

THIS REPORT IS VALID UPTO 31.08.2028



BRUSH CUTTER
MINERVA MULTI TECH MARS AGRIDON-52



सत्यमेव जयते

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

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Tele. 08551-286441

Machine- 515/1538	AGRIDON-52 BRUSH CUTTER	COMMERCIAL (ICT)
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Name of Manufacturer : M/s. Chongqing Wanggeng Machinery Manufacturing Co., Ltd, Silong Village, Huilongba Town, Shapingba District, Chongqing City, **China**

Name of Applicant : M/s. Minarva Multitech Mars Kallulote Extension, Sira Towz, Sira, Tumakuru, Karnataka, 572137

AGRIDON-52 BRUSH CUTTER

Report No.: Machine-515/1538 Month: September

Year: 2023



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Government of India
Ministry of Agriculture and Farmers Welfare
Department of Agriculture 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-515/1538	AGRIDON-52 BRUSH CUTTER	COMMERCIAL (ICT)
	THIS REPORT IS VALID UPTO 31.08.2028	

Type of test : INITIAL COMMERCIAL TEST

Period of test : 10.04.23 to 29.08.23

Test Report No. : Machine-515/1538

Month / Year of release : September, 2023

- i) The results reported in this report are observed values and no corrections have been applied for atmospheric and site conditions.
- ii) The brush cutter was selected by randomly through virtual mode by institute.
- iii) The results presented in this report do not, in any way, 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 Brush Cutter named “**AGRIDON-52, BRUSH CUTTER**”. This report is valid up to 31.08.2028, Vide Ministry's O.M. No. 13-24/2018-M&T (I&P) dated 19.09.2018.

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- 515/1538	AGRIDON-52 BRUSH CUTTER		COMMERCIAL (ICT)
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Big end bearings:

Bearing No.	Type of bearings		Max. permissible clearance limit, (mm)	
			Diametrical clearance, (mm)	Axial
	Diametrical	Axial	0.146	1.10
1.	*	0.35		

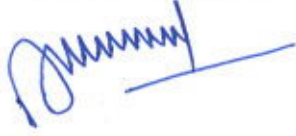


*Measurement of big end bearing clearance not possible ,as the piston along with connecting rod has not detachable

16. COMMENTS & RECOMMENDATIONS

- 16.1** The safety provisions, as mentioned at Para 5.14, have been provided by the applicant for safety aspect of operators.
- 16.2** The equivalent mechanical vibration on frame pipe was observed to the extent of 400 micron. This should be looked into for dampening the vibration.
- 16.3** A fuel on/off knob may be considered for providing in the fuel system of engine.
- 16.4** The hardness of blades do not conform to the requirement of IS : 6025-1982 (Reaffirmed: 2017). This should be looked into for corrective action.
- 16.5** The chemical composition of square blade is not as per requirement of the relevant code IS 6025:1982 (Reaffirmed: 2019) & therefore it should be looked into for the corrective action.
- 16.6** The provided labeling plate should be as per the requirement of the IS. Engine serial no and make , model of engine should be given with embossing on engine body instead of sticker during production level
- 16.7** **Adequacy of literature supplied with the machine:**
The User's manual and spare parts list of brush cutter and engine were not supplied with the brush cutter for reference during the test. It is therefore recommended that same may be revised and brought out as per IS: 8132-1999 (Reaffirmed:2019) for the sake of user & technical personnel.

Machine- 515/1538	AGRIDON-52 BRUSH CUTTER	COMMERCIAL (ICT)
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TESTING AUTHORITY

 Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 Er. D.C.MOULI AGRICULTURAL ENGINEER
 Dr. B.M NANDEDE DIRECTOR	

17. APPLICANT COMMENTS

With regard to observations made by your respected organizations, we would like to confirm to relook to those parameters and observations which is mentioned and work to correct them to the best of our knowledge.

