|  |  |  |
| --- | --- | --- |
| **Website: http://nrfmtti.gov.in**  **E-mail: fmti-nr@nic.in**  **Tele./FAX: 01662-276984** | C:\Users\HP\Desktop\emblem2.jpg | C:\Users\Hp\Desktop\download.png |

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| --- |
| **भारत सरकार**/**Government of India** |
| **कृषिएवं किसान कल्याण मंत्रालय**/Ministry of Agriculture and Farmers Welfare |
| **कृषि एवं किसान कल्याण विभाग**/Department of Agriculture and Farmers Welfare |
| **उत्तरी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान** |
| **Northern Region Farm Machinery Training and Testing Institute** |
| **ट्रैक्टर नगर,सिरसा रोड, हिसार (हरियाणा)-1250 001** |
| **Tractor Nagar, Sirsa Road, Hisar (Haryana)- 125001** |
| **[ISO 9001:2015 COMPLIANT INSTITUTION]** ­­­­­­­­­­­­­­­­­­­­ |

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| --- |
| **BRIEF TECHNICAL SPECIFICATIONS OF COMBINE HARVESTER** |
| (To be submitted by the applicant/ Manufacturer to testing Agency in quadruplicate.) |

|  |
| --- |
| **COMBINE HARVESTER** |

|  |  |  |  |
| --- | --- | --- | --- |
| **1.** | Name and Address of the manufacturer | **:** |  |
|  | Telephone Number (s) | **:** |  |
|  | Fax Number | **:** |  |
|  | E mail Address | **:** |  |
|  | Website | **:** |  |
| **2.** | Make of Combine Harvester | **:** |  |
| **3.** | Model | **:** |  |
| **4.** | Type | **:** |  |
| **5.** | Brand name, if any | **:** |  |
| **6.** | Trade name, if any | **:** |  |
| **7.** | Country of origin | **:** |  |
| **8.** | Chassis Number of machine proposed to be submitted/submitted for inspections/tests | **:** |  |
| **9.** | Serial Number of machine proposed to be submitted/ submitted for inspection/tests | **:** |  |
| **10.** | Month and year of Manufacture | **:** |  |
| **10.1** | Code for the month and year of Manufacture | **:** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **11.** | **Type of Prime Mover** | | | | |
|  | Engine | | **:** |  | |
| **12.** | Type of Combine | | **:** |  | |
|  |  | |  |  | |
| **13.** | **Wheel Equipments** | | | | |
| **13.1** | **Front Wheels (Drive Wheels)** | |  |  | |
|  | No. of wheels | | **:** |  | |
|  | Track width (mm) | | **:** |  | |
|  | Tyre size and ply rating | | **:** |  | |
|  | Maximum loading capacity, of each tyre  at pressure of kPa | | **:** |  | |
|  | RIM Size | | **:** |  | |
|  | Recommended tyre pressure for road work (kgf/cm²) | | **:** |  | |
| **13.2** | **Rear Wheels (Steered Wheels)** | |  |  | |
|  | No. of wheels | | **:** |  | |
|  | Track width, mm | | **:** |  | |
|  | Type size and ply rating | | **:** |  | |
|  | Maximum loading capacity of each tyre  at pressure of 240 kPa, | | **:** |  | |
|  | RIM Size | | **:** |  | |
|  | Recommended tyre pressure for road work (kgf/cm²) | | **:** |  | |
|  |  | |  |  | |
| **14.** | **Wheel base, mm** | | **:** |  | |
|  |  | |  |  | |
| **15.** | **Transmission System** | | | | |
| **15.1** | **Clutch** | |  |  | |
|  | Type | | **:** |  | |
|  | No. of plate (s) | | **:** |  | |
| **15.2** | **Gear box** | |  |  | |
|  | Make | | **:** |  | |
|  | Model & identification no., if any | | **:** |  | |
|  | Type | | **:** |  | |
|  | No. of arrangements | | **:** |  | |
| **15.2.1** | **Range of Speeds, at rated engine speed (Kmph) -**Forward | | **:** |  | |
|  |  | |  |  | |
| **16.** | **Brakes** | | | | |
| **16.1** | **Service brake:** | |  |  | |
|  | Type, Mechanical /Hydraulic/ any other (describe briefly) | | **:** |  | |
|  | Location | | **:** |  | |
|  | Method of operation | | **:** |  | |
| **16.2** | **Parking brake** | | | | |
|  | Type | | **:** |  | |
|  | Location | | **:** |  | |
|  | Method of operation | | **:** |  | |
|  |  | |  |  | |
| **17.** | **Details of Lights:** | | | | |
| **17.1** | **Head lights** | |  |  | |
