# व्यावसायिक परीक्षण रिपोर्ट COMMERCIAL TEST REPORT (INITIAL)

संख्या / No: Machine - 340/1152 माह / Month: May, 2020

Validity: 30.04.2025



#### **SAMYAK SPR 126 POWER REAPER**



#### 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: अनंतप्र (आं. प्र.)

Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

[An ISO 9001:2015 CERTIFIED INSTITUTE]

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Machine - 340/1152

### SAMYAK SPR 126 POWER REAPER

COMMERCIAL (ICT)

Manufacturer : M/s. Samyak Moros Private LImited,

3/34 C, Athipalayam Road, Athipalayam,

Coimbatore - 641 110, Tamil Nadu,

India.

Applicant : The Manufacturer

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#### **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.)

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Machine -	SAMYAK SPR 126 POWER REAPER	COMMERCIAL
340/1152		(ICT)

#### 17.11 Field Performance Test:

#### **17.11.1** Rate of work:

- i) The average area covered and time required for harvesting one hectare was recorded as 0.203 to 0.208 ha/h and 4.81 to 4.93 hours respectively.
- ii) The average hourly fuel consumption varies from 0.65 to 0.72 l/h & the fuel requires for harvesting one hectare area was recorded as 3.17 to 3.46 l/ha.
- iii) The average mass of straw with grain harvested was recorded as 23720 to 26136 kg/ha.
- iv) The average mass of grains recovered was recorded as 5879 to 6272 kg/ha.

### **17.11.2 Quality of work:**

- i) The average post harvest loss was recorded as 0.06 to 0.24 %.
- ii) The average stubble height was recorded as 82.0 to 110.0 mm.
- iii) The crop harvested by the machine is left in windrows, which minimizes the time required for the collection and transportation of the crop.
- 17.12 One skilled operator can operate the machine continuously for about two hours only. Hence, two skilled operators are required to operate the machine continuously and two unskilled labours for cutting of the crop on sides and corners of the field to be harvested.

## 17.13 Wear of critical components:

- i) The wear rate of cutter bar on mass basis was recorded as 0.02 % per hour.
- ii) Hardness of movable & stationary blade conforms to the requirement of IS 6025:1982 (Reaffirmed 1999).
- iii) Chemical composition of movable and stationary blades are not conforming to the requirement of relevant code. Therefore, this should be taken care for corrective action.

# **17.14** Provision for safety:

- i) A safety pin at driven sprocket of conveyor chain is provided to take of overloading of cutter bar.
- ii) Guards against all moving parts/drives and hot parts are provided

## **SAMYAK SPR 126 POWER REAPER**

COMMERCHII (ICT) /11

#### 17.15 Technical literature:

The operator's manual and parts catalogue of reaper and engine in a booklet was supplied with the reaper for reference during the test, however, recommended that same may be revised and bought out in & other regional languages as per IS 8132: 1999 (Reaffirmed 2004) to sake of user & technical personnel.

#### **TESTING AUTHORITY:**

B.N. DIXIT AGRICULTURAL ENGINEER	BL
Dr. P.P. RAO DIRECTOR	P-P. Lao

### 18. APPLICANT'S COMMENTS

Para No.	Our reference	Applicant's comments
(1)	(2)	(3)
18.1	17.1 to 17.4	We shall convey the report to engine manufacturer for the corrective action.
18.2	17.7	We will take necessary actions to reduce the vibrations.
18.3	17.8 & 17.13	We will share the data dimensional details with knife & blade manufacturer to maintain the as per IS 6025-1982.
18.4	17.15	We will provide the manuals in Hindi and Other language as per IS 8132:1999