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**SPECIFICATION SHEET OF TRACTOR OPERATED POTATO DIGGER**

|    |                                  |   |  |
|----|----------------------------------|---|--|
| 1  | Name of machine                  | : |  |
| 2  | Name and address of manufacturer | : |  |
| 3  | Name and address of applicant    | : |  |
| 4. | Selling price in India           | : |  |

**5. SPECIFICATIONS**

**(Appendix A, Clause 3.2 and 6.1, IS:11235-2006)**

|              |                                |  |   |
|--------------|--------------------------------|--|---|
| <b>5.1</b>   | <b>General:</b>                |  |   |
|              | a)                             | Name   | : |
|              | b)                             | Type   | : |
|              | c)                             | Make   | : |
|              | d)                             | Serial Number                                | : |
|              | e)                             | Model  | : |
|              | f)                             | Year of manufacture                          | : |
|              | g)                             | Recommended source of power as per applicant | : |
| <b>5.2</b>   | <b>Constructional Details:</b> |  |   |
| <b>5.2.1</b> | <b>Main frame:</b>             |  |   |
|              | a)                             | Type and material                            | : |
|              | b)                             | Size (mm)                                    | : |

|              |               |                                |   |
|--------------|---------------|--------------------------------|---|
| <b>5.2.2</b> | <b>Blade:</b> |                                |   |
|              | a)            | Type and Material              | : |
|              | b)            | Number                         | : |
|              | c)            | Size (mm)                      | : |
|              | d)            | Inclination angle              | : |
|              | e)            | Clearance from ground (mm)     | : |
|              | f)            | Clearance from main frame (mm) | : |
|              | g)            | Method of fixing               | : |

|              |                                  |                                      |   |
|--------------|----------------------------------|--------------------------------------|---|
| <b>5.2.3</b> | <b>Elevator chain conveyor :</b> |                                      |   |
|              | a)                               | Material and type                    | : |
|              | b)                               | Size (mm)                            | : |
|              |                                  | Peripheral length                    | : |
|              |                                  | Width                                | : |
|              | c)                               | Conveyor rack material and size (mm) | : |
|              | d)                               | Spacing between racks (mm)           | : |
|              | e)                               | Number of racks                      | : |

|       |  |   |   |  |
|-------|--|---|---|--|
|       | f)   | Material, nos. and size (mm) of spikes on racks | : |  |
|       | g)   | Slope of conveyor                               | : |  |
|       | h)   | Method of power transmission                    | : |  |
| 5.2.4 | <b>Rear support / Depth control wheel:</b> |   |   |  |
|       | a)   | Type  | : |  |
|       | b)   | Number  | : |  |
|       | c)   | Size  | : |  |
|       | d)   | Spacing (mm)                                    | : |  |
|       | e)   | Hub diameter (mm)                               | : |  |
| 5.2.5 | <b>Safety features :</b>                   |   |   |  |
|       | a)   | PTO guard                                       | : |  |
|       | b)   | V-belt guard                                    | : |  |
| 5.2.6 | <b>Type of hitch and its details :</b>     |   |   |  |
|       | a)   | Type  | : |  |
|       | b)   | Constructional details                          | : |  |

### Specification of Hitch Pyramid As per IS: 4468-1997 (Part-I)

| Sr.                        | Dimension (Refer Fig.1) | Description                       | Measurement |
|----------------------------|-------------------------|-----------------------------------|-------------|
| Upper Hitch attachments    |                         |                                   |             |
| 1                          | $d_1$                   | Diameter of hitch pin hole        |             |
| 2                          | $b'_1$                  | Width between inner faces of yoke |             |
| 3                          | $b'_2$                  | Width between outer faces of yoke |             |
| Lower hitch points         |                         |                                   |             |
| 4                          | $D_2$                   | Dia. of hitch pin                 |             |
| 5                          | $b'_3$                  | Linch pin hole distance           |             |
| 6                          | $l$                     | Lower hitch point span            |             |
| Other dimensions           |                         |                                   |             |
| Diameter of linch pin hole |                         |                                   |             |
| 7                          | $d$                     | For upper hitch pin               |             |
| 8                          |                         | For lower hitch pin               |             |
| 9                          | $h$                     | Mast height                       |             |

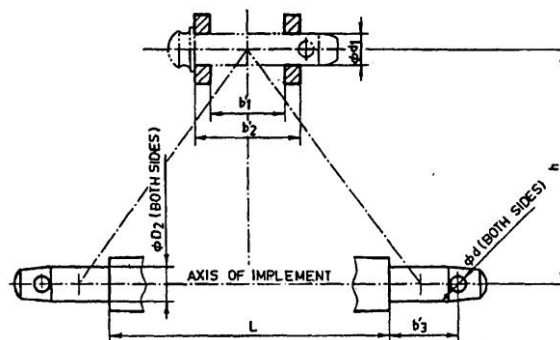


Fig. 3 : Implement Hitch Attachment

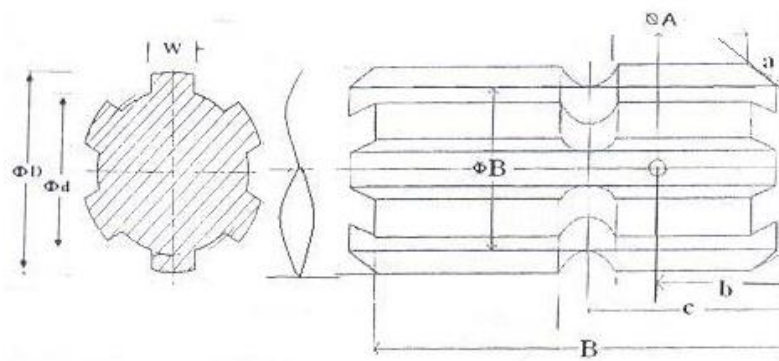
### 5.2.7 Power transmission system:

a) Method of transmission :

