
 BHEL-SBD		BHARAT HEAVY ELECTRICALS LIMITED SOLAR BUSINESS DIVISION PROF.C.N.R RAO CIRCLE, IISc POST MALLESHWARAM, BENGALURU-560012			<b>STANDARD QUALITY ASSURANCE PLAN</b>			QP NO.: EPD_QP_IP_2022-23_0003 REV. NO.: 00 DATE: 28.06.2022 PAGE 1 OF 2					
					ITEM: CONDUCTOR ROD 49820517423 REV01, 49820509223 REV02, 49821013023 REV01								
SL. NO	ITEM/ COMPONENT	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY		REMARKS	
									D *	M	B		
1.	2.	3.	4.	5.	6.	7.	8.	9.		**	10.	11.	
<b>A INSPECTION BY SUPPLIER AT THEIR WORKS</b>													
A.1	Conductor Rod	Raw Material TC (Heat No, Chemical Composition, Mechanical Etc.)	Major	Documentation	100%	IS 2062:2011, BHEL Drg./BHEL Spec	IS 2062:2011, BHEL Drg./BHEL Spec	Supplier TC	✓	V	V		
A.2		Visual	Major	Physical	100%			Inspection Report	✓	P	V		
A.3		Gauge Inspection (as applicable)	Major	Physical	100%			Inspection Report	✓	P	V		
A.4		Dimensions	Major	Physical	10 per 1000 & part thereof			Inspection Report	✓	P	V		
A.5		Mass/ Thickness of Zinc coating by Elcometer	Major	Physical	Min 3 per 1000 & part thereof	IS 4759:1996, BHEL Spec./ BHEL Drg.	IS 4759:1996, BHEL Spec./ BHEL Drg.	Inspection Report	✓	P	V	610 g/m <sup>2</sup> Unless mentioned in BHEL Drg./ Spec/BHEL PO	
A.6		Purity of Zinc Ingot used for Galvanizing	Major	Chemical	One sample per Ingot Lot	IS 209:1992	% Zinc ≥ 99.5	Manufacturer Test Certificate & Third party Lab Test report	✓	V	V	Vendor to give COC for Manufacturer TC for usage in BHEL PO	
A.7		Adhesion Test	Major	Mechanical	Min 5 per 5000 & part thereof	IS 2629 : 1985/BHEL Spec./ BHEL Drg.	No peel off	Inspection Report	✓	P	V		
<b>B PRE DISPATCH INSPECTION AT VENDORS WORKS/ INSPECTION AT BHEL WORKS</b>													
B.1	Conductor Rod	Visual	Major	Physical	IS:2500 Ptl AQL 0.65%	IS 4759:1996, BHEL Drg./BHEL Spec	IS 4759:1996, BHEL Drg./BHEL Spec	Inspection Report	-	P / -	W/P		
B.2		Gauge Inspection (as applicable)	Major	Physical	IS:2500 Ptl AQL 0.65%	IS 4759:1996, BHEL Drg./BHEL Spec	IS 4759:1996, BHEL Drg./BHEL Spec	Inspection Report	-	P / -	W/P		
B.3		Dimensions	Major	Physical	2 per 1000 & part thereof	IS 4759:1996, BHEL Drg./BHEL Spec	IS 4759:1996, BHEL Drg./BHEL Spec	Inspection Report	-	P / -	W/P		
<b>LEGEND: *D: RECORDS, IDENTIFIED WITH "TICK" ( ✓ ) SHALL BE ESSENTIALLY INCLUDED BY VENDOR IN QA DOCUMENTATION.</b> <b>** M: MANUFACTURER/SUB-VENDOR, B: BHEL/BHEL NOMINATED INSPECTION AGENCY</b> <b>P: PERFORM W: WITNESS AND V: VERIFICATION.</b>													
RAMANNA DHANANJAYA PREPARED BY: R DHANANJAYA						Digitally signed by RAMANNA DHANANJAYA DN: cn=R Chaudhary, o=BHEL, ou=SBD, email=rcd@bhel.in, c=IN Date: 2022.06.28 14:45:45+05'30'		aditya kumar mourya REVIEWED BY: ADITYA KUMAR MOURYA		Digitally signed by aditya kumar mourya DN: cn=aditya kumar mourya, o=BHEL, ou=SBD, email=aditya.kumar.mourya@bhel.in, c=IN Date: 2022.06.28 14:45:45+05'30'		R Chaudhary APPROVED BY: RAJNISH CHAUDHARY	

