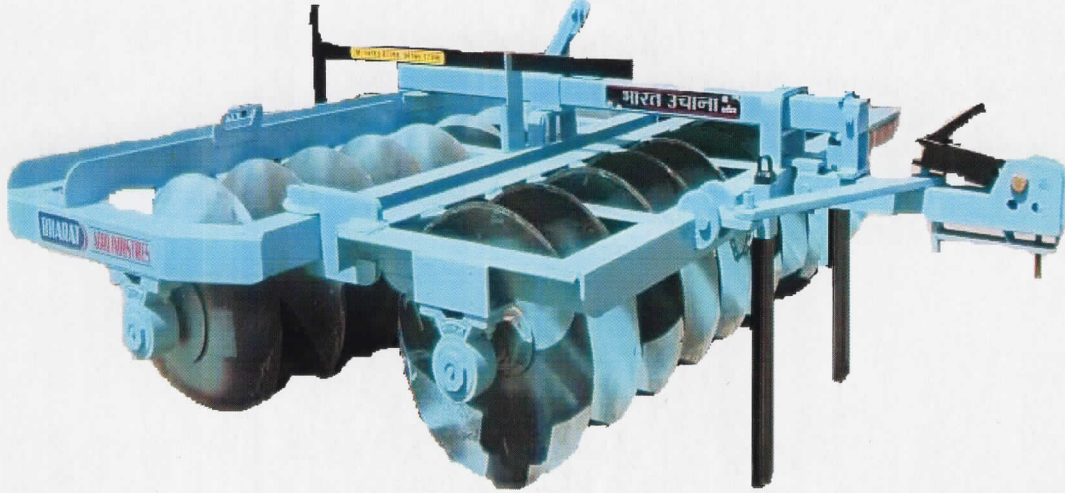


व्यावसायिक परीक्षण रिपोर्ट
COMMERCIAL TEST REPORT

संख्या/ No.: IMP-998/2305/2019

माह/Month : April, 2019

THIS TEST REPORT VALID UP TO : 30st APRIL, 2026



**BHARAT UCHANA, 24 x 20D 100x10
 OFFSET DISC HARROW TRACTOR DRAWN
 (TRAILED TYPE)**



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

उत्तरी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

Northern Region Farm Machinery Training and Testing Institute

ट्रेक्टर नगर, सिरसा रोड, हिसार, (हरियाणा) - 125 001

Tractor Nagar, Sirsa Road, HISAR (Haryana)-125 001

[ISO 9001:2015 CERTIFIED]

Website: <http://nrfmtti.gov.in/>

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Tele./FAX: 01662-276984

| | | |
|-------|--------------------------------------|----------------|
| ix) | Average width of cut (cm) | 226 to 228 |
| x) | Average area covered (ha/h) | 1.087 to 1.282 |
| xi) | Average time required for one ha (h) | 0.78 to 0.92 |
| xii) | Average field efficiency (%) | 75.1 to 85.9 |
| xiii) | Average fuel consumption | |
| | - l/h | 4.85 to 5.20 |
| | - l/ha | 3.78 to 4.78 |
| xiv) | Average implement draft (kgf) | 264 |
| xv) | Average drawbar power used (kW) | 4.2 |

Wear of discs

| Sr. No. | Initial mass (g) | Final mass (g) | Loss of mass (g) | Percentage of wear | |
|------------|---------------------|-------------------|---------------------|--------------------|----------|
| | | | | After 26.42 hr. | Per hour |
| Plain disc | | | | | |
| 1. | 9803.3 | 9737.1 | 66.2 | 0.68 | 0.03 |
| 2. | 9843.0 | 9785.6 | 57.4 | 0.58 | 0.02 |
| 3. | 9813.2 | 9734.4 | 78.8 | 0.80 | 0.03 |
| 4. | 9797.0 | 9714.4 | 82.6 | 0.84 | 0.03 |
| 5. | 9783.5 | 9713.8 | 69.7 | 0.71 | 0.03 |
| 6. | 9825.5 | 9745.5 | 80.0 | 0.81 | 0.03 |
| 7. | 9758.5 | 9684.9 | 73.6 | 0.75 | 0.03 |
| 8. | 9793.8 | 9723.3 | 70.5 | 0.72 | 0.03 |
| 9. | 9843.5 | 9783.3 | 60.2 | 0.61 | 0.03 |
| 10. | 9819.0 | 9759.6 | 59.4 | 0.60 | 0.02 |

The hourly percentage wear of discs on mass basis was recorded as 0.02 to 0.03 %.

5. EASE OF OPERATION & ADJUSTMENTS

No noticeable difficulty was observed during the operation and adjustment of disc harrow.

6. DEFECTS, BREAKDOWNS AND REPAIRS

No noticeable defect observed.

7. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATION

- 7.1 The specification of disc harrow does not conform, in full, to the requirement of IS:6635-1972. This should be looked into for corrective action.
- 7.2 The specification of plain spool does not conform, in full, to the requirements of IS:7230-1974. This should be looked into for corrective action.
- 7.3 The specification for agricultural tillage disc does not conform, in full, to the requirements of IS:4366 (Pt-I)-1985. This should be looked into for corrective action.
- 7.4 The scrapers are welded to the frame and arrangement for adjustment is not made. It should be provided.
- 7.5 The chemical composition of disc does not meet in full, to the requirement of IS:9442-1980. This should be looked into for corrective action.

- i) Make
- ii) Model
- iii) Serial Number
- iv) Year of manufacture
- v) Size of implement
- vi) Prime mover (Tractor) power requirement
- vii) Name of manufacturer
- viii) country of origin etc.

No literature was supplied by the applicant for reference during testing.

- (i) Operator's manual
- (ii) Service manual
- (iii) Part's catalogue

The operator's manual should be developed and updated as per IS: 8132- 1999.

TESTING AUTHORITY

| | |
|---|----------------------------|
| <p>R. K. NEMA SENIOR AGRICULTURAL ENGINEER</p> | <p><i>Per</i></p> |
| <p>P. K. PANDEY DIRECTOR</p> | <p><i>Y Bn - Jm 86</i></p> |

8. APPLICANT'S COMMENTS

No comments received from applicant.

