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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 any way detrimental to the interest of the company.		<u>PACKING, PRESERVATION AND SHIPPING INSTRUCTIONS</u> 1.0 DESCRIPTION This specification specifies the packing, preservation and shipping requirements for Gas Turbine DD packages. 2.0 FOLLOWING ARE THE MINIMUM REQUIREMENTS TO BE FOLLOWED FOR PACKING, PRESERVATION AND SHIPPING 1) Packing drawings with packing list, list of deliverables, details of no. of packages, package dimensions and weight shall be submitted for BHEL approval after inspection & before despatch. No item shall be dispatched without BHEL approved packing. 2) Packing shall be accomplished in accordance with acceptable seaworthy packing and commercial practices for all shipments. Vendor shall prepare shipment of all the equipment, such that they will be protected from damage in handling and transit over rough terrain. All items shall reach site in undamaged conditions. 3) It is the responsibility of the vendor to determine that the packaging done is adequate to assure that all equipment shall arrive at destination in an undamaged condition and ready for the intended use. 4) Packing together components of dissimilar metals shall be avoided. 5) All packing and preservation shall provide suitable protection for storage on site for a period of 1 year under the ambient conditions specified without any further protection. 6) All instruments and delicate components shall be de-mounted, preserved and packed separately and clearly indicated in packing list. 7) Each shipping container shall contain two packing lists, listing all contents of the particular container with one copy in a waterproof envelope inside the container and other copy shall be kept in a metallic pocket in a secure manner outside the container. 8) Commissioning spares and mandatory spares shall be packed separately and packing list shall be sent in the manner suggested in point no.7. 9) Completeness and correctness of shipment shall be witnessed by Purchaser's inspector at site/ shop with reference to the BHEL approved packing list. Any discrepancy during inspection at site shall be clarified/ resolved by vendor. 10) Any shortages discovered at site shall be air freighted by vendor at his expense. 11) Cabinets, MCC , DCDB and electronic panels shall be suitably protected against damage by (sea) water, sand, rough handling and pilferage. They shall be completely enveloped in plastic sheeting and hermetically sealed. Moisture absorbing silica gel envelopes shall be securely fixed to both the inside and outside of each cabinet/panel.			
		Ref. Doc	Revisions: Refer to record of Revisions	Prepared: SS	Checked: KSK

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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 any way detrimental to the interest of the company .		12) <u>3 – Layer Wrapping for the Equipment</u> All the items shall be individually wrapped with the following 3 layers minimum. ➤ Layer 1 - Polythene sheet of 100 GSM. ➤ Layer 2 - Two layers of stretch film sheet of 70 GSM (each). ➤ Layer 3 - HDPE Tarpaulin sheet of 150 GSM. 13) All sharp corners and edges shall be protected by covering with rubber mats to prevent damage to the packing. 14) Inner walls of the package shall be covered with HDPE Tarpaulin sheet of 150 GSM. 15) The timber used shall be of non-coniferous type as per specification HY51463 for Beams & Runners. Ply Wood planks as per specification IS:303 Gr. "MR" Type A,B shall be used for the Sides, Top & Bottom of the Packing Cases. All the openings of the equipment shall be closed with 10mm thick plywood sheet and the edges shall be sealed with GI sheet. 16) All inner walls of the package shall be provided with water proof material 17) All packages shall be marked with weight and center of gravity. Lifting points for lifting the package shall be clearly marked on the package. 18) All the openings of the equipment shall be closed with 10mm thick plywood sheet and the edges shall be sealed with GI sheet. 19) All stencil markings on the outside of casing shall be either of a waterproof material or protected by shellac or varnish to prevent obliteration in transit. 20) The equipment and packing must be provided with greater use of shock absorbent materials to with stand the rough conditions of the road during transport. 21) All equipment shall leave the Vendor's facility in a clean and dry condition both inside and outside. 2.1 Packing for instruments and meters 1) The minimum packing requirements detailed against Clause 2.0 of this specification is also applicable for instruments and meters. 2) For thermocouples the sensor tip shall be covered with proper plastic sleeve to prevent any damage while handling. 3) For vibration sensors, velocity transducers, proximitors , LVDTs , the item shall be packed with bubble packing material before inserting to the packing case. The on packing case shall have marking for safe handling of the material. 4) For meters the dial glass shall be covered with thermo coal and further wrapped with bubble packing material before inserting to the packing case to prevent any damage while handling.		
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<u>REVISION SHEET</u> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Rev. No.</th> <th style="width: 15%;">Date</th> <th style="width: 35%;">Revision Details</th> <th style="width: 20%;">Revised By</th> <th style="width: 20%;">Approved By</th> </tr> </thead> <tbody> <tr> <td>00</td> <td>02.09.2013</td> <td>First made</td> <td>KSK</td> <td>KS</td> </tr> <tr> <td>01</td> <td>30.11.2015</td> <td>Clause 2.1 & 2.2 included</td> <td>KSK</td> <td>KS</td> </tr> <tr><td>02</td><td></td><td></td><td></td><td></td></tr> <tr><td>03</td><td></td><td></td><td></td><td></td></tr> <tr><td>04</td><td></td><td></td><td></td><td></td></tr> <tr><td>05</td><td></td><td></td><td></td><td></td></tr> <tr><td>06</td><td></td><td></td><td></td><td></td></tr> <tr><td>07</td><td></td><td></td><td></td><td></td></tr> <tr><td>08</td><td></td><td></td><td></td><td></td></tr> <tr><td>09</td><td></td><td></td><td></td><td></td></tr> </tbody> </table>						Rev. No.	Date	Revision Details	Revised By	Approved By	00	02.09.2013	First made	KSK	KS	01	30.11.2015	Clause 2.1 & 2.2 included	KSK	KS	02					03					04					05					06					07					08					09				
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