|  | Make | | **:** |  | |
|  | Number (s) | | **:** |  | |
|  | Wattage of bulbs, W | | **:** |  | |
|  | Location | | **:** |  | |
|  | Colour | | **:** |  | |
| **17.2** | **Parking Light (s)** | | | | |
| **17.2.1** | **Front** | |  |  | |
|  | Make | | **:** |  | |
|  | Number (s) | | **:** |  | |
|  | Wattage of bulbs, W | | **:** |  | |
|  | Location | | **:** |  | |
|  | Colour | | **:** |  | |
| **17.2.2** | **Rear** | |  |  | |
|  | Make | | **:** |  | |
|  | Number (s) | | **:** |  | |
|  | Wattage of bulbs, W | | **:** |  | |
|  | Location | | **:** |  | |
|  | Colour | | **:** |  | |
|  |  | |  |  | |
| **17.3** | **Turn indicator light (s):** | | | | |
| **17.3.1** | **Front:** | |  |  | |
|  | Make | | **:** |  | |
|  | Number(s) | | **:** |  | |
|  | Wattage of bulbs, W | | **:** |  | |
|  | Location | | **:** |  | |
|  | Colour | | **:** |  | |
| **17.3.2** | **Rear:** | |  |  | |
|  | Make | | **:** |  | |
|  | Number(s) | | **:** |  | |
|  | Wattage of bulbs, W | | **:** |  | |
|  | Location | | **:** |  | |
|  | Colour | | **:** |  | |
|  |  | |  |  | |
| **17.4** | **Brake/stop light:** | | | | |
|  | Make | | **:** |  | |
|  | Number(s) | | **:** |  | |
|  | Wattage of bulbs, W | | **:** |  | |
|  | Location | | **:** |  | |
|  | Colour | | **:** |  | |
| **17.5** | **Registration plate light:** | |  |  | |
|  | Make | | **:** |  | |
|  | Number(s) | | **:** |  | |
|  | Wattage of bulbs, W | | **:** |  | |
|  | Location | | **:** |  | |
|  | Colour | | **:** |  | |
|  |  | |  |  | |
| **17.6** | **Reflector(s):** | | | | |
| **17.6.1** | **Front:** | |  |  | |
|  | Make | | **:** |  | |
|  | Shape, size and area | | **:** |  | |
|  | Number(s) | | **:** |  | |
|  | Location | | **:** |  | |
|  | Colour | | **:** |  | |
|  |  | |  |  | |
| **17.6.2** | **Rear:** | |  |  | |
| **17.6.2.1** | **At rear of Combine:** | |  |  | |
|  | Make | | **:** |  | |
|  | Shape, size and area | | **:** |  | |
|  | Number(s) | | **:** |  | |
|  | Location | | **:** |  | |
|  | Colour | | **:** |  | |
| **17.6.3** | **Sides:** | |  |  | |
|  | Make | | **:** |  | |
|  | Shape, size and area | | **:** |  | |
|  | Number(s) | | **:** |  | |
|  | Location | | **:** |  | |
|  | Colour | | **:** |  | |
|  |  | |  |  | |
| **18** | **Horn** | | | | |
|  | Make | | **:** |  | |
|  | Type | | **:** |  | |
|  | Model | | **:** |  | |
|  | No & Location | | **:** |  | |
|  |  | |  |  | |
| **19** | **Rear View mirror** | | | | |
|  | Make | | **:** |  | |
|  | Type | | **:** |  | |
|  | Model | | **:** |  | |
|  | Location | | **:** |  | |
|  |  | |  |  | |
| **20** | **Maximum gradeability, Degrees** | | **:** |  | |
|  |  | |  |  | |
| **21** | **GRAIN TANK:** | | | | |
|  | Location | **:** | |  | |
|  |  |  | |  | |
| **22** | **Steering** | | | | |
|  | Make | **:** | |  | |
|  | Type | **:** | |  | |
|  | Steering control wheel dia, mm | **:** | |  |  |
|  | Turning ability (Diameter in meter) |  | | **LHS** | **RHS** |
|  | Min turning dia, Without brake (m) | **:** | |  |  |
|  | Min clearance dia, Without brake (m) | **:** | |  |  |
|  | Min turning dia, With brake (m) | **:** | |  |  |
|  | Min clearance dia, Without brake (m) | **:** | |  |  |
|  |  |  | |  |  |
| **23.** | **OVERALL DIMENSIONS (mm):** | | | | |
|  | Length with Combine harvester | **:** | |  | |
|  | Width (Transport) | **:** | |  | |
|  | Height | **:** | |  | |
|  | Minimum ground clearance | **:** | |  | |
|  | Front Overhang | **:** | |  | |
|  | Rear Overhang | **:** | |  | |
|  |  |  | |  | |
| **24.** | **Mass of combine on transport (Kg):** | | | | |
|  | Mass of combine harvester at front | **:** | |  | |
|  | Mass of combine harvester at rear | **:** | |  | |
|  | Total mass of combine harvester | **:** | |  | |
|  | Mass of cutter bar & trailer | **:** | |  | |

**II. BRIEF TECHNICAL SPECIFICATIONS OF ENGINE MOUNTED ON COMBINE HARVESTER**

|  |  |  |  |
| --- | --- | --- | --- |
| **1** | **GENERAL:** |  |  |
| **1.1** | Name & address of the engine manufacturer | **:** |  |
| **1.2** | Telephone No. | **:** |  |
| **1.3** | Fax No. | **:** |  |
|  | E-Mail Address | **:** |  |
| **1.4** | Website | **:** |  |
| **2.0** | **Brief Technical Specification of ENGINE** | | |
|  | Make | **:** |  |
|  | Model | **:** |  |
|  | Type | **:** |  |
|  | Serial Number | **:** |  |
|  | Declared power, kW | **:** |  |
|  | Max. No load speed of the engine, rpm | **:** |  |
|  | Low idling speed of engine, rpm | **:** |  |
|  | Rated speed, rpm | **:** |  |
|  | Engine speed at maximum power, rpm | **:** |  |
|  | Engine speed at maximum torque, rpm | **:** |  |
|  | Recommended speed of engine for field work, rpm | **:** |  |
| **3.0** | **CYLINDERS:** |  |  |
|  | Number | **:** |  |
|  | Disposition | **:** |  |
|  | Bore / Stroke, mm | **:** |  |
|  | Cubic Capacity (c.c.) | **:** |  |
|  |  |  |  |
| **4.0** | **Fuel System Type** | **:** |  |
| **4.1** | **Fuel filters** |  |  |
|  | Make | **:** |  |
|  | Type/Part No. | **:** |  |
|  | Number(s) | **:** |  |
|  | Model/Group combination No. | **:** |  |
| **4.2** | **Fuel tank** |  |  |
|  | Material | **:** |  |
|  | Location | **:** |  |
|  | Capacity, Litre | **:** |  |
| **4.3** | **Fuel injection pump** |  |  |
|  | Make | **:** |  |
|  | Type/Type No. | **:** |  |
|  | Bosch Part No./Cust. Part No. | **:** |  |
|  | Sl. No. | **:** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **4.4** | **Electronic Control Unit (ECU)** |  |  |
|  | Make | **:** |  |
|  | Model/Group Combination No. | **:** |  |
|  | Part No./ Sr. No. | **:** |  |
|  |  |  |  |
| **5.0** | **Air Intake System** |  |  |
| **5.1** | **Pre-Air Cleaner** |  |  |
|  | Make | **:** |  |
|  | Type | **:** |  |
|  | Location | **:** |  |
| **5.2** | **Air Cleaner** |  |  |
|  | Make | **:** |  |
|  | Type | **:** |  |
|  | Location | **:** |  |
| **5.3** | **Turbo Charger** |  |  |
|  | Make | **:** |  |
|  | Model No. | **:** |  |
|  | Part .No./S.No. | **:** |  |
|  |  |  |  |
| **6.0** | **Exhaust System:** |  |  |
|  | Type of muffler | **:** |  |
|  | Protecting device if any | **:** |  |
| **6.1** | **EGR** |  |  |
|  | Make | **:** |  |
|  | Type | **:** |  |
|  | Part No. | **:** |  |
| **6.2** | **DOC Detail** | | |
|  | Make | **:** |  |
|  | Part .No. | **:** |  |
| **6.3** | **SCR/Urea Tank Detail** | | |
|  | Make | **:** |  |
|  | Part No. | **:** |  |
|  |  |  |  |
| **7.0** | **Starting System:** |  |  |
|  | Type | **:** |  |
| **7.1** | **Electrical System:** |  |  |
| **7.1.1** | **Generator/ Alternator:** |  |  |
|  | Make | **:** |  |
|  | Model /Group combination No. | **:** |  |
|  | Rating | **:** |  |
|  | Serial No. | **:** |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **7.1..2** | **Battery:** | |  |  |
|  | Make | | **:** |  |
|  | Type | | **:** |  |
|  | Capacity and rating | | **:** |  |
|  | No. of battery | | **:** |  |
| **7.1.3** | **Starter:** | |  |  |
|  | Make | | **:** |  |
|  | Type/Type No. | | **:** |  |
|  | Model/Group Combination No | | **:** |  |
|  | Sr. No. | | **:** |  |
| **7.1.4** | | **Voltage Regulator:** |  |  |
|  | | Type | **:** |  |
|  | |  |  |  |
| **8.0** | | **Special features if any** | **:** |  |
| **9.0** | | **Total weight of engine**  **(with accessories) , Kg** | **:** |  |

|  |  |
| --- | --- |
|  | I, of **M/s.** , hereby declare that information given above in page no. 1 to 8 is as per design/ drawing of the prototype/ commercial model of combine harvester submitted for inspection/ test and is complete and correct to the best of my knowledge and belief. I also understand that in case any of the information furnished above is found not correct or incomplete, among other action, the certificate is liable to cancelled. |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Applicant / Manufacturer | **:** |  |
|  | Signature of Authorized Signatory | **:** |  |
|  | Name | **:** |  |
|  | Designation | **:** |  |
|  | Place | **:** |  |
|  | Date | **:** |  |