 BHBL-SBD		BHARAT HEAVY ELECTRICALS LIMITED SOLAR BUSINESS DIVISION PROF.C.N.R RAO CIRCLE, IISc POST MALLESHWARAM, BENGALURU-560012				STANDARD QUALITY ASSURANCE PLAN		QP NO.: EPD_QP_IP_2022-23_0003 REV. NO.: 00 DATE: 28.06.2022 PAGE 2 OF 2				
						ITEM: CONDUCTOR ROD 49820517423 REV01,49820509223 REV02, 49821013023 REV01						
SL. NO	ITEM/ COMPONENT	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY		REMARKS
										M	B	
1.	2.	3.	4.	5.	6.	7.	8.	9.	D *	**	10.	11.
B.4		Mass/ Thickness of Zinc coating by Elcometer	Major	Physical	Min 3 per 1000 & part thereof	IS 4759:1996, BHEL Spec./ BHEL Drg.	IS 4759:1996, BHEL Spec./ BHEL Drg.	Inspection Report	-	P / -	W/P	610 g/m <sup>2</sup> Unless mentioned in BHEL Drg./BHEL Spec/BHEL PO
B.5		Adhesion Test	Major	Mechanical	Min 5 per 5000 & part thereof	IS 2629 : 1985/BHEL Spec./ BHEL Drg.	No peel off	Inspection Report	-	P / -	W/P	

**Notes:**

- Material supplied shall be in line with BHEL Purchase Order, Technical Specification, Approved Drawings, applicable Standard References, or any other document/references.
- For first time supply by the vendor, sample approval to be obtained before bulk manufacturing from BHEL Quality/Engg.
- The SQAP shall be read in conjunction with BHEL Specification mentioned in Purchase Order and shall deem to include any additional tests as per the specification/Standard.
- In case of any contradiction between this SQAP, BHEL Specifications the following precedence shall be followed:
  - 1<sup>st</sup>: BHEL Purchase Order Specification;
  - 2<sup>nd</sup>: This STANDARD QUALITY ASSURANCE PLAN & Applicable standard;
  - 3<sup>rd</sup>: Manufacturers plant standards
- Packing shall be as per BHEL purchase order.
- BHEL reserves the right for pre-dispatch inspection at vendor works by BHEL or BHEL nominated agency.**
- In case of pre-dispatch inspection, vendor shall raise the inspection call in the online portal URL: [www.cqir.bhel.in](http://www.cqir.bhel.in) with inspection agency as BHEL SBD and shall upload Test Certificates, Internal inspection Report as per this SQAP in CQIR Portal. Final Pre dispatch inspection report must contain joint inspection report, internal inspection report & Test certificates duly signed by inspector.
- Original Test Certificates, Internal Tests Report (Duly Sealed & signed) as per this SQAP shall be sent along with lot for review.

<b>LEGEND: *D:</b> RECORDS, IDENTIFIED WITH "TICK" ( ✓ ) SHALL BE ESSENTIALLY INCLUDED BY VENDOR IN QA DOCUMENTATION. <b>** M:</b> MANUFACTURER/SUB-VENDOR, <b>B:</b> BHEL/BHEL NOMINATED INSPECTION AGENCY <b>P:</b> PERFORM <b>W:</b> WITNESS AND <b>V:</b> VERIFICATION.				Digitally signed by RAMANNA DHANANJAYA DN: cn=RAMANNA DHANANJAYA, o=BHEL, ou=BHEL, email=rcd@bhel.in, c=IN Date: 2022.06.28 16:24:45 +05'30'	Digitally signed by aditya kumar mourya DN: cn=aditya kumar mourya, o=BHEL, ou=BHEL, email=rcd@bhel.in, c=IN Date: 2022.06.28 16:24:45 +05'30'	Digitally signed by R Chaudhary DN: cn=R Chaudhary, o=BHEL, ou=BHEL, email=rcd@bhel.in, c=IN Date: 2022.06.28 17:02:02 +05'30'
<b>PREPARED BY:</b> <b>R DHANANJAYA</b>				<b>REVIEWED BY:</b> <b>KUMAR MOURYA</b>	<b>ADITYA</b>	<b>APPROVED BY:</b> <b>RAJNISH CHAUDHARY</b>