
		<h1 style="text-align: center;">PRODUCT STANDARD</h1> <h2 style="text-align: center;">SWITCHGEAR ENGINEERING DIVISION</h2>		<b>SG 12722 REV.01</b>	
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<b>ALUMINIUM ALLOY CASTINGS OF POLE HEAD TOP AND POLE HEAD BOTTOM</b>							
<b>COPYRIGHT AND CONFIDENTIAL</b> The information on this document is the property of Bharat Heavy Electricals Limited It must not be used directly or indirectly in any way detrimental to interest of Co.		<b>1.0 INTRODUCTION :</b>  Aluminium Alloy Die castings of pole heads top and bottom are used in pole assembly of vacuum circuit breakers. Apart from mechanical coupling functions, these castings also facilitate current collection from terminals of vacuum interrupters as well as act as heat sinks to conduct away the heat generated at these VI terminals.					
		<b>2.0 MATERIALS AND PROPERTIES :</b>  The gravity die castings of these items shall be made from Aluminium Alloy of following equivalent grades:  Grade : 4635 T6 of IS617 : 1994 or Grade : LM 9 TF of BS1490 : 1988 or Grade : GK Al Si 10 Mg KA of DIN 1725 : 1983  These castings shall generally confirm to the requirements of BHEL specification BP19990.except mechanical properties which shall be as follows :  The castings shall be solution treated, quenched and precipitation hardened at room temperature for at least 10 days and shall meet following properties:  Tensile strength > or = 180 N/sq mm Yield stress > or = 120 N/sq mm Elongation > or = 2.8 % Flexural strength> or = 330 N/sq mm Hardness > or = 65 HB Electrical conductivity > or = 22 m per ohm sq mm					
		<b>3.0 FINISH AND SUPPLY CONDITION ETC :</b>  Specification BP19990 is applicable.					
		<b>4.0 TESTING REQUIREMENTS :</b>  Tests to verify following properties shall be carried out at supplier's works (method of tests as per BP19990 ) :  - Chemical composition - Tensile strength - Elongation - Hardness and - Electrical conductivity					
		<b>REV.</b> 01	<b>PRINTS TO :-</b> PDG/SWE   1 11KV PLAG  1 SWM QCX   1	<b>APPROVED –</b> R.K. SHUKLA			
		<b>ALTD.</b> DIVYA	4	<b>PREPARED</b> SMM	<b>ISSUED</b> RKK	<b>DATE</b> 17.07.95	
		<b>APPD.</b> ILB					
		<b>DATE.</b> 21.09.99					

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