

**Specifications of Some
Urgently Required Machines for
Mechanization of Horticulture in India**

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This presentation is prepared to help Indian farmers for Mechanization of Horticulture.

The presentation is also to help Agricultural Machinery Manufacturers to identify the machinery for import or manufacture the same in India.

For any further help feel free to contact

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**1. ALL MACHINES SHOULD CARRY “CE” MARK
OR
TEST REPORT FROM APPROVED FARM MACHINERY
TESTING CENTRE IN INDIA**

**2. ALL THE PTO OPERATED MACHINES ARE TO BE
SUPPLIED WITH PTO DRIVE SHAFT AND ANY OTHER
COMPONENTS TO ATTACH THE MACHINE TO
TRACTOR**

MANURE SPREADER



- **Manure spreader-with beater drum**
- **Trailer type manure spreader fitted with beater drum for pulverizing the manure and spreading.**
- **The chain type manure conveyor is provided at the bottom of the trailer.**
- **The beater drum and manure conveyor are operated by tractor pto, The pto drive shaft is also to be supplied.**
- **Trailer size - 1.5 Meter width, 5 meter lenth, manure height – 0.6 meter**

FERTILIZER BROADCASTER



- **Tractor operated fertilizer spreader – spin disc type**
- **The 500 kg capacity hopper is constructed of steel and baked with an epoxy varnish to resist damage and corrosion.**
- **Manual adjusting gear box to allow a spreading width from 6 to 12 meter for granular material and 7 to 16 m for crystalline material**
- **The attachment for applying fertilizer for 2 rows is to be supplied**
- **Working speed 3 to 16 km/hr. Field Capacity- 2 ha/hr..**
- **An agitator and PTO shaft are included.**

Raised bed former cum mulch layer and drip line layer



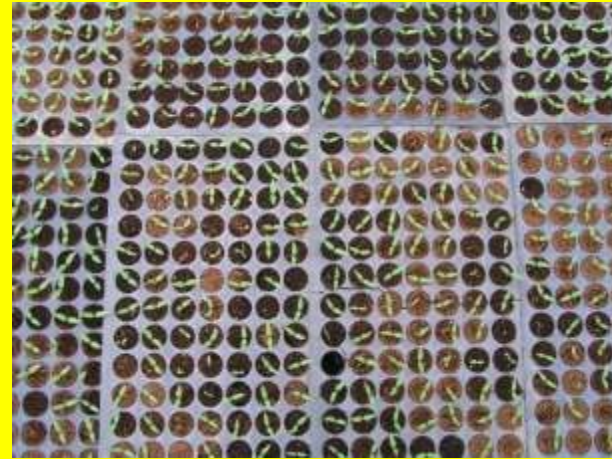
•It is used to lay plastic mulch on the bed and secure it with soil. Raised Bed mulch layer shape a raised bed and cover it with plastic all in one pass. It also lays the drip lateral line below plastic mulch.

- Working width- 1 meter, 1.2meter and 1.5 meter**
- Working speed – 3 km/hr**

VARIOUS STAGES OF NURSERY UNDER NETHOUSE



SEEDED PROTRAYS



SEED GERMINATION



IRRIGATION



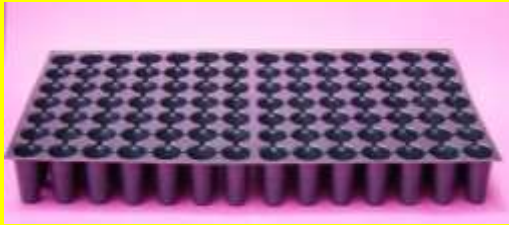
NURSERY



RAIN PROTECTION



VEGETABLE NURSERY MACHINERY



PROTRAY & NURSERY IN PROTRAY



PROTRAY STEP SEEDER



The machine is for dibbling and seeding the protrays for vegetable nurseries

Dibbles single row of filled protray

Drops a single seed in each cavity

Automatic advancement of tray

Pneumatic vibrator on the seed holding plate for **singulation of seeds**

Kit of nozzles- 0.20 – 0.25 – 0.30 – 0.35 – 0.40 – 0.50 – 0.60 – 0.70

Capacity : 40 steps / min , 200-300 Protray/hr

Maximum tray size : 750×500x 120mm

SUITABLE FOR FOLLOING SIZES OF PROTRAYS

Size of tray (mm) (width x length x height)	Centre to centre distance in cavities (mm)	No. of cavities in protray (Width x length)
530 x 270 x 37	36	7 x 14
485 x 280 x 40	33	8 x 13
370 x 460 x 70	41	9 x 11
460 x 730 x 70	41	11 x 18

BATTERY OPERATED PESTICIDE APPLICATOR FOR NURSERY



- Type** - Back Pack Sprayer
- Tank capacity** - 16 liter
- Battery** - 12 volt
- Operating pressure** - maximum of 10 bar
- Battery working time** – 2 hours
- Battery life** - 4 years.
- The battery charger is** supplied with sprayer.

PNEUMATIC PLANTER FOR ONION SEEDS



pto operated planter for 50 hp tractor.

Seeds are picked by air suction created and dropped/ blown by air by the rotary seed plates. The fertilizer application system is provided.

Type

– Tractor mounted

Working width

- 2.1 meters

Number of rows – 14 no.

Row spacing

– 15 cm.,

Seed spacing

-7.5 cm.

Seed depth

-adjustable (1 to 3 cm.)

Seed covering

- rollers

Seed box capacity

- 2 liter and it get emptied fully at the end of operation.

Fertilizer Applicator

- To be provided for each row



PNEUMATIC PLANTER FOR VEGETABLES



Tractor operated 4 row pneumatic seed planter with fertilizer attachment for raised bed for following crops . Raised bed width is 1 meter.

Crop	Row spacing (cm)	Seed spacing (cm)
Okra	45	15
Cow pea	45	15
Pea	30	7.5
Carrot and raddish	45	7.5
Spinach	20	4
Frech bean	45	20
Corriander	30	5

VEGETABLE SEEDLING TRANSPLANTER



Adjustable row and plant spacing

Type

- Rotary cup

No. of rows

- 2

Tractor

- 35 hp

Transplanting capacity - 4,000 seedlings/hr/row

Working speed

- 1.2 - 2.5 km / hr

Field capacity

- 0.16 ha/hr (1.5ha/day).

VEGETABLE SEEDLING TRANSPLANTER

ROW AND PLANT SPACING FOR DIFFERENT CROPS

Crop	Row spacing (cm.)	Seedling spacing (cm.)
Chilli	60	45
Cauliflower	45	30 and 45
Cabbage	45 and 60	45
Tamato	75 , 120 and 150	30
Brinjal	60	30 and 45
Capsicum	60	30

SEEDLING TRANSPLANTER FOR MULCHED FIELD



This is tractor mounted punch type transplanter with watering system

- Number of punch wheels/ rows** – 2
- No. of operators/ seats** - 4
- Diameter of punch wheel** - 50 cm
- Type of punch** – “V” shape
- Water tank capacity** - 300 liter
- Speed of operation** - 1.5 -2.0 km/hr.
- Plant spacing** - 30cm to 60cm



ROW CROP WEEDER (VEGETABLE)



Tractor mounted pto operated reigi weeder
The rotary discs (rotary harrow unit) of reigi weeder
are rotated by pto of the tractor and
are moved/controlled by the labours sitting
on the seats provided on the frame of the weeder.

Row spacing	- 60 cm.	No. of rows	- 2
No. of discs	- 4	No. of operators / seats	-2
No of handles	-4	Tractor required	- 35 hp
Weeding Capacity	- 0.3 ha/hr or 2.5 ha/day		

ROW CROP WEEDER (VEGETABLE) WEEDING CUM EARTHING



Tractor mounted - 3 ROW WEEDER

Working width - 1.80 meter , Working speed - 5 km/hr

Tractor requirement – 35 hp

For crop raised on ridges with ridge spacing of 63 cm.

Consists of Three weeding units

Each weeding unit consist of

- a. 5 spring tines fitted with reversible shoves.**
- b. 2 discs of 35 cm. (fitted in bearings)**
- c. Adjustable spacing of weeding units**

ROW CROP WEEDER FOR ORCHARDS/ BASIN CLEANER OFFSET ROTAVATOR



Working width / rotavator (cm)	Offset from center of tractor (cm)	Retraction (cm)	Suitable for crop	Tractor hp
65	140	50	Papaya	30
65	225	40	Mango	40

(Offset Rotavator with sensing device)

with a hydraulic sensor to overcome /jump the obstruction.

