



**Farm Machinery Testing and Training Centre**  
**Department of Farm Power and Machinery**  
**College of Agricultural Engineering and Technology**  
**Dr. PANJABRAO DESHMUKH KRISHI VIDYAPEETH**  
**AKOLA- 444 104 (MS)**  
*Email: fmtt28@gmail.com*



**SPECIFICATION SHEET OF TRACTOR OPERATED STRAW REAPER**

<b>1</b>	<b>General</b>		
	Name and address of manufacturer	:	
	Name and address of applicant	:	
	Name of machine	:	
	Make	:	
	Model	:	
	Serial No	:	
	Type	:	
	Year of manufacturing	:	
	Recommend power of tractor, kW	:	
<b>2</b>	<b>Straw reaper-combine:</b>		
	Transport wheels	:	
	Type	:	
	No. and size	:	
	Track width	:	
	Recommended lyre pressure (kg/ern')	:	
<b>3</b>	<b>Propeller shaft</b>		
	Type	:	
	Number of pieces	:	
	Number of splines	:	

	<b>Outer diameter and length of shaft, mm</b>		
	a)	Length and size of rectangular shaft	:
	b)	Length and size of inserted rectangular shaft	:
	c)	Maximum length of inserted shaft with spline flange	:
	d)	Method of fixing of drive shaft to the flange	:
	e)	Safety device, if any	:
<b>4</b>	<b>Gear box</b>		
		Dia . of splines	:
		Number of splines	:
		Gear ratio	:
		Oil capacity, litres	:
		Method of driving arrangement and location	:
<b>5</b>	<b>Reel assembly</b>		
		Type	:
		Number of tyne bars	:
		Dia of bars	:
		Type of tyne bars	:
		Dia of reel	:
		Width of reel	:
		No. of tynes on each bar and their spacing	:
		Maximum distance ahead of cutter bar	:
		Maximum distance ahead of cutter	:

	bar when the reel is in rearmost position		
	Maximum vertical distance above the cutter bar point up to the outer bar of reel	:	
	Maximum vertical distance above the cutter bar points from the center of the reel	:	
	Maximum vertical distance below the cutter bar points	:	
	Distance from cutter bar points to the front of feeding auger	:	
	Arrangement for variation of angle of the tynes	:	
	Arrangement for forward and backward movement of the reel	:	
	Type of reel drive	:	
	Safety device in reel drive	:	
<b>6</b>	<b>Cutter bar assembly</b>		
	Cutting width	:	
	Effective cutter bar width	:	
	Knife stroke	:	
	Number and spacing of knife guards	:	
	Number and type of blades	:	
	Type of ledger plates	:	
	Details of the knife drive	:	
	Arrangement for lift ing of lodged crop	:	

<b>7</b>	<b>Feeding auger</b>	:	
	Type	:	
	Size of auger		
	a) Diameter	:	
	b) Width	:	
	Safety device, if any	:	
<b>8</b>	<b>Details of scoop</b>		
	Number of scoops	:	
	Number of scoops on each row	:	
	Arrangement for adjusting the clearance of crop auger	:	
<b>9</b>	<b>Beater</b>		
	Type	:	
	Width	:	
	Dia	:	
	Number of sections	:	
	Width of one section . mm	:	
	Location	:	
	Number and type of bearings	:	
<b>10</b>	<b>Threshing drum</b>		
	Type	:	
	Width	:	
	Outside dia	:	
	Number of bars	:	
	Number of blade s and their	:	

	spacing on each bar		
	Shape of blade	:	
	Size of blade, mm	:	
	Number and type of bearings	:	
<b>11</b>	<b>Baffle plate</b>		
	Type	:	
	Size of plate	:	
	Location	:	
	Method of fixing of plate to machine	:	
<b>12</b>	<b>Concave</b>		
	Width of concave	:	
	Peripheral length	:	
	Concave area, m ~	:	
	Type of concave	:	
	Number of bar s and rods	:	
	Range of clearance	:	
	a) Front	:	
	b) Rear	:	
	Method of fixing of concave in place	:	
	Method of adjusting the clearance between drum and concave	:	
<b>13</b>	<b>Cleaning sieve</b>		
	Type	:	
	Size of sieve	:	
	Effective size of sieve	:	
	Hole dia	:	

	Number of holes per 100 cm <sup>2</sup>	:	
	Inclination towards the blower unit	:	
	Method of fixing and location	:	
<b>14</b>	<b>Grain pan</b>		
	Type	:	
	Size of grain pan	:	
	Size of unloading door	:	
	Method of fixing and location	:	
<b>15</b>	<b>Straw blower</b>		
	Number of blower	:	
	Dia	:	
	Effective width	:	
	Number and type of blade s	:	
	Size of blade length x Width	:	
	Type of drive	:	
	Number and type of bearings	:	
	Method of varying the blower speed	:	
<b>16</b>	<b>Straw outlet</b>		
	Type	:	
	Outlet size	:	
	Height of outlet from top reference point of machine	:	
	Length of curved portion	:	
<b>17</b>	<b>Straw outlet extension</b>		
	Type	:	
	Diameter	:	
	Length	:	
<b>16</b>	<b>Safety device provided on the machine</b>		
<b>17</b>	<b>Total number of lubricating points</b>		
	Greasing	:	

	Oiling	:	
	Wheel bearing	:	
<b>18</b>	<b>Length of straw reaper-combine in transport position</b>	:	
<b>19</b>	<b>Height of hitch in working position</b>	:	
<b>20</b>	<b>Overall dimensions</b>		
	a) Length (drawbar hitch point to trailer hitch point)		
	b) Width		
	Height (from ground level to top of straw outlet)		
	Mass; kg		
<b>21</b>	<b>Turning radius and turning space</b>		
	Minimum radius of turning circle		
	LHS		
	RHS		
	Minimum radius and turning space		
	LHS		
	RHS		
<b>22</b>	<b>Hardness of blades, HB/HRC</b>		
	Cutter bar:		
	Minimum		
	Maximum		
	Bruising cylinder:		
	Minimum		
	Maximum		

Place:

Date:

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

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

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