

FIELD QUALITY PLAN

FOR


**FQP-Balance work for extension of GJB for establishing
manufacturing facility of Heat exchangers for nuclear project.**



FACTORY CIVIL DEPARTMENT

BHARAT HEAVY ELECTRICALS LIMITED

BHOPAL

 BHOPAL FACTORY CIVIL DEPARTMENT		AUTHORISATION FOR DIFFERENT CATEGORIES OF CHECKS	
Classification of Check		Inspection Authority	Clearing Authority
Symbol	Description	BHEL	BHEL
A	Critical	Engineer-in-charge	Sr.Engineer-in-charge
B	Major	Engineer-in-charge	Sr.Engineer-in-charge
C	Minor	Engineer-in-charge	Sr.Engineer-in-charge

NOTE :

- 1 Quantum of check shall be 100% for all characteristics unless otherwise mentioned in reference documents. Contractors will be responsible for getting the work inspected by inspecting authority after carrying out inspection by themselves as per Field Quality Plan.
- 2 In case of non-conformity, before accepting, clearing agency shall ensure disposition and the same shall be reflected in the log-sheet / protocol.
- 3 For checks where log sheets are not called for, suitable records shall be maintained in the form of log book / protocols.
- 4 Abbreviations used in the column "Type of Check" are
 - R : Record Verification
 - M : Measurement
 - W : Witness
 - T : Test
- 5 Abbreviations used in the column "Format of Record" are
 - SR: Site Register
 - TR : Test Report
- 6 In case of non-availability of inspecting/clearing authority of prescribed level the job shall be performed by higher authorities or the persons authorized by sectional head
- 7 Tests not explicitly mentioned but necessitated as per work requirement or as per discretion of Engineer Incharge shall be carried out as per relevant standards.



BHOPAL
FACTORY CIVIL DEPARTMENT

FQP-Balance work for extension of GJB for establishing manufacturing facility of Heat exchangers for nuclear project.

DOC NO:

REV NO: NIL

S No.	CHARACTERISTICS / ITEM	TYPE OF CHECK	INSTRUMENT	CLASS	QUANTUM/ FREQUENCY OF CHECK	REFERENCE DOCUMENT/ ACCEPTANCE STANDARD	FORMAT OF RECORD	REMARKS
1.0	GENERAL REQUIREMENTS							
1.1	Setting up of Field QA & QC laboratory	V	As agreed/required	A	Once prior to start of work	Tech Spec	SR	Contractor may also opt to get the material tested in outside reputed laboratory. In such a case, contractor has to establish a field laboratory with only instruments required for in-situ testing.
1.2	Availability of requisite laboratory setup & equipment in good working condition well before commencement of concerned activity .	V	As agreed/required	A	Once prior to start of work	Tech Spec	SR	
2.0	Fabrication Works							
2.1	Electrodes							
2.1.1	Moisture Free storage for electrodes as per IS 1395:1982	W	As per IS:1395:1982	B	100%	As per IS:1395:1982	SR/LB	
2.1.2	100% visual examination shall be carried out in the vicinity of welds for arc strikes, undercuts, cleats, tacks & gouges & shall be ground and blended. The entire butt weld area shall be dye penetrant/magnetic particles tested.	W	As per Corporate Standard AA 0622101	B	100%	As per Corporate Standard AA 0622101	Test Report	
2.1.3	Visual checks/Dye penetration test as per criticality of the joint	W	As per relevant standards	A	100%	As per relevant standards	IR	



BHOPAL
FACTORY CIVIL DEPARTMENT

FQP-Balance work for extension of GJB for establishing manufacturing facility of Heat exchangers for nuclear project.

DOC NO:

REV NO: NIL

S No.	CHARACTERISTICS / ITEM	TYPE OF CHECK	INSTRUMENT	CLASS	QUANTUM/ FREQUENCY OF CHECK	REFERENCE DOCUMENT/ ACCEPTANCE STANDARD	FORMAT OF RECORD	REMARKS
3.0	Galvalume Sheet							
	Note : Source Inspection and Test witness as required shall be done.							
3.2.1	Physical dimensions such as pitch, crest depth etc	W	IS 14246	A	For each supply of 10 tonnes	IS 14246	Test record	
3.2.2	Tensile Strength	W	IS 14246	A	For each supply of 10 tonnes	IS 14246	Test record	
3.2.3	Thickness of Color coating	W	IS 14246	A	For each supply of 10 tonnes	IS 14246	Test record	
3.2.4	Bend test	W	IS 14246	A	For each supply of 10 tonnes	IS 14246	Test record	
3.2.5	Impact resistance test	W	IS 14246	A	For each supply of 10 tonnes	IS 14246	Test record	
3.2.6	Pencil hardness test	W	IS 14246	A	For each supply of 10 tonnes	IS 14246	Test record	
3.2.7	Scratch resistance test	W	IS 14246	A	For each supply of 10 tonnes	IS 14246	Test record	
3.2.8	Composition test	W	IS 15961	A	For each supply of 10 tonnes	IS 15961	Test record	