



SHRACHI VIRAT 13 HP POWER TILLER



भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषि, सहकारिता एवं किसान कल्याण विभाग

Department of Agriculture, Cooperation 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]

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Tele.: 08551-286441

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|-----------------|----------------------------------|---------------------|
| PT- 144/1254 | SHRACHI VIRAT 13 HP POWER TILLER | COMMERCIAL (ICT) |
|-----------------|----------------------------------|---------------------|

Manufacturer : M/s. V.S.T. Tillers Tractors Ltd.,
Plot No. 222-224 & 229-232, 3rd Phase,
KIADB Industrial Area, Malur,
Kolar District - 563130, Karnataka,
India.
Regd. & Head Office:
Plot No. 1, Dyavasandra Inhl. Layout,
Whitefield Road, Mahadevapura Post,
Bangalore-48, Karnataka, India.

Applicant : M/s. BTL EPC LTD.,
2 Jessore Road, Dumdum,
Kolkata- 700 028, West Bengal, India.

Indigenous/ Imported : **Indigenous**

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Report No. : PT-144/1254

Month: February

Year:2021



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- 18.17.5.2** Distance traveled per liter was observed 13.09 to 13.43 km.
- 18.17.5.3** Specific fuel consumption was observed 49.64 to 50.93 cc/km/t.
- 18.17.6 Wetland cultivation (Puddling test) :**
- 18.17.6.1** Puddling test was conducted with cage wheels and with hatchet blade.
- 18.17.6.2** The maneuverability of power tiller during puddling test was found satisfactory.
- 18.17.6.3** On partial dismantling of the power tiller and inspection of the oil lubricants from engine sump, clutch assembly, gear box, chain case, and rotary shaft housing, no entry of mud and/water was observed.
- 18.17.7 Rotary blades:**
- i) The hourly rate of wear of blades for dry land and wet land operations was observed as 0.02 to 0.28 percent and 0.19 to 0.39 percent respectively.
 - ii) All the constituents of chemical composition of straight and except silicon content of hatchet blades conforms to IS 6690:1981 (Reaffirmed 2012).
 - iii) The dimensions of hatchet blades does not conforms fully to the requirement of IS 6690:1981 (Reaffirmed 2012).
 - iv) The hardness of straight and hatchet blades are conforming to the requirement of IS 6690:1981 (Reaffirmed 2012).
- 18.17.8** As per IS 12239 (Part 3): 1988, “maximum safe speed” with trailer is required to be specified by the manufacturer. Necessary action may be taken in this regard.
- 18.17.9** As per IS 12239 (Part 3): 1988, balancing mass to be added to achieve correct weight balance of the power tiller with various attachments should be recommended by the manufacturer in the operator manual. This may be examined for compliance.
- 18.17.10** Provision of spark arresting device may be considered for incorporation in the exhaust system.

- 18.17.11** Provided metallic labeling plates should be as per IS 10273:1987.
- 18.17.12** It is recommended that the tire should have the "marking" as per clause 8 of IS13154:1991.
- 18.17.13** The handle grip does not meet the requirement of IS11858:1986. This may be looked into for compliance.

18.18 Adequacy of literature supplied with the machine:




The following literature was supplied with the test sample for reference during the test :

Operator manual & service log book and parts catalogue for power tiller and engine in English in separate booklets.

However, it is recommended that the same may be brought out in accordance with IS8132:1999 (Reaffirmed 2004)with inclusion of, inter alia, the following: -

-Fuel saving tips

TESTING AUTHORITY:

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|---|--|
| B.N. DIXIT AGRICULTURAL ENGINEER |  |
| P.C. MESHARAM SENIOR AGRICULTURAL ENGINEER |  |
| Dr. P.P. RAO DIRECTOR |  |

19. APPLICANT COMMENTS

| Para No. | Our reference | Applicant's comments |
|----------|---------------|---|
| 19.1 | 18.17.3 | We would likely to discuss with manufacturer to dampen the vibration within specified limit |
| 19.2 | 18.17.4 | We would likely to discuss with manufacturer to reduce the noise at operator's ear level within specified limit |
| 19.3 | 18.17.8 | We would take necessary action in this regard |
| 19.4 | 18.17.9 | The same point will be examined by us for compliance |