







# **HAWK**

Special Process Machines, Waste Management Machineries

COCO
Coco peat and

Substrates for soil-less farming

FROM TILLING TO HARVESTING POWERING ALL YOUR NEEDS!



# ONE STOP SOLUTION FOR INNOVATIVE AGRI IMPLEMENTS



Being, the most famous industry among all, agriculture and allied activities have become technology implemented and mechanized to extent in this millennium which we foresee there is much to grow in this sector. In this regards, we bring to you the following series of products to cater to varied usage and needs.





# **BHEEM**

# **TILLING**

# BHEEM POWER TILLER BMT1400 DI





### Features:

- Durable REN Diesel Engine
- Easy Handling
- 6 Forward, 2 Reverse Gears
- Multi plate clutch

# **Technical Specifications**

Model	BMT 1400DI
Engine power	8.3 kw
Fuel	Diesel
Rotovator Speed	320 R.P.M
Weeding Distance	600 mm
No. of Blades	20
Transmission Gears	6 Forward & 2 Reverse
Starting Method	Hand Crancking
Weight	390 Kgs.
Overall Dimensions	L 2950 x W 850 x H 1240 mm

- Oil Lubricated Gearbox
- 2 Speed Rotovator
- Suitable for all Wet land &
- Dry land operations



# **SERIES**



# **BHEEM POWER TILLER BMT 1200DI**



### Features:

- Durable REN Diesel Engine
- Easy Handling
- 6 Forward, 2 Reverse Gears
- Multi plate clutch Electric Start
- Oil Lubricated Gearbox

# **Technical Specifications**

. commeat epochtoations		
Model	BMT 1200DI	
Engine power	7.9 kw	
Fuel	Diesel	
Rotovator Speed	375 R.P.M	
Weeding Distance	600 mm	
No. of Blades	16	
Transmission Gears	6 Forward & 2 Reverse	
Starting Method	Recoil & Electric	
Weight	338 Kgs	
Overall Dimensions	L 1850 x w 600 x H 1200 mm	

- 2 Speed Rotovator
- Suitable for all Wet land &
- Dry land operations



# **PLANTING**





BHEEM TRANSPLANTER



# Technical Specifications

Model	BMP 350	
Engine power	163 cc	
Fuel	Petrol	
Туре	4 - Row walk behind	
No. of Gears	2 Forward & I Reverse	
No. of Planting Rows	4	
Distance Between Rows	30 Cm	
Seeding type	Seedling Mat	
Seedling Height	10 to 25 cms	
Operation Efficency	0.22 - 0.52 (acre/hr)	

- Durable Ren Petrol Engine
- Easy Handling
- Shaft Drive System
- Hydraulic System
- 4 Row Transplanter

# **WEEDING**



# BHEEM MARVEL WEEDER BMT 1000DF





# Technical Specifications

Model	BMT 1000DE
Engine power	7.9 Hp @ 3000 R.P.M
Fuel	Diesel
Rotovator Speed	375 R.P.M
Weeding Distance	600 mm
No. of Blades	16
Transmission Gears	6 Forward & 2 Reverse
Starting Method	Recoil & Electric
Weight	330 Kgs
Overall Dimensions	L 1850 x w 600 x H 1200 mm



### Features:

- Durable REN Diesel Engine
- Easy Handling
- 6 Forward, 2 Reverse Gears
- Multi plate clutch Electric Start
- Oil Lubricated Gearbox
- 2 Speed Rotovator
- Suitable for all Wet land & Dry land operations



# BHEEM EXCEL WEEDER BMT600 D





# Technical Specifications

Model	BMT 600D
Engine power	5.5 Hp @ 3000 R.P.M
Fuel	Diesel
Rotovator Speed	375 R.P.M
Weeding Distance	420 mm
No. of Blades	12
Transmission Gears	2 Forward & I Reverse
Clutch	Multi Plate Dry Type
Weight	119 Kgs
Overall Dimensions	L 1500 x w 500 x H 1100 mm





Model	BMT 600 P
Engine power	196 cc
Fuel	Petrol
Rotovator Speed	375 R.P.M
Weeding Distance	420 mm
No. of Blades	12
Transmission Gears	2 Forward & I Reverse
Clutch	Multi Plate Dry Type
Weight	90 Kgs
Overall Dimensions	L 1500 x w 500 x H 1100 mm

# One Machine for All your Farming Needs!

- Durable REN Diesel & Petrol Engine
- Rotatable Handle
- 2 Forward I Reverse Gears
- Multi plate clutch
- Oil Lubricated Gearbox
- Oil bath Air Cleaner
- High Speed Rotavator
- Suitable for Weeding in 2 ft crops like vegetables, cotton, chilly, mulberry and for round about in coconut field.



# **WEEDING**



BHEEM PIXEL WEEDER BM 200



# **Technical Specifications**

Model	BM 200
Engine power	I.9 hp @ 6500 R.P.M
Fuel	Petrol with 2T oil mix
Rotovator Speed	170 R.P.M
Weeding Distance	380 mm
No. of Blades	18
Weight	21 Kgs
Overall Dimensions	L 980 x w 660 x H 970 mm



### Features:

- Durable REN Engine
- Oil Lubricated Gearbox Easy Handling
- Highly Portable
- Height Adjustment
- Hardened Rotovator blades
- Suitable for Weeding in 1.5 ft & above crops like Cotton, chilly, Vegetables, Etc..



**BHEEM** BABY WEEDER BM 170



**Technical Specifications** 

Model	BM 170
Engine power	1.75 hp @ 6500 R.P.M
Fuel	Petrol with 2T oil mix
Rotovator Speed	170 R.P.M
Weeding Distance	9 Inches
No of Blades	8
Weight	17 Kgs
Overall Dimensions	L 830 x w 530 x H 900 mm
Accesories	
Two Tyne Holder	12 inches weeding with 16 blades









POWERED BY

# Technical Specifications

Model	BM 175
Engine power	1.75 hp @ 6500 R.P.M
Fuel	Petrol with 2T oil mix
Rotovator Speed	170 R.P.M
Weeding Distance	250 mm STD
No. of Blades	12
Weight	18 Kgs
Overall Dimensions	L 1470 x w 735 x H 830 mm
Accessories	
Weeding Kit	For 180,300 mm crop spacing

### Features:

- Durable REN Engine
- Oil Lubricated Gearbox Easy Handling
- Highly Portable
- Height Adjustment
- Hardened Rotovator blades
- Suitable for Weeding in 1 ft & above crops like Cotton, chilly, Vegetables, Etc..

Worried about Weeds! No Worries when BHEEM is there!

- Durable REN Engine
- Oil Lubricated Gearbox
- Easy Handling
- Highly Portable
- Suitable for Weeding in 20,25, & 30 cms of paddy

# **HAND TOOLS**



BHEEM BRUSH CUTTER BM 33B & 43 B & 52 B



# **Technical Specifications**



# Features:

**SERIES** 

• Durable REN 2 stroke Engine

Low in vibration

Offset bull handle

• Double harness cushioned straps

• Centrifugal clutch

Easy Handling

# BHEEM BACK PACK WEEDER BM 43 W



# **Technical Specifications**

Model	BM 43 w	
Engine power	1.25 Kw	
Fuel	Petrol with 2T oil mix	
Carburetor Type	Diaphragm Type	
Clutch System	Automatic Centrifugal Clutch	
Ignition Type	Non Contact Electronic	
Weight	12Kgs	
Blade	roller type	

# Features:

- Durable REN 2 stroke Engine
- Low in vibration
- Double harness cushioned straps
- Centrifugal clutch
- Easy Handling

# **BHEEM CHAIN SAW**



# Technical Specifications

reclinical Specifications			
Model	BMCS 5200	BMCS 6200	
Engine power & 6000 rpm	1.7 kw	2.2 kw	
Displacement	52 cc	62 cc	
Fuel Ratio	1000 ml : 25 ml		
Fuel tank capacity	550ml		
Oil tack capacity	260 ml		
Chain oil grade	SAE 10W - 30		
Maximum Cutting speed	I I 00 RPM		
Maximum cutting length	44 CM		
Weight	5.50 kg		

ecinical specifications				
Model	BMCS 5200	BMCS 6200		
Engine power & 6000 rpm	1.7 kw	2.2 kw		
Displacement	52 cc	62 cc		
Fuel Ratio	1000 ml : 25 ml			
Fuel tank capacity	550ml			
Oil tack capacity	260 ml			
Chain oil grade	SAE 10W - 30			
Maximum Cutting speed	I I 00 RPM			
Maximum cutting length	44 CM			
Weight	5.50 kg			

# BHEEM EARTH AUGER



# **Technical Specifications**

recinical opecinications					
BM 5200S BMEA 630					
1.46 kw	2.2 kw				
52 cc	63 cc				
ILt. : 40 ml					
I 200ml					
Magneto					
Diaphragm					
Centrifugal Friction Clutch					
100,150, 200, 250, 300 mm					
10 kg	10.6 kg				
	1.46 kw 52 cc 1Lt.: 1200 Magr Diaph Centrifugal Fr 100,150, 200,				

# Features:

- Durable REN 2 stroke Engine
- Easy Handling
- Oil Lubricated Gearbox
- Centrifugal clutch
- Low in Vibration

- Durable REN 2 stroke Engine
- Easy Handling
- Oil Lubricated Gearbox
- Centrifugal clutch
- Low in Vibration
- Single & Double Operator

# **POST HARVESTING**



BHEEM BAGGER BMB 400



# Technical Specifications

Model	BMB 400
Engine power	163 cc
Fuel	Petrol
Collecting of Grains	Upto 80 kgs.
Collector Engagement	Manual by Use of Lever



# Features:

- Durable REN 4 stroke Engine
- Easy Handling
- Oil Lubricated Gearbox
- Centrifugal clutch
- Suitable for Collecting upto
- 80 Kg in Single time

# **ENGINES** (Petrol Engines)

# The real power for all your powering needs







**REN PX120** 



**REN PX 160** 



**REN PX200** 



**REN PX420** 

# **Technical Specifications**

# REN PX420

PX80	PX120	PX163	PX196	PX420
4 Stroke Overhead Valve, Single Cylinder, Air Cooled				
54 x 38	60 x 42	68 x45	68 × 54	90 x 66
87	120	163	196	420
TCI Transistorized Ignition				
Splash				
8	8.5	8.5	8.5	8.3
0.70 - 0.80				
300×290×280	340x205x320	360x320x335	365x320x337	450x405x443
11	13	15	16	31
	4 Stroke 54 x 38 87 8	4 Stroke Overhead Va 54 x 38 60 x 42 87 120 TCI Tran  8 8.5 (300x290x280 340x205x320	4 Stroke Overhead Valve, Single Cy 54 x 38 60 x 42 68 x45 87 120 163 TCI Transistorized Igni Splash 8 8.5 8.5 0.70 - 0.80 300x290x280 340x205x320 360x320x335	4 Stroke Overhead Valve, Single Cylinder, Air Coc 54 x 38 60 x 42 68 x 45 68 x 54 87 120 163 196 TCI Transistorized Ignition Splash 8 8.5 8.5 8.5 0.70 - 0.80 300x290x280 340x205x320 360x320x335 365x320x337

- Durable Ren 4 Stroke Engines
- OHV
- Rewind Start / Electric Start
- Dual Air Filter or Oil Bath Air Filter
- Oil Level Switch
- Easy Start
- Transistorised Ignition





Light duty rotary tillers are very common and preferred among the farmers of India. This can be used with tractors ranging from  $35 \sim 50$  HP. Ishan RT is capable of tilling across almost all the soil categories. Suggested for regular farming, small sized operations in paddy, wheat, dry, semi-dry, wet land conditions as well. ISHAN manufacture the following range of single speed and multi speed light duty rotary tiller machines.



