PSGSG 12-13 / 29	**Product Specifications For MOVABLE FIXED ARCING RODS**	Drg. No.	RD DG 435 0617 0618
		Date	16.12.2014
		Product	**GSM 400**

1.0 **Application** : Movable Fixed Arcing rods for Gas Insulated Switchgear Equipment

2.0 **Configuration** :

1. Sintered W-Cu (70-30 %), welded (by electron Beam welding process) to the high conductivity copper.
2. Machined to drawing dimensions.

3.0 **Quantity** : 20 No.s

4.0 **Specifications:**

1. Dimension Drawings : Refer Drg No. RDDG 4 35 0617 0618

2. Material: : Tungsten-Copper, ETP Copper, SS-304

(a). **W-Cu**

A sintered matrix of W-Cu (70-30 %) shall be produced by PM technique. The sintering shall be carried out in neutral or reducing atmosphere. The ingredient (powders) shall have high purity.

(b) ETP Copper:

The specified copper material shall have minimum conductivity of 95 % IACS. Supplied material will be tested at BHEL for conductivity and the same will be rejected in case they do not meet specified conductivity.

The material shall be good for brazing, soldering and for electrical applications where high Current transfer is involved.

5.0 Electron Beam Welding (EBW):

The component shall be finished to size before electron beam welding at the interface. The interface will be between High conductivity copper and W-Cu Tip. The interface shall be welded to full depth. The welding joint between high conductivity copper and W-Cu tip shall exhibit minimum contact resistance. The Component shall be free from dirt, grease and loose particles.

6.0 Qualifying Requirements:

The supplier shall be of national / International repute with proven record and should have supplied arcing contacts for electrical applications. The supplier must submit along with the quotation a few references to whom the supplier has supplied a similar material.

7.0 Tests:

(a). Dimensional : All dimensions shall comply to drawing measures.
(b). The component shall be subjected to micro-ohm measurement test, using 100 A DC source and shall measure less than one micro-ohm at the welding interface.

8.0 Packing :

The contacts shall be packed in high density cardboard boxes, with a primary wrapped in polyethylene and packed individually in dust free boxes after degreasing. The component shall be guaranteed against all manufacturing defects.

9.0 General :

1. Surface finish of the components shall be at least RA 1.6.
2. The component shall be free from dirt, grease and loose particles.

In case of doubts in drawings or specifications the supplier shall contact BHEL for clarifications.