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| TD-106-1<br>Rev. No. 5<br>Form No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                 | <b>PRODUCT STANDARD</b>                                                                                                                                                                                                                                                                               |                                      | Prod. Std. No: <b>53027</b> |  |
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| <p style="text-align: center;"><b>Fr-6 Gas Turbine Stage#2 Bucket Casting with Cooling Holes Drilled</b></p> <p><b>1. Description:</b> The specification defines the scope of supply of Fr-6 Gas turbine Stage#2 Bucket casting with cooling holes drilled.</p> <p><b>2. Scope:</b> Scope of supply includes</p> <p>a) Supply of bucket casting as per BHEL drawing 03530667019-01.</p> <p>b) Drilling of cooling holes on each airfoil of bucket as per BHEL drawing 03530661021 Var01. The holes shall be drilled in accordance with details Mentioned in sec B-8, ViewF-3, Sec E-2, Sec C-3, Sec A-3 and sec C-1 of 03530661021.</p> <p>Total no of holes per airfoil: 6.</p> <p>It shall be the responsibility of supplier to thoroughly understand the work scope and all documentation needed to complete the work. Prior to initiation of any manufacturing activity, the applicable drawing shall be jointly reviewed by GT Engineering, BHEL Hyderabad and supplier to document any discrepancies in the drawing.</p> <p><b>3. Quality Requirements:</b> The castings with cooling holes drilled shall conform to the requirements as outlined in specifications GT10221 (Eq GE spec: P3D-AG1), GT10579 (Eq GE Spec: P3D-AG5) and GT10273 (Eq GE Spec: P3D-AG2). The job would be accepted in accordance with norms set forth in specification GT10271 (Eq GE Spec: P29A-AG103).</p> <p>QC documentation envisaged in the above specifications shall be submitted along with the supplies. A certificate of conformance shall be submitted stating that buckets were processed in accordance with this specification and all applicable documents.</p> |                                                 | <p style="text-align: center;"><b>© COPYRIGHT &amp; CONFIDENTIAL</b></p> <p style="text-align: center;">The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED<br/>It must not be used directly or indirectly in any way detrimental to the interest of the company</p> |                                      |                             |  |
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| Ref<br>Doc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Revision<br><br>Refer to record of<br>revisions | Prepared<br><br>Naveen Kumar /<br>Kamaldeep Gupta                                                                                                                                                                                                                                                     | Checked & Approved<br><br>NVS MURTHY | Date<br><br>March 12, 2014  |  |

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| TD-106-1                                                                                                                                                                                                               | Rev. No. 5<br>Form No |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | PRODUCT STANDARD | Prod. Std. No: <b>53027</b> |               |             |            |   |              |
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|                                                                                                                                                                                                                        |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  | Page <b>2</b> of <b>3</b>   |               |             |            |   |              |
| © COPYRIGHT & CONFIDENTIAL<br>The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED<br>It must not be used directly or indirectly in any way detrimental to the interest of the company |                       | <p><b>4. Packing:</b> The castings shall be packed suitably in solid packages for long distance transport (using several means of transport), repeated handling and long term storage period (min 12 months). Proper moisture, rust, mold and corrosion resisting measures shall be adopted to ensure receipt of components at BHEL without corrosion and damage. Details of packing shall be enclosed along with the offer. Suitable batons shall be provided to arrest movement &amp; goods inside the package during transportation. Packaging, packager shall be upended to check any movement</p> |                  |                             |               |             |            |   |              |
|                                                                                                                                                                                                                        |                       | <p><b>5. Variant Table</b></p> <table><tr><th>Sl. no</th><th>Material Code</th><th>Description</th><th>Weight(Kg)</th></tr><tr><td>1</td><td>GT9753027010</td><td>FR6 S2 BKT CSTG WITH CLG HOLE DRILLED</td><td>2.8</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                  |                  | Sl. no                      | Material Code | Description | Weight(Kg) | 1 | GT9753027010 |
| Sl. no                                                                                                                                                                                                                 | Material Code         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Weight(Kg)       |                             |               |             |            |   |              |
| 1                                                                                                                                                                                                                      | GT9753027010          | FR6 S2 BKT CSTG WITH CLG HOLE DRILLED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2.8              |                             |               |             |            |   |              |
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| TD-106-1<br>Rev. No. 5<br>Form No |  | <b>PRODUCT STANDARD</b> | Prod. Std. No: <b>53027</b> |
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|                                   |                                                                                   |                         | Page <b>3</b> of <b>3</b>   |

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**Table 1 : Record of Revisions**

| REV | DATE       | DESCRIPTION                                  | MODIFIED       | CHK & APP  |
|-----|------------|----------------------------------------------|----------------|------------|
| 00  | 12/03/2014 | FIRST MADE                                   | C NAVEEN KUMAR | NVS MURTHY |
| 01  | 13.07.21   | SPEC REVIEWED. NO CHANGES. GENERALLY REVISED | NAGENDRA       | SHRIDHAR   |
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