The tractor is operated - 1.4 to 2.2 m away from the trunk / pillar

The retraction can also be done manually by the tractor driver / operator in case of emergency

ROW CROP WEEDER FOR ORCHARDS/ BASIN CLEANER OFFSET ROTARY HARROW



No. of vertical rotors/ tynes	Working width (cm)	Offset from center of tractor (cm)	Retraction (cm)	Suitable for crop	Tractor hp
4	65	140	50	Papaya	30
4	65	225	40	Mango	40

(Offset Rotary hoe with sensing device)

with a **hydraulic sensor to overcome /jump the obstruction.**

The tractor is operated - 1.4 to 2.2 m away from the trunk / pillar

The retraction can also be done manually by the tractor driver / operator in case of emergency

ROW CROP WEEDER FOR ORCHARDS/ BASIN CLEANER OFFSET DISC HARROW



No. of discs & dia. Cm.	Working width (cm)	Offset from center of tractor (cm)	Retraction (cm)	Suitable for crop	Tractor hp
3 (33 cm.)	65	140	50	Grapes	30

(Offset disc harrow with sensing device)

with a **hydraulic sensor to overcome /jump the obstruction.**

The tractor is operated - 1.4 to 2.2 m away from the trunk / Pillar. The direction of the discs can be reversed.

The retraction can also be done manually by the tractor driver / operator in case of emergency



SPIN WEEDER

Working width - 2.4 to 3.0 m

Weeder heads – 2 nos. of 45 cm. diameter with 40 mm deep flange , operating with hydraulic system of tractor

Tills and weeds approximately -50 mm deep

Operational speed - 6 – 10 km/hr

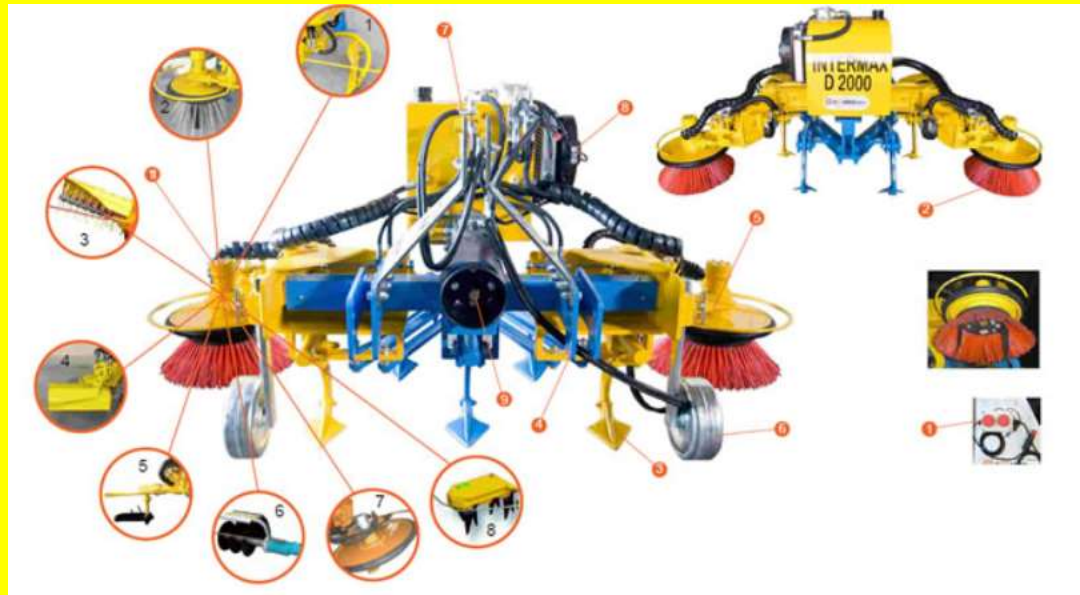
Weeder wheels can be angled for raised berms or flat ground

It should meet following requirements:

(1) adjustable spring loaded retraction system

(2) weeder head spins around the vines

(3) tilled soil is forced between weeder head and vine base providing cushion



Inter row multipurpose machine

This machine is for inter-row, inter-plant weeding, orchard harrowing and leveling. The accessories /parts disc harrow, rotary harrow, weeding blade, rotary brushes can be changed for different operations.

