

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

संख्या/No: Machine-594/1651
माह/Month: June, 2024

THIS TEST REPORT IS VALID UPTO 31.05.2031



JAMNA, JAISB-165 SQUAR BALER
(TRACTOR DRAWN, PTO POWERED)



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.)

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Machine- 594/1651	JAMNA, JAISB-165 SQUAR BALER (TRACTOR DRAWN, PTO POWERED)		COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Jai Automotive Components Limited
Bhagwanpur, Barwala Road, Dera Bassi,
S.A.S Nagar, Punjab -140507.

Applicant : M/s. Jamna Auto Industries Limited Jai
Spring Road, Yamuna Nagar, Dist.
Yamunanagar-135001, Haryana.

**JAMNA, JAISB-165 SQUAR BALER
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SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE,
ANANTAPUR, (A.P.)

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Machine-
594/1651

**JAMNA, JAISB-165 SQUAR BALER
(TRACTOR DRAWN, PTO POWERED)**

**COMMERCIAL
(ICT)**

THIS TEST REPORT IS VALID UPTO 31.05.2031

Type of test : COMMERCIAL (ICT)

Period of test : 09.05.2024 to 29.05.2024

Test Report No. : **Machine-594/1651**

Month / Year : June, 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 for test by the testing authority at applicant's site.
- 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 Square Baler named "**JAMNA, JAISB-165 SQUAR BALER (TRACTOR DRAWN, PTO POWERED)**". This report is valid up to **31.05.2031**, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

SELECTED CONVERSIONS

S. No	Units	Conversion Factor
1	Force	
	1 kgf	9.80665 N 2.20462 lbf
2	Power	
	1 hp	1.01387 metric hp (Ps) 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



Machine-
594/1651

**JAMNA, JAISB-165 SQUAR BALER
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**COMMERCIAL
(ICT)**

THIS TEST REPORT IS VALID UPTO 31.05.2031

9.2 Quality of tying and knotting the bale:

Wrapping of the twine has been tight enough.

9.3 Quality of work:

- The field efficiency and straw recovery varied from 75 to 77% and 98.0 to 98.5 % respectively.
- Bale density was recorded as 206.4 to 214.4 kg/m³.

9.4 Adequacy of power of prime mover:

The power of prime mover was found adequate.

9.5 Labour Requirements:

Prior to each test, about two-man hour were required for daily maintenance of tractor and baler for operation otherwise one skilled operator is enough to operate tractor with baler.

10. EASE OF OPERATION & ADJUSTMENTS

No difficulty was observed during the operation and adjustment of square baler.

11. DEFECTS, BREAKDOWNS AND REPAIRS

No defects or breakdowns were observed during the entire test.

12. COMMENTS & RECOMMENDATIONS

12.1 Provision for bale counting mechanism is provided in the baler.

12.2 Chemical composition:

Chemical composition of stationary & movable blades of plunger unit are not conforming to IS 1511: 1979 (Reaffirmed 2012). This should be looked into for corrective action.




12.3 Dimensions of power input connection (PIC) of universal drive shaft is conforming the relevant code i.e. IS 4931: 1995.

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12.4 Technical literature:

Operator's manual & parts manual in English were supplied with the Square Baler 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

 Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 Er. P. KAMALABAI SENIOR AGRICULTURAL ENGINEER
 Dr. B.M. NANDEDE DIRECTOR	



13. APPLICANTS COMMENTS

Sl.no.	Para no.	Parameter	Comments
1	12.2	Chemical composition	We will be taking care during our regular production.
2	12.4	Technical literature	We will be providing the same in Hindi and other regional languages at the time of delivery of the machine to the end user (Farmers).