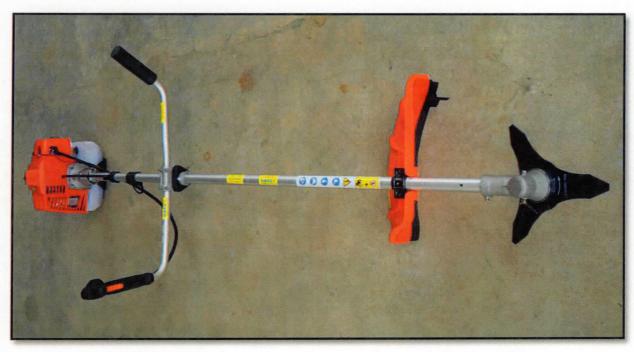
# व्यावसायिक परीक्षण रिपोर्ट COMMERCIAL TEST REPORT



संख्या / No. : Equip No. 21/205 माह / Month: May, 2014



KisanKraft Power Weeder/Brush Cutter (KK-BC2-8665)



भारत सरकार GOVT OF INDIA कृषि मन्त्रालय

MINISTRY OF AGRICULTURE कृषि एवं सहकारिता विभाग

DEPARTMENT OF AGRICULTURE AND COOPERATION

उत्तर पूर्वी क्षेत्र कृषि यंत्र प्रशिक्षण एवं परीक्षण संस्थान

NORTH EASTERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE

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#### 1. SCOPE OF TEST

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

#### 1.1 Laboratory test

- Checking the specification and other data furnished by the applicant
- Noise measurement
- Mechanical vibration measurement
- Hardness & chemical analysis of critical components
- Wear analysis of critical components

#### 1.2 Field test

- Rate of work
- Quality of wok
- Labour requirement
- Adequacy of power of prime mover
- Ease operation & adjustments
- Defects, Breakdowns & Repair

### 2. METHOD OF SELECTION

The test sample was submitted directly to this Institute by the applicant. Hence, the method of selection does not arise.

## 3. TEST PROCEDURE

There is no Indian Standard Test Code available for testing of Brush Cutter/Power Weeder as such. The guidelines, however, have been taken from the following codes:

i) IS: 11467 - 1985

: Test code for cereal harvesting machine

ii) IS: 6025 - 1982

Specification for knife sections for harvesting

machines

## 4. SPECIFICATIONS

#### 4.1 General

Name of Machine : Power weeder/Brush cutter

achine : Self propelled

Type of Machine

M/s Shandong Huasheng

Manufacturer

Pesticides Machinery Co. Ltd.,

1 Zhongtian Road, High and New Tech

Industrial Dev Zone, Linyi, Shandong, China

Make

KisanKraft

FARM MACHINERY TRAINING & TESTING INSTITUTE (NER), B. CHARIALI, SONITPUR-ASSAM

: KK-BC2-8665 Model

China Country of origin

Not Specified Frame Serial no. Not Specified Year of manufacture

M/s KisanKraft Machine Tools Pvt. Ltd., Name & Address of

32/5C, Dasarahalli Village, Dasarahalli Applicant Main Road, H.A. Farm Post,

Hebbal, Bangalore-560024 : For cutting weeds/brush

Type of weeds/brush recommended

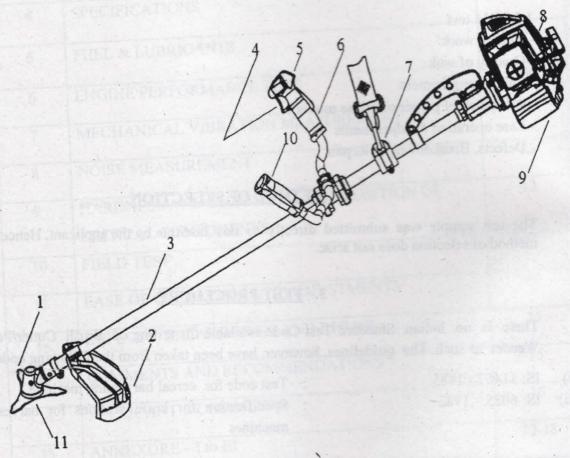


Fig.1: Schematic view of KisanKraft Power Weeder/Brush Cutter (KK-BC2-8665)

## KEY WORDS:

- Blade 1.
- Frame-pipe 3.
- Engine stopping switch 5.
- Hook for attaching shoulder belt 7.
- Fuel tank 9.
- 11. Gear case

- Grass deflector 2.
- Throttle cum clutch lever 4.
- RHS handle 6.
- Engine 8.
- 10. LHS handle

30 minutes work  $\rightarrow$  15 minutes rest  $\rightarrow$  30minutes work  $\rightarrow$  15 minutes rest  $\rightarrow$  25 minutes work  $\rightarrow$  20 minutes rest  $\rightarrow$  25 minutes work  $\rightarrow$  and so on. Details of demographic information of the operator is given in *ANNEXURE-III*.

#### 12. DEFECTS, BREAKDOWNS AND REPAIR

No defects and breakdowns were occurred during 20.5 hours of field test.

#### 13. COMMENTS & RECOMMENDATIONS

- Noise at Bystander's position and Operator's ear level was observed as <u>87 dB(A)</u> and <u>106 dB(A)</u> respectively which is on very higher side against warning and danger limits of <u>85 dB (A)</u> and <u>90 dB (A)</u> for Bystander's position and Operator's ear level respectively as specified by ILO for continuous exposure of 8 hours per day. This calls for reduction in noise level to improve the operational comfort and safety.
- The amplitude of mechanical vibration on various assemblies of the machine is observed on very higher side. This calls for dampening down of vibration to improve the operational comfort and service life of components.
- During testing, only face shield was provided as protective device. The necessary protective accessories as mentioned in the owner's manual like-Helmet, Thick work gloves and Non-slip sole work boots, Goggles, Ear plugs etc. were not provided. All these should necessarily be provided for the safety of the operator.
- 13.4 The chemical composition of 3-T blade does not conform to relevant Indian Standard. This should be looked into in future production level.
- No labeling plate is provided with the machine. Hence, labeling plate indicating Year of manufacture, Power of prime mover, Specific fuel consumption, Rated speed of engine, Speed of cutting attachment etc. should be provided on the machine in future production.
- 13.6 Servicing schedule of air cleaner/filter is not specified in the manual. However, it should be clearly specified in the literature.

#### Technical Literature:

Only owner's manual/shop manual is provided with the machine. Hence, parts catalogue should also be provided with the machine to be referred by the operator or other field personnel when required.

It is recommended to bring out the manuals also in Hindi and other vernacular languages as per IS: 8132-1999.

Equip, No. 21/205

# KISANKRAFT Power Weeder/Brush Cutter (KK-BC2-8665) [Commercial Test]

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## 14. APPLICANTS COMMENTS

Para No.	Our Reference	Applicant's comments	Our Justification
Nil	13.4	Requested to mention as confirms in the report.	The chemical composition of blade was examined By GML Bangalore vide report no 7101/2013-14 and
	Carres from	0.33 to 0.36 kmp Mayamwo 5.35 d 2 kmp	observed values does not conform the IS: 6025 – 1982.

TESTING AUTHORITY

SANJAY KUMAR AGRIL. ENGINEER	Shimas
M. K. VISHWAKARMA DIRECTOR	NEZ EM

Test conducted and data compiled by-

provided with the machine to be referred by the

Shri P.C. Dihingia, Assistant Agril. Engineer Shri Anshul Pandey, Senior Technical Assistant (Inst.)