प्रारंभिक व्यावसायिक परीक्षण रिपोर्ट INITIAL COMMERCIAL TEST REPORT

THIS TEST REPORT VALID UP TO

संख्या/No. CSIR/CMERI/FMTTC/2025/002

माह/Month: January, 2025

31st December 2031



APSPEE POWER WEEDER MODEL NO.- RT/GE/G7)





कृषि मशीनरी प्रशिक्षण और परीक्षण केंद्र
Farm Machinery Training and Testing Centre
सीएसआईआर- केन्द्रीय यांत्रिक अभियांत्रिकी अनुसंधान संस्थान
CSIR - Central Mechanical Engineering Research Institute
महात्मा गांधी एवेन्यू, दुर्गापुर

Mahatma Gandhi Avenue, Durgapur पश्चिम बंगाल - 713209

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ASPEE POWER WEEDER (MODEL NO.- RT/GE/G7) (INITIAL COMMERCIAL TEST)

Name of Machine : Power Weeder With 4-Stroke Petrol Engine

Type : Self-propelled, Walk-behind Type

Make : ASPEE Model : RT/GE/G7

Name and address of Manufacturer : ASPEE Agro Equipment Pvt. Ltd.

> SURVEY/ BLOCK No. 84, VILLAGE/ POST: Balwada, Tal. Chikli, Dist. -

Navasari, PIN - 396521, GUJARAT GST NO. 24AAACA8980G1ZN

Name and address of Applicant : ASPEE Agro Equipment Pvt. Ltd.

> SURVEY/ BLOCK No. 84, VILLAGE/ POST: Balwada, Tal. Chikli, Dist. -

Navasari, PIN – 396521, GUJARAT GST NO. 24AAACA8980G1ZN

Test Conducted at : Farm Machinery Training and Testing Centre

> CSIR - Central Mechanical Engineering Research Institute, M G Avenue, Durgapur,

Pin - 713209, West Bengal.

THIS TEST REPORT IS VALID UP TO: 31st December 2031 vide DAC&FW OM No. 13-22/2020- M&T (I&P) dated 12.12.2023



Government Of India







Report No.: CSIR/CMERI/FMTTC/2025/002 Month: January Year: 2025

> **CSIR - Central Mechanical Engineering Research Institute**, **Durgapur - 713209** (W.B.), INDIA

> > Report prepared by

Report verified by Subrata Kr marriel

Farm Machinery Training and Testing Centre, CSIR-Central Mechanical Engineering Research Institute, Durgapur THIS REPORT IS VALID UPTO: 31st December 2031

ASPEE POWER WEEDER (MODEL NO.- RT/GE/G7) (INITIAL COMMERCIAL TEST)

Type of Test

: Initial Commercial Test

Period of Test

August 2024 – December 2024

Test Report No.

CSIR/CMERI/FMTTC/2025/002

Month and Year

January, 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 pertains to the particular machine submitted by the applicant for test.
- iii. The results presented in this report do not in any way attribute to durability of the machine.
- iv. The report should not be reproduced in part or full without prior permission of the Director, CSIR- Central Mechanical Engineering Research Institute, M G Avenue, Durgapur -713209 (West Bengal)
- v. This test report is not covered under BIS certification. Therefore, the manufacturers cannot market the machine with ISI mark, only on the strength of this report.
- vi. This report cannot be used for legal purposes.

SELECTED CONVERSIONS

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

3. Pressure

 $1 \text{ psi} \qquad = \quad 6.895 \text{ kPa}$

1 kgf/sq.cm = 98.067 kPa

= 735.56 mm of Hg

1 bar = 100 kPa

= 10 N/sq.cm.

1 mm of Hg = 1.3333 m-bar

4. Area

1 ha $= 10000 \text{m}^2$

= 2.471 Acres

Report prepared by

Report verified by

Farm Machinery Training and Testing Centre, CSIR-Central Mechanical Engineering Research Institute, Durgapur THIS REPORT IS VALID UPTO: 31st December 2031

ASPEE POWER WEEDER (MODEL NO.- RT/GE/G7) (INITIAL COMMERCIAL TEST)

4 **SPECIFICATIONS**

4.1 General

Type of machine

Self-propelled, Walk-behind Type

Make

ASPEE

Model

RT/GE/G7

Serial No.

