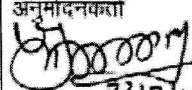


		उत्पाद मानक हाइड्रोजनरेटर		HG-10 096 Rev-00	
		PRODUCT STANDARD HYDROGENERATOR		पृष्ठ 1 कुल 3	
<u>SPECIFICATION OF WIRE ROPE SLINGS</u>					
1.0 GENERAL: The steel wire rope slings are used for lifting of various assemblies/ components of hydrogenerators.					
2.0 TECHNICAL REQUIREMENTS:					
2.1 General: The steel wire rope shall have a construction of 6 x 36 Right Hand Ordinary Lay (IS 2363) (14-7+7-7-1) with fibre core and shall conform to IS-2266					
2.2 Material: The steel wire rope shall be manufactured from ungalvanised steel wires having minimum tensile strength of 1770 N/mm Sq. Conforming to IS 1835. The fibre core of the wire shall comply with the requirements of IS 1804.					
2.3 Size and SWL: The diameter and length of each sling shall be as mentioned in the drawing. Each wire rope sling should meet the respective safe working load specified in the table on the drawing.					
2.4 End Connections: The slings shall be loop ended or endless as called in the drawings. The wire ends shall be terminated by mechanical splicing as per IS: 5245 Part II. <u>Hand splicing not acceptable.</u>					
2.5 The eye ends of the loop ended sling shall be made to suit Ramshorn crane hook* to IS 5749 of capacity specified on the drawing.					
2.6 Identification: A metal label ring indicating drawing, item number and safe working load shall be put into the eye of the steel wire rope slings.					
2.7 Freedom from defects: The completed sling shall be free from loose wires & strands or other irregularities. The wire rope shall be evenly laid & shall remain in condition when unwound from a reel or coil.					
संशोधन :		हाइड्रोजनरेटर इंजीनियरिंग विभाग भारत हेवी इलेक्ट्रिकल्स लिमिटेड			
		तैयारकर्ता	अनुमोदनकर्ता	जारी करने की दिनांक	
		 RAHUL 	 JKB 22/7/11	21.07.2011	

		बी.एच.एल. BHEL	उत्पाद मानक हाइड्रोजनरेटर PRODUCT STANDARD HYDROGENERATOR	HG-100 96 Rev-00 पृष्ठ 3 का 2
गोपनीय एवं अधिकार सुरक्षित इस प्रपत्रा पर दी गई जानकारी भारत हेवी इलेक्ट्रिकल्स लिमिटेड की संपत्ति है इसे प्रत्यक्ष या अप्रत्यक्ष रूप से कम्पनी के हितों को नुकसान पहुँचाने के लिए कदापि उपयोग नहीं किया जावे		3.0TESTS: 3.1Proof load test: The supplier shall test the wire rope sling for twice the safe working load as per IS: 5245 (Part II). 3.2Breaking load test: Breaking load test shall be carried out by any of methods specified below in 3.2.1 or 3.2.2. 3.2.1 As per IS-6594 : For minimum breaking load refer table given IS-2266. 3.2.2 As per IS-5254 – Part-II : For minimum breaking load refer table given in this IS. The tests in 3.1 & 3.2 above shall be witnessed by BHEL Safety Inspector. 4.0TEST CERTIFICATES: Three copies of test certificate as specified in Appendix ‘C’ of IS 6594 shall be supplied. 5.0PACKING: The slings shall be packed as per IS 6594. Note: Whenever standards are mentioned, the latest versions of the same are to be referred.		



उत्पाद मानक हाइड्रोजनरेटर

HG-100 96
Rev-00

पष्ठ 3 का 3

PRODUCT STANDARD HYDROGENERATOR

6.0 TABLE FOR MINIMUM BREAKING FORCE :-

Nominal Diameter (mm)	Approx. weight (kg/100 m)	Minimum Breaking Force for 1770 Rope Grade (KN)
8	24.3	37
9	30.8	47
10	38.0	58
11	46.0	71
12	54.7	84
13	64.3	99
14	74.5	114
16	97.3	149
18	123	189
19	137	211
20	152	234
22	184	283
24	219	336
26	257	395
28	298	458
32	389	598
36	493	757
38	549	843
40	608	934
44	736	1130
48	876	1345
52	1028	1579
56	1192	1831
60	1369	2102
64	1557	2392
68	1758	2700
70	1863	2861
72	1971	3027
76	2196	3373
80	2433	3737
84	2683	4120
86	2812	4319
88	2944	4522
92	3218	4942