Minm. Working width – 2.5m

Maxm. Working width - 3.0m

No. of cultivator tines- 7 , Min. plant spacing – 0.6 m

Field capacity – 1.5 ha/hr. , Tractor hp 70

An inter-row multipurpose machine combined with a movable double arm (right and left) that adopts itself to the width of the rows for all jobs between vineyards and orchards.

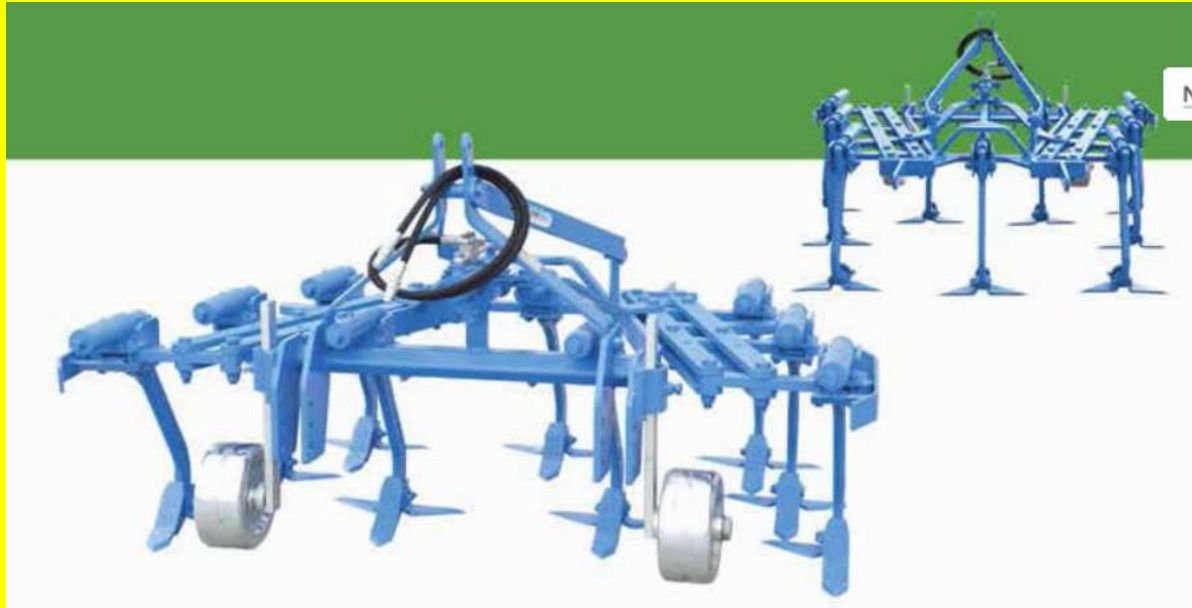
comes with a set of fixed or rotating tools which are easily interchangeable, to allow every type of plowing, mowing, fitting and re-fitting of the entire rows, and from the base of the stump. The application of special brushes under the cutter wheel allows the elimination of grass residues effectively from the base of the stump to. (ground level)

A series of central spring anchors in steel base permits the complete cultivation from the row's center. This machine can also be used for non-cultivation jobs on the central row, working only between stumps.

It is equipped with an emergency hydraulic device with a manual lever next to the driver's seat and in case of collisions, it re-calls the arm to its emergency position.

The machine has to be supplied with following accessories:

- 1) Emergency hydraulic device with manual lever that recalls the arm in case of obstacles
- 2) Cupped brushes for cleaning base of stump
- 3) Adjustable spinning anchors
- 4) 3-point universal attachment
- 5) Recordable sensor on the movable arm w/valve regulator
- 6) Lateral wheels of depth
- 7) Hydraulic system that varies regulation of width of job
- 8) Cooling system
- 9) Takeoff force 540 rounds/min
- 10) Cardan joint T30/600
- 11) Interchangeable right/left-side group head



VARIABLE WIDTH CULTIVATOR

No. of tines	-9
Min. working width	- 1.8 m
Maxm. Working width	- 2.8 m
Tractor hp	- 80

This is tractor mounted variable width cultivator, width of cultivator is varied by hydraulic cylinders operated by hydraulic system This is variable pyramidal hydraulic vibro-cultivator suitable for the new systems of plant cultivation of vineyards and orchards.

