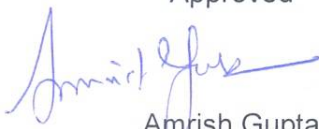

			Spec. No	FCR/P03/004
			Rev. No	00
			Page 1 of 2	

COPYRIGHT AND CONFIDENTIAL The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used directly or indirectly in anyway detrimental to the interest to the company

TECHNICAL SPECIFICATION for supply of Moulded Graphite Plates for Proton Exchange Membrane (PEM) Fuel Cell

The due date for receiving the proposals against the EoI is 2nd July 2021 (Friday).

Rev 00	Approved		
	 Amrish Gupta		
	Prepared	Issued	Date
	 Dr Vasu Gollangi		18/06/2021



Spec. No FCR/P03/004

Rev. No 00

Page 2 of 2

Specification for Test station for Proton Exchange Membrane (PEM) Fuel Cell**Quantity: 600 - 800 Nos**

Sl. No.	item	BHEL specifications
1.	Graphite plate dimensions	(330x200x2) mm
2.	Glass transition temperature	Shall be more than or equal to 120 Deg. C
3.	Tolerance in thickness variations	± 0.03 mm
4.	Operating Temperature	90 °C
5.	Electrical conductivity	>55 S/cm
6.	Gas permeability	Negligible or below 10^{-3} cm ³ /cm ² .s
7.	Compressive strength	>40 MPa
8.	Specific gravity (g/cm ³)	>1.80
9.	Material	Composite graphite
10.	Binder resin & Graphite content in composite graphite plate	Binder resin content:12-18 wt%, & Graphite content: 82-88%
11.	Thermal conductivity	>18 W/mK
12.	Supply of sample plate	Vendor is required to send two sample plates of minimum size 330mm X 200mm X 2mm for technical evaluation at free of cost. The sample plate is to be delivered duty paid through courier & it will not be returned back to the vendor.
13.	Manufactures Test Certificate	Manufacturer's Test Certificate required and shall be provided along with the dispatch.
14.	Warranty	All supplied items to be provided with warranty for 12 months from the date of acceptance.
15.	Replacement of supplied items against mechanical defects	The vendor is responsible for replacement of items which are found to be mechanically defective at their own cost under warranty period
16.	Contact details for any technical information	Dnyndev Arjun, BHEL Corporate R & D Division Vikasnagar, Balanagar, Hyderabad – 500093, Telangana state. Email: devkitte@bhel.in
17.	Issue of drawings on submission of non-disclosure agreement	Drawings can be issued to the potential vendors who can meet the above technical specifications also the vendor should have prior experience in supplying the composite graphite plates for fuel cells

COPYRIGHT AND CONFIDENTIAL The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used directly or indirectly in anyway detrimental to the interest to the company