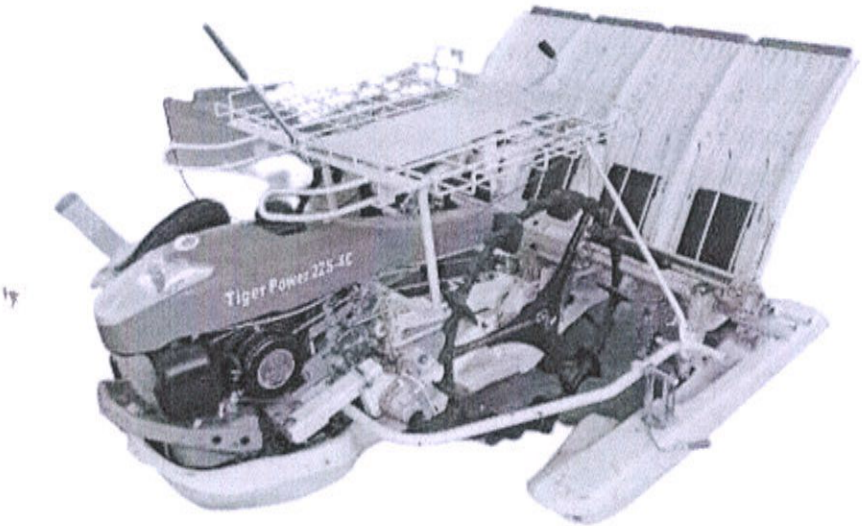
व्यावसायिकपरीक्षणरिपोर्ट (प्रारंभिक) संख्या/No: Machine - 502/1513

COMMERCIAL TEST REPORT माह:/Month: June, 2023

(INITIAL) Validity: 31.05.2028

THIS TEST REPORT IS VALID UPTO 31.05.2028



RICE TRANSPLANTER
SELF PROPELLED WALK BEHIND
MAA SANTOSHI ENGINEERING TIGER POWER (2ZS-4C)

भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषि एवं किसान कल्याण विभाग

Department of Agriculture and Farmers Welfare

दक्षिणी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

Southern Region Farm Machinery Training and Testing Institute

ट्रैक्टर नगर, गार्लदिन्ने - 515 731, जिला: अनंतपुर (आं. प्र.)

Tractor Nagar, Garladinne- 515 731, District: Anantapur (A.P.)

[An ISO 9001:2015 CERTIFIED INSTITUTE]

Website: http://srfimtti.dacnet.nic.in/

E-mail: fmti-sr@nic.in Tele.: 08551-286441

Manufacturer : M/S. Yancheng Mantianxing Agriculture Equipment Co Ltd. Chengzhuang Village, One Group(G) Zhanghuang Town, Yandu District Yancheng City, Jiangsu, **China**

Applicant : M/s. Maa Santoshi Engineering., Main Road Jaipatna, Taluka: Jaipatna, Dist.: Kalahandi, State: Odisha- India, Pin-766018.

RICE TRANSPLANTER, SELF PROPELLED WALK BEHIND MAA SANTOSHI ENGINEERING TIGER POWER (2ZS-4C)

Report No.: **Machine - 502/1513** Month: June Year: 2023

सत्यमेव जयते

Government of India
Ministry of Agriculture and Farmers Welfare
Department of Agriculture and Farmers Welfare
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13. EASE OF OPERATION AND ADJUSTMENT

No noticeable difficulties were observed in operation and adjustment during the test period.

14. DEFECTS, BREAKDOWNS AND REPAIR

No breakdown occurred during the test.

15. SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMMENDATIONS

15.1.1 The maximum power and rated power were observed as 2.66Kw@3400rpm and 2.11kW@3600rpm under natural ambient condition against the declared value of 3.5 kW and 2.9kW respectively.

15.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 473 g/kWh Against declared value of 543 g/kWh.

15.1.3 Max. Torque was observed as 7.93 Nm. Against declared value of 8.3 Nm.

15.1.4 Back up torque of engine was observed as 6.30%.

15.2 Max. Noise at operator's ear level was observed as 90.5 dB (A).

15.3 The amplitude of mechanical vibration on most of the assemblies of the rice transplanter was observed up to the maximum extent of 335 microns, which is on higher side In view of the above, this should be dampened down to improve operational comfort and life of components.

15.4 The provided labeling plate should be as per the requirement of IS.

15.5 Field Test:-

The transplanter was operated in varying field conditions for a total period of 30.5 hours for transplanting Suraj-1556 variety of paddy seedlings. The results are summarized as under:-

The average area covered and time required to cover one hectare area was recorded as 0.291 to 0.304 ha/h and 5.154 to 5.465 h respectively at the forward speed of 2.43 to 2.54kmph.

- The average depth of transplanting was recorded as 3.90 to 4.10cm.
- The spacing between rows was recorded as 30 cm.
- The average number of plants per hill was recorded as 4 to 7
- The average spacing between hills was recorded as 14 to 21 cm.
- The average percentage of missing hills was recorded as 0.83 to 2.0%.
- The average percentage of floating seedlings was recorded as 0.71 to 1.0%.
- The average percentage of buried seedlings was recorded as Nil.
- The average percentage of damaged seedlings was recorded as Nil.
- The total percentage of transplanting faults was recorded as 1.16 to 3.0.

15.6 Adequacy of Literature Supplied With Model:-

The applicant not supplied the operator's manual, technical manual and parts catalogue for reference during the test. It is recommended that same should be provided as per IS: 8132-1999 (Reaffirmed 2019) in regional/vernacular languages for the convenience of users & technical personnel.

TESTING AUTHORITY

D.C. MOULI AGRICULTURAL ENGINEER	
P.KAMALABAI **SENIOR AGRICULTURAL ENGINEER/DIRECTOR(I/C)**	

16. APPLICANTS COMMENTS.

As per your recommendation and suggestions, the necessary action will be taken and will be in corporate in further production models.