SOP-QC-001: Incoming Material Inspection

PURPOSE: Verify incoming raw materials meet specifications SCOPE: All incoming brake rotor blanks and casting materials

PROCEDURE:

- 1. Check delivery documentation against purchase order
- 2. Verify material certificates and heat treatment records
- 3. Perform visual inspection for cracks, porosity, inclusions
- 4. Conduct dimensional checks using CMM station
- 5. Test sample hardness (HRC 45-50 required)
- 6. Accept/reject decision and material routing
- 7. Update inventory system with inspection results

ACCEPTANCE CRITERIA:

- All dimensions within ±0.1mm of specification
- Surface finish Ra ≤0.8mm on machined surfaces
- No visible cracks or defects >1mm