

**Bharat Heavy Electricals Limited**  
**Ranipet-632406, India.**  
**Quality Assurance (Mech)**


KOTHA: FGD: MISTELM: 240  
Dt. 21-08-2021

Indent No:RFW11233 - RFW11236. Dt:14.08.2021	Project : KOTHAGUDEM (1X800 MW)
Item: Mist Eliminator	PGMA : FW215, FW997 (For Mandatory Spares)
Tech Spec: FGD:ME:R02, Dt:14.08.2021 and FGD:ME:KTPS:001, Rev:01 Dt:06.08.2021	

Following are Quality recommendation

1. All the items shall be inspected at Manufacturer works as per Customer approved QP/Approved Drawing/Approved datasheet and Technical Specification.
2. Physical Inspection shall be done by Customer and BHEL/BHEL AIA at Manufacturer works.
3. Commercial shall be contacted for applicable source being Non NTPC Project.
4. Arrange Vendor acceptance for BHEL SQP (MIST ELIMINATOR: 742/00, DT: 27.04.2020).
5. Above QP is indicative only. Inspection stage and quantum of check may vary based on Customer review of MQP.
6. Successful vendor to submit MQP in this format for BHEL review and onward submission to Customer for their review and approval after award of PO.
7. Packing of items shall be as per BHEL Engg Approved Packing Drawing/Packing Specifications.
8. BHEL Authorized representatives shall have the right to witness the necessary inspection and testing of goods mentioned in the PO. The supplier shall inform BHEL in advance about the readiness of the goods for inspection and testing. Inspection / Inspection wavier / approval by BHEL does not absolve Supplier's responsibility for conformity of the specification as per the terms of PO. Material Test Certificates shall be submitted to BHEL.
9. Annexure 'Q' shall be part of enquiry File and shall be filled by Supplier with their duly sign and seal.
10. Supplier should be manufacturer not a trader/Agent. *(If the OEM/Principal engaging the services of an agent to participate on their behalf, vendor will be acceptable with respect to Quality requirement provided acceptance on Point No 2, 3, 7 and 10 shall be accepted to supplier)*
11. **General Inspection Notes:**
  - a. Latest version of standards & Specification shall be applied.
  - b. Materials shall be procured in compliance to Functional Technical specification.
  - c. Gauges and measuring instruments with valid calibration only shall be used.
  - d. Inspection / Inspection wavier / approval by BHEL does not absolve Supplier's responsibility for conformity of the specification as per the terms of PO.
  - e. BHEL /BHEL Authorized representatives shall have the right to witness the necessary inspection and testing of goods mentioned in the PO.
  - f. In case of Vendor Drawing & Datasheet, it needs approval by BHEL Engineering.
  - g. This QP shall be read along with relevant PO, BHEL Specification / Approved Drawing/ Datasheet.

This is for your information and further necessary action at your end please.

  
Prepared by.  
Rakesh Kr Madhu (Dy.Mgr/QA)

  
Reviewed & Approved by.  
K Renjith(Mgr/QA)



Ranipet

MANUFACTURER'S NAME & ADDRESS  
BHEL/ BHEL APPROVED SOURCE

ITEM: MIST ELIMINATOR WASHING SYSTEM  
SUB SYSTEM: MIST ELIMINATOR

QP. NO.: MIST ELIMINATOR :742  
Rev No.:00  
Date: 27.04.2020  
Page 1 of 2

STANDARD QUALITY PLAN

PROJECT: AS PER PO.

