



CONTROLS AND INSTRUMENTATION/QA/FB

STANDARD QUALITY PLAN FOR

MASS FLOW METER

REV	DATE	PREPARED	REVIEWED	APPROVED	REVISION HISTORY
00	27/02/2013	Sd/-	Sd/-	Sd/-	Initial release.
01	17/06/2014	V.AVINASH 	RM.VAIRAVAN 	N.SRIDHAR 	Revised based on discussion with C&I/Engg on 17/06/14



BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPPALLI - 620014

QUALITY PLAN FOR
MASS FLOW METER

QA:CI:STD:QP:72

Rev: 01

Page: 2 of 2

Sl. No	Component & Operation	Characteristics	Class	Type of Check	Quantum of check		Ref Doc. & Acceptance STD	Format of record	AGENCY			Remarks
					M	B/C			M	B	C	
A	Finished Product Inspection											
01	Flow Sensor	Material	Major	CHEM	Sample	-	PO, BHEL Spec	TC or COC	P	V	-	
02	Mounting Flanges	Material	Major	CHEM	Sample	-	PO, BHEL Spec	-Do-	P	V	-	
03	Sensor	Dimensional Check	Major	MEAS	100%	-	BHEL Appd Drg	TR	P	V	-	
04	Complete Unit	a. Verification of components and accessories	Major	VISU	100%	Random	PO, BHEL Appd Drg.	TR	P	W	-	
		b. Functional test including calibration for repeatability, linearity and accuracy	Major	ELEC	100%	-	BHEL Appd Drg	TR	P	V	-	
		c. Power – ON	Major	ELEC	100%	100%	Mfr. Std.	TR	P	W	-	
05	Type Tests	a. Enclosure Protection (Transmitter and Sensor)	Critical	ENVI	One of design	One of design	PO, BHEL Spec	TC or COC	P	V	-	
		b. Explosion Proof Certificate	Critical	ENVI	-Do-	-Do-	PO, BHEL Spec	TC	P	V	-	If applicable

D.NOTES:

1.LEGENDS:

ELEC	:	Electrical	MEAS	:	Measurement
TR	:	Test Report	TC	:	Test certificate
VISU	:	Visual	CHEM	:	Chemical
ENVI	:	Environment	COC	:	Certificate of compliance

- The vendor shall arrange all testing facilities at their works. Tests for which facilities are not available are to be carried out at recognized National Test Houses like ETDC/CIL/NPL/ERTL etc., at vendor cost.
- Through Log Book / any other documents available at the vendor's works, it shall be possible to correlate the finished products with raw material and in process stage checks / inspection carried out.

- All Measuring and Testing Instruments shall be periodically calibrated from recognized test houses & certificates made available during inspection for verification.
- Test Certificates for routine test are to be furnished by the vendor.
- Type test certificate shall not be earlier than 5 years from the date of Purchase Enquiry.
- Vendor to give tentative inspection program in advance and confirm exact date two weeks in advance for arranging BHEL's inspection.
- Packing shall be as per the "PACKING PROCEDURE" indicated in the specification.

SQP72R1.DOC

M- MANUFACTURER/ SUB-VENDOR; **B** - BHEL / TPI ; **C** - CUSTOMER / TPI
P - PERFORM; **W** - WITNESS **V** - VERIFICATION;