



M/s SHREE SHYAM AGROTECH, SURAJ 1200 DI TRACTOR



सत्यमेव जयते

भारत सरकार

कृषि एवं किसान कल्याण मंत्रालय
(कृषि, सहकारिता एवं किसान कल्याण विभाग)

GOVERNMENT OF INDIA

MINISTRY OF AGRICULTURE AND FARMERS WELFARE

(DEPARTMENT OF AGRICULTURE, CO-OPERATION AND FARMERS WELFARE)

केन्द्रीय कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

ट्रैक्टर नगर, बुदनी (म.प्र.) ४६६ ४४५

CENTRAL FARM MACHINERY TRAINING & TESTING INSTITUTE

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T-1003/1527/2016

M/S SHREE SHYAM AGROTECH, SURAJ 1200 DI TRACTOR -
Commercial (Initial)

Manufacturer : M/s. SHREE SHYAM AGROTECH,
Ghoghavadar Road, Gondal – 360311,
Dist. : Rajkot (Gujarat) – 360311

Test requested by (applicant) : The manufacturer
Selected for test by : The manufacturer
Place of running-in : At manufacturer's works

Duration of said running-in (h):
- Engine : 18
- Transmission : 8

Method of Selection : The tractor was submitted directly by the
applicant for test. Hence, method of
selection is not known.

1. SPECIFICATIONS

- 1.1 Tractor:**
Make : M/s SHREE SHYAM AGROTECH
Model : SURAJ 1200 DI
Variants, if any : None
Brand name : SURAJ (apa)
Type : Four wheeled, Rear wheel driven,
Agricultural Tractor.
Year of manufacture : 2012
Chassis number : SG120001
Country of Origin : India
- 1.2 Engine:**
Make : M/s Greaves Cotton Limited
Model : G 600 WII
Type : Four stroke, naturally aspirated, water
cooled, direct injection, diesel engine
Serial number : S2F8027188
Engine speed (Manufacturer's recommended production setting), (rpm) :
- Maximum speed at no load : 3350 to 3550
- Low idle speed : 1100 to 1300
- Speed at maximum torque : 1600 to 1800
Rated speed, (rpm):
- For PTO use : 3000
- For drawbar use : 3000
- 1.3 Cylinder & Cylinder Head:**
Number : One
Disposition : Vertical
Bore/stroke, (mm) : 92/92
Capacity as specified by the applicant, (cc) : 611
Compression ratio, (apa) : $18 \pm 0.5 : 1$
Type of cylinder head : Vertical, Wet type
Type of cylinder liners : Wet, replaceable
Type of combustion chamber : Re-entrant
Arrangement of valves : Overhead



17. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

17.1 Evaluative (mandatory) / Non-evaluation (Non-mandatory) parameters applicable for qualifying Minimum Performance criteria as per Clause-4 (Table-1) of IS: 12207-2014 for acceptance of the tractor for the purpose of subsidies/NABARD financing are summarized as under:

| Sl. No. | Characteristic | Category (Evaluative / Non Evaluative) | Requirements as per IS: 12207-2014 | Values declared by the applicant (D)/Requirement (R) | As observed | Whether meets the requirements (Yes/No.) |
|---------------|---|--|---|--|-------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17.1.1 | PTO Performance : | | | | | |
| a) | Max. power under 2 h test, (kW) (Natural ambient condition) | Evaluative | Declared value to be achieved with a tolerance of: -5 / +10% for PTO power >26 kW. -7.5/+10% for PTO power ≤ 26 kW or -5 / +10% for Engine power >26 kW. -7.5/+10% for Engine power ≤ 26 kW | 7.0 (D) | 7.1 | Yes |
| b) | Power at rated engine speed, (kW) | Non Evaluative | -do- | 7.0 (D) | 7.1 | Yes |
| c) | Specific fuel consumption corresponding to maximum power, (g/kWh) | Non Evaluative | ± 5% | 284 (D) | 329 | No |
| d) | Maximum equivalent crankshaft torque, (Nm) | Non Evaluative | ± 8% | 31 (D) | 30.0 | Yes |
| e) | Back-up torque, percent | Non Evaluative | 7 percent, min. | 10 percent, min (R) | 32.16 | Yes |
| f) | Maximum operating temperature (°C) | | | | | |
| 1) | Engine oil | Non Evaluative | The declared value should not exceed the max. value specified by the oil company and the observed value under high ambient condition should not exceed the declaration. | 140 (D) | 115 | Yes |
| 2) | Coolant (water) | Evaluative | The declared value should not exceed the boiling temperature of coolant under the pressurized or otherwise and the observed value under high ambient condition should not exceed the declaration. | 110(D) | 94 | Yes |



