DASMESH-612, SHRUB MASTER
(TRACTOR MOUNTED)

Government of India
Ministry of Agriculture and Farmers Welfare
Department of Agriculture, Cooperation and Farmers Welfare
Northern Region Farm Machinery Training and Testing Institute
Tractor Nagar, Sirsa Road, HISAR (Haryana) - 125 001
[ISO 9001:2015 CERTIFIED]

Website: http://nrfmtti.gov.in/
Tele./FAX: 01662-276984
9.1.1 Rate of work
   i) The average speed of shrub master was recorded as 5.33 to 5.63 kmph
   ii) The average area slashing by the machine was recorded as 0.551 to 0.700 ha/h area time required to cover one hectare was recorded as 1.43 to 1.81 h.

9.1.2 Quality of work
   i) The average stubble height after operation was recorded as 35 to 49 mm.
   ii) The average mass of stubble after operation was recorded as 73 to 102 g/m².

9.1.3 Labour requirement
Two skilled labours are required for operating the machine continuously.

9.2 WEAR OF BLADES

<table>
<thead>
<tr>
<th>S.No</th>
<th>Initial Mass (g)</th>
<th>Final Mass (g)</th>
<th>Percentage of Wear</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>After 26.82 h</td>
</tr>
<tr>
<td>i)</td>
<td>756.5</td>
<td>745.1</td>
<td>1.51</td>
</tr>
<tr>
<td>ii)</td>
<td>745.6</td>
<td>732.1</td>
<td>1.72</td>
</tr>
</tbody>
</table>

The hourly percentage wear of blades on mass basis was recorded as 0.06 %.

10. EASE OF OPERATION & ADJUSTMENTS
No noticeable difficulty was observed during the operation and adjustment of shrub master.

11. DEFECTS, BREAKDOWN AND REPAIRS
No noticeable defect occurred in the shrub master during the test.

12. SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMMENDATION

12.1 The specification of implement hitch does not conform fully to the IS: 4468-1997 (Pt-1). It is recommended that the same should be provided conforming to the relevant Indian Standards.

12.2 The specification of blades does not conform fully to the requirement of IS: 1511-1979. This should be looked into for corrective action.
12.3 The chemical composition of blades does not meet, in full, the requirement of IS : 1511-1979. This should be looked into for corrective action.

12.4 Adequacy of literature :-
The operator cum service manual was supplied with the Shrub Master for reference during the testing. However, It should be updated as per IS : 8132-1999.

TESTING AUTHORITY

R. K. NEMA
SENIOR AGRICULTURAL ENGINEER

P. K. PANDEY
DIRECTOR

Draft test report compiled by Sh. V.S. Shinde, STA

13. APPLICANT'S COMMENTS

<table>
<thead>
<tr>
<th>Para No</th>
<th>Our reference</th>
<th>Applicant’s comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.1</td>
<td>12.1</td>
<td>We will take corrective action regarding implement hitch specifications as per requirement of IS : 4468-1997.</td>
</tr>
<tr>
<td>13.2</td>
<td>12.2</td>
<td>We will take corrective action regarding implement hitch specifications of blade as per requirement of IS : 1511-1979.</td>
</tr>
<tr>
<td>13.3</td>
<td>12.3</td>
<td>We will take corrective action regarding chemical composition of blade as per requirement of IS : 1511-1979.</td>
</tr>
<tr>
<td>13.4</td>
<td>12.4</td>
<td>We will update operator cum service manual as per IS : 8132-1999.</td>
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</tbody>
</table>