ISO 9001:2015

Weighing India Corporation

PLASTIC WASTE MANAGEMENT PRODUCTS

PWM

FATKA MACHINE (PLASTIC)
MODEL - WICFMP001

SHREDDER MACHINE
MODEL - WICSM001

CAP CUTTER MACHINE
(PLASTIC & ALUMINUM)
MODEL - WICCM001

HYDRAULIC BALE MACHINE
MODEL - WICHBM001

155/230/232 Jungalpur Road, Kolkata - 700 081 | Email - wic.calcutta@gmail.com

PLASTIC WASTE MANAGEMENT (PWM) will involve activities associated with segregation, collection, storage, transportation, processing and disposal. According to the reports for year 2017-18, Central Pollution Control Board (CPCB) has estimated that India generates approximately 9.4 Million tonnes per annum plastic waste, (which amounts to 26,000 tonnes of waste per day), and out of this approximately 5.6 Million tonnes per annum plastic waste is recycled (i.e. 15,600 tonnes of waste per day)

The seven types of plastic include:

1 PETE Polyethylene Terephthalate (PETE or PET)

2 HDPE High-Density Polyethylene (HDPE)

3 PVC Polyvinyl Chloride (PVC)

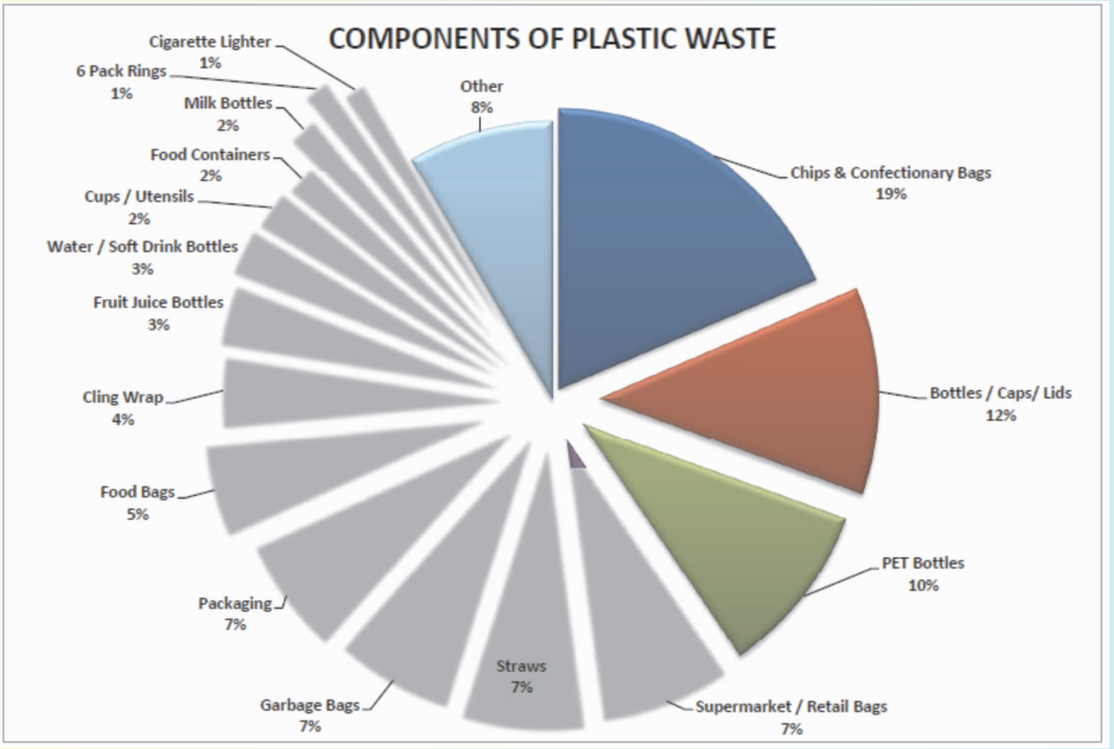
4 LDPE Low-Density Polyethylene (LDPE)

5 PP Polypropylene (PP)

6 PS Polystyrene or Styrofoam (PS)

7 Other Miscellaneous plastics

(includes: polycarbonate, polylactide, acrylic, acrylonitrile butadiene, styrene, fiberglass, and nylon)



MACHINERY & EQUIPMENTS IN DIFFERENT STAGES OF PWM

CLEANING & DRYING

Post collection of plastic waste it requires cleaning before further procssing. The wastes during these phase require proper cleaning mechanism to remove dust.

OUR PRODUCT

Fatka Machine

SIZING & CHIPPING

Cleaned plastic waste products should be sized/chipped to fed into the extruders for processing and palletizing and these operations depends upon the type and size of the plastic waste.

For the big pieces of waste plastics, such as pipes or window frames, pre-shredding can be an interesting option in order to reduce the stocking area and the transportation costs. The benefits of recycling can be categorized into these aspects such as; environmental, economic, social and Environmental awareness of the population.

OUR PRODUCT

Shredder Machine & Cap Cutter Machine

BAILING

This device reduces the volume of plastic waste by compacting, so that storage and transportation becomes relatively easier Baling is a suitable option for both films and bottles, providing a reduction in volume that aids storage, transportation and management of the waste plastics.