Its solid structure with amortized anchor system , can be used in any type of terrain including rocky, with depth of work that ranges from 10 to 40 Cm. The machine is versatile and can be transformed from 7 to 9 tines and vice versa, until arriving to a width of work of 2.80 m. max. It is able provide the same inter-row systems with interchangeable tools /shovels and hydraulic side-shift system.

Attachments:

- 1) Hydraulic regulation for the width of job
- 2) Depth wheels
- 3) 3-point universal hitch
- 4) Pressed steel anchors wear resistant
- 5) On the VRM version, shock absorber D.50MM

AIR BLAST ORCHARD SPRAYER



- Fan diameter - 500mm
- Pump - 105 liter/min
- Tank - 400 liter
- Horizontal spray - 36 metr
- Verticle spray - 23 meter
- Tractor hp - 40-50
- Spray gun adjustment 90 deg vertical and 360 deg horizontal from tractor seat

The air blast sprayer has centrifugal blower with an impeller of dual aspiration, gearbox 2 speeds and clutch with flexible cylinder, Hydraulic rotation of the cannon head by 360° horizontally and 90° vertically.

The sprayer is ideal for spraying of very high orchards, in greenhouses and in open fields and in the on slope cultivations.

Details of parts:

- 1) Polyethylene principle tank with wash circuit and washbasin
- 2) Centrifugal air ventilator at dual velocity, hydraulic adjustable head at 360° horizontally and 90° vertically
- 3) Rubber clutch
- 4) Separate hand wash tank provided

- 4) Arches Jets holding in stainless steel with double nozzles in brass
M 82
- 5) Chassis in hot galvanized steel
- 6) Brass remote set of controls with pressure regulator
- 7 Pumps in aluminum or brass ANNOVI and REVERBERI of 105
lt.min
- 8) Kit for suction of phytopharmaceuticals with filter for external
suction and auto refilling
- 9) Machine conformed to the EC provisions
- 10) Internal stirrer
- 11) 3-point universal hitch

ELECTROSTATIC SPRAYER WITH SPRAY GUN



Electrostatic sprayer with spray gun

Frame- Hot dipped galvanized , Tank capacity -400 liter

Length of canon – 1.38 meter , Dia. Of nozzle – 4mm.

Working pressure 1.5 bar , Centrifugal pump- (bronze) – 60 lpm

Centrifugal fan (fan can be adjusted)- 4500 cu.m. /hr

Air velocity. – 90 m/sec , Gun foldable vertical- 90 deg.

Horizontal – 360 deg. From tractor seat

Tractor 3 point linkage mounted, Tractor hp 40 hp



Electrostatic sprayer- Back Pack Martignani K800

TECHNICAL FEATURES:

ENGINE -two-stroke- 72,4 cc. - 3.7 kW (5HP) rpm- 6,700

Manual Recoil Starter Electronic IGNITION

Fan's AIR VOLUME 1,044 cu.m./hr , AIR SPEED 120 m/s

FUEL TANK 1.7 l , CHEMICAL MIX TANK 14 l

FLOW CALIBRATING VALVE - -4 positions JOYSTICK -

Multifunctional ergonomic EMPTY WEIGHT 12 Kg.

SPRAY SWATH: vertical 8 m. - horizontal 10-12 m.



Tractor Operated Electrostatic Sprayers

Martignani srl Via Fermi, 63 - Zona
Industriale Lugo 1 - 48020 - S. Agata sul
Santerno (RA) Italy

TRACTOR OPERATED ORCHARD SPRAYERS



Grape Orchards



Orchards



Vegetable Crops

Electrostatic Spraying
Systems, Inc.
62 Morrison Street
Watkinsville, GA 30677

MACHINERY FOR PRUNING OF FRUIT ORCHARDS OF CITRUS & GUAVA



Type

Hydraulic system

Total Number blades / Dia

Maximum height of vertical work (hedging)

Maximum height of horizontal work (topping)

Vertical raise , running

Power requirement

Total weight of front and back unit

Working capacity

- Tractor front mounted
- pto operated ,
mounted on 3- point linkage

- 10no. Of 50 cm.

- 6.5 m

- 4 m

-1.2 to 1.5 m

- 12 hp

- 360 & 80 kg

- 0.6 ha/hr or 5 ha/day

PRUNER (ELECTRIC) OPERATED ON BATTERY FOR GRAPES



- The battery pack is supported in belt**
- Cutting capacity** - 30 mm
- Weight** - 820 gm.
- Weight of Battery Pack** - 1.8 Kg and contains
- Type of battery** - Li-ion, 44.4 volts
- Average power** -150-watt, 4 ampere
- hour**
- Working capacity** - one day
- Time required for charging** -5 hours
- Battery replacement** - after 600 chargings

PNEUMATIC SECATUER AND CHAIN SAW



PNEUMATIC SECATUER

Air compressor - 7 kg/ sq. cm.

cutting capacity - 50 mm.

Length - 26 cm

Weight - 685 gm.

Extension rod of 60 / 120 / 150 / 300 cm

No. of secateurs operated by the pto shaft operated compressor - 7

PNEUMATIC CHAIN SAW

Air pressure - 8 to 10 kg/ sq. cm.

Air requirement 400 and 430 lit / min.

Length of blade - 280mm.

Cutting capacity - 200 mm diameter.

Compressor capacity is 500 lpm.

No. operated by tractor - 2

COMBINE HARVESTER FOR POTATO CROPS



Single row , Side mounted to tractor

Field capacity - 0.12 ha/hr or 1.0 ha/day

The requirement of tractor - 80-100 hp

The labour requirement - 4 for operation of harvester & tractor

Digging web width - 63 cm

Sorting table width - 63 cm

Provision of hedgehog belt- Provided

Weight - 1500- 1900 kg

Requirement of tractor hydraulic - 35 liter per minute

Working speed - 2 -4 km/hr

Field capacity -0.8 - 1.5 ha/day

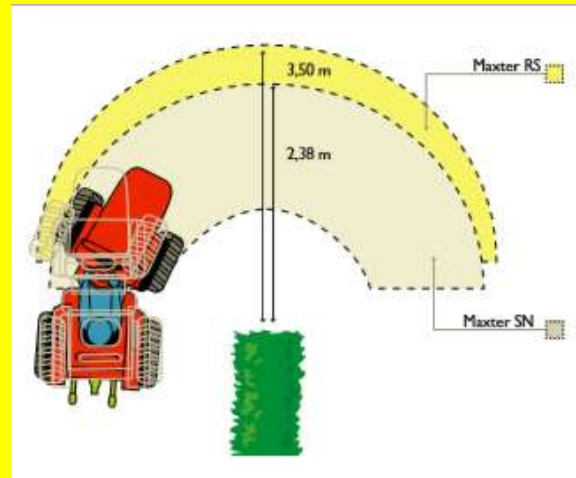
REQUIREMENT OF TRACTORS

Tractors for vegetable crops – narrow tyres and high ground clearance

Tractors for grape orchards – less height and lesser turning radius

All the tractors should have hydraulic system to operate the advanced machines

ARTICULATED TRACTOR 48 hp



ARTICULATED TRACTOR

Equal wheel tractor – 33 hp , Euro 40 RS

		Euro 30 RS	Euro 40 RS	Euro 45 RS	Euro 45 SN	
Engine	Power rating	kW(hp)	19 (25)	25 (33)	28 (38)	28 (38)
	N° Cylinders/nominal rate	n°-rpm	2 aspirated at 2800		3 aspirated at 2800	
	Cooling		Air		Water	
	Swept volume	cc	1248	1551	1649	1649
	Tank capacity	lt	24		30	
Transmission	N° Speeds	9 speeds: 6 forward + 3 reverse				
Brakes and Steering	Type of brakes	Rear brakes, drum type. Mechanical control. Independent or simultaneous braking and integral on the 4 wheels				
	Type of steering	Hydraulic, hydrostatic type				
Rear PTO	Type	Independent at 540 rpm and synchronized with all gears	Independent at 540/750 rpm and synchronized with gearbox speeds			
Rear Power Lift	Lifting capacity	Kg	1000		1200	
	3 point hitch		Class 1N			Class 1 e 1N
Dimensions and Weights*	Lenght	mm	2870	3005	3005	2660
	Width min. and max.	mm	1098 - 1360	1098 - 1360	1110 - 1431	1000 - 1290
	Height to safety frame	mm	1970	1970	2000	2005
	Wheelbase	mm	1155	1155	1155	1294
	Weight with safety frame	Kg	1100	1100	1350	1300
Tyres	Front and Rear		7.50x16" - 29x12.50-15" Garden		8.25x16"	8.25x16" - 260/80x20" adjustable rim

