COMMERCIAL TEST REPORT (Variant)

SYNOPTIC TABLE

<table>
<thead>
<tr>
<th>Specification</th>
<th>Test Value</th>
<th>Standard Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Power (kW)</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Transmission Type</td>
<td>8F+2R</td>
<td>8F+2R</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>2800</td>
<td>3000</td>
</tr>
<tr>
<td>Ground Speed (km/h)</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

**Notes:**
- All tests conducted under standard conditions.
- Variations may occur due to environmental factors.

**Test Equipment:**
- Test tractor: INDO FARM, 3040 DI TRACTOR
- Test site: CENTRAL FARM MACHINERY TRAINING & TESTING INSTITUTE, TRACTOR NAGAR, BUDNI (M.P.) 466 445

**Conclusion:**
The tractor meets all the specified requirements and is recommended for commercial use.

**Signature:**
[Signature]
[Name]
[Position]

**Date:** May, 2012
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.

<table>
<thead>
<tr>
<th>Sl. 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/requirement</th>
<th>As observed</th>
<th>Whether Variant model meets the requirements (Yes/No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Base model</td>
<td>Variant Model</td>
<td>Base model</td>
<td>Variant model</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>5 a</td>
<td>5 b</td>
<td>6 a</td>
<td>6 b</td>
<td>7</td>
</tr>
</tbody>
</table>

6.1.1 PTO Performance :

a) - Max. power under 2 h test, (kW) (Natural ambient condition) 

<table>
<thead>
<tr>
<th></th>
<th>Category</th>
<th>Requirements</th>
<th>As observed</th>
<th>Values declared by the applicant/requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Evaluative</td>
<td>Declared value to be achieved with a tolerance of: -5 / +10% for PTO power &gt;35hp. -7.5/-10% for PTO power ≤ 35 hp</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>22.5</td>
<td>25.5</td>
<td>23.2</td>
</tr>
</tbody>
</table>
### Power at Rated Engine Speed, (kW)

<table>
<thead>
<tr>
<th>Model</th>
<th>Make</th>
<th>Engine serial number</th>
<th>Chassis number</th>
<th>Year of manufacture</th>
<th>Year of manufacture (June)</th>
<th>PTO Power, kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indo Farm, 3040 DI</td>
<td>Indo Farm</td>
<td>C324401665</td>
<td>FNM3040 001684</td>
<td>FNM (June, 2010)</td>
<td>25.5</td>
<td>25.5</td>
</tr>
</tbody>
</table>

### Specific Fuel Consumption Corresponding to Maximum Power, (g/kWh)

<table>
<thead>
<tr>
<th>Model</th>
<th>Make</th>
<th>Engine serial number</th>
<th>Chassis number</th>
<th>Year of manufacture</th>
<th>Year of manufacture (June)</th>
<th>Specific Fuel Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indo Farm, 3040 DI</td>
<td>Indo Farm</td>
<td>C324401665</td>
<td>FNM3040 001684</td>
<td>FNM (June, 2010)</td>
<td>255</td>
<td>255</td>
</tr>
</tbody>
</table>

### Salient Observations:

6.2.1 Laboratory tests:

6.2.1.1 PTO Performance:

i) The specific fuel consumption in case of base and variant models corresponding to maximum power were observed as 273 & 255 g/kWh respectively against the declaration of 255 & 255 g/kWh respectively, which is within the specified limit in case of variant model.

ii) The maximum PTO power in case of base and variant models was observed 23.2 kW & 27.1 against the declaration of 22.5 & 25.5 kW respectively, which is within the specified limit.

6.2.1.3 Operator’s seat (Conformity with IS: 12343-1998):

Vertical distance from seat index point to centre of clutch pedal does not meet the requirement of IS: 12343-1998. This should be looked into for necessary corrective action.

6.2.1.4 Symbols of operator’s control and other displays [Conformity with IS: 6283 (Part 1 & 2)-1998]:

Colour zones in the engine revolution gauge has not been provided as per the requirements of Indian Standard and calls necessary improvement.

6.2.1.5 Location and operation of operator’s control:

Provision of safety switch to avoid accidental start of the tractor is not provided, besides fuel shut-off lever does not remain in “STOP” position and hence does not meet the requirement of IS: 8133-1983. This may be looked into for corrective action.

6.3 Maintenance / Service Problems:

No noticeable maintenance or service problem was observed during the course 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 of safety against accidental start of engine.

ii) Provision for spark arresting device in exhaust system.
iii) Provision of master shield has not been provided.
iv) The fuel shut-off lever does not remain in “STOP” position
v) Differential lock

6.5 Adequacy of Literature supplied with machine:
6.5.1 The following literatures were supplied with the test sample for reference during test:
i) Operator’s & service manual for 3035 DI, 3055 DI, 3055 NV VX, 3052 DI, 3050 DI, 
3048 DI, 3040 DI & 3035 DI tractor models.
ii) Spare parts catalogue for 3035 DI, 3055 DI, 3055 NV VX, 3052 DI, 3050 DI, 3048 
DI, 3040 DI & 3035 DI tractor models.
iii) Workshop manual for 3035 DI, 3055 DI, 3055 NV VX, 3052 DI, 3050 DI, 3048 DI, 
3040 DI & 3035 DI tractor models.

6.5.2 The supplied literature was found adequate, however These literatures may also be 
brought out in national as well as other regional languages may also be brought out in 
national & other regional languages for the guidance of the user’s.

The results of the tests carried out on variant model "Indo Farm 3040 DI" have been 
compared with those on base model "Indo Farm 3035 DI" and found within the limit, as 
specified in Indian Standard:12207:2008

TESTING AUTHORITY:

J.J.R. NARWARE  
SENIOR AGRICULTURAL ENGINEER

V.N. KALE  
DIRECTOR

Test report compiled by: Chanchilesh Singh Raghuvanshi ,Senior Tech.Ast.