 14.03.2020
Page 1 of 3
BHEL SPEC:TC64362 REV 00

CUSTOMER: MAHAGENCO
CONSULTANT: M/S DCPL
PROJECT: 1x660 MW MAHAGENCO Bhusawal Unit-6

SL NO	COMPONENT & OPERATION	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY			REMARKS
					M	B/C				D*	M	B	C	
1.	2.	3.	4.	5.	6		7	8	9.		** 10.			11.

1.0	VERIFICATION OF MATERIAL TEST CERTIFICATES													
1.1	LUBE OIL PUMP (SCREW/ CENTRIFUGAL AS APPLICABLE)	SEPARATE QAP SHALL BE FURNISHED						INSP. REPORT	✓	P	V	V	ITEMS SHALL BE PROCURED FROM BHEL APPROVED SOURCES /AS PER PO CONDITION	
1.2	OIL COOLERS	SEPARATE QAP SHALL BE FURNISHED						INSP. REPORT	✓	P	V	V		
1.3	MOTOR	SEPARATE QAP SHALL BE FURNISHED						INSP. REPORT	✓	P	V	V		
1.4	DUPLEX FILTER	SEPARATE QAP SHALL BE FURNISHED						INSP. REPORT	✓	P	V	V		
1.5	LUBE OIL TANK	SEPARATE QAP SHALL BE FURNISHED						INSP. REPORT	✓	P	V	V		
1.6	VALVES (3 WAY, GATE, GLOBE, CONTROL & CHECK VALVES (As applicable)	REVIEW OF SUPPLIER TC	MAJOR	VERIFY	100%	BHEL SPEC. & BHEL APPROVED DATA SHEETS	BHEL SPEC. & BHEL APPROVED DATA SHEETS	INSP. REPORT	✓	P	V	V		
1.7	ACCUMULATOR	REVIEW OF SUPPLIER TC	MAJOR	VERIFY	100%	BHEL SPEC. & BHEL APPROVED DATA SHEETS	BHEL SPEC. & BHEL APPROVED DATA SHEETS	INSP. REPORT	✓	P	V	V		
1.8	INSTRUMENTS	REVIEW OF TCS FOR CALIBRATION	MAJOR	VERIFY	100%	BHEL SPEC. & BHEL APPROVED DATA SHEETS	BHEL SPEC. & BHEL APPROVED DATA SHEETS	INSP. REPORT	✓	P	V	V		
2.0	INPROCESS INSPECTION													
2.1	REVIEW OF WPS, PQR & WQR	REVIEW OF RECORDS	MAJOR	REVIEW	100%	ASME SEC.IX	ASME SEC.IX	RECORDS		P	V			
2.2	HYDRO TEST OF PIPING	HYDRO TEST	MAJOR	HYDRO	100%	BHEL SPEC., DRG. & BHEL APPROVED DATA SHEETS	BHEL SPEC., DRG. & BHEL APPROVED DATA SHEETS	TEST REPORT	✓	P	V	V		

LEGEND: M: MANUFACTURER / VENDOR B: BHEL /BHEL NOMMNATED INSPECTION AGENCY, C: CUSTOMER / CUSTOMER NOMINATED INSPECTION AGENCY. P: PERORM, W: WITNESS V: VERIFICATION, * D: RECORDS IDENTIFIED WITH TICK (✓) SHALL BE ESSENTIALLY INCLUDED IN QA DOCUMENTATION.	PREPARED BY:  ALOK BEHERA SR.ENGR/ QA	APPROVED BY:  G BALA AGM /QA	APPROVED BY:  G BALA AGM /QA	APPROVED BY: CUSTOMER / CONSULTANT
	Format no. : HYQA/QP/MQP-1 Rev.00			



MANUFACTURER'S NAME & ADDRESS: BHARAT HEAVY ELECTRICALS LIMITED R.C.PURAM, HYDERABAD		MANUFACTURING QUALITY PLAN						CUSTOMER: MAHAGENCO CONSULTANT: M/S DCPL PROJECT: 1x660 MW MAHAGENCO Bhusawal Unit-6						
		ITEM: LUBE OIL SYSTEM FGD (800 MW) SUB SYSTEM: TG & AUX PKG			QP No HYQA/SSMQP/HE/505/FGD/00 Rev. No.:00 DATE: 14.03.2020 Page 2 of 3 BHEL SPEC:TC64362 REV 00									
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1.	2.	3.	4.	5.	6		7	8	9.	D*	** 10.			11.
2.3	REVIEW OF NDT REPORTS OF WELDS	REVIEW OF NDT REPORTS	MAJOR	REVIEW	100%		BHEL SPEC.,DRAWING	BHEL SPEC.,DRAWING	TEST REPORT	✓	P	V	V	DPT OR RT AS APPLICABLE
3.0	FINAL INSPECTION (R-01)													
3.1	VISUAL & DIMENSIONAL INSPECTION-INCLUDING SKID BASE FRAME	GENERAL ARRANGEMENT , ORIENTATION, DIMESIONA AS PER GA DRAWING	CRITIC AL	MEASRT, VISUAL	100%		BHEL APPROVED DRAWING	BHEL APPROVED DRAWING	INSP. REPORT	✓	P	W	W	NOTE 2
3.1	FUNCTIONAL TEST OF LUB OIL SYSTEM	FUNCTIONAL TEST	CRITIC AL	TEST	100%		BHEL APPROVED PROCEDURE	BHEL APPROVED PROCEDURE	TEST REPORT	✓	P	W	W	
3.2	PAINTING AND PACKING	PAINTING	MAJOR	VISUAL	100%		BHEL SPEC.	BHEL SPEC.	RECORDS		P	V	V	

- NOTE:
- 1)

ALL MATERIALS SHALL BE AS PER APPROVED DRAWING / DATA SHEET.
- 2)

PROPER ALIGNMENT AND DIMENSION ACCURACY OF SKID TO BE ENSURED. PROPER MATCH MARKING TO BE ENSURED IF THE PARTS ARE DISPATCHED TO SITE IN DISMANTLE CONDITION
- 3)

IN CASE OF INCONSISTENCY BETWEEN REQUIREMENTS OF DRG./DATA SHEET AND QP, DRG./DATASHEET WILL PREVAIL

GENERAL LEGENDS					
NDE	NON DESTRUCTIVE EXAMINATION	ASSLY	ASSEMBLY	CHEM	CHEMICAL
UT	ULTRASONIC TEST	QC	QUALITY CONTROL	MECH	MECHANICAL
PT	DYE PENETRANT TEST	TPIA	THIRD PARTY INSPECTION AGENCY	TC	TEST CERTIFICATES
MT/MPI	MAGENTIC PARTICLE INSPECTION	WPS	WELDING PROCEDURE SPECIFICATION	VERFN	VERIFICATION
RT	RADIOGRAPHY TEST	WQR	WELDER QUALIFICATION RECORD	IGC	INTER GRANULAR CORROSSION
MEASRT	MEASUREMENT	PQR	PROCEDURE QUALIFICATION RECORD	HT	HEAT TREATMENT
DIMN	DIMENSION	IR	INSPECTION REPORT	QA	QUALITY ASSURANCE

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