

THIS TEST REPORT IS VALID UP TO 29.02.2032



**C & O TRADE INDIA PRIVATE LIMITED, CLAVIS CK-600  
6-ROW SELF PROPELLED WALK BEHIND RICE TRANSPLANTER**



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]

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Machine- 738/1841	C & O TRADE INDIA PRIVATE LIMITED, CLAVIS CK-600 6-ROW SELF PROPELLED WALK BEHIND RICE TRANSPLANTER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UPTO 29.02.2032	

Manufacturer : M/s. C & O China Co. Ltd., Beihai St.  
Fangzi District, Weifang, Shandong,  
China.

Applicant : M/s. C & O Trade India Private limited  
Door No.-16, Le- Paradise, Anna Street,  
Sholingallur, Chennai-600119,  
TamilNadu.

**C & O TRADE INDIA PRIVATE LIMITED, CLAVIS CK-600  
6-ROW SELF PROPELLED WALK BEHIND RICE TRANSPLANTER**

Report No.: Machine-738/1841

Month: March

Year:2025



सत्यमेव जयते

**Government of India  
Ministry of Agriculture and Farmers Welfare  
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Southern Region Farm Machinery Training and Testing Institute  
Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)  
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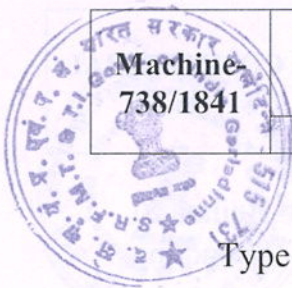
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**SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE,  
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COMMERCIAL  
(ICT)

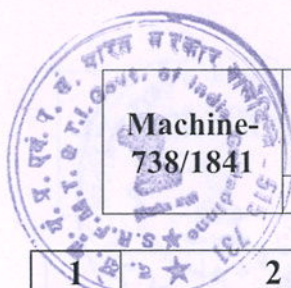
Type of test : COMMERCIAL (ICT)  
Period of test : November, 2024 to February, 2025  
Test Report No. : Machine-738/1841  
Month / Year of release : March, 2025

- 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 randomly selected through virtual mode by testing authority.
- iii) The results presented in this report do not, in anyway, 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 Paddy transplanter named "C & O TRADE INDIA PRIVATE LIMITED, CLAVIS CK-600 6-ROW SELF PROPELLED WALK BEHIND RICE TRANSPLANTER". This report is valid up to 29.02.2032, 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	<b>Force</b>	
	1 kgf	9.80665 N
		2.20462 lbf
2	<b>Power</b>	
	1 hp	1.01387 metric hp (Ps)
		745.7 W
	1 Ps	735.5 W
	1 kW	1.35962 Ps
3	<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-  
738/1841

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RICE TRANSPLANTER

COMMERCIAL  
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1	2	3	4	5	6	7
d)	Provision of headlights	Non - evaluative	-do-	Yes	Provided	Yes
<b>16.10 Literature (submission to test agency)</b>						
	Operator manual	Evaluative	-do-	Provided	Provided	Yes
	Parts catalogue	Evaluative	-do-	Provided	Provided	Yes
	Workshop/service manual	Evaluative	-do-	Provided	Provided	Yes
<b>16.11 Labelling of machine (provision of labelling plate) :</b>						
a)	Name of manufacturer	Evaluative	Metallic plate shall be welded/riveted permanently on the machine at place where it can be easily identified	Provided	Yes	Provided
b)	Country of origin	Evaluative		Provided	Yes	Provided
c)	Make	Evaluative		Provided	Yes	Provided
d)	Model	Evaluative		Provided	Yes	Provided
e)	Year of manufacture	Evaluative		Provided	Yes	Provided
f)	Engine serial number	Evaluative		Provided	Yes	Provided
g)	Chassis serial number	Evaluative		Provided	Yes	Provided
h)	Size of machine	Evaluative		Provided	Yes	Provided
i)	Maximum engine power, kW	Evaluative		Provided	Yes	Provided
j)	Specific fuel consumption, g/kWh	Evaluative		Provided	Yes	Provided

## 16.12 Salient observations:


### 16.12.1 Engine Performance:

- The maximum power was observed as 3.11 kW under natural ambient condition against the declared value of 3.4 kW.
- Specific fuel consumption of engine corresponding to maximum power recorded as 319 g/kWh against the declared value of 307 g/kWh.

### 16.12.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the transplanter was observed to the extent of 701 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.



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### 16.12.3 Field Test:

- i) The transplanter was operated in varying field conditions for a total period of 26.0 hours for transplanting ADT-37 variety of paddy seedlings. The results are summarized as under:
  - Av. Forward speed of operation was observed as 2.44 to 2.54 kmph.
  - Av. Area covered was recorded as 0.304 to 0.331ha/h.
  - Av. Depth of transplanting was recorded as 4.4 to 4.8 cm.
  - The spacing between rows was recorded as 30 cm.
  - Av. number of plants per hill was recorded as 9.3 to 11.0.
  - Av. spacing between hills was recorded as 20.6 to 21.0 cm.
  - Av. Total number of hills in 5 m row length was recorded as 24.
  - Av. percentage of missed hills was recorded as Nil to 1.0.
  - Av. percentage of floating seedlings was recorded as Nil to 1.0.
  - Av. percentage of buried seedlings was recorded as Nil to 1.0.
  - Av. percentages of damaged seedling were recorded as Nil to 1.0.
  - The total percentage of transplanting faults was recorded as 1.0 to 3.0.
  - The consumption of nursery trays was recorded as 230 to 272 numbers per hectare.
  - The hourly fuel consumption was recorded as 0.88 to 1.08 and fuel required for planting of one hectare area was recorded as 2.89 to 3.26.
- ii) The quality of work was observed as smooth during entire transplanting operation. The overall performance of the machine was found satisfactory.

### 16.12.4 Components/assembly inspection:

- i) The transplanter and engine were dismantled after 38.00 hours of operation and wear of critical components were observed within the limits.
- ii) The main gear box, planting box, planting arm drive mechanism and bearings were dismantled after completion of field operation and found in satisfactory working condition.

### 16.12.5 Safety provisions:

The machine is provided with various safety provisions while working in the field or moving on the road as mentioned in the clause 5.10 of this test report.

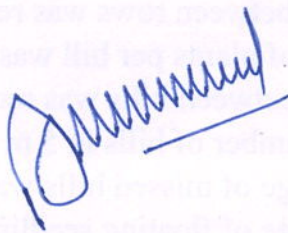


### 16.12.6 Technical literature:

Operator's manual, service manual and parts catalogue of Rice Transplanter and engine in separate booklet were supplied with the Rice Transplanter for reference during the test. It is however, recommended that same may be revised in Hindi and other regional languages as per IS 8132: 1999 (Reaffirmed 2004) for the sake of user & technical personnel.



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### TESTING AUTHORITY

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

### 17. APPLICANT'S COMMENTS

We will take proper action against all the comments and recommendations specified in the draft report for future products of our company.