ENGINE SPECIFICATION

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | **General** | : |  |
|  | Name of Machine | : |  |
|  | Name & address of manufacturer | : |  |
|  | Country of origin | : |  |
|  | Selected by | : |  |
|  | Method of selection | : |  |
|  | Place of running in | : |  |
|  | Schedule & duration of running in | : |  |
|  |  |  |  |
| 2 | ENGINE | : |  |
|  | Make | : |  |
|  | Model | : |  |
|  | Type | : |  |
|  | Manufacturer’s name & address | : |  |
|  | Country of manufacturing | : |  |
|  | Year of manufacturing | : |  |
|  | Engine serial No | : |  |
|  | Max. Torque | : | Nm |
|  | Speed at max. torque | : | rpm |
|  | Maximum Power | : | kW |
|  | Engine speed corresponding to Max. Power | : | rpm |
|  | Rated power | : |  |
|  | Engine speed corresponding to Rated Power | : | rpm |
|  | Engine speed (Manufacturer’s Recommended settings) | : |  |
|  | Recommended high idle speed(rpm) | : |  |
|  | Recommended low idle speed(rpm) | : |  |
|  | Recommended Rated speed(rpm) | : |  |
|  | Speed at max. torque | : | Rpm |
| 3 | Cylinder and cylinder head | : |  |
|  | Number | : |  |
|  | Disposition | : |  |
|  | Bore/strole(mm) | : |  |
|  | Capacity (cc) | : |  |
|  | Compression ratio | : |  |
|  | Type of cylinder head | : |  |
|  | Type of cylinder liner | : |  |
|  | Type of combustion chamber | : |  |
|  | Arrangement of valves | : |  |
|  | Valve clearance(mm) | : |  |
|  | Inlet | : |  |
|  | Exhaust | : |  |
| 4 | **Fuel system** | : |  |
|  | Type of fuel system | : |  |
|  | Type, make & model of feed pump | : |  |
|  | Type make & model of fuel filter | : |  |
| 4.1 | **Fuel Injection pump** | : |  |
|  | Make model & type | : |  |
|  | Serial number | : |  |
| 4.2 | **Fuel injector** | : |  |
|  | Make model & type | : |  |
|  | Manufacturer’s production pressure setting (Mpa) | : |  |
|  | Injection timing | : |  |
|  | Firing order | : |  |
| 4.3 | **Governor** | : |  |
|  | Make , Model | : |  |
|  | Type | : |  |
| 4.4 | **In case of spark Ignition Engine** | : |  |
| 4.4.1 | **Spark plug** | : |  |
|  | Make | : |  |
|  | Electrode gap | : | Mm |
| 4.4.2 | **Carburettor** | : |  |
|  | Make | : |  |
|  | Type | : |  |
| 4.5 | **Air intake system** | : |  |
|  | Type, make &model of pre Cleaner | : |  |
|  | Type, make &model of Air Cleaner | : |  |
|  | Oil capacity(Oil bath type) | : |  |
|  | Range of suction pressure (mm of hg) | : |  |
|  | Recommended grade of oil | : |  |
|  | Recommended service schedule | : |  |
| 4.6 | **Lubrication system** | : |  |
|  | Type | : |  |
|  | Number of filter | : |  |
|  | Type of lubricating oil pump | : |  |
|  | Capacity of lubricating oil pump at rated engine speed (l/min.) | : |  |
|  | Relief valve setting Oil capacity(l) | : |  |
|  | Recommended grade of lubricating oil | : |  |
|  | Oil change period(h) | : | First change after..........hrs then subsequent changes after every ...... hours of operation |
|  | Minimum permissible lubricating oil pressure | : |  |
|  | Maximum permissible lubricating oil temperature | : |  |
|  | Details of cooling arrangement if any provided | : |  |
| 4.7 | Cooling System | : |  |
|  | Type | : |  |
|  | Coolant pump/blower size & capacity | : |  |
|  | Coolant capacity(l) | : |  |
|  | Means of temperature control | : |  |
|  | Pressure of radiator cap (kPa) | : |  |
|  | Maximum permissible coolant temperature | : |  |
| 4.80 | **Starting system** | : |  |
|  | Type | : |  |
|  | Capacity of Starter | : |  |
| 4.90 | **Electrical System** | : |  |
|  | Type, make & capacity of battery | : |  |
|  | Type make & Model of starter | : |  |
|  | Type make & Model of generator | : |  |
|  | Serial number & output rating of Generator | : |  |
| 5.0 | Engine discard limits | : |  |

|  |  |  |
| --- | --- | --- |
| **Sl. No** | **Engine Component** | **Discard limit** |
| 1 | Cylinder bore dia (mm) |  |
| 2 | Piston dia (mm) |  |
| 3 | Ring-end gap (mm): |  |
|  | -Top compression ring |  |
|  | -2nd compression ring |  |
|  | -3rd compression ring |  |
|  | - Oil ring |  |
| 4 | Ring groove clearance (mm): |  |
|  | -Top compression ring |  |
|  | -2nd compression ring |  |
|  | -3rd compression ring |  |
|  | - Oil ring |  |
| 5 | Clearance of big end bearings (mm) |  |
|  | - Diametrical |  |
|  | - Axial |  |
| 6 | Crankshaft end float (mm) |  |
| 7 | Backlash of timing gears |  |
| 8 | Backlash of primary gear box gears |  |
| 9 | Backlash of secondary gear box gears |  |
| 10 | Overall thickness of clutch plate (mm) |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Place |  | |
|  | Date |  |  |
|  |  | Signature |  |
|  |  | Name of signatory |  |
|  |  | Designation |  |
|  |  | Name & address of firm |  |