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|---|---|-------------------------|---|--|-------------------------------|-------|-----|
| g) | Engine oil consumption, (g/kWh) | Evaluative | Not exceeding 1% of SFC at max. power under High ambient conditions | 3.29 (R) | 1.48 | Yes | |
| h) | Smoke level | Evaluative | Maximum light absorption coefficient of 3.25 per meter or equivalent BOSCH No. 5.2 or 75Hatridge value (As per CMVR) | 3.25 per meter (R) | 0.11 per meter | Yes | |
| 17.1.2 Drawbar performance : | | | | | | | |
| a) | Max. drawbar pull with ballast corresponding to 15 percent wheel slip, (kN) | Non Evaluative | Minimum 65% of static mass with ballast | 5.92 (D) | 7.33 | Yes | |
| | | | | 5.92 (R) | | | |
| b) | Max. drawbar pull without ballast corresponding to 15 percent wheel slip, (kN) | Evaluative | Minimum 65% of static mass of tractor without ballast | 5.67 (D) | 6.13 | Yes | |
| | | | | 5.67 (R) | | | |
| c) | Maximum drawbar power without ballast, (kW). | Evaluative | Minimum 80 % of PTO power as referred in SI No. i) a) of PTO performance in case of tractors having total static mass > 1500 kg Minimum 75 % of PTO power as referred in SI No. i) a) of PTO performance in case of light weight tractors having 1500 kg total static mass of tractor Minimum 75 % of the engine power as referred in SI No. i) a) of engine performance in case of tractors which do not have a PTO shaft. | 5.6 (D) | 6.5 | Yes | |
| | | | | 5.7 (R) | | | |
| d) | Max. transmission oil temperature(°C) | Non Evaluative | The declared value should not exceed the maximum value specified by oil company | 120 | 83 | Yes | |
| 17.1.3 Power lift and hydraulic pump performance : | | | | | | | |
| a) | Maximum lifting capacity throughout the range of lift, (kN): | | | | | | |
| | 1) | At hitch points | Non Evaluative | [Tolerance of minus 10%] | 5.0 (D) | 10.22 | Yes |
| | 2) | With the standard frame | Evaluative | The lift capacity should at least be 24 kg/PTO kW, and it should be 21.5 kg/engine kW where the tractor is not provided with a PTO shaft | 1.68 (D) 1.67 Minimum, (R) | 5.60 | Yes |
| b) | Maximum drop in the height of the point of application of the force after each 5 minutes interval for a total duration of 30 minute, (mm) | Non Evaluative | [Tolerance of plus 5 mm] | 20 (D) | 07 | Yes | |



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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|--|---|------------|------------|---------|-----------|------|-----|
| 17.1.4 Brake performance at maximum attainable speed of 21.88 kmph: | | | | | | | |
| a) | Maximum stopping distance at a force, equal to or less than 600 N on brake pedal with ballast* (m): | | | | | | |
| | 1) | Cold brake | Evaluative | 10 | 10 (R) | 6.55 | Yes |
| | 2) | Hot brake | Evaluative | 10 | 10 (R) | 6.50 | Yes |
| b) | Maximum force exerted on the brake pedal to achieve a deceleration of 2.5 m/s ² (N) | Evaluative | 600 | 600 (R) | 270 & 370 | Yes | |
| c) | Whether parking brake is effective at a force of 600 N at foot pedal(s) or 400 N at hand lever | Evaluative | Yes / No | Yes (R) | Effective | Yes | |

| | | | | | | |
|-----------------------------------|--|------------|-------------|--------|----|------|
| 17.1.5 Noise measurement : | | | | | | |
| a) | Maximum ambient noise emitted by the tractor dB(A) | Evaluative | As per CMVR | 85(R) | 83 | Yes |
| b) | Maximum noise at operator's ear level dB(A) | Evaluative | As per CMVR | 96 (R) | 97 | Yes* |

