



**SRI LAKSHMI TRADERS SLT 5 BDFC  
FIVE BOTTOM DUCK FOOT CULTIVATOR (Tractor Mounted)**



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]

Website: <http://srfmtti.dacnet.nic.in/>

E-mail: [fmti-sr@nic.in](mailto:fmti-sr@nic.in)

Tele./FAX: 08551-286441

<b>IMP- 527/1097</b>	<b>SRI LAKSHMI TRADERS SLT 5 BDFC FIVE BOTTOM DUCK FOOT CULTIVATOR (Tractor Mounted)</b>	<b>COMMERCIAL (ICT)</b>
--------------------------	--	-----------------------------

Manufacturer : M/s. Sri Lakshmi Traders,  
Sy. no. 67/1, 67/2, Plot No. 10,  
SRC Colony, Ballary by pass Road,  
Anantapuramu- 515 004, Andhra Pradesh,  
India

Name of Applicant : The Manufacturer

**SRI LAKSHMI TRADERS SLT 5 BDFC  
FIVE BOTTOM DUCK FOOT CULTIVATOR (TRACTOR MOUNTED)**

Report No.: IMP-527/1097

Month: December

Year: 2019



**Government of India  
Ministry of Agriculture and Farmers Welfare  
Department of Agriculture, Cooperation and Farmers Welfare  
Southern Region Farm Machinery Training and Testing Institute  
Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)  
[An ISO 9001:2015 CERTIFIED INSTITUTE]**

Telephone: 08551-286441  
Website: <http://srfmtti.dacnet.nic.in/>

Fax: 08551-286441  
E-mail: [fmti-sr@nic.in](mailto:fmti-sr@nic.in)

<b>IMP- 527/1097</b>	<b>SRI LAKSHMI TRADERS SLT 5 BDFC FIVE BOTTOM DUCK FOOT CULTIVATOR (Tractor Mounted)</b>	<b>COMMERCIAL (ICT)</b>
--------------------------	--	-----------------------------

## 6.2 Quality of work

- Average depth of operation was recorded as 12.6 to 13.8 cm.
- Average field efficiency was recorded as 67.06 to 69.95 %.

## 6.3 Power requirement

The average draft requirement was ranged from 562.0 to 591.0 kgf and the average power requirement was calculated as 5.20 to 5.52 kW.

## 6.4 Wear of Shovel

Sl. No.	Initial mass (g)	Final mass (g)	Loss of mass (g)	Percentage of wear	
				After 26.0 h	Per hour
1	2852.9	2750.8	102.1	3.58	0.14
2	2818.2	2723.4	94.8	3.36	0.13
3	2947.4	2842.1	105.3	3.57	0.14
4	2883.2	2784.7	98.5	3.42	0.13
5	2835.9	2734.5	101.4	3.58	0.14

**Remark:** - The hourly percentage wear of blades on mass basis was recorded as 0.13 to 0.14 %.

## 7. EASE OF OPERATION & ADJUSTMENTS

No difficulty was observed during the operation and adjustment of cultivator

## 8. DEFECTS, BREAKDOWNS AND REPAIRS

No defect/breakdown and repair was occurred during entire period of field & lab tests.

## 9. SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMMENDATION

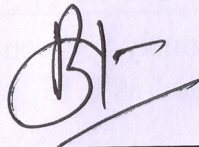
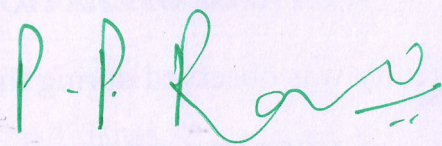
- 9.1 The hardness of shovels does not conform the requirement of IS 6813:2000. This should be looked into for corrective action.
- 9.2 The chemical composition of shovel conforms to the requirement of IS 6690:1981 (Reaffirmed 2001).
- 9.3 The material used for tine is mild steel, it is therefore recommended to use carbon steel as per IS 6638:1972.



IMP- 527/1097	SRI LAKSHMI TRADERS SLT 5 BDFC FIVE BOTTOM DUCK FOOT CULTIVATOR (Tractor Mounted)	COMMERCIAL (ICT)
------------------	---	---------------------

- 9.4 The specification of implement hitch does not conform in full to the IS 4468 (Pt-I):1997 (Reaffirmed 2012). It is recommended that the same should be provided conforming to the relevant Indian Standards.
- 9.5 The bolt used for shovel is Hexagonal bolt, it is recommended to use the Counter sunk bolt as per IS 6813 : 2000.
- 9.6 The provided labeling plate should be as per the requirement of IS.
- 9.7 **Adequacy of literature:**  
Operation manual, Service manual, Maintenance manual and Spare parts catalogue of cultivator in English was provided in a single booklet form for reference during the test. However, this may be brought out in Hindi and other regional languages as per IS 8132 : 1999 (Reaffirmed 2004) for the sake of user & technical personnel.

**TESTING AUTHORITY:**

B.N. DIXIT AGRICULTURAL ENGINEER	
Dr. P.P. RAO DIRECTOR	

**10. APPLICANT'S COMMENTS**

"The suggestions are noted and we will make all possible necessary changes our future products".