गोपनीय एवं अधिकार सुरक्षित इस प्रपत्रा पर दी गई जानकारी भारत हेवी इलेक्ट्रिकल्स लिमिटेड की सम्पत्ति है इसे प्रत्यक्ष या अप्रत्यक्ष रूप से कम्पनी के हितों को नुकसान पहुँचाने के लिए कदापि उपयोग नहीं किया जावे

 BHOPAL	TECHNICAL PRE-QUALIFICATION REQUIREMENTS (T-PQR)	DOC. NO. : HGG-1822 DATE: 06/02/2019 REV. - 00 PAGE 1 OF 1
	HYDRO GENERATOR ENGINEERING DIVISION	

Technical Pre-Qualification Requirements (T-PQR) for Set of slings (Steel wire rope) for hydro-generators.

S. No.	Description of pre-qualification requirement	Vendor Response	
		Complied /Not complied	Supporting Documents required to accept compliance
1	Only original manufacturers or their authorized distributors/agents will qualify. Traders/stockiest etc. will not be considered.		Certificate of being original manufacturer or authorization letter from original manufacturer (for distributors/agents).
2	Company to be ISO certified <i>ISO: 9001</i>		Valid ISO certificate. For distributors/agents ISO certificate of principle to be submitted.
3	Compliance to attached specification HG 10096 Rev 00 of Set of slings		Point-wise compliance statement to attached specification.
4	Source of Raw material - Use of only raw material from reputed national/ international brands.		Necessary confirmation to be submitted.
5	The company should have experience of supplying at least 5 supplies of Set of Slings (Steel wire rope) in last 10 years and minimum 1 supply in last 3 years.		Copy of PO /completion certificate / invoice to be submitted
6	All correspondence and documents shall be in ENGLISH language. If any document provided by vendor is in any language other than English, it must be supported with its English translation.		Compliance

Note:

1. Compliance to above Pre-qualification requirements are mandatory. In absence of compliance of above requirements vendor PQ application is liable to be rejected.
2. BHEL has right to verify information/ confirmation furnished, by asking additional documents proofs etc.

Giriraj Agarwal
 Giriraj Agarwal
 Sr. Engineer

Vivek Goswami
 Vivek Goswami
 Manager

D K Chandrakar
 D K Chandrakar
 Sr. Manager

A. Dixit
 A. Dixit
 AGM-HGE

A. Biswas
 A. Biswas
 AGM (HOD/HGE)

79
 12/2/19
 11.2.19
 Safety Dept. (HSE)
 Giriraj Agarwal / GIRIRAJ AGARWAL
 बंधक / Manager
 स्वास्थ्य, सुरक्षा एवं पर्यावरण विभाग / HSE Division
 डी.एच.ई.एल., भोपाल / BHEL, BHOPAL



3 SPICED ENDLESS SLING

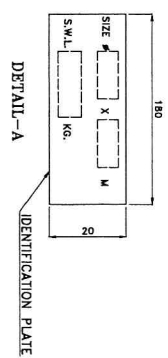
TECHNICAL REQUIREMENTS:-

1. SLINGS TO BE MANUFACTURED AS PER PRODUCT STANDARD HG 10096 REV. 00.
2. END OF SLINGS SHALL BE SUITABLE FOR 200 TON CRANE HOOK, TO IS 5749.

ITEM NO.	ROPE NOM. DIA	LENGTH (L) (MM)	APPLICATION
2.	48	13000	BOTTOM BKT. CENTER ASSY. LIFTING BOTTOM BKT. CENTER AND ARM ASSY. LIFTING TOP BKT. CENTER ASSY. LIFTING TOP BKT. CENTER AND ARM ASSY. LIFTING 1/4 STATOR FRAME LIFTING & TURNING
3.	52	8000 (CIRCUMFERENTIAL)	BOTTOM SHAFT LIFTING & TURNING TOP SHAFT LIFTING & TURNING
4.	24	4500	LIFTING OF POLES
5.	24	10700	GENERAL PURPOSE STATOR FRAME LIFTING AND TURNING

[illegible][illegible]

INVENTORY NO.	SIGN AND DATE	REF. DRG. NO.
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TECHNICAL REQUIREMENTS:-

1. STEEL WIRE ROPE SLINGS TO BE MANUFACTURED AS PER PRODUCT STD. HG-10096.
2. END OF SLINGS SHALL BE SUITABLE FOR 150 TONNES CRANE HOOK.

[illegible][illegible]

