1. SPECIFICATION OF ZERO SEED CUM FERTILIZER DRILL

1.1 GENERAL

Name of machine: 
Name & address of manufacturer/applicant: 
Type: 
Make: 
Serial No.: 
Model: 
Year of manufacture: 
Different seed which the drill is designed to sow: 
Source of power: 
Recommended travelling speed of the drill, kmph: 
Recommended power of tractor: 

Location of fertilizer outlet in relation to seed outlet, mm:

1.2 CONSTRUCTIONAL DETAILS

1.2.1 Furrow Openers

Type: 
No. of openers: 
Arrangement of openers: 
Range of selection of openers: 
Method of changing row space and range: 
Nominal width, mm: 
Lifting and lowering of openers: 
Depth control: 

Fertilizer placement with respect to seed: 

Website: http://nrfmtti.gov.in  E-mail: fmti-nr@nic.in  Tel./Fax: 01662276984  GSTIN:06AAAGN0273PIZ3 [ISO - 9001 : 2015 CERTIFIED]
1.2.2 Metering Mechanism  
   a- Seed Metering Device

   Type :  
   Size of feed shaft, mm :  
   Length :  
   Dia. :  
   Size, mm :  
   Dia. :  
   Number of plate :  
   Source of power :  
   Transmission ratio of shaft of seed metering device to land wheel axle :  
   Type of agitator :  
   Method of feed rate control for different sizes of seed :  
   Provision for closing seed discharge :  

   b- Fertilizer distributor

   Type : Cup type  
   Size of shaft, mm :  
   Length :  
   Dia. :  
   No. of cup in metering device :  
   No. of cells in each rollers on periphery of rollers :  
   No. of fertilizer feed chamber :  
   No. of rollers device in each chamber :  
   Type of agitator :  
   Method of feed rate control :  
   Provision for closing fertilizer discharge :  
   Transmission on ration of the feed shaft of land wheel axle :  

1.2.3 Hopper

   Capacity, cubic meter/Kg :  
   i- Seed box :  
   ii- Fertilizer box :  

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Type of hoppers:

1.2.4 Marker details:

1.2.5 Seed covering arrangement:

1.2.6 **Type of hitch & its details**:

<table>
<thead>
<tr>
<th>Type</th>
<th>Shape</th>
<th>Material of construction</th>
<th>Size of flat, mm</th>
<th>Length of lower link hitch pins, mm</th>
<th>Height of lower link hitch pins from ground level, mm</th>
</tr>
</thead>
</table>

**Dimensions of Three point linkage:**

<table>
<thead>
<tr>
<th>4.7</th>
<th>Three point linkage (Refer fig.1)</th>
<th>As per IS:4468-March 2007, mm</th>
<th>As measured, mm</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td><strong>Upper hitch point (cat-II)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Diameter of hitch pin (A)</td>
<td>25.27 to 25.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Diameter of hitch pin hole (B)</td>
<td>25.70 to 25.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Linch pin hole distance (D)</td>
<td>93 (min.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d) Width between outer faces of yoke (E)</td>
<td>86 (Max.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Width between inner faces of yoke (F)</td>
<td>52-0 (min)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td><strong>Lower hitch points (cat-II)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Dia of hitch pin</td>
<td>27.79 to 28.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Diameter of hitch pin hole (H)</td>
<td>28.70 to 29.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Linch pin hole distance (K)</td>
<td>49 (Min.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td><strong>Diameter of linch pin hole for (Cat.II)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Upper hitch pin (L)</td>
<td>12 (min)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Lower hitch pin (L)</td>
<td>12 (min)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td><strong>Mast height (Cat. II) (M)</strong></td>
<td>510 (min.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td><strong>Lower hitch point span (Cat.2) (N)</strong></td>
<td>823.5 to 826.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

:: .... out of ..... (........%) dimension are not conforming to Indian Standard.

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1.2.7 Ground drive
No. of wheels : 
Type of wheel : 
Outer dia of wheel, m : 

Method of transmitting power to feed shaft : 

1.2.8 Details of depth adjustments : 

1.2.9 Safety arrangement for rotating parts : 

1.2.10 Metering unit controls
1.2.10.1 a-Fluted roller position handle
Material & type : 
Length, mm : 
Width, mm : 
Thickness, mm : 
Height from ground level, mm : 

<table>
<thead>
<tr>
<th></th>
<th>Wheat</th>
<th>Mustard/ Bajra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material &amp; type</td>
<td>M.S. flat</td>
<td>M.S. rod with</td>
</tr>
</tbody>
</table>

1.2.10.2 b-Fertilizer metering control lever
Material & Type : 
Total length, mm : 
Dia of rod , mm : 
Length of threaded portion, mm : 
Height from ground level, mm : 

1.2.11 Overall Dimensions, mm
Length : 
Width : 
Height : 

1.2.12 Mass, Kg. : 

1.2.13 No. of greasing/oiling points : 9 :-
1) Drive wheel bearing - .... nos.
2) Depth control wheel bearing - ..... nos.
3) Chain & sprocket -.......nos.

Place: 
Signature: 

Date: 
Name of Signatory: 

Designation: 
Name and Address of Firm: