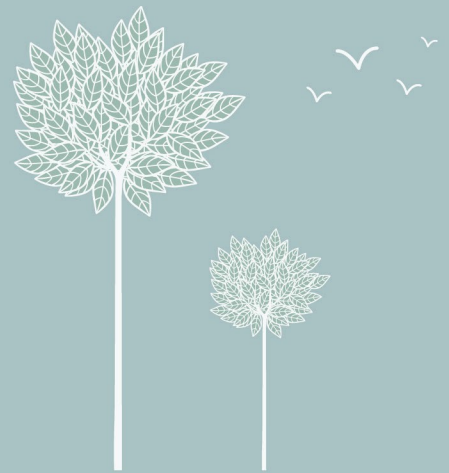




From C°llection To Re-creati°n



ABOUT US

We aim to introduce an adaptable change in the production model by presenting a regenerative route to use the excess amount of waste material. Our goal is to bring a change in the attitude of how people understand plastic waste by incorporating them in contributing toward a circular economy. We look forward to nurturing a healthy and sustainable environment where our focus lies on turning plastic into a resourceful substance to create useful products and removing the notion of it being a waste material and providing an economic route to establish recycling as a profitable business.

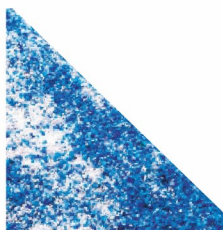
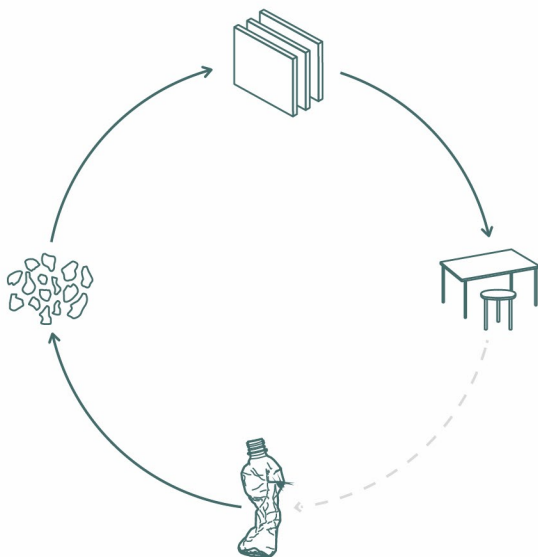
VISION

Empowering to turn all commoners into productive recyclers! We envision presenting techniques and technology to recycle waste at its source and produce marvelous products which can be of use to the general public!





We recycle large amounts of waste material using the micro-machines that we manufacture and break down the waste into reusable material. We recreate vibrant plastic sheets, useful and handy products for use from waste material making a full circle and doing our bit towards creating a circular economy.



MISSION

We're looking at a three-step mission at The Recreus Lab

1. We are determined toward recycling by implementing a ubiquitous approach by making machinery available at the source and letting people view recycling through an economic lens and as a profitable business opportunity!
2. Manufacturing small compact machinery and making it available to the general public while also developing numerous micro-factories on a domestic and global level.
3. A team looking forward to achieving successful waste management in the community through a cumulative approach with large-scale opportunities for recycling in the simplest ways possible to develop a pollution-free ecosystem!

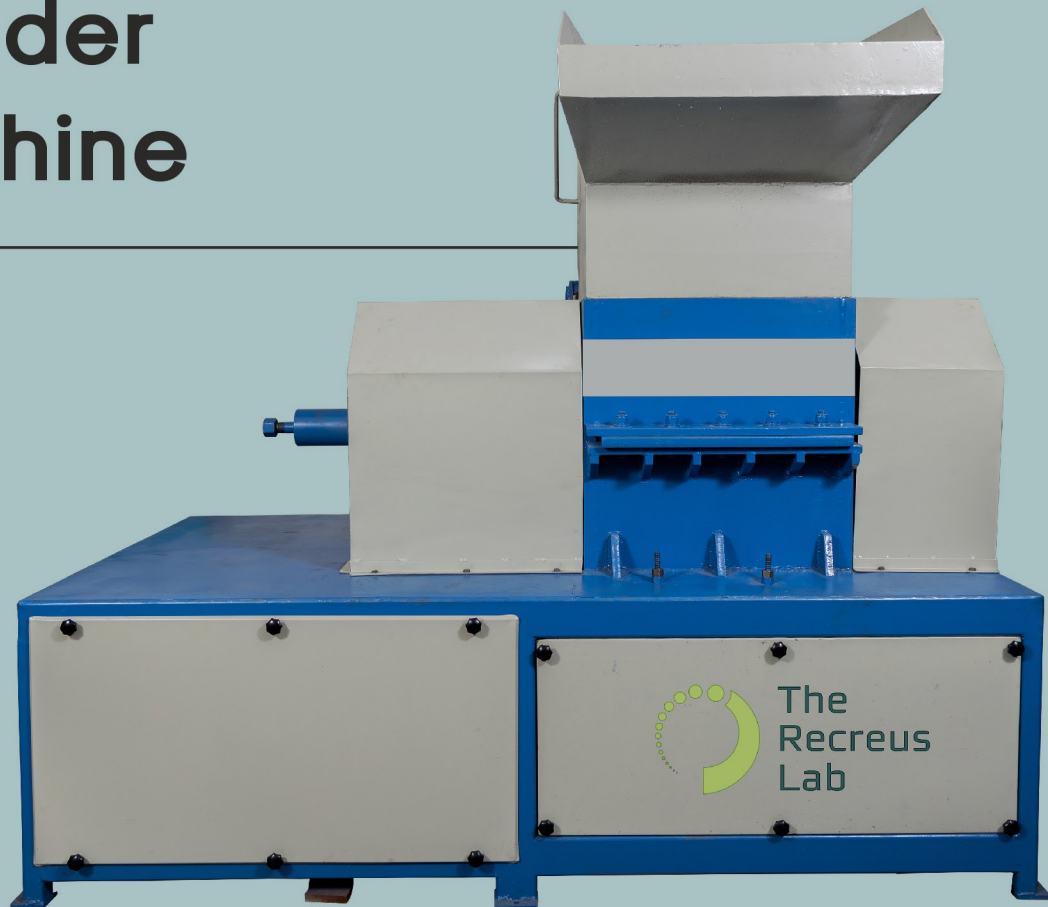




Recreus
Machines



Plastic Grinder Machine





IN12 Plastic Grinder

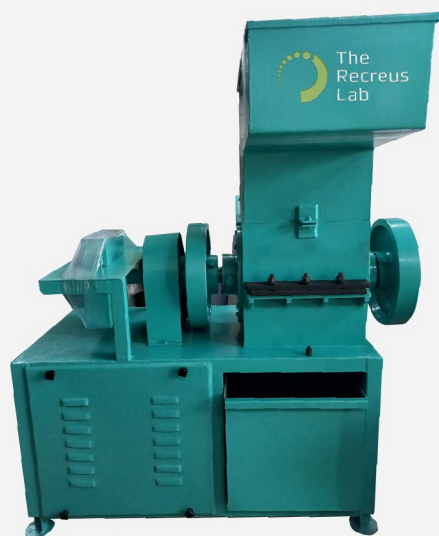
The Grinder Crush plastic items into small flakes ready to be turned into new things by the other machines.

Technical specification

- 3HP Three-phase Motor
- Crushing Chamber 300x300mm
- EN Steel Grade Blades : 2 Fix, 3 Rotating
- Output Capacity: 60-70kg Per Hour

Customization available

Images and dimensions may change in actual machine



IN15 Plastic Grinder

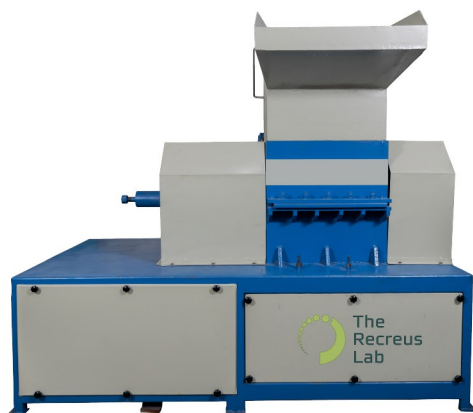
The Grinder Crush plastic items into small flakes ready to be turned into new things by the other machines.

Technical specification

- 10HP Three-phase Motor
- Crushing Chamber 450x450mm
- EN Steel Grade Blades : 2 Fix, 3 Rotating
- Output Capacity: 150-200kg Per Hour

Customization available

Images and dimensions may change in actual machine



IN24 Plastic Grinder

The Grinder Crush plastic items into small flakes ready to be turned into new things by the other machines.

Technical specification

- 30HP Three-phase Motor
- Crushing Chamber 600x600mm
- EN Steel Grade Blades : 2 Fix, 6 Rotating
- Output Capacity: 400-500kg Per Hour

Customization available

Images and dimensions may change in actual machine



V3 Shredder

The Shredder cuts plastic items into small flakes ready to be turned into new things by the other machines.

Technical specification

- 2HP Three-phase Motor
- 20 RPM Gearbox
- En8 Blades And Single Shredder Box
- Output Capacity: 5kg Per Hour

Customization available

Images and dimensions may change in actual machine



V4 Shredder

The Shredder cuts plastic items into small flakes ready to be turned into new things by the other machines.

Technical specification

- 5HP Three-phase Motor
- 20 RPM Gearbox
- En8 Blades And Double Shaft Shredder Box
- Output Capacity: 20kg Per Hour

Customization available

Images and dimensions may change in actual machine



Heavy Duty Plastic Shredder

The Shredder cuts plastic items into small flakes ready to be turned into new things by the other machines.

Technical specification

- 20HP Three-phase Motor (Each size)
- 20 RPM Gearbox
- En8 Blades And Double Shaft Shredder Box
- Output Capacity: 300-350kg Per Hour

Customization available

Images and dimensions may change in actual machine



PLASTIC AGGLOMERATOR

MODEL	INMAG-15	INMAG-18	INMAG-26	INMAG-35	INMAG-40
Main Motor (HP)	10	15	20	25	40
Batch Capacity Kg.	4	4-6	5-8	8-10	15-20
Production kg. /Hr.	15-40	20-50	50-75	60-100	125-200
Application					
LD/HM	✓	✓	✓	✓	✓
PP (Film/Tape)	x	x	x	✓	✓
PP/HDPE/PVC	x	x	x	✓	✓

Application:

This machine is developed for plasticizing and recycling of LLDPE, LDPE, HM, HDPE, PP, PVC, Nylon, Polyester and other type of film, tape, monofilament, fabric & production waste. Available in various model from 10 HP - 120 HP, Production from 10kg - 500 kg/hr.

Material

Material Forms

LDPE	Film/Rolls
LLDPE	Sheet
HM	Monofilament
PP	Raffia
PET	Textile
Polyester	Carpet
Nylon	Powder
PVC	Foam

Main Features:

- It's a simple process, complete process from feeding to discharge within 5 minutes.
- Easy to operate, compared to conventional process 1/3 labour required.
- It's granules are freely flowing and of high bulk density.
- Material can be coloured and mixing.
- Low power electricity cost as no external heat required.

PLASTIC WASHING SYSTEM



Model	Drum Size	Motor	Production
PPM-24/30TW	24 Inches	25 HP	100 kg/hr
PPM-32/39TW	32 Inches	50 HP	250 kg/hr
PPM-40/42TW	40 Inches	75 HP	500 kg/hr

This high-performance washing tank offers a powerful cleaning solution for plastic scrap, effectively removing contaminants and maximizing material recovery.

- **Key Features:**

- Thorough Cleaning: Agitation and friction effectively remove dirt, debris, and other impurities from plastic flakes.

- **Water Efficiency:** A closed-loop water system continuously cleans and filters the water for reuse, minimizing consumption and environmental impact.

PLASTIC DRYER SYSTEM



Model	PPM-50/120 HD	PPM-90/150 HD	PPM-120/200 HD	PPM-120/350 HD
Rotor Diameter	500mm	900mm	1200mm	1200mm
Rotor Length	1200mm	1500mm	2000mm	3500mm
Motor	20-40 hp	50-100 hp	75-150 hp	200 hp
Production				
LDPE Film	180-200 kg/hr	400-500kg/hr	600-700kg/hr	1400-1500kg/hr
HDPE/PP regrind	800-1000kg/hr	1000-1500kg/hr	1800-2000kg/hr	2500-3000kg/hr
PET Bottle Flakes	1000-1500kg/hr	1500-2000kg/hr	2200-2500kg/hr	2500-3000kg/hr

Introducing the efficient washing system to clean dirty shredded plastic.

- The clean flakes are conveyed to a drying system. This can be a centrifugal dryer that removes most of the surface moisture through centrifugal force
- Hydrocyclones use a vortex motion to separate remaining contaminants with different densities from the plastic flakes



**Plastic Extruder
System** _____





V3 Extruder

Extrusion is a continuous process where plastic flakes are inserted into the hopper and extruded into a line of plastic.

These lines can be used to make new raw material, granulated plastic, or used in your own creative ways.

Technical specification

- 2HP Three-phase Motor
- 50 RPM Gearbox
- EN41B Screw And Barrel Highly Polished
- 3 Heating Zone Sync With Master Control Panel
- Output Capacity: 10kg Per Hour

Customization available

Images and dimensions may change in actual machine



V4 Extruder Pro

Extrusion is a continuous process where plastic flakes are inserted into the hopper and extruded into a line of plastic.

These lines can be used to make new raw material, granulated plastic, or used in your own creative ways.

Technical specification

- 2HP Three-phase Motor With VFD
- 70 RPM Gearbox
- EN41B Screw And Barrel Highly Polished
- 3 Heating Zone Sync With Master Control Panel
- Output Capacity: 25kg Per Hour

Customization available

Images and dimensions may change in actual machine



Pelletizer Extrusion Machine

Extrusion is a continuous process where plastic flakes are inserted into the hopper and extruded into a line of plastic.

These lines can be used to make new raw material, granulated plastic, or used in your own creative ways.

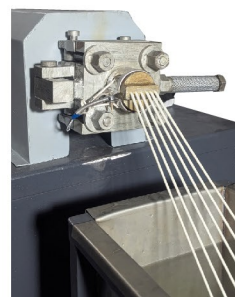
Technical specification

- 15HP Three-phase Motor With VFD
- 70 RPM Gearbox
- EN41B Screw And Barrel Highly Polished
- 4 Heating Zone Sync With Master Control Panel
- Output Capacity: 150-200kg Per Hour

Customization available

Images and dimensions may change in actual machine

Extruder With Strand Pelletizer



Application:

This machine is developed for pelletizing a wide range of Polymers like LDPE, HDPE, PP, PVC, PET, HIPS, PC, ABS etc. Production from 50kg to 500 kg/hr.

Pelletizing/Repelletizing a wide range of applications in the pelletizing of polyolefins can be handled using single screw extruders. Proven concepts with & without grooved feed zone and combination with & without a barrier screw permit high outputs and outstanding dispersion results. Strand, Air or Water ring pelletizers are used, depending on the application in hand. Material venting and smooth feed bushes can be supplied for special applications.

Material Forms

Film/Rolls
Sheet
Monofilament
Raffia
Textile
Carpet
Powder
Foam

Main Features :

- Single screw.
- Base made of electro welded steel sheet & channel.
- Helical Gearbox unit with casehardened and hardened gear pair with ground profile.
- Extruder cylinder and screw is nitriding steel with high skin hardness.
- Main electric panel with PID Temperature regulation zone & electric drives controls.
- Hydraulic screen changer Platen type.
- Stainless Steel water tank for cooling of various strands.
- Strand Pelletizer / Die-face cutter (water & air cooling).
- For more Production we also provide L/D upto 35:1.

MODEL	PPM-75Ex	PPM-90Ex	PPM-100Ex	PPM-120Ex	PPM-140Ex
Screw Diameter(mm)	75	90	100	120	140
Main Motor (HP)	20	25	30	50	75
Ratio (L/D)	26:1	26:1	26:1	26:1	26:1
Heating Load (kW)	18	22	28	32	36
Pelletizer Size (In.)	8	8	8	10	10
Pelletizer Motor (HP)	2 HP	2 HP	2 HP	3 HP	5 HP
Production (Kg/Hr)	60-80	90-120	100-150	200-250	300-350

* Specification are not binding and subject to change without notice.