* Remark: The year of manufacturer of the test sample is before the date of implementation of relevant IS: 12207-2014 and the tractor was also submitted to the Institute in the year 2013. Therefore, for prospective effects of implementation of Indian standard this conforms to IS: 12207-2014 by considering the limit as 96 dB(A) as per IS:12207-2008. The Institute also released the satisfactory CMVR certificate on the same tractor having same serial/chassis number.

| | | | | | | | |
|---|------------------------|---------------------------|----------------|-------------------|---------|-----|-----|
| 17.1.6 Amplitude of mechanical vibrations at : | | | | | | | |
| | 1) | Left foot rest | Non Evaluative | 100 microns (Max) | 100 (R) | 310 | No |
| | 2) | Right foot rest | | | 100 (R) | 190 | No |
| | 3) | Seat (with driver seated) | | | 100 (R) | 100 | Yes |
| | 4) | Steering wheel | | | 100 (R) | 350 | No |
| 17.1.7 | Air cleaner pull over: | Non Evaluative | 0.25% (Max) | 0.25 % | 0.17 | Yes | |

| | | | | | | | |
|--|----|-----------|----------------|----|--------------|----------------|-----|
| 17.1.8 Haulage requirements : | | | | | | | |
| a) Gross mass of the trailers, (tones): | | | | | | | |
| | 1) | Two wheel | Non Evaluative | -- | 1.5 (D) | 1.5 | Yes |
| b) Distance travelled / liter of fuel consumption, (km/l): | | | | | | | |
| | 1) | Two wheel | Non Evaluative | -- | 10 to 12 (D) | 7.95 to 8.44 | No |
| c) Fuel consumption (ml/km/tonne): | | | | | | | |
| | 1) | Two wheel | Non Evaluative | -- | 60 to 65 (D) | 78.98 to 83.82 | No |

| | | | | | | |
|---------------------------------|--|------------|---|----|-----------------------|-----|
| 17.1.9 Safety features : | | | | | | |
| a) | Guards against moving and hot parts | Evaluative | Belt drives, pulley, silencer, hydraulic pipes (As per IS 12239 part 2) | -- | Meets the requirement | Yes |
| b) | Lighting arrangement (Tractor having more than 1150 mm rear track width) | Evaluative | As per CMVR | -- | Meets the requirement | Yes |



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|----|--|----------------|---|----|--|-----|
| c) | Seating requirement (Tractors having more than 1150 mm rear track width) | Non-Evaluative | Should meet the requirements of IS 12343 (as amended from time to time) | -- | (Trackwidth less than 1150 mm) | -- |
| d) | Technical requirements for PTO shaft | Non-Evaluative | Should meet the requirements of IS 4931 (as amended from time to time) | -- | Does not meets the requirement | No |
| e) | Dimension of three point linkage | Non-Evaluative | Should meet the requirements of IS 4468 (part 1) (as amended from time to time) | -- | Does not meets the requirement | No |
| f) | Specification of linkage and swinging drawbars | Non-Evaluative | Should meet the requirements of IS 12953 and IS 12362 (part 3) (as amended from time to time) | -- | Conforms (swinging drawbar not provided) | Yes |

17.1.10 Labelling of tractors (Provision of labelling plate):

| | | | | | | |
|----|--------------------------------|------------|--|----|---------------------------|-----|
| 1) | Make | Evaluative | Should conform to the requirements of CMVR along-with declared value of PTO HP | -- | M/s. SHREE SHYAM AGROTECH | Yes |
| 2) | Model | Evaluative | | -- | SURAJ 1200 DI | Yes |
| 3) | Year of manufacture | Evaluative | | -- | 2012 | Yes |
| 4) | Engine number | Evaluative | | -- | S2F8027188 | Yes |
| 5) | Chassis serial number | Evaluative | | -- | SG120001 | Yes |
| 6) | Declaration of PTO power, (kW) | Evaluative | | -- | 7.0 | Yes |

