

व्यावसायिक परीक्षणरिपोर्ट  
COMMERCIAL TEST REPORT

संख्या / No. : Imp. No. 163/214  
माह / Month: October, 2014



**New Swan (NSERT 200) Super C Series Rotavator**

Expte (4)



सत्यमेव जयते

भारत सरकार  
GOVT OF INDIA  
कृषि मन्त्रालय

MINISTRY OF AGRICULTURE  
कृषि एवं सहकारिता विभाग

DEPARTMENT OF AGRICULTURE AND COOPERATION

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**1. SCOPE OF TEST**

The scope of test was to check and assess the following:

**1.1 LABORATORY TEST:**

- Checking of specifications
- Hardness of soil engaging parts (Rotavator blades)
- Chemical analysis of critical components (Rotavator blades)
- Wear analysis of critical components (Rotavator blades)

**1.2 FIELD TEST:**

- Rate of work
- Quality of work
- Ease of operation, maintenance and adjustments
- Labour requirement
- Defects, Breakdowns & Repairs

**2. METHOD OF SELECTION**

The implement was directly submitted by the applicant for test at this Institute, hence method of selection does not arise.

**3. TEST PROCEDURES**

- i) IS: 6690-2002 : Specifications of blades for rotavator and power tillers
- ii) IS: 4931 – 1995 : Agricultural tractors-Rear Mounted PTO
- iii) IS: 4468 – 1997 : Agricultural wheeled Tractors- Rear Mounted three point linkage.  
(Part-1)
- iv) IS: 11531 – 2001 : Test code for puddler

**4. SPECIFICATIONS****4.1 General:**

Manufacturer	: New Swan Multitech Limited, Village Raian, Kohara-Macchiwara P.O.-Heeran, Ludhiana, Punjab-141112
Name of machine	: Rotavator
Make	: NEW SWAN
Model	: NSE RT 200 Super C Series Rotavator
Type	: Gear Drive
Serial number	: 0012928

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Year of manufacture : 2014

Type of blade : Hatchet (L-Type)

Working width of implement(mm) : 2015

Recommended power source : 55-70 hp Tractor

Prime mover used during test : New Holland 7500 Tractor

#### 4.2 Constructional Details (Refer Fig.1):

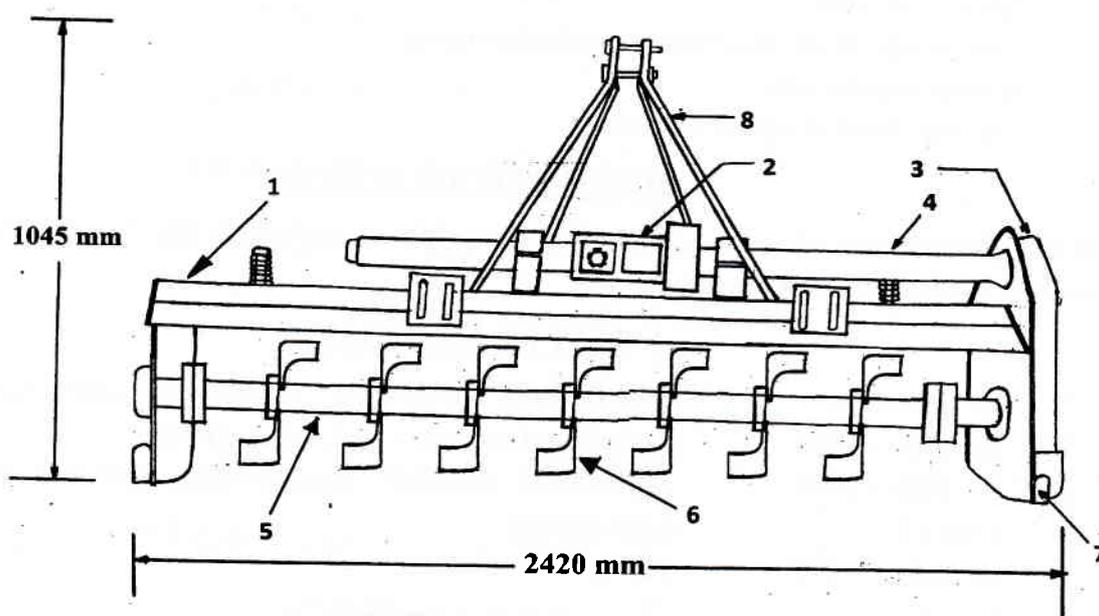


Fig.1: NEW SWAN (NSE RT 200 Super C Series) Rotavator

#### 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                |

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### **10. DEFECTS, BREAKDOWNS AND REPAIRS**

No noticeable defect or breakdown was observed during 40.3 hours of field operation.

### **11. COMMENTS AND RECOMMENDATIONS**

- 11.1 The specifications of implement hitch, does not conform to the IS: 4468 (Part-1)-1997. Hence, it is recommended that implement should be provided with the hitch conforming to relevant Indian Standards.
- 11.2 Dimensions of PIC of implement does not conform to IS: 4931-1995 and therefore, it should be looked into for corrective action.
- 11.3 Chemical composition of rotor blade does not conform to IS: 6690-2002. This needs to be looked into for corrective action in production level.
- 11.4 Size of implement and power requirement should also be indicated on the labeling plate.
- 11.5 **Technical literature:**  
No literature was submitted for testing. Hence, other literature such as operation manual , service manual, parts catalogue, service manual etc. should also be provided with the implement.  
However, it is recommended to bring out the manuals also in Hindi and other vernacular languages as per IS: 8132-1999.

### **12. APPLICANTS COMMENTS**

No comments have been received from the applicant on this machine.