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

1.0 RAW MATERIAL

1.1	Inspection of incoming Material	Major	Verification of MTC	100%	100%	Manufacturer's Test Certificates	Test certificates.	✓	P	V	-		
1.2	Inspection of semi-finished goods(plates, profiles, pipes, nozzles etc.)	Major	Visual & Dimension	Each Heat	Each Heat	Approved Drawing / P.O.	Test certificates.	✓	P	V	-		

2.0 IN PROCESS INSPECTION

2.2	Inspection of parts and profiles after cutting ( profile, plates etc. )	Critical	Visual & Dimension	Random	Random	Approved Drawing / P.O.	Inspection Report	✓	P	V	-		
-----	---	----------	--------------------	--------	--------	-------------------------	-------------------	---	---	---	---	--	--

3.0 FINAL INSPECTION AND DOCUMENTATION


3.1	Final Dimensional Inspection of all items	Major	Visual & Dimension	Single module of each type	Single module of each type	Approved Drawing / P.O.	Inspection Report	✓	P	W	-		
-----	---	-------	--------------------	----------------------------	----------------------------	-------------------------	-------------------	---	---	---	---	--	--

M - Manufacturer / Subcontractor,  
B - BHEL /BHEL Authorized Inspection Agency,  
C - Customer, P - perform,  
V - Verification of reports  
W - Witness, TC - Test certificate  
"D" - Record, identified with tick (✓) shall be essentially included by Supplier in QA documentation.

**Prepared by**  
*Sanjib Pandit*  
Sanjib Pandit (AE/QA)

**Reviewed by**  
*Rakesh Kumar Madhu*  
Rakesh Kumar Madhu (Dy Manager / QA)

**Approved by**  
*K C Gandhiparimalam*  
K C Gandhiparimalam (DGM/QA)

 <b>MANUFACTURER'S NAME &amp; ADDRESS</b> BHEL/ BHEL APPROVED SOURCE Ranipet		<b>STANDARD QUALITY PLAN</b>					PROJECT: AS PER PO.								
		<b>ITEM: MIST ELIMINATOR WASHING SYSTEM</b> <b>Rev No.:00</b> <b>Date: 27.04.2020</b> <b>Page 2 of 2</b>		<b>QP. NO.: MIST ELIMINATOR :742</b> <b>Rev No.:00</b> <b>Date: 27.04.2020</b> <b>Page 2 of 2</b>		REFERENCE DOCUMENTS 7		ACCEPTANCE NORMS 8		FORMAT OF RECORD 9		Agency M   B   C 10		REMAR KS 11	
<b>SUB SYSTEM: MIST ELIMINATOR</b>		QUANTUM OF CHECK 6		B/C M		5		TYPE OF CHECK 4		CLASS OF CHECK 3		CHARACTERISTICS 2		COMPONENT & OPERATION 1	




4.1	Review of Final Documentation	Inspection Reports & test certificates, Quality	Major	Visual & Verification	100%	100%	Drawing / P.O.	QC Dossier	√	P	V	-
-----	-------------------------------	---	-------	-----------------------	------	------	----------------	------------	---	---	---	---

Note: \* 100% by manufacturer / supplier.

- Latest version of standards & Specification shall be applied.
- Materials shall be procured in compliance to Functional Technical Specification.
- Gauges and measuring instruments with valid calibration only shall be used.
- Inspection / Inspection waiver / approval by BHEL does not absolve Supplier's responsibility for conformity of the specification as per the terms of PO.
- BHEL /BHEL Authorized representatives shall have the right to witness the necessary inspection and testing of goods mentioned in the PO.
- In case of Vendor Drawing & Datasheet, it needs approval by BHEL Engineering.
- This QP shall be read along with relevant PO, BHEL Specification/Drawing/Approved Datasheet.

**Record of revision**

Rev no	Date	Description
00	27.04.2020	Original Issue – First submission

M – Manufacturer / Subcontractor, B - BHEL /BHEL Authorized Inspection Agency, C - Customer, P - perform, V - Verification of reports W - Witness, TC - Test certificate "D" – Record, identified with tick (√) shall be essentially included by Supplier in QA documentation.	<b>Prepared by</b>		<b>Reviewed by</b>		<b>Approved by</b>	
	 Sanjib Pandit (AE/QA)		 Rakesh Kumar Madhu (Dy Manager / QA)		 K C Gandhiparimalam (DGM/QA)	

**Annexure Q**

Indent No:		Enquiry no:	
Sl.No	BHEL / Customer Requirements	##Specific confirmations by the manufacture(Acceptable/Not acceptable)	
1	<b>Quality Plan Requirement: (If SQP is not given &amp; Vendor QP applicable)</b>		
	(i) MQP (Manufacturing Quality Plan) shall be submitted in attached format for BHEL/Customer review & approval. Our SQP/Typical MQP/ MQP Format is attached for guidance & use.		
	(ii) MQP shall invariably cover w.r.t Inward inspection including on Raw material Procurement, In process and Final inspection in elaborated way/details.		
	(iii) Bidder shall also to give specific confirmation that on need basis, their competent officials shall visit to BHEL/customer for finalization of Quality plan including test procedure/methodology during preaward / post award approval / detailed engineering in the event of an order.		
	(iv) No deviation on BHEL/Customer approved MQP/ SQP (In case BHEL SQP is provided) is acceptable.		
	(v) Bidder shall agree to submit all cross referred documents other than codes/standards to BHEL/Customer/Consultant.		
	<b>Important Notes shall be included in MQP :</b> (a) Latest revision of Standards & Specification shall apply. Only International Standards are applicable. (b) Materials shall be procured in compliance to Functional Technical Specification. (c) Inspection shall be in compliance with Approved Quality Control Procedure for the Product. (d) NDT shall be carried out by Qualified Personnel with compliance to Approved NDT Procedures and Acceptance Norms, as per ASME Section V. (e) Gauges and measuring Instruments, with valid calibration only shall be used. (f) Cleaning and Painting of products shall be carried out as per Approved Painting Schedule. (g) Finished Products shall be packed to comply with Approved Packing Schedule. (h) Welding shall be carried out by Qualified Personnel with compliance to Approved NDT Procedures and Acceptance Norms, as per ASME Section V.		
2	<b>Domestic / Inland Inspection</b> will be carried out by BHEL/BHEL appointed Third Party Inspection Agency (TPIA) / Customer/Customer Apointed Inspection Agency/Consultant. This is applicable for all Stage inspection and Final Inspection identified as "W" - Witness or "CHP" - Customer Hold Point as per customer approved Quality Plan/ Technical specification / Approved Drawing/ Approved Data sheet / Scheme / PID / PFD / SLD (Process Instrumentation Diagram / Process Flow Diagram / Single Line Diagram) etc (As applicable).		
3	<b>Inspection Agency for Foreign Bidders and also for Indian Bidder but importing from Foreign Sources:</b> (1) Any one of the following Third Party Inspection Agency (TPIA) shall be appointed by the bidder and same shall be furnished by the bidder in techno commercial bid itself. (2) The details of TPIA with contact details like Name of the official, Phone no, Email id shall also to be submitted during pre/post award. However cost for such inspection agency shall be borne by the bidder only. Inspection charges for such inspection agency shall be indicated separately so that if BHEL/Customer is undertaking the inspection by on their own, then these charges non claimable by the bidder. <b>List of TPIA</b> 1.M/s Bureau Veritas 2.M/s TUV-Nord 3.M/s TUV-SUD 4.M/s TUV Rheinland 5.M/s Lloyds Register 6.M/s SGS 7.M/s Germanischer Lloyds 8.M/s QUEST 9.M/s Certification Engineers International 10.M/s Intertek 11.M/s IR Class Systems and Solutions 12.M/s DNV 13. M/s Fichtner 14. M/s ABS Inspection Services		

