PRE-QUALIFICATION CRITERIA FOR EXHAUST CAMSHAFT (FULLY FINISHED) TO DRG No. 20-07-15A

1. The firm should have Forging manufacturing facility for manufacturing similar type of steel forging (i.e.cam shafts) (or) should have tie-up with good forging manufacturing firms. The firm should produce the past records for supply of similar type if components.
2. The firm should have CNC turning centres for carrying out various turning operations like turning, boring, internal threading, chamfering etc.
3. The firm should have CNC cam milling machine for carrying out the cam lobe profile.
4. The firm should have bench drilling machine for carrying out the oil hold drilling, chamfering operation.
5. The firm should have hydraulic (or) manual press for carrying out the bend removal operation at various stages.
6. The firm should have deep hole drilling machine for carrying out 19.4mm deep hole drilling operation (or) the firm should show the alternate method of carrying out the subject deep hole drilling operation.
7. The firm should have Induction hardening machine for carrying out the induction hardening of cam lobes (or) the should have tie up with good heat treatment firms for carrying out the induction hardening operation.
8. The firm should have reputed make of cam lobe grinder and journal grinder for carrying out the grinding of cam lobes & journals.
9. The firm should have tempering facility in house for carrying out tempering operation after grinding.
10. The firm should have magnetic flaw detector machine for checking the cracks (or) should have tie-up with the firms having crack detecting machine.
11. The firm should have inspection facility including surface tables, vernier calliper, micrometer, height master, surface finish tester, cam lobe profile checking machine etc.
12. The firm should have inspection facility to check the critical forging parameters like physical properties & chemical composition, porosity & crack detection etc. (or) should have the up with reputed NABL laboratories to check the above parameters.
13. The firm should have suitable standby power back up system.
14. The firm should have adequate technical knowledge/skill of staffs/workmen to carry out machining of the subject component.

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