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

संख्या/No: PT-174/1884

माह/Month: June,2025

[ONLINE TESTING as per new testing regime] THIS TEST REPORT IS VALID UP TO 31.05.2032



KAMCO, KAMCO VAJRA 120 POWER TILLER



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://srfmtti.dacnet.nic.in/ E-mail: fmti-sr@nic.in/

PT-174/1884

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COMMERCIAL (INITIAL)

IMPORTANT INFORMATION

The Government of India, Ministry of Agriculture and Farmers' Welfare has directed, vide an OM No. 9-9/2023-M&T(I&P) (122999) dated 08.01.2024, that since 1st April, 2024, only mandatory tests will be carried out on a power tiller unless applicant has expressly requested for optional tests as well, mentioned in the above captioned OM. In the instant case, there is no request from the applicant to carry out the optional tests hence only Mandatory Tests, as given below, have been conducted and reported in this report: -

- 1. Rotary Shaft Performance Test
- 2. Drawbar Performance Test
- 3. Brake Test
- 4. Noise level test
- 5. Tuning Ability Test
- 6. Nominal Speed Test
- 7. Haulage Test
- 8. Field Test
- 9. Torture test
- 10. Material & Chemical Composition

Manufacturer

: M/s. Kerala Agro Machinery Corporation Ltd,

Athani 683585, Ernakulam District, Kerala.

Applicant

The manufacturer

Indigenous/ Imported

Indigenous

KAMCO, KAMCO VAJRA 120 POWER TILLER

Report No.: PT-174/1884

Month: June

Year: 2025



Government of India

Ministry of Agriculture and Farmers Welfare
Department of Agriculture and Farmers Welfare
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SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE, ANANTAPUR, (A.P.)

Page 2 of 33



KAMCO, KAMCO VAJRA 120 POWER TILLER THIS TEST REPORT IS VALID UPTO: 31.05.2032

COMMERCIAL (INITIAL)

Type of test

: INITIAL COMMERCIAL TEST (ICT)

Test code/Procedure

Ministry's Office Memorandum No. 9-9/2023-M&T(I&P) (122999) dated 08.01.2024.

(ii) IS: 9935-2002 with all the applicable standards referred to therein.

(iii) IS: 13539-2018

Period of Test

15.04.2025 to 16.05.2025

Test Report No.

: PT-174/1884

Month/Year

June.2025

i) The results reported in this report are observed values and no corrections have been applied for atmospheric and site conditions.

ii) The data given in this report pertain to the particular machine submitted by the applicant for test.

iii) The results presented in this report do not in any way attribute to the durability of the machine.

iv) This report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training and Testing Institute, Garladinne, Anantapur (A.P.).

v) This is a report on commercial test of power tiller named "KAMCO, KAMCO VAJRA 120 POWER TILLER". This report is valid up to 31.05.2032, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

SELECTED CONVERSIONS

S. No	Units	Conversion factor	
1	Force		
	1 kgf	9.80665 N	
		2.20462 lbf	
2	Power		
	1 hp	1.01387 metric hp (Ps)	
	200000	745.7 W	
	1 Ps	735.5 W	
	1 kW	1.35962 Ps	
3	Pressure		
	1 psi	6.895 kPa	
	1 kgf/cm ²	98.067 kPa = 735.56 mm of Hg	
	1 bar	100 kPa = 10 N/cm ²	
	1 mm of Hg	1.3332 m-bar	

STATEMENT

An item marked "C" indicates to the test report user that the information has been checked by the Testing Institute and reported herein whereas, an item marked "D" indicates that the manufacturer's declaration, as such, has been reported.

PT-	KAMCO, KAMCO VAJRA 120 POWER TILLER	COMMERCIAL
174/1884	THIS TEST REPORT IS VALID UPTO: 31.05.2032	(INITIAL)

8.1.14.2 Rotary blades:

- i) The hourly rate of wear of blades for dry land and wet land operations was observed as 0.03 to 0.62 percent and 0.10 to 0.26 percent respectively.
- ii) Remaining constituents except, Carbon & Manganese content of chemical composition of rotary blade conforms to IS 6690:1981 (Reaffirmed 2012).
- iii) The chemical analysis of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2012).

8.1.14.3 Recommendation with regard to safety on power tiller:

- i) 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.
- ii) Provision of spark arresting device may be considered for incorporation in the exhaust system.
- iii) The handle grip does not meet the requirement of IS 11858:1986. This may be looked into for compliance.
- **8.1.14.4** Provided metallic labeling plates should be as per IS 10273:1987.

8.1.14.5 Adequacy of literature supplied with the machine:

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

Operator cum service manual and parts catalogue for power tiller and maintenance manual and parts catalogue of engine in English in a separate booklet.

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

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

mmm

Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. P.P.RAO DIRECTOR

9.APPLICANT'S COMMENTS -NIL-

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Page 31 of 33