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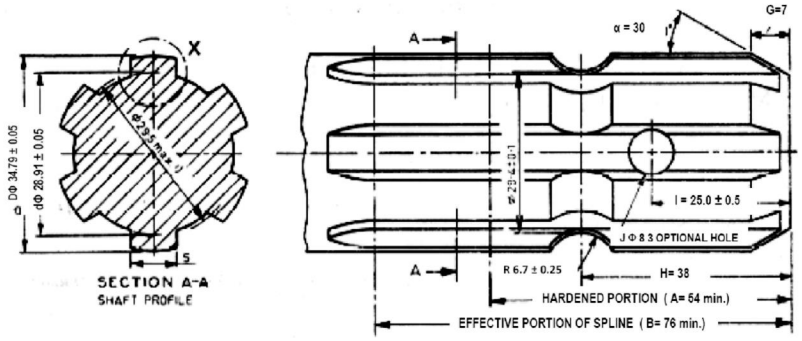
SPECIFICATION SHEET OF ROTAVATOR

1.0	**General:**			
	a)	Name	:	
	b)	Address of manufacturer	:	
	c)	Address of applicant	:	
	d)	Type	:	
	e)	Make	:	
	f)	Serial Number	:	
	g)	Model	:	
	h)	Year of manufacture	:	
	i)	Recommended power of tractor, if tractor operated	:	
2.0	**Constructional Details**			
2.1		**Mainframe**	:	
	a)	Material detail	:	
	b)	Size	:	
2.2		**SIDE SUPPORT**		
	a)	Type of frame	:	
	b)	Thickness of plate, mm	:	
	c)	Method of fixing to main frame	:	
2.3	**SHIELD (TOP COVER)**			
	a)	Type	:	
	b)	Size of shield, mm	:	
	c)	Thickness of sheet, mm	:	
	d)	Method of fixing to main frame	:	
2.4	**TRAILING BOARD**		:	
2.5	**ROTOR UNIT**			
	ROTOR SHAFT			
	a)	Type	:	
	b)	Length of shaft, mm • Ground wheel side • Opposite to ground wheel side • Dia. of shaft	:	
	c)	Size of rotor pipe, mm	:	
	d)	Method of mounting blades on shaft	:	
	e)	No. of blades on shaft	:	

	f)	Dia of rotor with blades, mm	:	
	g)	Tractor PTO rpm corresponding to 1700 rpm of engine (on load)	:	
	h)	Rotation of rotor shaft corresponding to 540 rpm of PTO shaft, rpm	:	
2.6	**ROTOR BLADE**			
	a)	Number	:	
	b)	Type	:	
	c)	Overall thickness, mm	:	
	d)	Thickness at tip, mm	:	
	e)	Method of mounting blades on rotor pipe	:	
	f)	Size of bolt, mm • Length • Diameter • Pitch	:	
	g)	Size of spacer, mm • Length • Diameter (Inner/Outer)	:	
	h)	Distance between two adjacent blades, mm	:	
	i)	Peripheral speed of rotor blades (m/sec)	:	
	j)	Speed index	:	
	k)	Blade bracket size, mm	:	
	l)	Method of arrangement of blade on rotor shaft	:	
	m)	Clearance of blade from the tip of the blade to ground, mm	:	
2.7	**Depth control Mechanism**			
	a)	Method of depth control adjustment	:	
	b)	Range of depth adjustment, mm	:	
2.8	**Skid**			
	a)	Type & Material	:	
	b)	Size, mm Peripheral length Width Thickness of plate	:	
	c)	No. of skids	:	
	d)	Method of fixing	:	
2.9	**Adjusting Rack**			
	a)	Type	:	
	b)	Size of flat, mm	:	
	c)	Range of depth adjustment, min-max (mm)	:	
	d)	Method of fixing	:	
	e)	Bolt size, mm	:	
2.8	**POWER TRANSMISSION SYSTEM**			
	Method of transmission			

Notation	As per IS: 4931- Oct. 2004 mm	mm
A	54.0 (min)	

B	76.0 (min)	
D ű	34.79 ± 0.06	
d ű	28.91 ± 0.05	
G	7.0	
H	38.0	
I	25.0 ± 0.5	
J	ş8.3	
R	6.7 ± 0.25	
S	8.69	
Ɣ	30 º	