002

Name and address of

ASPEE Agro Equipment Pvt. Ltd.

manufacturer

SURVEY/ BLOCK No. 84, VILLAGE/ POST:

Balwada, Tal. Chikli, Dist. - Navasari, PIN -

396521, GUJARAT

GST NO. 24AAACA8980G1ZN

Year of manufacture

2023

Country of origin

India

4.2 Details of prime mover

Name and address of

: ASPEE Agro Equipment Pvt. Ltd.

manufacturer

SURVEY/ BLOCK No. 84, VILLAGE/ POST:

Balwada, Tal. Chikli, Dist. - Navasari,

PIN – 396521, GUJARAT

Type

: Forced Air Cooled, 4 Stroke, Inclined, Single

Cylinder, Petrol Engine

Make

: ASPEE

Model

170FB

Sr. No.

K GC-241000536

Country of origin

India

Year of manufacture

2023

Engine speed (Manufacturer's

3800

recommended setting), (rpm)

High idle speed 4000

Low idle speed

2200

Rated speed, (rpm)

3600

No load engine speed for field

2200 - 4200

operation, (rpm)

Speed at maximum torque, rpm

3300

Max Torque (Nm)

12.9

Rated Power (kW)

5.31 kW (7.12 hp)

Max Power (kW)

: 5.34 kW (7.16 hp)

Report prepared by

Report verified by Subrata Kr mandel

Farm Machinery Training and Testing Centre, CSIR-Central Mechanical Engineering Research Institute, Durgapur THIS REPORT IS VALID UPTO: 31st December 2031

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ASPEE POWER WEEDER (MODEL NO.- RT/GE/G7) (INITIAL COMMERCIAL TEST)

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 machine	The labeling plate should be riveted on the body of 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.	Provided	Conforms
28.	Literature	Operator manual, service		Conforms

16 COMMENTS & RECOMMENDATION

- 16.1 The amplitude of mechanical vibration marked as (*) under section 7, are on higher side. It is not just directly concerned with operator's health, safety and comfort, but also adversely affects the useful life of the components. It needs to be corrected.
- 16.2 The chemical composition of the rotor blade does not fully confirm to the requirements outlined in IS: 6690-1981. This issue should be thoroughly examined and rectified.
- 16.3 The material used for the rotor shaft does not meet the requirements as per the requirement of BIS Standard. This issue requires prompt investigation and correction.
- 16.4 The material used for the rotor blade does not comply as per the requirement of BIS Standard. This issue requires immediate attention and corrective measures.
- 16.5 The user manual and service manual have been provided; however, they require updating to ensure compliance with the latest IS standards.

Report prepared by
Substa ky mandel

ASPEE POWER WEEDER (MODEL NO.- RT/GE/G7) (INITIAL COMMERCIAL TEST)

17 TECHNICAL LITERATURE

The following literatures are provided by the applicant during the test along with the application form.

- a) User's manual book
- b) Parts' catalogue
- c) Service manual

These manuals need to be provided as per IS: 8132-1999.

TESTING AUTHORITY

Report Prepared by	Sr. Technical Officer, CSIR-CMERI Farm Machinery Testing Centre	Jul 2025
Report Approved by	In-Charge, CSIR-CMERI Farm Machinery Testing Centre	Substate March 1 07/1/2025
Report Approved for release by	Head, Business Development Unit, CSIR-CMERI, Durgapur	Sudif Samanter 07/1/25

18 APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's Comments	
	16.1	We appreciably noted the same, we will do	
	10.1	needful to reduce mechanical vibration	
	16.2	We noted the same, we will take necessary	
		corrective action.	
18	16.3	We also noted this, we will take necessary	
	10.3	and prompt corrective action.	
	16.4	We also noted the same, we will take	
		necessary and prompt corrective action.	
		Noted the same, we will further update the	
	10.3	same is per latest IS standards.	



