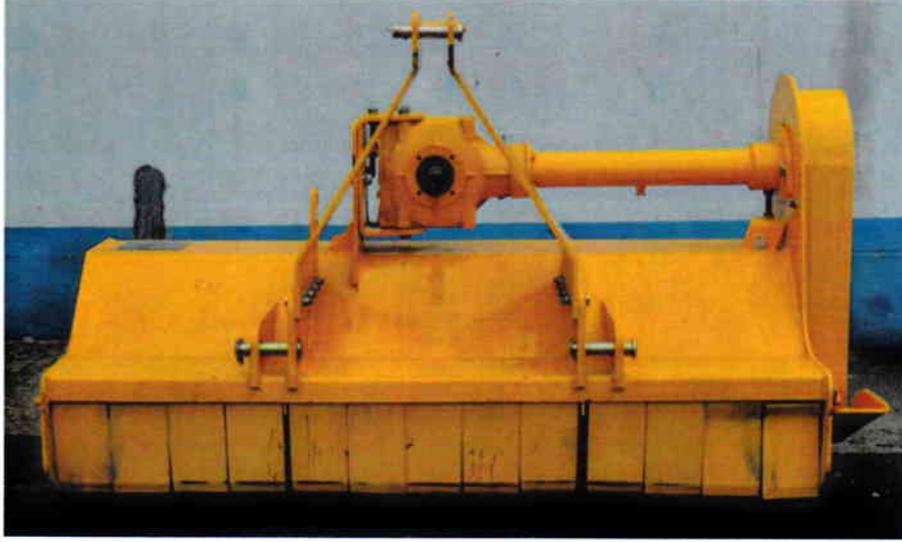




THIS TEST REPORT IS VALID UPTO 31/03/2027



MULCHER MLD-160



भारत सरकार
GOVT OF INDIA

कृषि एवं किसान कल्याण मन्त्रालय
MINISTRY OF AGRICULTURE & FARMERS WELFARE

कृषि, सहकारिता एवं किसान कल्याण विभाग

DEPARTMENT OF AGRICULTURE, COOPERATION & FARMERS WELFARE

उत्तर पूर्वी क्षेत्र कृषि यंत्र प्रशिक्षण एवं परीक्षण संस्थान

NORTH EASTERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE

विश्वनाथचारिआलि, जिला-विश्वनाथ (असम)

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[AN ISO 9001:2015 CERTIFIED INSTITUTION]

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4. SPECIFICATIONS

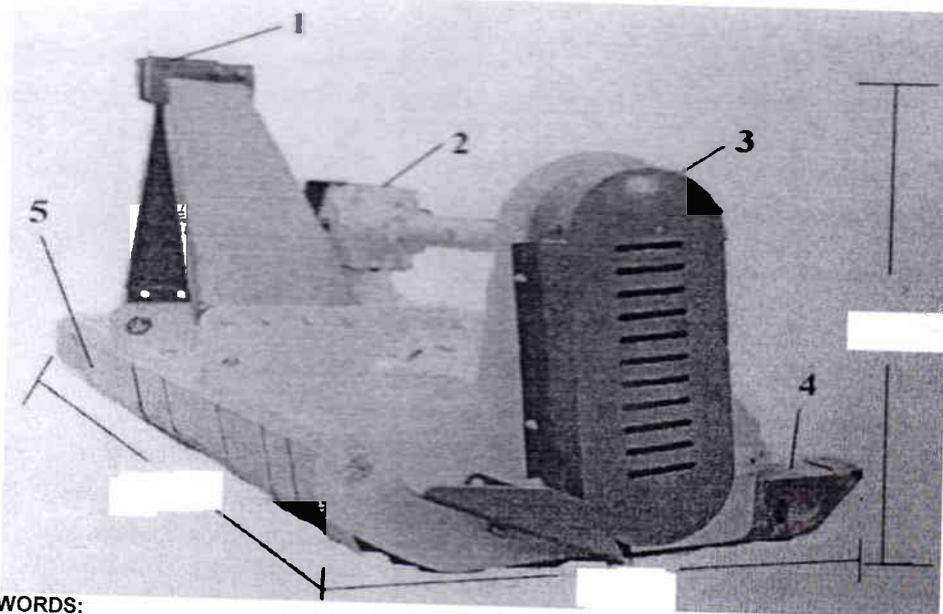
4.1 General:

Name and address of the manufacturer	: M/s New Swan Multitech Ltd., Village: Raian, P.O.Heeran, Kohara Machiwara Road, Ludhiana (Punjab)-141112
Name & Address of Applicant	: M/s New Swan Multitech Ltd., Village: Raian, P.O.Heeran, Kohara Machiwara Road, Ludhiana (Punjab)-141112
Name of machine	: Mulcher
Type	: Tractor mounted, P.T.O Driven
Make	: Swan Agro
Model	: MLD-160
Year of manufacture	: 2019
Serial Number	: 00376
Recommended power source, hp	: 35 hp and above
Type of blade	: Hatchet C-shape & straight blade
Working width of implement (mm)	: 1520