Power Take Off shaft

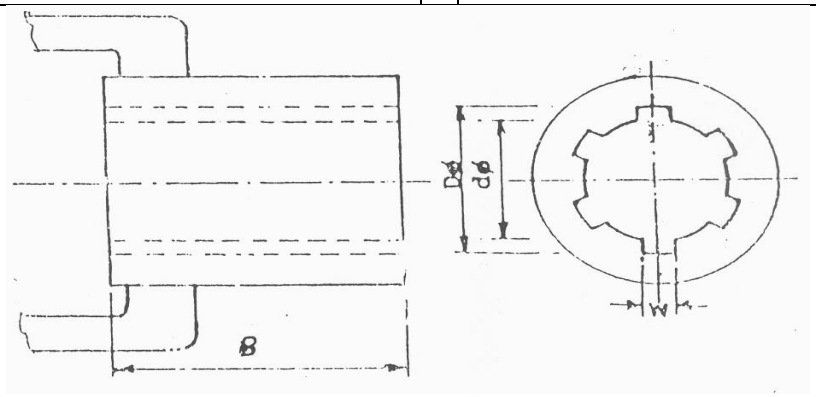
2.9	**Gear box (Primary Reduction Unit)**			
	a)	Type	:	
	b)	For 540 PTO RPM	:	
	c)	For 1000 PTO RPM (optional)	:	
	d)	No. of teeth on pinion	:	
	e)	No. of teeth on bevel gear	:	
	f)	Overall Reduction ratio at gear box	:	
	g)	Oil capacity, l	:	
	h)	Oil change period, h (apa)	:	
	i)	Recommended grade of oil, apa	:	
	j)	Length of power transmission shaft (mm) (from gear box to secondary reduction unit)	:	
	k)	Dia. of shaft (mm)	:	
	l)	Provision of breather & Dipstick	:	
	m)	No. of bearings	:	
2.9.1	**Gear box (Secondary Reduction Unit)**			
	a)	Type	:	
	b)	No. of teeth on driver gear	:	
	c)	No. of teeth on Idler gear	:	
	d)	No. of teeth on driven gear	:	
	e)	Overall Reduction ratio	:	
	f)	No. of bearings At drive shaft At idle shaft At driven shaft	:	
	g)	RPM obtainable at rotavator shaft	:	
	h)	Oil capacity (ltr)	:	
	i)	Recommended grade of oil, apa	:	

	j)	Oil change period, h (apa)	:	
	k)	Oil level checking and filling	:	

Name of Gear	No. of teeth	
	For 540 PTO RPM	For 1000 PTO RPM
N_1 or N_3	N_1 = 17	N_3 = 12
N_2 or N_4	N_2 = 19	N_4 = 23
N_5 (Bevel Pinion)		
N_6 (Bevel Gear)		
N_7 (Driver Gear)		
N_8 (Idler Gear)		
N_9 (Driven Gear)		

Gear box assembly

2.10	**Propeller shaft**		
	Type	:	
	Length of propeller shaft, mm	:	
	Mass of shaft	:	
	Provision for locking	:	
	Provision for safety Clutch /device	:	



PROPELLER SHAFT

Notation	As per IS:4931-2004, mm	mm
Dű	34.93 ± 0.03	
dű	29.7 ± 0.1	
W	8.69	
B	54 (Min)	

2.11	**Three point linkage**			
	a)	Type	:	
	b)	Specifications of Hitch pyramid	:	As per IS:4468 Part-I, 2001 (Cl.5.1) & Part-II, 1998 (Cl.5.1) (All dimensions are in mm)

Sr.	Dimension	Description (Refer Fig.)	Dimension in mm
Upper Hitch attachments			
1	d_1	Diameter of hitch pin hole	
2	$b\hat{o}_1$	Width between inner faces of yoke	
3	$b\hat{o}_2$	Width between outer faces of yoke	
Lower hitch points			
4	D_2	Dia of hitch pin	
5	$b\hat{o}_3$	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	

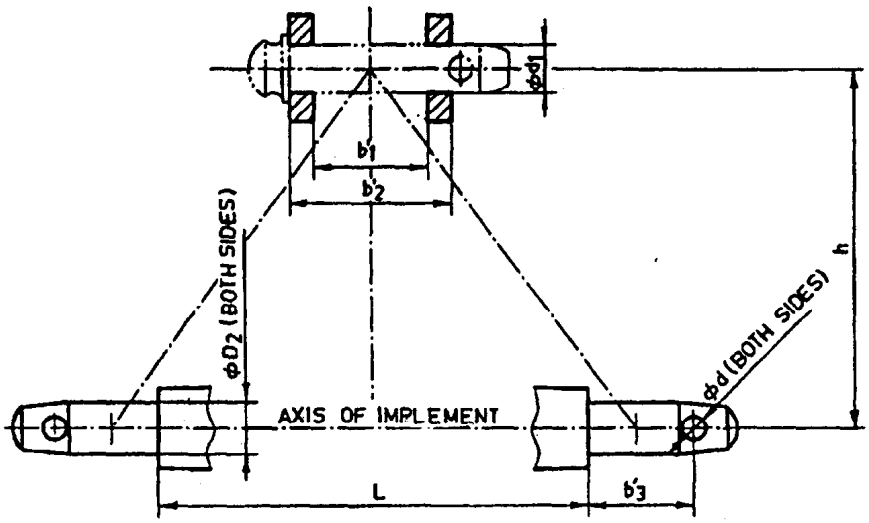


Fig. : Implement Hitch Attachment

2.12	**Overall dimensions (mm) :**			
	a)	Length	:	
	b)	Width	:	
	c)	Height	:	
	d)	Ground clearance	:	

Place:
Date:

Signature: _____

Name : _____

Designation: _____