

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

संख्या/No: Machine-681/1759  
माह/Month: November, 2024

THIS TEST REPORT IS VALID UPTO 31.10.2031



**SIDDHI, VKA-700 LT POWER WEEDER**



सत्यमेव जयते

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.)**

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Machine- 681/1759	SIDDHI, VKA- 700 LT POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31.10.2031	

Manufacturer, (apa) : M/s. Chongqing Fuchai Power Machine, No.8, Jiang Jia Yan Road, East City of Tongliang District, Chongqing, **China**.

Applicant : M/s. Siddhi Traders H. No. 2049, A/P-Takawade, Kolhapur -416121 Tal.-Shirol, Dist.-Kolhapur

**SIDDHI, VKA-700LT POWER WEEDER**

Report no.: **Machine-681/1759** Month: **November**

Year: **2024**



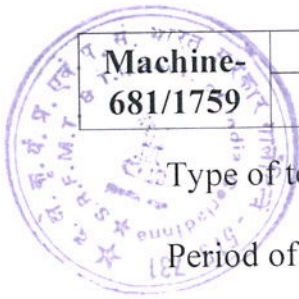
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**Government of India  
Ministry of Agriculture and Farmers Welfare  
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<b>SOUTHERN REGION FARM MACHINERY TRAINING &amp; TESTING INSTITUTE, ANANTAPUR, (A.P.)</b>	<b>Page 2 of 31</b>
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<b>Machine-681/1759</b>	<b>SIDDHI, VKA- 700 LT POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
	<b>THIS TEST REPORT IS VALID UP TO 31.10.2031</b>	

Type of test : COMMERCIAL (ICT)  
Period of test : October, 2024 to November, 2024  
Test Report No. : **Machine-681/1759**  
Month / Year of release : November, 2024

- 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 randomly selected by testing authority.
- iii) The results presented in this report do not, in any way, attribute to the durability of the machine.
- iv) This Test Report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training & Testing Institute, Garladinne, Anantapur (A.P.).
- v) This is a report on Commercial Test of Power Weeder named "**SIDDHI, VKA-700 LT POWER WEEDER**" This report is valid up to **31.10.2031, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.**

#### SELECTED CONVERSIONS

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



Machine-681/1759		SIDDHI, VKA- 700 LT POWER WEEDER		COMMERCIAL (ICT)	
		THIS TEST REPORT IS VALID UP TO 31.10.2031			
1	2	3	4	5	
22	Provision for shield/cover to prevent flying of mud and stone from rotor	Must be provided	Provided	Conforms	
23	Depth control mechanism	Must be provided	Provided	Conforms	
24	Provision for transport wheels	Must be provided	Provided	Conforms	
25	Provision for cover on exhaust	Must be provided	Provided	Conforms	
26	Direction of exhaust emission away from operator	Must be provided	Provided	Conforms	
27	Marking/labeling of machine	The labeling plate should be riveted on the body of the machine having name and address of manufacturer & applicant, country of origin, make, model, year of manufacturer, serial number, engine number, engine HP, rated rpm & SFC	<b>Name &amp; address of the manufacturer, Country of origin, year of manufacture &amp; SFC are not provided.</b>	<b>Does not conform</b>	
28	Literature	Operator manual, service manual and parts catalogue should be provided	Not Provided	<b>Does not conform</b>	

### 18. COMMENTS & RECOMMENDATIONS

#### 18.1 Engine Performance:

- 18.1.1 The maximum and rated power were observed as 4.61 kW under natural ambient condition against the declared value of 4.84 kW and 4.51 kW respectively.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 366 g/kWh against the declared value of 330g/kWh.
- 18.1.3 Back up torque of engine was observed as 7.31% against declared value of 10%.
- 18.1.4 Max. torque was observed as 13.07 Nm against the declared value of 14 Nm.

#### 18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 344 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

Machine- 681/1759	SIDDHI, VKA- 700 LT POWER WEEDER	COMMERCIAL (ICT)
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**18.3 Hardness & Chemical composition:**

The hardness & chemical composition of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2022). This should be looked into for corrective action.

**18.4 Marking /labeling:**

The labeling plate does not reveal all the required information. It is therefore recommended that a suitable labeling plate covering all essential components, interlaid, the following must be provided:

- i) Name & address of the manufacturer
- ii) Country of origin
- iii) Year of manufacture
- iv) Specific fuel consumption, (g/kWh)

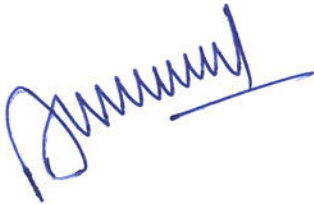


**18.5 Technical literature:**

User's manual is not provided during the test. However, the same must be brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the guidance of users.

The following literature should be provided.

- i) Service manual
- ii) Parts catalogue

**TESTING AUTHORITY**

Er. PRAMOD YADAV AGRICULTURAL ENGINEER	
Dr. B.M. NANDEDE DIRECTOR	 

**19. APPLICANT COMMENTS**

We have gone through all your comments and we will inform our manufacturing facility about your comments and recommendations.