Tyres considered 7.50x16" (EURO 30 RS - 40 RS) and 8.25x16" (EURO 45 RS - 45 SN)

ARTICULATED TRACTOR

Equal wheel tractor – 48 hp , Maxter 60 SN

			Maxter 60 SN	Maxter 60 RS
Engine	Power rating/nominal rate	kW(hp) rpm	35 (48) - 2600	
	N° Cylinders	n°	3	3
	Cooling		Water	
	Swept volume	cm ³	2082	2082
	Tank capacity	lt	30	30
Transmission	N° Speeds		12+4 synchronized	16+16 synchronized
Brakes and Steering	Type of brakes		Rear oil-cooled multiple-plate type	
Rear PTO	Type of steering		Hydraulic with cylinder acting on the articulation	Hydraulic, hydrostatic type
Rear Power Lift	Type		Independent at 540/750 rpm and synchronized with gearbox speeds	
Dimensions and Weights*	Lifting capacity	Kg	1500	
	3 point hitch		Class I e IN	
	Lenght	mm	3250	3250
	Width min. and max.	mm	1195 - 1375	1425 - 1515
	Height to safety frame	mm	2160	2130
	Ground clearance	mm	250	250
	Wheelbase	mm	1370	1370
Tyres	Weight with safety frame	Kg	1650	1650
	Front and Rear		280/70x18" - 8.25x16" 250/80x18" - 260/80x20" - 300/70x20"	280/70x18" - 8.25x16" - 260/70x16" - 250/80x18" 33x12.50x15" Garden - 31x15.50x15" Garden

* Tyres considered: front and rear 280/70x18"

ARTICULATED TRACTOR Equal wheel tractor – 66 hp , Cluster 70 SN

		Cluster 70 SN	Cluster 70 RS	Cluster 70 RS REV			
Engine	Power rating/nominal rate	kW(hp)					
	N° Cylinders	n°					
	Cooling	Water					
	Swept volume	cc					
	Tank capacity	lt					
Transmission	N° Speeds	12+4 synchronized	16+16 synchronized				
Brakes and Steering	Type of brakes	Rear Oil-cooled multiple-plate type					
	Type of steering	Hydraulic with cylinder acting on the articulation	Hydraulic, hydrostatic type				
Rear PTO	Type	540/750 rpm and synchronized with gearbox speeds	Independent at 540/750 rpm and synchronized with gearbox speeds				
Rear Power Lift	Lifting capacity	Kg					
	3 point hitch	Class I e IN					
Hydraulic Circuit	Pump flow rate	l/m		40			
Dimensions and Weights (1)	Lenght	mm	2930	2930	2940	3110	3130
	Width min. and max.	mm	1160-1560	1340-1800 (2)	1390-1800	1340-1800 (2)	1390-1800
	Height to safety frame	mm	2110	2110	2090	2110	2090
	Wheelbase	mm	1372	1372	1375	1552	1552
	Weight with safety frame	Kg	1770	1790	1770	1850	1850
Tyres	Front and Rear	8.25x16" - 250/80x18" 280/70x18" - 300/70x20" 340/65x20" - 31x15.50x15"	8.25x16" - 250/80x18" 300/70x20" - 300/65x18" 31x15.50x15"	9.5/20" - 7.50/16" 11.2/20" - 8.25/16" 320/70/20" - 250/80/16" 300/70/20" - 280/70/16" 340/65/20" - 300/65/16"			

4 Equal wheel

Variant

SPECIFICATIONS OF 100 HP TRACTOR (4WD)

FOR POTATO COMBINE HARVESTER.