4.2 Prime Mover Used:

Tractor used during test	: Swaraj 855
Make	: Swaraj
Model	: Swaraj 855
Engine No.	: 471402/MSL5041
Chassis No.	: QUCL61618127164

4.3 Constructional Details (Refer Fig.1) :



KEYWORDS:

- | | |
|----------------|---------------------------------|
| 1. Mainframe | 5. Primary reduction gear box |
| 2. Side plate | 6. Secondary reduction gear box |
| 3. Rotor shaft | 7. Skid |
| 4. Rotor blade | 8. Hitch pyramid |

Fig.1:Swan Agro, MLD-160, Mulcher

1	2	3	4	5	6	7
5.	Left	456.0	436.5	19.5	4.27	0.11
	Straight	177.0	171.0	6.0	3.38	0.08
	Right	459.0	444.0	15.0	3.26	0.08
6.	Left	452.0	438.0	14.0	3.09	0.07
	Straight	178.0	170.0	8.0	4.49	0.11
	Right	450.0	434.0	16.0	3.55	0.09
7.	Left	471.0	455.5	15.5	3.29	0.08
	Straight	179.0	171.0	8.0	4.46	0.11
	Right	468.0	451.5	16.5	3.52	0.09
8.	Left	453.0	437.5	15.5	3.42	0.08
	Straight	181.0	172.0	9.0	4.97	0.12
	Right	447.0	434.0	13.0	2.90	0.07
9.	Left	453.0	437.5	15.5	3.42	0.08
	Straight	184.0	174.5	9.5	5.16	0.13
	Right	453.0	439.0	14.0	3.09	0.07
10.	Left	458.0	443.5	14.5	3.16	0.08
	Straight	179.0	169.5	9.5	5.30	0.13
	Right	455.0	440.5	14.5	3.18	0.08
11.	Left	447.0	441.5	5.5	1.23	0.03
	Straight	181.0	171.5	9.5	5.24	0.13
	Right	457.0	432.0	25.0	5.47	0.14
12.	Left	458.0	444.0	14.0	3.06	0.07
	Straight	182.0	172.5	9.5	5.21	0.13
	Right	470.0	456.5	13.5	2.87	0.07
13.	Left	454.0	442.0	12.0	2.64	0.06
	Straight	181.0	174.0	7.0	3.86	0.09
	Right	450.0	439.0	11.0	2.44	0.06
14.	Left	441.0	431.5	9.5	2.15	0.05
	Straight	177.0	170.0	7.0	3.95	0.10
	Right	450.0	433.5	16.5	3.66	0.09

Remarks – The hourly percentage of wear on mass basis was observed as 0.03 to 0.15%.

8. EASE OF OPERATION & ADJUSTMENTS

The operator can easily adjust and control the implement from operator's seat in the field as the adjustments are within the easy reach of operator. No noticeable difficulty was observed during the operation and adjustment of mulcher.

9. DEFECTS, BREAKDOWNS AND REPAIRS

No breakdown was occurred during the field performance test.

10. COMMENTS AND RECOMMENDATIONS

- 10.1 The dimension of three point linkage (hitch pyramid) of the mulcher does not conform to IS: 4468-1997. This should be looked into for corrective action for standardization.
- 10.2 Dimensions of PIC of implement do not conform to IS: 4931-1995 and therefore, it should be looked into for corrective action.
- 10.3 The hardness of edge & shank portion of rotor blades does not conform to relevant Indian Standard. It is therefore, recommended that the material of flail should be improved and provided as per requirement of Indian Standard.
- 10.4 Recommended power source mentioned in the application form and on the machine labeling plate is different and it should be same. It should be looked into for corrective action.

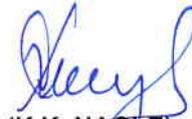
**10.5 Technical literature:**

Operator cum Service Manual & Parts Catalogue was provided along with the machine during the course of testing. It is further recommended to bring out these manuals in Hindi and other vernacular languages as per IS: 8132-1999.

TESTING AUTHORITY


(M.R. PATIL)
AGRICULTURAL ENGINEER


(J.P. MANDAL)
SENIOR AGRICULTURAL ENGINEER


(K.K. NAGLE)
DIRECTOR

Draft test report compiled by - Shri Khagendra Bora, STA

11. APPLICANT'S COMMENTS

Para No	Our Reference	Applicants Comments
11.1	10.1	We take an appropriate action in further production for the same to comply IS 4468-1997.
11.2	10.2	We take an appropriate action in further production for the same to comply IS 4391-1995.
11.3	10.3	We take an appropriate action in further production for the same.
11.4	10.4	We take an appropriate action in further production for the same.