#### 5.2.7.1 Splined end of digger input shaft (Refer Fig. 4):

| Sr. | Specification/ Notations (Refer Fig.2) | Measurement |
|-----|--|-------------|
| 1   | PTO Type                               |             |

|                 |                            |  |
|-----------------|----------------------------|--|
| 2               | Nominal speed (rpm)        |  |
| 3               | Nominal dia.(mm)           |  |
| 4               | Number and type of splines |  |
| Dimensions (mm) |                            |  |
| 5               | D $\Phi$                   |  |
| 6               | d $\Phi$                   |  |
| 7               | B $\Phi$                   |  |
| 8               | A $\Phi$                   |  |
| 9               | W                          |  |
| 10              | a                          |  |
| 11              | b                          |  |
| 12              | c                          |  |
| 13              | x                          |  |
| 14              | B                          |  |
| 15              | h                          |  |



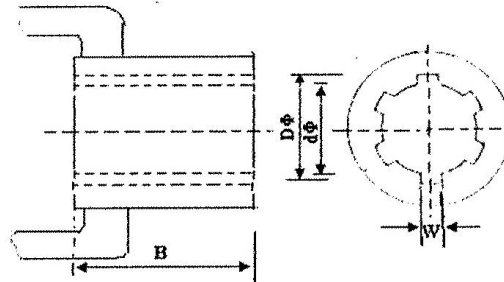
**Fig. 4: Dimension of Implement Power Input Shaft**

|         |  |  |   |
|---------|--|--|---|
| 5.2.7.2 | <b>Gear box assembly (primary reduction):</b>                    |  |   |
|         | a)   | Type   | : |
|         | b)   | No. of teeth on pinion   | : |
|         | c)   | No. of teeth on bevel gear   | : |
|         | d)   | Reduction ratio at gear box  | : |
|         | e)   | Oil capacity (L)   | : |
|         | f)   | Oil change period (hr)   | : |
|         | g)   | Recommended grade of oil   | : |
|         | h)   | Length of power transmission shaft (mm)<br>(from gear box to front pulley) | : |
|         | i)   | Diameter of shaft (mm)   | : |
|         | j)   | Provision of breather  | : |
| 5.2.7.3 | <b>Gear box to conveyor upper pulley (secondary reduction) :</b> |  |   |
|         | a)   | Front pulley diameter (mm)   | : |
|         | b)   | Rear pulley diameter (mm)  | : |
|         | c)   | V-belt size, number  | : |
|         | d)   | Provision of belt tightening   | : |
|         | e)   | Dia. of casing of output shaft (mm)  | : |
|         | f)   | Dia. of rear drive shaft (mm)  | : |
| 5.2.7.4 | <b>Propeller shaft (Refer Fig. 5)</b>                            |  |   |
|         | a)   | Type and material  | : |
|         | b)   | Length of shaft (mm)   | : |
|         | c)   | Mass of shaft (kg)   | : |

|    |                       |   |
|----|-----------------------|---|
| d) | Provision for locking | : |
|----|-----------------------|---|

**Propeller Shaft Insert Dimensions As per IS: 4931-2006**

| Sr . | Notations<br>(Refer Fig.3) |  |
|------|----------------------------|--|
| 1    | D $\Phi$                   |  |
| 2    | d $\Phi$                   |  |
| 3    | W                          |  |
| 4    | B                          |  |



**Fig. 5 : Propeller Shaft Insert Dimensions**

|       |                                 |   |  |
|-------|---------------------------------|---|--|
| 5.2.8 | <b>Windrowing mechanism:</b>    |   |  |
|       | a) Type and material            | : |  |
| 5.3   | <b>Overall Dimensions (mm):</b> |   |  |
|       | a) Length                       | : |  |
|       | b) Width                        | : |  |
|       | c) Height                       | : |  |
|       | d) Mass (kg)                    | : |  |
| 5.4   | <b>Color of implement</b>       | : |  |

**5.5 Details of Material of Construction : (Cl. 6.1.1.(b) and 8.2 of IS:13818-1999)**

| Sr. | Name of part                      | Material |
|-----|-----------------------------------|----------|
| 1   | 2                                 | 3        |
| 1   | Frame                             |          |
| 2   | Elevator racks                    |          |
| 3   | Blade                             |          |
| 4   | Main shaft                        |          |
| 5   | Conveyor shaft                    |          |
| 6   | Chain Sprocket                    |          |
| 7   | Pulley                            |          |
| 8   | Rear support/ Depth control wheel |          |

Place:

Date:

Signature: \_\_\_\_\_

Name : \_\_\_\_\_

Designation: \_\_\_\_\_