17.1.11 Discard limit for:

| | | | | | | |
|-----|--|----------------|--------------------------------------|-------|----------------|-----|
| (a) | Cylinder bore diameter, (mm) | Evaluative | To be specified by the manufacturer- | 92.10 | 92.01 to 92.02 | Yes |
| (b) | Clearance between piston & cylinder liner at skirt, (mm) | Non Evaluative | | 0.15 | 0.097 | Yes |
| (c) | Ring end gap (mm): | | | | | |
| | - Top comp. ring. | Evaluative | -do- | 0.75 | 0.35 | Yes |
| | - 2 nd comp. ring. | | -do- | | 0.45 to 0.58 | Yes |
| | - Oil ring. | | -do- | | 0.40 to 0.50 | Yes |
| (d) | Ring groove clearance (mm): | | | | | |
| | - Top comp. ring. | Evaluative | -do- | 0.2 | 0.107 | Yes |
| | - 2 nd comp. ring. | | -do- | | 0.044 | Yes |
| | - Oil ring | | -do- | | 0.038 | Yes |
| (e) | Clearance of main bearings, (mm): | | | | | |
| | - Diametrical clearance | Evaluative | -do- | 0.25 | 0.078 to 0.094 | Yes |
| | - Crankshaft end float | Evaluative | -do- | 0.50 | 0.10 | Yes |
| (f) | Clearance of big end bearings, (mm): | | | | | |
| | - Diametrical | Evaluative | -do- | 0.15 | 0.066 to 0.080 | Yes |
| | - Axial | Evaluative | -do- | 1.0 | 0.50 | Yes |

Specifications are also referred on the basis of provisions available in the printed literature.



| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|---|----------------|------|----|----------------|----|
| (g) | Clearance between king pin and bush, (mm) | Non Evaluative | -do- | - | Not applicable | - |
| (h) | Clearance between center pin and bush, (mm) | Non Evaluative | -do- | -- | Not applicable | -- |

17.1.12 Literature (Submission to test agency)

| | | | | | | | |
|-----|--------------------------|------------|-----------------------|------------------------|------------|----------|-----|
| (a) | Operator manual | Evaluative | Provided/Not Provided | As relevant Code 8132) | per IS (IS | Provided | Yes |
| (b) | Parts Catalogue | Evaluative | Provided/Not Provided | As relevant Code 8132) | per IS (IS | Provided | Yes |
| (c) | Workshop/ Service manual | Evaluative | Provided/Not Provided | As relevant Code 8132) | per IS (IS | Provided | Yes |

17.1.13 CATEGORY OF BREAKDOWNS / DEFECTS :

| S. No. | Category of breakdowns | Category (Evaluative / Non Evaluative) | Requirements as per IS: 12207-2014 | As observed | Whether meets the requirements (Yes/No.) |
|--------|------------------------|--|--|---------------------------|--|
| 1. | Critical | Evaluative | No critical breakdown | None | Yes |
| 2. | Major | Evaluative | Not more than two and neither of them should be repetitive in nature | 01 | Yes |
| 3. | Minor | Evaluative | Not more than five and frequency of each should not be more than two. | 03 | Yes |
| 4. | Total breakdowns | Evaluative | In no case, the total number of breakdowns should exceed five, that is, (2 major + 3 minor) or 5 minor breakdowns. | (1 major + 3 minor) 04 | Yes |

17.2 Optional requirements as per Clause-4 (Table-2) of IS:12207-2014:

| S. No. | Characteristic | Requirements as per IS: 12207-2014 | As observed | Whether meets the requirements (Yes/No.) |
|--------|-----------------|---|-----------------------------|--|
| 1. | Fitment of ROPS | With a provision for fitment of ROPS. | Not provided | Not applicable |
| | | If ROPS fitted it should meet the requirement of IS: 11821-1992 | Not provided | Not applicable |
| 2. | Accessories | Trailer hitch, front tow hook, linkage drawbar may be provided. | Front tow hook not provided | Yes |

17.3 Conformity with following IS:

- i) Guide lines for declaration of power and specific fuel consumption and labelling of agricultural tractors (First revision) [IS10273: 1987 (Reaffirmed 2009)] : Conforms



