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# व्यावसायिक परीक्षण रिपोर्ट COMMERCIAL TEST REPORT

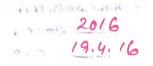


संख्या / No.: PHM-13/238 माह / Month: January, 2016



## NBSU WINNOWING FAN, MODEL: WF07 (MANUALLY OPERATED)





भारत सरकार GOVT OF INDIA

कृषि एवं किसान कल्याण मन्त्रालय

MINISTRY OF AGRICULTURE & FARMERS WELFARE

कृषि, सहकारिता एवं किसान कल्याण विभाग

bepartment of agriculture, cooperation and farmers welfare उत्तर पूर्वी क्षेत्र कृषि यंत्र प्रशिक्षण एवं परीक्षण संस्थान NORTH EASTERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE विश्वनाथ चारिआलि, जिला-शोणितपुर (असम)

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### 1. SCOPE OF TEST

The scope of test was to check and assess the following: -:

#### 1.1 Laboratory Test:

- Checking of specifications

### 1.2 Field Test :

4.1

General:

- Rate of work
- Quality of work
- Labour requirement
- Ease of operation, maintenance and adjustments
- Defects, Breakdowns & Repairs

### 2. METHOD OF SELECTION

The equipment was directly submitted for test by the applicant at this Institute. Hence, the method of selection is not known.

### 3. TEST CODE AND PROCEDURE

As agreed between applicant and testing authority.

#### 4. SPECIFICATIONS

	General.		
	Manufactured by		<b>M/s. New Bihar Sellar Udyog,</b> Village-Shitalpur, PostJokiyari, P.SRaxaul, Dist-East Champaran-845305, Bihar
	Name & Address of Applicant	:	<b>Mr.Saroj Prasad</b> <b>M/s. New Bihar Sellar Udyog,</b> Village-Shitalpur, PostJokiyari, P.SRaxaul, Dist-East Champaran-845305, Bihar
	Name of machine	5	Winnowing fan
	Make	ł	NBSU (apa)
	Model	5	WF07 (apa)
	Туре	•	Manually Operated
9	Serial Number of machine	:	0035 (apa)
	Year of manufacture		2014 (apa)
	Country of origin		India

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### NBSU WINNOWING FAN, MODEL: WF07 (MANUALLY OPERATED) [Commercial Test]

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## 7. EASE OF OPERATION & ADJUSTMENTS

Operation and adjustments of the machine was found satisfactory.

## 8. DEFECTS, BREAKDOWNS AND REPAIRS

No breakdown was occurred during the operation of the winnowing fan.

# 9. SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMMENDATIONS

## 9.1 Performance of winnowing fan :

## 9.1.1 Rate of work :

a) The output of the machine was observed from 211-248 kg/hr.

## 9.1.2 Quality of work :

- a) The cleaning efficiency of the fan was observed from 84-93.2%.
- b) The loss of grain with the blown sample was recorded as 8-12 %
- 9.2 Fan guard is required to be provided for fan blade to avoid accidents/ injuries during operation.
- 9.3 It was observed that knocking sound from gear during operation it should be proper adjustment of drive and driven gear.
- 9.4 A provision should be provided to lock the movement of the fan when machine is not in use.

## 9.5 Labeling:

Labeling plate was not provided on the winnowing fan. It is therefore, recommended that the winnowing fan should be marked with details like manufacturer's name and Trade mark, year of manufacture, Serial no/Code, Size, etc.

### 9.6 Adequacy of Literature:

Operator's Manual, Service Manual & Parts Catalogue were provided in Hindi along with the implement during the course of testing and found satisfactory.

**TESTING AUTHORITY** 

<sup>•</sup> S. G. PAWAR AGRICULTURAL ENGINEER

Test conducted and report compiled by -

rward

J. J. R. NARWARE DIRECTOR

Sh. K. Bora, Technical Assistant

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## 10. APPLICANT'S COMMENTS

10.1 One copy of the draft test report was made available to the applicant. No comments, however, was received in this office.

### **ANNEXURE-I**

S.No.	Parameters	Test Trials							
		1	11		IV	V			
1.	Date of test	28.12.15	28.12.15	29.12.15	29.12.15	29.12.15			
2.	Net test duration (h)	0.72	0.83	0.78	0.86	0.83			
3.	Name & variety of grain	Paddy & Keteki Joha							
4.	Fan speed (rpm)	360	340	330	320	340			
5.	Distance from fan (m)	0.95	0.80	0.85	1.0	0.97			
6.	Height of winnowing (m)	1.4	1.4	1.4	1.5	1.4			
7.	Wind velocity (m/s)	1.56	1.42	1.42	1.39	1.47			
8.	Air flow (m <sup>3</sup> /s)	9.7	8.8	8.8	8.7	9.2			
9.	Dropping rate (kg/hr)	279	240	255	231	240			
10.	Output (kg/hr)	248	225	237	220	211			
11.	Cleaning efficiency (%)	84	93.2	88.3	90.33	93			
12.	Loss of grain with blown sample (%)	8	9	10	12	11			

### FIELD PERFORMANCE RESULTS

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