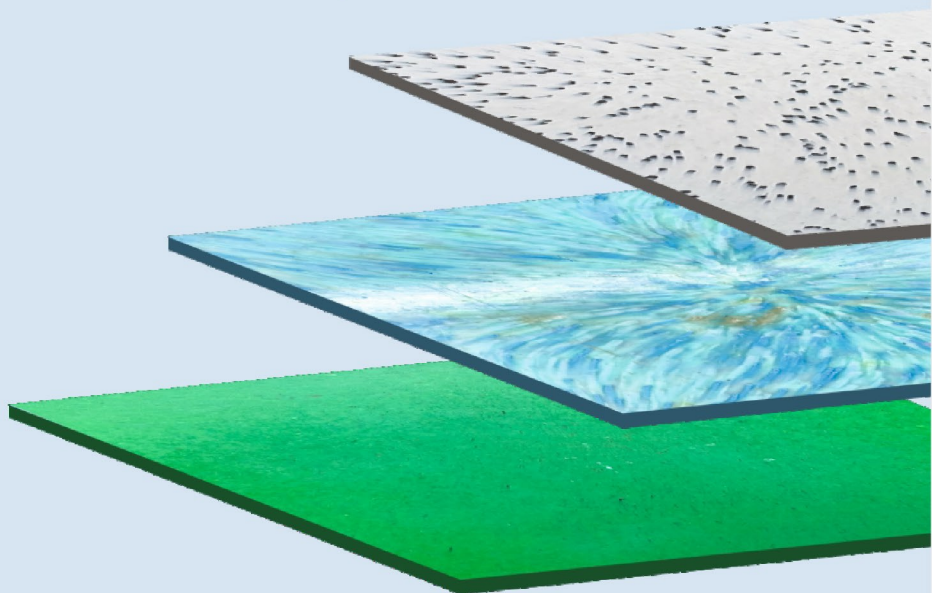
The Sheet press convert plastic wastes into recycled sheets.

Sheet Press System

Manual

Semi Automatic

Fully Automatic





Sheet Press 600 x 600 mm

This machine can make multiple sheets of 600 x 600 mm

Recycling around 3-8 kg of plastic per sheet.

Suitable for LDPE, HDPE, PP, PS, ABS

- Jack Capacity: 5 Ton
- 2 Heating Zone with 8 plates heater Sync With Master Control Panels
- 4 Bearing To Ensure Smooth Up-down Movement
- Aluminum Platform 650x650 MM



Sheet Press 1 Meter

This machine can make multiple sheets of 1 x 1 meter.

Recycling around 8-25 kg of plastic per sheet.

Suitable for LDPE, HDPE, PP, PS, ABS

- Jack Capacity: 8 Ton
- 6 Heating Zone with 40 plates heater Sync With Master Control Panels
- 4 Bearing To Ensure Smooth Up-down Movement
- Aluminum Platform 1300x1300 MM



Sheet Press 1.5 Meter

This machine can make multiple sheets of 1.5 x 1.5 Meter

Recycling around 13-30 kg of plastic per sheet.

Suitable for LDPE, HDPE, PP, PS, ABS

- Jack Capacity: 10 Ton
- 6 Heating Zone with 50 plates heater Sync With Master Control Panels
- 4 Bearing To Ensure Smooth Up-down Movement
- Aluminum Platform 1500x1500 MM