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- ii) Agricultural tractors - Rear mounted power take-off - : **Does not conform**
Types 1, 2 and 3 (third revision) [IS:4931-1995 (Reaffirmed 2009)]
- iii) Agricultural wheeled tractors - Three-point linkage: Part 2 : **Does not conform**
Category 1N (Narrow Hitch) (Third Revision) [IS 4468 (Part-2):1993/ ISO 730-2:1979 (Reaffirmed 2009)]
- iv) Drawbar for agricultural tractors - Link type [IS : Conforms
12953:1990 (Reaffirmed 2007)]
- v) Agricultural tractors - Operator's seat technical : --
requirement [IS 12343 -1998 (First revision) (Reaffirmed : (track width less
2009)] than 1150 mm)
- vi) Guide for safety & comport of operator of agricultural : **Does not conform**
tractors: Part 1 General requirements (first revision); [IS 12239 (PT-1) 1996/ISO 4254-1:1989 (Reaffirmed
2009)]
- vii) Tractors and machinery for agriculture and forestry - : **Does not conform**
Technical means for ensuring safety Part 2: Tractors (first :
revision) (IS 12239 (PT-2) 1999) (Reaffirmed 2009)]
- viii) Guide lines for location and operation of operator controls : **Does not conform**
on agricultural tractors and machinery (first revision) IS: :
8133-1983 (Reaffirmed 2009)]
- ix) Tractors and machinery for agriculture and forestry, : **Does not conform**
powered lawn and garden equipment - Symbols for :
operator controls and other displays Part 2 Symbols for :
agricultural tractors and machinery [IS:6283 (Part-1)- :
2006 and IS: 6283 (Part-2)-2007 (Reaffirmed 2009)]
- x) Agricultural Tractors and Machinery - Lighting device for : Conforms
travel on public roads (IS: 14683-1999) (Reaffirmed :
2009)]

17.4 Salient Observations:

17.4.1 Laboratory tests:

17.4.1.1 PTO Performance:

- i) The backup torque was observed as **32.16%**.
- ii) The specific fuel consumption corresponding to maximum power was observed as **328.53 g/kWh** against the declaration of **284 g/kWh**. The specific fuel consumption was considered very high for this power range of tractor. This may be looked into for necessary corrective action.

17.4.1.2 Drawbar Performance :

- i) The required engine rpm was not achieved during the 10 hr drawbar performance test and it was suddenly goes down below the rated engine speed, hence the fuel pipe line assembly, diesel filter was cleaned and tapped clearance was adjusted.

**17.4.1.3 Hydraulic Performance:**

- i) During load maintenance test (hydraulic test) hydraulic oil leakage was observed from the distributor. So the hydraulic assembly dismantled and three numbers 'O' rings found damaged which consider as a consequential failures, the damaged 'O' rings replaced with new one vide part number SR 03 031 9 02. This should be looked into.
- ii) Again after refitting the leakage was observed from the packing of distributor due to the miss alignment of distributor. So again distributor assembly was dismantled and found one nos o-ring damaged (part number SR 03 031 9 02) and it was replaced with new one. The nature of breakdown was observed as repetitive in nature. This should be looked into.

17.4.1.4 Operator's ear level test

During OEL test the rear RHS tyre stuck and some noise was coming from rear differential housing. So tractor were dismantled and found following parts were damaged.

- i) Rear differential half axle shaft outside the differential housing damaged and splines of this shaft was also broken.
- ii) The teeth of bull pinion gear were totally damaged and it was replaced with new one.
- iii) Splines of rear axle were also broken.

This is required to improve the robust quality control system during production

17.4.1.5 Brake test:

During brake performance test it was observed that the LHS brakes were not work properly. So LHS brakes assemblies was dismantled and clean it and refitted. This may be looked into for necessary corrective action.

17.4.1.5 Mechanical Vibration:

The amplitude of mechanical vibration on various assemblies marked as (*) in Chapter-9 of this test report is on higher side, especially at the steering control wheel, left and right foot rest. This calls for dampening down of vibrations to improve the operational comfort and service life of components.

17.4.1.6 Three point linkage:

The width of ball of upper and lower hitch point, distance from end of power take-off to centre of lower hitch point does not meets the requirements of IS: 4468- (Part-I) - 1997. This should be looked into for necessary corrective action.

17.4.1.7 Specifications of Power Take-off Shaft:

The PTO specification does not meets the requirements to relevant IS, so necessary improvement may be incorporated.

17.4.2 Field performance test:**17.4.2.1 Dry land cultivation**

During the trail of field test the PTO lever was not dis-engaged from engaged position. The gasket between top cover of transmission cum hydraulic and the transmission hydraulic assembly was found totally damaged due to frequent opening of top cover for rectification in hydraulic system.

