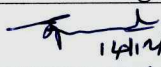
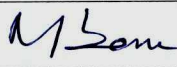
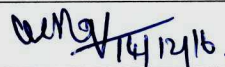
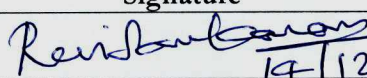


	BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPPALLI - 620 014, INDIA. QUALITY ASSURANCE DEPARTMENT
STANDARD QUALITY PLAN FOR SEAL AIR FILTER	
SQP:SD:21 Rev No: 00	Page: 1 of 3

Prepared By Quality Assurance	ABDUR RAHMAN SULTAN	 14.12.2016
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Reviewed by	Signature
Quality Assurance (S. PANNARSELVAN)	 14/12/16
Engineering (M. VENKATESWARLU)	 14.12.16
Material Management M. SOMASUNDARAM	
Quality Control G. CHITHAMBARARAJAN	 14/12/16.

Rev No	Date	Approved by	Signature
00	14/12/2016	AGM / QA & BE	 14/12/16

Record of Revisions

Rev No	Details of Revision	Remarks
00	Fresh Issue	

		MANUFACTURER'S NAME & ADDRESS: BHEL: TIRUCHIRAPPALLI APPROVED SUPPLIERS	STANDARD QUALITY PLAN								QWI NO:SQP:SD:21 REV NO: 00 DATE: 14/12/2016 PAGE: 2 OF 3			
			PRODUCT: SEAL AIR FILTER											
			SUB-SYSTEM: Steam Generator and Auxiliaries											
SL NO	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS	
					M	C/N				M	C	N		
1	2	3	4	5	M	C/N	7	8	9	D*	**	10	11	

1.0	RAW MATERIAL:													
1.1	Sheet Metal (Housing, Cell Body, Blade Pack Assembly, Side Flashing Assembly, Bull nose support clamp, Bleed air duct, Transition Duct, Bleed Air Flange & Vanes)	Chemical & Mechanical Properties	A	Review	100%	1 Heat /Lot	BHEL Specification/ Approved datasheet/ Approved drawing		MTC	√	P	V	-	Material test certificates shall be Submitted
		Dimensions	A	Measurement	5 %	5 %	BHEL Approved Drawing		IR	√	P	V	-	
2.0	INPROCESS CONTROLS:													
2.1	Welding Qualifications	Procedure	B	Review	100%	100%	AWS D1.1 / ASME Sec IX		PQR & WPS	√	P	V	-	
		Personnel	B	Review	100%	100%			WQR	√	P	V	-	
2.2	NDE on Weldments	Surface Quality	B	NDE-LPI*	10%	10%	ASME Sec V	ASME Sec V	IR	√	P	V	-	*NDE – LPI of Dynavane Housing & Duct
3.0	FINAL INSPECTION :													
3.1	Seal Air Filter Assembly with Bleed Duct, Transition Ducts & Bleed Air Flange	Dimensions & Number of cells	A	Measurement	100%	100%	Approved GA Drawing	Approved GA Drawing	IR	√	P	W	-	

LEGEND: * RECORDS IDENTIFIED WITH “TICK” (√) SHALL BE ESSENTIALLY INCLUDED BY THE SUPPLIER IN QA DOCUMENTATION;
**** M:** MANUFACTURER, **C:** BHEL QC/BHEL AIA, **N:** CUSTOMER; **P:** PERFORM. **W:** WITNESS, **V:** VERIFICATION; **CLASS :** A - CRITICAL ; B - MAJOR ; C – MINOR;
MTC- Manufacturer's Test Certificate; IR- Inspection/Test Report; COC: Certificate of Compliance; ALC: Approved Lab Test Certificate

		MANUFACTURER'S NAME & ADDRESS: BHEL: TIRUCHIRAPPALLI APPROVED SUPPLIERS		STANDARD QUALITY PLAN							QWI NO:SQP:SD:21 REV NO: 00 DATE: 14/12/2016 PAGE: 3 OF 3		
				PRODUCT: SEAL AIR FILTER									
				SUB-SYSTEM: Steam Generator and Auxiliaries									
SL. NO	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS
										M	C	N	
1	2	3	4	5	M	C/N	7	8	9	D*	**	10	11

4.0	PAINTING, MARKING, PACKING AND PRESERVATION:												
4.1	Painting	Surface Preparation, Color Shade & DFT	B	Visual & Measurement	100%	100%	BHEL Spec & PO / BHEL Approved drawings	BHEL Spec & PO / BHEL Approved drawings	IR	√	P	V	-
4.2	Marking/ Identification	Marking /Name Plate & Tagging, Direction of Air Flow,Orientation marking of filter	A	Visual	100%	100%	BHEL Specification, GA Drawing & Purchase Order	BHEL Specification, GA Drawing & Purchase Order	IR	√	P	V	-
4.3	Packing	Tightness & Stability	B	Visual	100%	100%	BHEL Specification & Purchase Order	BHEL Specification & Purchase Order	IR	-	P	-	-
5.0	CERTIFICATION												
5.1	Data Folder	Completeness of documentation	B	Review of documents	100%	100%	BHEL Spec/ approved datasheet		IR	√	P	V	-

Notes:

1. Customer verification stages specified above shall be followed. Any witness stages shall be as specified/indicated in BHEL PO.
2. Type test certificates for the filter efficiency and pressure drop shall be provided.

LEGEND: * RECORDS IDENTIFIED WITH "TICK" (√) SHALL BE ESSENTIALLY INCLUDED BY THE SUPPLIER IN QA DOCUMENTATION;
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MTC- Manufacturer's Test Certificate; IR- Inspection/Test Report; COC: Certificate of Compliance; ALC: Approved Lab Test Certificate