व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक) COMMERCIAL TEST REPORT (Initial)



संख्या / No.: Imp. 244/321 माह / Month: March, 2019

THIS TEST REPORT VALID UPTO 31/03/2026



MASCHIO GASPARDO ROTARY TILLER, Model: WIND 85 (Chain Drive) (Tractor Operated)



भारत सरकार GOVT OF INDIA

कृषि एवं किसान कल्याण मन्त्रालय

MINISTRY OF AGRICULTURE & FARMERS WELFARE

कृषि, सहकारिता एवं किसान कल्याण विभाग

DEPARTMENT OF AGRICULTURE, COOPERATION & FARMERS WELFARE

उत्तर पूर्वी क्षेत्र कृषि यंत्र प्रशिक्षण एवं परीक्षण संस्थान

NORTH EASTERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE विश्वनाथ चारिआलि, जिला-विश्वनाथ(असम)

BISWANATH CHARIALI: BISWANATH: ASSAM, PIN - 784 176

[AN ISO 9001:2015 CERTIFIED INSTITUTION]

Website: http://nerfmtti.nic.in

Fax No: 03715-230358

E-Mail: fmti-ner@nic.in

Ph. No. 03715-222094



Imp. 244/321

MASCHIO GASPARDO ROTARY TILLER, Model : WIND 85 (Chain Drive) (Tractor Operated) -Commercial (Initial)

9. DEFECTS, BREAKDOWNS AND REPAIRS

No breakdown was occurred during 42.7 h of dry land and wet land operation.

10.SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMMENDATIONS

- 10.1 The dimension of three point linkage (hitch pyramid) of the rotary tiller does not conform to IS: 4468-1997. This should be looked into for corrective action for standardization.
- **10.2** Dimensions of PIC and PIC yoke bore of implement do not conform to IS: 4931-1995 and therefore, it should be looked into for corrective action.
- 10.3 Chemical composition of rotor blades does not conform to IS: 6690-2002. The percentage of carbon content in composition of rotary tiller blade material was recorded as 0.407. The carbon content was on lower side when compared with the relevant Indian Standard. Moreover, the hardness of rotor blades also does not conform to relevant Indian Standard. It is therefore, recommended that the material of rotary tiller blade should be improved and provided as per requirement of Indian Standard.
- **10.4** The rate of work was recorded 0.232 to 0.258 ha/h at forward speed of 3.42 to 3.56 kmph in dry land operation.
- 10.5 The Machines working width is not specified. It must be specified.
- 10.6 The material of blade is not specified. It must be specified
- **10.7** The depth of operation in dry land operation was recorded as 8 to 9 cm with soil moisture content of 11.5 to 16.9 % in sandy loam soil and considered on lower side. The depth of puddle was recorder as 21 to 34 cm which is considered as normal for wetland operation.
- **10.8** The hourly rate of wear of blade on mass basis in Dry land & Wet land operations was recorded as 0.18 to 0.22% and 0.07 to 0.09% respectively.
- **10.9** The hourly rate of wear of blade on dimensional basis in Dry land & Wet land operations was recorded as 0.04 to 0.84.% and as 0.01 to 0.32% respectively.
- 10.10 No ingress of mud and/or water was found in primary and secondary reduction boxes after 42.7 hr of field operations and the sealing provided on different subassemblies were found effective.

10.11 Technical literature:

An Operator cum Service Manual & Parts Catalogue was provided along with the machine during the course of testing. It is further recommended to bring out these manuals in Hindi and other vernacular languages as per IS: 8132-1999.

TESTING AUTHORITY

S. G. PAWAR AGRICULTURAL ENGINEER	Spasa_
K.K. NAGLE DIRECTOR	Vence }
Draft test report compiled by -	Sh. Rahul Prajapati

FARM MACHINERY TRAINING & TESTING INSTITUTE (NER), B. CHARIALI, ASSAM [AN ISO 9001:2015 CERTIFIED INSTITUTION] (THIS TEST REPORT VALID UP TO 31" MARCH 2026)