Engine Performance **5090RN (John Deere) / Equivalent**

Stage III certified acc.97/68/EC

Rated Power , kW (hp)66 (90)/ Max. Power 72 (98)

Constant power range, rpm/max. torque (97/68/EC) 376/550

Rated Speed. rpm **2300**

Type Power Tech E. Common Rail, 2 Valve, Stage III A Emissions Certified

Cylinder/Displacement **4/4525**

Cooling fan drive Temperature controlled viscous fan

Fuel injection system & control High Pressure Common Rail

Fuel tank Capacity in litres 114

ClutchOil-cooled Perma Clutch II, 225mm diameter discs

Parking lock Base equipment

TRANSMISSION OPTIONS 16/16 Power Quad Plus 3.3-40km/h

16/16 Power Quad Plus with 16/16 underdrive

1.5-40 km/h

PTO-REAR

PTO Clutch

Electro-hydraulically
operated oil-cooled multi-
disc.

540/540E PTO with 6 Spline **2097/1701**

Shaft, Engine rpm

540/540E/1000 PTO

with Reversible 6 & 21

Spline

Shaft, rpm



2097 / 1697 / 2074

PTO-FRONT

Speed rpm

1000

HYDRAULIC SYSTEM

Maximum Flow in l/min

Type

Maximum SCV's

Mid mounted couplers

3-POINT HITCH- Rear & FRONT LIFT

Hitch control

Sensing type

Sensing Modes

Control Modes

Maximum Lift Capacity at Hooks

Front Hitch

Maximum lift capacity

Maximum Flow 56 or 64
with 200 bar

Load sensing with constant flow pump
(PC=pressure compensated)

3



Electronic lower link

Load & depth control, infinite mix, float

Height limiter, rate of drop, quick raise
& pull-in, hitch dampening

42 kN (4000 kg)

29 kN (3000 kg)

CAB

Type Tilttable cab; 310° all round vision; telescoping and tilttable steering column/wheel;

2 storage compartments' opt, Field Office

DIMENSIONS AND WEIGHTS

Wheelbase / Ground Clearance, mm 2250/ 390

Overall Height Standard Cab/ Low profile Cab, mm 2595 / 2540 (Low profile cab)

Overall width front at the ground

(11.2R20 front tires)

1840

Overall width of front axle /

1860 / 1640

Flange width front axle, mm

Overall Width, mm

Overall Length with Base Weight, mm

3950

Minimum Shipping weight / Maximum Permissible

37 / 66

Specifications of 60 hp orchard tractor (4WD) for operation of sprayer & row crop weeder for grapes & mango

Engine

Engine type

SDF 1000.3 WT TIER III
(SAME)

Cylinders/Capacity

3/3000 no./cc

Injection

Turbo
Intercooler

Power at rated speed

46/62
kW/HP

Rated speed

2200 rpm

Air conditioning

liquid-oil

Engine speed at maximum

1600 rpm

power

Maximum torque

240 Nm

Fuel tank capacity

55 L.

Transmission

Transmission

mechanically operated

Shuttle

mechanical, synchronized

No. of speeds

Mechanical gearbox,

5 synchronised gears, 2 gear ranges

with underdrive

(Min. speed: 1.33 km/h)

/Mechanical gearbox, 5 synchronised

gears, 2 gear ranges with underdrive

and creeper

(Min. speed: 0.21 km/h)

Forward speeds

20/30

Reverse speeds

10/15

Maximum speed

40 km/h

Hydrostatic power steering with independent pump

standard

Steering angle

60°

Rear lift

mechanical

Rear lift capacity

3000 kg

Pump delivery

45 L/min

Hydraulic distributors

4/6 ways

PTO

PTO clutch

dry type (rear)

Speed

540-540 ECO+ synchro

(posteriore)

PTO engage

mechanical, independent (rear)

Cab

Telaio di sicurezza

fixed/folding

On board instrumentation

analog

Tyres

Rear tyres

360/70 R24

Dimensions and Weights

Wheelbase

1990 mm

Weight

2250 kg

Carreggiata min-max

1165-1442 mm
(front)/1083-1652 mm
(rear)

Width min.-max.

1443-2012 mm

Length

3186 mm

Cab height

2228 mm

Ground clearance

225 mm

Farmers and govt. organizations should be permitted to import and use the advanced tractors with following features

Without testing at Testing Institute, Budni

If these have **CE CERTIFICATION** and Manufactured in

European Countries, USA, Canada and Australia.

They may also be permitted to register these with RTO

1. Tractor with front, side and rear pto.

2. Tractor with front and rear 3 point linkage

3. Orchard tractors hinged at center for small turning radius

4. Tractors with powerful hydraulic system for operation of advanced machinery

THANKS

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