OUR PRODUCT

Hydraulic Bale Press Machine

Fatka Machine

SALIENT FEATURES

The Bailing Press is robust in design and is designed to take 200% of the rated load. The press is provided with closed wall on two sides, the back side of the press is provided with groves to enable movement of the straps during tying. The front of the press is provided with a door of 500mm height. The gap between the top pressing plate and the door acts as a loading space of the scrap.

OPERATIONS

The waste is charged into the shredder through a Side Top Door, the loading chute is designed to enable the rotor of the machine to grab the material easily and the charged waste is not pushed out of the shredder.

Once the waste is fed the rotor makes the material starts rotating inside the chamber and grinds it on one of the side faces of the machine, the grinding face is made of High quality Abrasion Resistant steel. After this the material comes in contact with the mesh which also grinds the waste and breaks it further into smaller pieces.

The reduced size pieces falls through the mesh and any material which remains larger than the mesh keeps revolving in the shredder till it is not smaller than the mesh holes.

The material gets shredded in the chamber due to the centrifugal action of the hammers. The hammers are designed in a way that they are out massed and when they start rotating the Hammers opens up like feathers into their maximum position and due to the centrifugal force breaks the waste into smaller pieces. This design also gives a Hammering load which acts on the waste to further break it. The flywheel action helps in reducing the power requirement of the machine and provides the torque whenever required.

The Machine is provided with a Hydraulic system to open the top side cover. This makes the operator access the chamber without removing any part of the machine. This helps the operator to remove any blockage or maintain the rotor without dismantling the machine.

TECHNICAL SPECIFICATIONS

Drum Size	600 mm
Drum Length	1300 mm
Starter	As per requirement
Pully	4 " - 12" (Inch)
Motor	3 HP
Out Put	100-200 Kg/hr
Material Used In Sheet Bearing Rotor	CR (Cold ROLLD) Pedestal Bearing Dynamically Balanced
Length	1500 mm
Width	1200 mm
Height	5 ft
Weight	450-500 kg (Approx.)
Material	MS
Uses	For cleaning the dust from waste Plastic

Shredder Machine

SALIENT FEATURES OF THE SHREDDER

During the crushing process, the claws on the rotor pull the material into the crushing cavity. The blades are arranged in a staggered and occlusal manner, so
that the material can be cut and broken in both the horizontal and vertical directions at the same time.

OPERATIONS

Shredding machines consist of feed shafts (for industrial applications), a feed zone into which materials are placed, crushing gears or slicing blades, a motor to spin the blades, and a chute (also for industrial) which transports the materials onto a conveyor for more handling or into a container for disposal.

The Machine is provided with a Hydraulic system to open the top side cover. This makes the operator access the chamber without removing any part of the machine. This helps the operator to remove any blockage or maintain the rotor without dismantling the machine.

TECHNICAL SPECIFICATIONS:-

Chamber Size Width	18”
15” 1 No.=both side total 2 nos. fix blade En-31 2 fix and 6 rotated	30 nos.
Heavy duty rotor stapes blade Motor Pulley Rotating Blade	 10 HP 16” – 4” B Sec Single shaft
Chamber wall	12 mm thickness
Heavy duty MS casting pedestal Screen hole	8.5 mm
Shredding Capacity	1-500 kg/hr
Height	5 ft

Hydraulic Bale Press Machine

SALIENT FEATURES

The Bailing Press is robust in design and is designed to take 200% of the rated load. The press is provided with closed wall on two sides, the back side of the press is provided with groves to enable movement of the straps during tying. The front of the press is provided with a door of 500mm height. The gap between the top pressing plate and the door acts as a loading space of the scrap.

OPERATIONS

1. The front door is closed.
2. The scrap is loaded in the chamber till the height of the door.
3. Auto On switch is pressed, the hydraulic cylinder starts pressing form the top.
4. The pressure is exerted till the set limit.
5. The pressing plate moves back for next fill of the scrap.
6. Scrap is reloaded in the machine
7. The operation in Pint 2-5 is repeated till the set weight is not achieved.
8. Once the set weight is achieved the press locks.
9. The door is opened manually and the bale is strapped manually.
10. A hinged plate provided at the bottom of the press is attached to the pressing plate.
11. Reverse button is pressed and the hinged plate ejects the bale from the pressing chamber.
12. The above cycle is repeated for next charge of scrap.

TECHNICAL SPECIFICATIONS

Capacity (Ton)	25
Chamber Size (mm)	600 x 450 x 1100
Box Size	600 x 450
Pressure (kg/sq cm)	170
Mini. Bale Height (mm)	200
Bale dimension	600 x 450
Machine Weight	1100 kg (approx.)
Bale weight	25 to 30 (depend on material)
Bale Time:	10-15 minute
Type	Vertical
No.of cylinder	1 no.
Main motor (HP)	10 HP
Motor	ISI Make (1 yr warranty)
Cycle time Approach speed	40 mm/sec
Pressing speed	17mm/sec
Return Speed	70 mm/sec
Approximate time for 100 mm travel	30 sec
Cylinder Stock (mm)	800 mm
Day Light Gap (mm)	1050 mm
Oil required Min. (Ltr)	80-90 ltr (Life time oil)
Working Fluid	Hydro Enclo 68 no.
Dimension (mm)	600 x 450 x 2800