# **Specifications:**

- Tractor HP: 35-40 HPNumber of flanges: 6
- Number of blades : 36
- Weight :370 Kgs
- Input RPM : 540 / 1000
- Transmission : Gear drive



# **Specifications:**

- Tractor HP: 35-40 HP
- Number of flanges : 6
- Number of blades : 36
- Weight :400 Kgs
- Input RPM: 540 / 1000
- Transmission: Gear drive



Champ series rotary tiller machines are specially designed and manufactured for tilling banana plantations. Champ 150 is a common model of the champ series among our farming community. This machine can be used in medium  $\sim$  large sized banana variety fields. This machine can be used with tractors ranging  $60\sim70\,\text{HP}$ 

CHAMP 150

# **Specifications:**

Tractor HP: 60-70 HPNumber of flanges: 6Number of blades: 42

Weight :640 Kgs

Input RPM : 540 / 1000Transmission : Gear drive

Balers ensured that straw is converted into a commodity and is the last mile income for the farmer. Depending on the model, these balers can bale rice straw, wheat straw, corn harvest residue, sugarcane harvest waste and cotton stalks. Our round straw balers use environmentally friendly organic jute twine to bind the bales making it ideal for cattle fodder as well as other applications like mushroom farming, paper industry, fuel briquettes and for power generation.



- Auto lubrication system
- Bale counter
- Heavy duty frame structure & roller
- Bale density adjuster
- Pick-up height adjuster
- Extra heavy duty roller chain







- Suitable for 50 +HP Tractors
- Double row in 1.2 to 1.5 meter crop spacing
- Adjustable Row Spacing
- Depth control wheels at rear

TURMERIC / POTATO DIGGER



- Higher digging efficiency and less damage to the turmeric rhizomes
- Modular design eases the job, Transportation
   & Storage
- Convertible with coulter and knife for potato harvesting
- Les power required 40 hp+
- Collection Bin at rear can be attached

TALL TREE SPRAYER
TRACTOR PTO OPERATED



- Suitable for Mini & Standard Tractors.
- Utilization of the farm tractor.
- Multi usage of the sprayer.
- Maximum height with special jet.
- More productivity less expenses.

# DETACHABLE FRONT END LOADER (Attachment)





Our loader attachments are easier to learn, easier to operate. Whatever you expect, you will get it highest performance and reliability for mildest applications. Robust construction for longer life and high economy.

### **Features:**

- Low cost
- Robust sliding upright framed loader for 2 wheel drive tractors
- Quickfit attachment for enhanced utility of tractor
- Ergonomic location of operating system
- Ideal for handling grains, manure, soil, garbage and blue metal...

# INCLINED PLATE PLANTER













Tractor mounted 6-row inclined plate planter is a multi-crop planter for planting of both, bold and small seeds which cannot be sown by conventional seed drills. This planter is suitable for sowing of bold seeds like ground-nut, maize, Kabuli gram, etc. and very small seeds (mustard, sorghum, etc).

The planter is also suitable for sowing of intercrops. It has six modular design seed boxes with independent inclined plate type seed metering mechanism. Seed plates for sowing different seeds can be selected and easily changed.

# DOZER BLADE (Attachment)





## Features:

- Quickfit attachment for enhanced utility of tractor
- Welded construction for strength & torque under strain of unbalanced loades
- Tractor hydraulic system supports dozer operation
- Ergonomic location of operating system
- Lower fuel consumption & lesser maintenance

# **ELLIPTICAL MILD STEEL WATER TANKER**



Water tanker is designed to carry and transfer water by pump also incase it is demanded it is used for road cleaning purposes.

It can be elliptical, cylindrical shape and is made of sheet metal or stainless steel.

There is a manhole on the top of the tank (500mm diameter) there are sufficient amount of baffles. Ventilation unit which helps the release of excess air and water inside.

There is a ladder at the rear and catwalk on the tank.





# Mono Shaft Shredders





# Variants:

2HP, 3HP, 5HP, 10HP, 15HP, 20HP,30HP Also available in two stage shredding model Blade options: EN8, EN42J, OHNS MOC - MS ISI frame, powder coated MS sheets (optional - Stainless steel sheets)

# Applications:

Vegetable waste, household waste, Bio waste, Garden waste, Banana leaf, coconut husk

Plastic Shredders



# Variants:

1HP, 2HP, 3HP, 5HP, 10HP, 20HP, 30HP

# Applications:

PET, Shrink wraps, stretch wraps, Chairs, tables, PP etc.

# **Dual Shaft Shredders**



Variants: 2HP, 3HP, 5HP, 10HP, 15HP, 20HP, 30HP

Available in double motor models also **Blade options**: EN8, EN42J, OHNS

MOC - MS ISI Frame, powder coated sheet work Automatic function control system with auto reverse controls to handle loading issues.