Sl.No	BHEL / Customer Requirements	##Specific confirmations by the manufacture(Acceptable/Not acceptable)
4	<b>Stage Inspection during manufacturing Process</b> : Stage Inspection during manufacturing shall be carried out as per approved quality plan and all necessary documents shall be provided for review,verification and clearanace for further processing. This inspection call shall be given well in advance (atleast 2 weeks before for Indeginious and 45 days forforeign) to TPI/Bidder's own inspection agency to avoid delay in the manufacturing processes.	
5	<b>Inspection before despatch for domestic supplier</b> : Inspection before despatch at supplier's works shall be carried out by Bidder appointed Inspection agency(As in Sl no.3.) Inspection shall be done as per approved Quality plan/ Technical specification/ Approved Drawing/ Approved Data sheet .	
6	Inspection at Forign Source/Supplier: (a) As in sl no: 3. shall be ensured without fail (b) No materail / items shall be despatched without getting the written communication from BHEL / Customer inspection carried out by Bidder apointed Third Party Inspection Agency (As per Sl no.3) / Customer/Customer Apointed Inspection Agency/Consulatnat. This is applicable for all Stage inspection and Final Inspection identified as "W" - Witness or "CHP" - Customer Hold Point as per customer approved Quality Plan/ Technical specification / Approved Drawing/ Approved Data sheet / Scheme / PID / PFD / SLD (Process Instrumentaion Diagram / Process Flow Diagram / Single Line Diagram) etc (As applicable). Inspection before despatch for Foreign supplier : Inspection before despatch at supplier's works shall be carried out by bidder appointed inspection agencies having international presence at vendors and or vendor's sub vendor works. Inspection shall be done as per approved Quality plan/ Technical specification/ Approved Drawing/ Approved Data sheet by TPIA mentioned in Sl no: 03 at supplier's cost.	
7	<b>Painting</b> shall be done strictly as per BHEL/Customer approved painting schedule / scheme only. Paint Thickness / Paint shade shall be ensured as per BHEL / Customer approved painting schedule / specification / data sheet etc. No deviation is acceptable unless otherwise accepted by BHEL/Customer in writing. Any conflict if any among BHEL / Customer approved painting schedule / Spec / data sheet etc shall be brought to the notice to BHEL well in advance before proceding including the BOI being pro cured for assy / skid like motors etc	
8	Specific conformation for document package in the event of an order (2 Hard copies & soft copy in PDF file) is to be given containing the following with proper linkages (i) Index Sheet (ii) MQP/RQP/Endorsement Sheet (As applicable) (iii) TCs identified by BHEL/ Customer for record for "CHP" / "W" and Verification portion ("V") as given in approved QP. (iv) Final inspection report + TC including Chemical + Mechnaical + HT + NDT etc (v) Third party Inspection report + TC (vi) Customer CHP/ MDCC (vii) Type test / Performance Test reports conducted (viii) Type test / Performance Test approval/ clearance obtained from BHEL/Customer (ix) BOM with As Build Drgs with actual make / rating used with BHEL/customer approved drawings.	
9	<b>Packing / Seaworthy Packing</b> shall be as per BHEL Packing schedule / approved drg / sketch. This shall be ensured to take care tarnsit / handling / transhipment in Road / Sea / Air. Photographs are to be submitted for BHEL review before despatching the material as per contract conditions.	
10	<b>Outsourcing of test facilities:</b> Bidder shall ensure all the testing facilities in house. However If any of the test facilities are not available with successful bidder, then bidder shall ensure the same at NABL accreadted third party lab / Govt / Govt Lab for major testing such as NDT, Electrical & Mechanical testing.	
11	<b>Important Note:</b> No deviation on the above requirement 01 to 10 is acceptable w.r.t Quality Requirement and those offers not meeting these specific customer requirement is liable for rejection and hence the bidder shall submit all the required documentary evidances in the offer itself.	
12	## Necessorily to be filled up by the bidder at the time of offer itself otherwise the offer may not be considered w.r.t Quality Requirement being customer specific requirement.	
13	If the OEM/Principal engaging the services of an agent to participate on their behalf, Then mention OEM /vendor Name & address as well as agent details with their sign and seal.	
VENDOR SIGN AND STAMP:		Vendor Name & Address: