****

**2017**

**FMSCI 2W Homologation Form**

A25, Krishna Towers, 50 Sardar Patel Road, Chennai 600113

Ph : (91) (44) 22352673, 2235304 Fax : (91) (44) 22351684

email : admin@fmsci.in, web : www.fmsci.co.in

|  |  |  |
| --- | --- | --- |
| **Article** | **Description** |  |
| **1. General** |
| 101 | Manufacturer's Name |       |
| 102 | Manufacturer's address |       |
| 103 | Brand name |       |
| 104 | **Model** |
| (a) Model Year |       |
| (b) Model Identification Name |       |
| (c) Beginning Serial No. |       |
| (d) End Serial No. |       |
| 105 | Type | [ ]  Motorcycle | [ ]  Scooter | [ ]  Moped |
| 106 | Minimum weight |       kgs |

|  |  |
| --- | --- |
| **Right Side view of the vehicle** | **Left Side view of the vehicle** |
|  |  |

|  |
| --- |
| **2. Engine** |
| 201 | Type of Engine | [ ]  Four Stroke | [ ]  Two Stroke |
| 202 | Number of Cylinders |       |
| Cylinder height |       mm |
| Cylinder head height |       mm |
| 203 | a) Bore  |       mm |
| b) Stroke  |       mm |
| c) Conrod length  |       mm |
| d) Supercharging | [ ]  Yes [ ]  No |
| e) Type and number of compressors |       |
| 204 | Cubic capacity (Refer Manual) |       cc  |
| 205 | (a) Minimum Volume of Cylinder Head  |       cc |
| (b) No. of spark plugs per Cylinder |       |
| 206 | Compression Ratio  |       : 1 |
| 207 | **Piston** |
| a) Material |       |
| b) Minimum Weight  |       |
| c) No. of Rings per Piston |       |
| C1) Thickness of Rings (mm) |       |
| d) Piston pin offset  |       mm |
| e) Piston pin material |       |
| f) Piston pin weight |       |
| g) Piston Pin Diameter |       mm |
| 208 | **Material** |
| a) Crankcase |       |
| b) Cylinder barrel |       |
| c) Cylinder head |       |
| d) Generator cover |       |
| e) Primary case cover |       |
| f) Clutch cover |       |
| g) Crankshaft cover |       |
| h) Gear Box cover |       |
| i) Ignition cover |       |
| k) Cylinder head cover (valve) |       |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Material** | **Weight** |
| 208 | l) Crank shaft (with connecting rod and bearing) |       |       gms \*\* |
| m) Conrod  |       |       gms \*\* |
| 209 | Thickness of tightened cylinder head gasket |       mm +/- 0.1 mm |
| 210 | Position of Cylinder & head relativeto the Crank Case |       degree |
| 211 | a) Method of cooling | [ ]  Air | [ ]  Liquid |  [ ]  Air & Liquid |
| b) Type of liquid |       |
| 212 | Does the cylinder have a sleeve or linerIf yes, material | [ ]  Yes **Material :**      , [ ]  No |
| 213 | Cylinder barrel – coating | [ ]  Chrome | [ ]  Nickel | [ ]  Electrofusion |
| Others :       |
| 214 | Method of Induction | [ ]  Reed Valve | [ ]  Rotary Valve |
| [ ]  Piston Port | [ ]  Poppet Valve |

|  |  |
| --- | --- |
| **View of Engine / Crankcase Assembly – Left Side** | **View of Engine / Crankcase Assembly– Right Side** |
|  |  |

|  |  |
| --- | --- |
| **View of Engine/Crankcase Assembly– Front Side** | **View of Engine / Crankcase Assembly– Rear View** |
|  |  |

|  |  |
| --- | --- |
| **View of Engine/ Crankcase Assembly – Top View** | **View of Engine / Crankcase Assembly– Bottom Side** |
|  |  |

|  |  |
| --- | --- |
| 215 | **A) Fuel feed by Carburettor** |
| a) Make |       |
| b) Type / Model |       |
| c) Venturi diameter |       mm +/- 0.25 mm |
| d)Maximum diameter of Carburettor exit port |       mm |
| e) Length of adaptor |       mm |

|  |
| --- |
| **Carburettor showing exit port** |
|  |

|  |  |
| --- | --- |
| 215  | **B) Fuel feed by Injection** |
| a) Make |       |
| b) Model |       |
| c) Kind of fuel measurement | [ ]  Mechanical | [ ]  Electronic | [ ]  Hydraulic |
| d) Dimensions of intake pipe at the throttle or slide location |       |
|
| e) Number of effective fuel outlets |       |
| f) Position of injectors |       |
| f1) Manifold / Cylinderhead | [ ]  Manifold | [ ]  Cylinderhead |
| g) Sensors of injection system |       |
| h) Actuators of injection system |       |

|  |
| --- |
| **Injection System** |
|  |

|  |
| --- |
| **Location of Sensors & Actuators** |
|  |

|  |
| --- |
| **For Two Strokes Only** |
| 216 | **a) Number of Ports** |       |
| Total |       |
| Intake |       |
| Transfer |        |
| Boost |        |
| Exhaust |        |
| 216 | **b) Height of Ports** |  |
| Intake |       mm |
| Transfer |       mm |
| Boost |       mm |
| Exhaust |       mm |
| **c) Width of Ports** |
| Intake |       mm |
| Transfer |       mm |
| Boost |       mm |
| Exhaust |       mm |

|  |
| --- |
| **For Four Strokes only** |
| 217 | **Inlet valves** |
| a) Number |       |
| b) Diameter |       mm |
| c) Stem dia |       mm |
| d) Overall length |       mm |
| e) Weight |       gms |
| f) Number of springs per valve |       |
| g) Type of valve springs |       |
| If more than one spring | Inner | Outer |
| h) Maximum length of the spring |       under a load of       N |       under a load of       N |
| i) External diameter of springs |       +/- 0.2 mm |       +/- 0.2 mm |
| j) Diameter of spring wire |       |       |
| k) Number of spring coils |       |       |
| l) Maximum free length of springs |       mm |       mm |
| 218 | **Exhaust valves** |
| a) Number |       |
| b) Diameter |       mm |
| c) Stem dia |       mm |
| d) Overall length |       mm |
| e) Weight |       gms |
| f) Number of springs per valve |       |
| g) Type of valve springs |       |
| h) Maximum length of the spring |       under a load of       N |       under a load of       N |
| i) External diameter of springs |       +/- 0.2 mm |       +/- 0.2 mm |
| j) Diameter of spring wire |       |       |
| k) Number of spring coils |       |       |
| l) Maximum free length of springs |       mm |       mm |
| m) Diameter of pipe between manifold and first silencer |       mm +/- 5% |       mm +/- 5% |
| 219 | **Maximum valve lift** |
| a) Intake |       mm |
| b) Exhaust |       mm |
| 220 | Type of valve operation | [ ]  Tappet Rockerarm  | [ ]  Oscillating Lever |
| [ ]  Direct | [ ]  Hydraulic |
| 221 | **Ratio** |
| a) Rocker Arm |       /       |
| b) Oscillating lever |       |
| c) Rocker Arm weight |       gms |
| 222 | Overhead valve | [ ]  Yes [ ]  No |
| 223 | Overhead CAM | [ ]  Yes [ ]  No |
| 224 | Pushrod | [ ]  Yes [ ]  No |
| 225 | Method of Cam shaft drive |       |
| 226 | **CAM Timing** |
| a) Inlet opens  |       Degree BTDC |
| b) Inlet closes  |       Degree ABDC |
| c) Exhaust opens |       Degree BBDC |
| d) Exhaust closes |       Degree ATDC |
| 227  | **CAM dimensions** |
| a) Inlet  | A=      +/-0.1 mm |
|  | B=     +/-0.1 mm |
| b) Exhaust  | A=     +/-0.1 mm |
|  | B=     +/-0.1 mm |
| c) Weight of the Cam  |       gms |
| d) Number |       |
| e) Location |       |
| f) Number of bearings per shaft |       |
| g) Inside diameter of bearings |       +/- 0.1 mm |
| h) Cam gear No. of teeth |       |

|  |
| --- |
| **Cam lift in mm (dismounted camshaft)** |
| **Intake** | **Exhaust** |
| RotationAngle inDegrees | Lift inMm | RotationAngle inDegrees | Lift inmm | Rotationangle in Degrees | Lift inMm | Rotationangle inDegrees | Lift inmm |
| 0 |       |  |  | 0 |       |  |  |
| -5 |       | +5 |       | -5 |       | +5 |       |
| -10 |       | +10 |       | -10 |       | +10 |       |
| -15 |       | +15 |       | -15 |       | +15 |       |
| -30 |       | +30 |       | -30 |       | +30 |       |
| -45 |       | +45 |       | -45 |       | +45 |       |
| -60 |       | +60 |       | -60 |       | +60 |       |
| -75 |       | +75 |       | -75 |       | +75 |       |
| -90 |       | +90 |       | -90 |       | +90 |       |
| -105 |       | +105 |       | -105 |       | +105 |       |
| -120 |       | +120 |       | -120 |       | +120 |       |
| -135 |       | +135 |       | -135 |       | +135 |       |
| -150 |       | +150 |       | -150 |       | +150 |       |
| A shift of +/- 2 degrees of the whole measurement is accepted |

|  |
| --- |
| **Applicable to both 2 & 4 Stroke Engines** |
| 228 | Type of Ignition |       |
| 229 | Starting Devices | [ ]  Kick | [ ]  Self | [ ]  Both |
| 230 | a) Clutch | [ ]  wet | [ ]  dry |
| b) Method of operation | [ ]  Cable | [ ]  Hydraulic |
| c) Weight of Clutch Basket (Refer Manual) \*\* |       kg |
| 231 | **Transmission** |
| **Primary Drive** |
| a) Method of primary drive | [ ]  Gear | [ ]  Belt | [ ]  Chain |
| b) If gear drive | [ ]  Helical | [ ]  Straight Cut |
| Primary Drive Ratio |       |
| If gears / Chain | **Drive** | **Driven** |
| a) No. of teeth  |       |       |
| b) Thickness  |       mm |       mm |
| if belt |
| a) Diameter of pulleys |       mm |
| 232  | **Gear Box** |
| a) Shell Material |       |
| b) No. of speeds |       |
| c) Material of gears |       |
| **Gear** | **Ratio** | **No. of teeth** | **Thickness \*\*** |
|  |  | **Drive** | **Driven** | **Drive** | **Driven** |
| First |       |       |       |       |       |
| Second |       |       |       |       |       |
| Third |       |       |       |       |       |
| Fourth |       |       |       |       |       |
| Fifth |       |       |       |       |       |
| Sixth |       |       |       |       |       |

|  |  |
| --- | --- |
| 233 | **Secondary Drive** |
| a) Method of Secondary Drive | [ ]  Chain | [ ]  Shaft | [ ]  Belt |
| b) Secondary Drive Ratio |       |
| c) If chain, No. of teeth | **Drive**       **Driven**       |
| d) If belt, diameter of pulleys |       |

|  |  |
| --- | --- |
| 3 | **Chassis and Suspension** |
| 301 | a) Main frame type |       |
| b) Material (Gussets / Tubes) |       |

|  |
| --- |
| **Frame** |
|  |

|  |  |
| --- | --- |
| 302 | **Front Suspension** |
| a) Method of suspension |       |
| b) Front tube O.D. |       mm |
| c) Lower Slider O.D. |       mm |
| 303 | **Rear Suspension** |
| a) Method of suspension | [ ]  Mono Shock | [ ]  Twin Shock |
| b) Swinging Arm Type | [ ]  Tubular [ ]  Rectangular Box Section |
| c) Material of Swinging Arm |       |
| 304 | **Wheels** |
| a) Front wheel rim diameter (OD) |       Inches |
| b) Width |       Inches |
| 305 | a) Rear wheel rim diameter (OD) |       Inches |
| b) Width |       Inches |
| 306 | Oil Tank Capacity |       liters |
| 307 | **Fuel Tank** |
| a) Capacity |       Litres |
| b) Material |       |
| 308 | Has the fuel system an electrical pump |  |

|  |  |
| --- | --- |
| 4 | **Exhaust System** |
| 401 | Detachable baffles |  |
| 402 | Weight of the silencer system with bolts for fixing the same |       kgs |
| 403 | Inner diameter of the bend of the silencer |       mm |
| 404 | Anti Pollution System : Description |       |

|  |  |  |  |
| --- | --- | --- | --- |
| 501 | **5. Brakes** | **Front** | **Rear** |
| a) Number of pistons per caliper  |       |       |
| b) OD of piston in caliper |       mm |       mm |
| **c) Drum Brakes** | [ ]  Yes [ ]  No | [ ]  Yes [ ]  No |
| c1) Internal diameter |       +/-1.5 mm |       +/-1.5 mm |
| c2) Number of linings per wheel |       |       |
| c3) Developed length of lining |       +/-1.5 mm |       +/-1.5 mm |
| c4) Width of lining |       +/- 1mm |       +/- 1mm |
| **d) Disc Brakes** | [ ]  Yes [ ]  No | [ ]  Yes [ ]  No |
| d1) Number of pads per wheel |       |       |
| d2) Number of calipers per wheel |       |       |
| d3) Caliper Material |       |       |
| d4) Thickness of new disc |      +/- 1 mm |      +/- 1 mm |
| d5) External diameter of disc |       +/-1.5 mm |       +/-1.5 mm |
| d6) External diameter of pads rubbing surface |       +/-1.5 mm |       +/-1.5 mm |
| d7) Internal diameter of pads rubbing surface |       +/-1.5 mm |       +/-1.5 mm |
| d8) Overall friction length of pads |       +/-1.5 mm |       +/-1.5 mm |
| d9) Ventilated discs | [ ]  Yes [ ]  No | [ ]  Yes [ ]  No |

|  |  |
| --- | --- |
| **6** | **Radiator** |
| 601 | **Radiator Core Dimensions** |
| a) Height |       |
| b) Width |       |
| c) Depth |       |

|  |  |
| --- | --- |
| **7** | **Airbox** |
| 701 | a) Air Box | [ ]  Yes [ ]  No |
| b) Material |       |
| c) RAM Air intake opening in fairing | [ ]  Yes [ ]  No |
| d) Dimension of filter element |       |

|  |  |
| --- | --- |
| **8** | **Clutch Variamatic Assembly** |
| 801 | Weight |       gms |
|  |

|  |
| --- |
| **Production Certificate** |
| Manufacturer : |       |
| Model : |       |
| I hereby certify that the production indicated below concern motorcycle which are entirely completed, identical and in conformity with the recognition form submitted for the said model. |
| **Production** |
| **Month** | **Year** | **Number** |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
| Total  |       |

All information requested must be supplied or application will be rejected.

Application for approval of motorcycles for use in FMSCI competition must be made on the form promulgated by the FMSCI. From the date of receipt of application, the FMSCI has a 30 day investigation period, within which the applicant will be notified of the action of the FMSCI. Approval of any motorcycle is the sole discretion of the Council of the FMSCI. It is the objective of the FMSCI to approve only such models as are available through normal commercial channels in adequate quantities to supply customer requirements, thus ensuring that competition motorcycles can be readily acquired. Therefore, in order to be approved, a motorcycle must be a standard catalogue production model. Upon meeting all the requirements of the FMSCI and upon approval by the FMSCI Council, there may be a 15 day notification period before it may be used in competition. The FMSCI Council’s decision is final.

|  |  |
| --- | --- |
| Manufacturer submitting application |       |
| Address |       |
| Name of the authorised signatory |       |
| Designation |       |
| Date |       |
| Signature & Seal |  |