The new gasket of same specification fitted and problem was rectified. This should be looked into.

**17.4.2.2 Wetland cultivation (pudding operation) :**

The manufacturer has recommended that the tractor is not suitable for wetland cultivation (puddling operation). Hence, the wetland cultivation (puddling operation) was not conducted. **Therefore, the declaration of the fact that the tractor is not suitable for Wetland cultivation (Puddling operation) should be mentioned clearly and boldly in all the literature relevant to this tractor model.**

17.4.3 Maintenance / Service Problems:

- i) LHS brakes during the ten hours test found heated. So it was adjusted.
- ii) The low pressure pipe line was found cracked and it was replaced with new one

17.4.5 Requirement of Actuating force for controls:

The requirement of actuating force for hand lever operated hydraulic power lift system does not meet the requirement of IS: 10703-1992. This should be looked into.

17.4.6 Symbols of operator's controls and other displays:

The symbols for operator's controls such as PTO, speed range, grease lubricant frequency, oil lubricant type & frequency, Caution on hot parts, & zones for engine revolution not provided and does not meet the requirements of IS: 6283 (Pt- I & II)-1998. This should be looked into for corrective action.

17.4.7 Haulage Test:

- i) The distance travelled per litre of fuel consumption with two wheel trailer was observed as 7.95 to 8.44 km/l against the declaration 10 to 12 km/l. This does not meet the requirement of IS: 12207-2014 and therefore, should be looked into for necessary corrective action.
- ii) The specific fuel consumption with two wheel trailer was observed as 78.98 to 83.82 ml/km/tonne against the declaration 50 to 60 ml/km/tonne. This does not meet the requirement of IS: 12207-2014 and therefore, should be looked into for necessary corrective action.

17.4.8 Recommendation with regard to safety on tractor:

The following requirements, inter-alia, may be considered for incorporation on the tractor:

- i) Provision for track adjustment for working for under sloppy condition.
- ii) Working clearance around PTO engaging lever has been not provided as per the requirement.
- iii) Provision for mounting a canopy above the driver's seat.
- iv) Minimum cautionary notice as per clause 11.2 of above referred standard
- v) Spark arrester has not been provided in the exhaust system.
- vi) Provision of PTO master shield.
- vii) Safety switch in starting switch
- viii) Provision of ballasting in the front axle.
- ix) Alternator and its belt, silencer is not guarded
- x) Fuel shut off knob does not remain in 'STOP' position, without application of manual effort.
- xi) Provision of master shield in PTO shaft
- xii) Provision of front tow hook.

**17.4.9 Adequacy of Literature supplied with machine:**

17.4.9.1 The following literature was supplied with the tractor after completion of all test

- Operator's manual
- Parts Catalogue
- Service Manual

17.4.9.2 The technical details of PTO power in kW and hp unit, drawbar power, hydraulic power, haulage recommendation, ballasting details for different operation, tyre size and tyre inflation pressure, weight of tractor etc. should be provided in the operator's manual. The literature should be brought out in national as well as other regional languages of India for guidance of users.

18. CITIZEN CHARTER

| Time frame for Testing & Evaluation as per Citizen Charter | Duration of Test | Whether the Test Report is released within the time frame given in Citizen Charter | Remarks |
|--|---|--|--|
| 10 Months | 26 Months (October, 2013 to January, 2016) | No | Testing delay due to the breakdowns coming during drawbar, brake & field test. Applicant was not attaining to rectify the breakdown attentively in time being. |

TESTING AUTHORITY:

P. C. MESHRAM
SENIOR AGRICULTURAL ENGINEER

C. R. LOHI
DIRECTOR

Test Report compiled by: **Mr. Shwetabh Singh**, Senior Technical Assistant.

19. APPLICANT'S COMMENTS

| Para No. | Our Reference | Applicant's comments |
|----------|--|---|
| 19.1 | 17.4.1.1,17.4.3,17.4.1.2,17.4.1.4,17.5,17.6 | These are being studied and corrective action will be taken in near future wherever required. |
| 19.2 | 17.1.1,17.2,17.3,17.5,17.6,17.8,17.4.1.7,17.4.1.8,17.4.1.9 | Your valuable comments and suggestion for improvements are well taken. Under our policy of continuous product improvement these aspects are further being looked into and will try to eliminate these deviations soon wherever necessary. |