# **Applications:**

Market waste, arecanut leaf waste, banana leaf waste, function hall waste, wet vegetable waste, long stem waste, hard plastics, rubber etc.

## Chicken Waste Shredder





Specially designed for shredding chicken waste and egg waste.

MOC - Stainless steel

# Add ons:

- 1. Squeezer attachment for dewatering
- 2. Pulverizer for powdering of bone waste

# Organic waste composting machine



Shredder waste is maintained in a calculated hot chamber to increase the decomposing rate thereby reducing the post processing time for compost production.

Available in range of 100 to 1500 Kgs/hr.

Method: Electric filaments with automatic function controllers.

Optional attachment to shredders.

# Tractor Operated Shredder cum pulverizers





Available for 35HP tractor onwards

# **Applications:**

Coconut plantations, banana plantations, stems, dry trunks in fields etc.

# **Grain Dryers**

Stand alone multi grain dryer



Mobile Multi Grain Dryer



Drying has been effective way to increase shelf life of paddy, rice, maize, cereals and millets etc.

It has been practiced by sun drying, steam drying etc which are either laborious or expensive infrastructure or requirement of larger volumes for cycles. On observation of these back logs and credentials to grain drying, we have developed a mobile grain drying tractor powered machine that is in all ways efficient and supportive to the process.

Principle: Radial Counter Flow Hot Air Drying

Fuel options: Gasoline (light oil), LPG

Flexible Screw Conveyors





Coco Peat Blocks - 5kg



# Coco Peat Grow bags



# Specifications:

Mix : Cocopeat 50% Husk 50% (Can be customized as per requirements) Electrical Conductivity ← 1mS/cm pH : 6 to 7, Moisture : Less than 20%

# Applications:

Growing Medium, Potting Soil, Horticulture, Floriculture, Green House Farming, Hydrophonics, Gold Courses, Landscapes etc.,

# COCO

# **Technical Specifications**

Model	Washed (Low EC) Coco peat	Uneashed (Low EC) Coco peat
Electrical Conductivity	< 0.5mS/cm	< 0.5mS/cm
pH	5.5 to 6.5	5.5 to 6.5
Weight	5 kgs per Block	5 kgs per Block
Dimension	20x20x10-14 (cms)	30x30x10-14 (cms)
Moisture	Less than 20%	Less than 20%
Rehydration Volume	14 to 15 ltrs. per kg	14 to 15 ltrs. per kg
Compression Ratio	1:5	1:5
Impurities	<3%	<3%

# Applications:

Growing Medium, Potting Soil, Horticulture, Floriculture, Green house Farming, Hydrophonics, Gold Courses, Landscapes etc.,

# Buffered Coco Peat Blocks



# Applications:

Tissue Culture replanting to trays, (
Seed plug preparation, I
Growing medium

# **Technical Specifications**

Model	Washed (Low EC)	
	Coco peat	
Electrical Conductivity	< 0.5mS/cm	
pН	5.5 to 6.5	_
Weight	5 kgs per Block	
Dimension	30x30x10-14 (cms)	
Moisture	Less than 20%	_
Rehydration Volume	14 to 15 ltrs. per kg	_
Compression Ratio	1:5	_
Impurities	<3%	_

Coir fibre Products



Cocopots are biodegradable cultivation pots made from Coconut fibres. It has multiple uses - in horticulture, in ornamental plant cultivation, vine and tree nurseries and in domestic gardening. Coco Pots has exceptionally high premeability to water, air and roots. Coco Pots enables faster cultivation, excellent root system and re-establishment without any shock from transplanting.

- Produced from rubberised coir (Natural rubber late & Coir fibre)
- 100% Non GMO, Bio-degradable, Environment friendly product
- Suitable for nurseries as well as domestic gardening
- Supports better plant growth compared to plastic due to better root aeration
- Faster growth & less fertilizer usage owing to minimal weed growth
- Bio-degradability allow plants to be planted on the ground including the pot.
- Root cause deformations can be avoided
- Available in varying shapes and sizes
- Available for Light Duty & Heavy Duty
- Contains no animal ingredients





