

**SPEED POST/E-MAIL**भारत सरकार / **Government of India**उत्तरी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान / **Northern Region Farm Machinery Training and Testing Institute**ट्रैक्टर नगर, सिरसा रोड, हिसार (हरियाणा)/**Tractor Nagar, Sirsa Road, Hisar (Haryana)- 125 001**Website: <http://nrfmtti.gov.in> E-mail: [fmti-nr@nic.in](mailto:fmti-nr@nic.in) Tel./Fax: 01662276984 GSTIN:06AAAGN0273PIZ3**[ ISO – 9001 : 2015 CERTIFIED ]****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 :

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**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 :

Tranmission 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 metrering 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 ot land wheel axle :

**1.2.3 Hopper**

Capacity, cubic meter/Kg :

i- Seed box :

ii-Fertilizer box :

Type of hoppers	:
<b>1.2.4</b> Marker details	:
<b>1.2.5</b> Seed covering arrangement	:
<b>1.2.6</b> <b>Type of hitch &amp; its details</b>	:
Type	:
Shape	:
Material of construction	:
Size of flat, mm	:
Length of lower link hitch pins, mm	:
Height of lower link hitch pins from ground level , mm	:

#### Dimensions of Three point linkage :-

<b>4.7</b> Three point linkage ( Refer fig.1)				
Sl.No		As per IS:4468-March 2007, mm	As measured , mm	Remarks
<b>I</b>	<b>Upper hitch point ( cat-II)</b>			
a)	Diameter of hitch pin (A)	25.27 to 25.40		
b)	Diameter of hitch pin hole (B)	25.70 to 25.91		
c)	Linch pin hole distance (D)	93 (min.)		
d)	Width between outer faces of yoke (E)	86 (Max.)		
c)	Width between inner faces of yoke (F).	52-0 (min)		
<b>II</b>	<b>Lower hitch points ( cat.-II)</b>			
a)	Dia of hitch pin	27.79 to 28.0		
b)	Diameter of hitch pin hole (H)	28.70 to 29.03		
c)	Linch pin hole distance (K)	49 (Min.)		
<b>III</b>	<b>Diameter of linch pin hole for (Cat.II)</b>			
a)	Upper hitch pin (L)	12 (min)		
b)	Lower hitch pin (L)	12(min.)		
<b>IV</b>	<b>Mast height (Cat. II) (M)</b>		510 (min.)	
<b>V</b>	<b>Lower hitch point span (Cat.2) (N)</b>		823.5 to 826.5	

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

- 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 :

<u>Wheat</u>	<u>Mustard/ Bajra</u>
M.S. flat	M.S. rod with

**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: