COMMERCIAL TEST REPORT (Variant)

ESCORTS LIMITED, FARMTRAC 60 EPI SMPS TRACTOR

भारत सरकार
कृषि मंत्रालय
(कृषि एवं सहकारिता विभाग)
GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
(DEPARTMENT OF AGRICULTURE & CO-OPERATION)

केंद्रीय कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान
TRACTOR NAGAR, BUDNI (M.P.) 466 445

CENTRAL FARM MACHINERY TRAINING & TESTING INSTITUTE

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6. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

6.1 On the basis of test conducted the performance results have been summarized as evaluative (mandatory) and non-evaluative (not mandatory) parameters applicable for qualifying Minimum Performance Criteria as per clause-4 table-1 of Indian Standard 12207: 2008 for acceptance of tractor for the purpose of subsidies/NABARD financing for the applicable features for this tractor model.
### ESCORTS LIMITED, FARMTRAC 60 EPI SMPS TRACTOR – Commercial (Variant)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Characteristic</th>
<th>Category (Evaluative / Non Evaluative)</th>
<th>Requirements as per IS: 12207-2008</th>
<th>Values declared by the applicant(D)/ Requirement(R)</th>
<th>As observed</th>
<th>Whether Variant model meets the requirements (Yes/No)</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Base model</td>
<td>Variant Model</td>
<td>Base model</td>
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<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>5 a</td>
<td>5 b</td>
<td>6 a</td>
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#### 6.1.1 PTO Performance:

| a)     | Max. power under 2 h test, (kW) (Natural ambient condition) | Evaluative | Declared value to be achieved with a tolerance of: -5 / +10% for PTO power >35hp. -7.5/+10% for PTO power ≤ 35 hp | 32.3 (D) | 32.3 (D) | 31.6 | 33.0 | Yes |

| b)     | Power at rated engine speed, (kW) | Non Evaluative | -do- | 32.3 (D) | 32.3 (D) | 31.6 | 33.0 | Yes |

| c)     | Specific fuel consumption corresponding to maximum power, (g/kWh) | Non Evaluative | ± 5% | 265 (D) | 265 (D) | 256 | 257 | Yes |

#### 6.1.2 Labelling of tractors (Provision of labelling plate):

1. Make: Escorts Limited
2. Model: Farmtrac 60 EPI SMPS
3. Year of manufacture: 2011
4. Engine serial number: E2211410
5. Chassis number: T2208151
6. Declaration of PTO power, kW (HP): 32.3 (43.3)

#### 6.2 Salient Observations:

6.2.1 Laboratory tests:

6.2.1.1 PTO Performance:

i) The maximum PTO power in case of base and variant models were observed as 31.6 & 33.0 kW respectively against the declaration of 32.3 & 32.3 kW respectively and which meets the requirement of IS: 12207-2008 with regard to tolerance.

ii) The specific fuel consumption in case of base and variant models corresponding to maximum power were observed as 256 & 257 g/kWh respectively against the declaration of 265 & 265 g/kWh respectively and which meets the requirement of IS: 12207-2008 with regard to tolerance.

6.2.1.2 Three point linkage:

The lateral distance from lower hitch point to the centre line of tractor does not meet the requirement of IS: 4468 (Part-1)-1997. This should be looked into for necessary corrective action.
6.2.1.3 Linkage drawbar:
Some of the parameters of linkage drawbar conform to Cat. I and some of them
conforms to Cat. II. Keeping in view the spirit of standardization, the necessary
improvements may be incorporated.

6.3 Maintenance / Service Problems:
No noticeable maintenance or service problem was observed during the period of test.

6.4 Recommendation with regard to safety on tractor:
The following requirements, inter alia, may be considered for incorporation on the
tractor:
   i) Provision for spark arresting device in exhaust system.
   ii) Provision for retaining the fuel shut-off lever in “STOP” position.
   iii) The minimum cautionary notice as per clause 11.2 of IS: 12239 (Part-2),1999
       should be provided.

6.5 Adequacy of Literature supplied with machine:
6.5.1 The following literature was supplied with the test sample for reference during the test
a) Operator’s manual
b) Supplementary repair manual for Farmtrac 60 EPI SMPS Tractor
   c) Part’s catalogue for Farmtrac 60 EPI SMPS Tractor

6.5.2 The modified literature submitted by the applicant was found adequate. The literature
should also be brought out in regional languages for guidance of users.

The results of the tests carried out on variant model “Farmtrac 60 EPI SMPS” have
been compared with those on base model “Farmtrac 60 SMPS” and found within the limit, as

TESTING AUTHORITY:

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