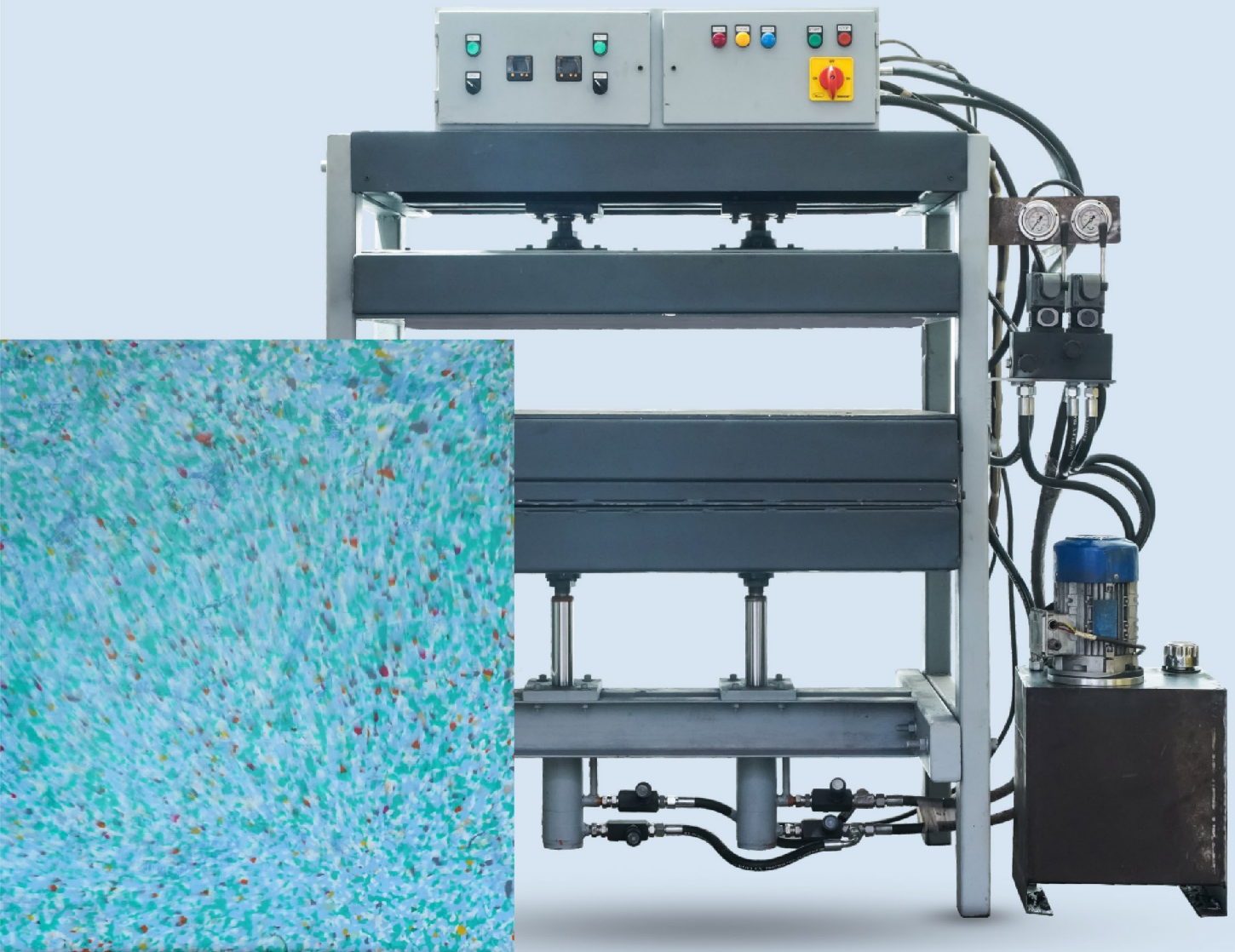
1.2 x 2.4 Meter Automatic Hydraulic Sheet Press System.

This machine can make multiple sheets of 1.2x2.4 meter.

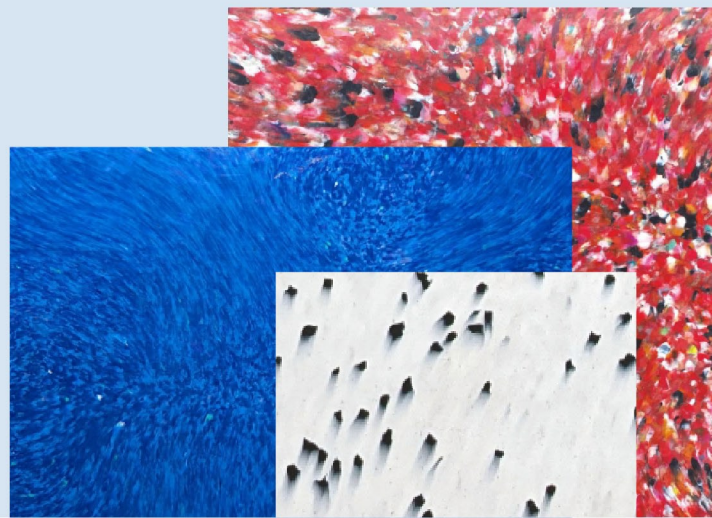
Recycling around 8-25 kg of plastic per sheet.

Suitable for LDPE, HDPE, PP, PS, ABS

- Jack Capacity: 100-300 Ton
- Automatic Hydraulic Daylight System From 1 - 10 Daylights
- Hydraulic Cylinders from 6 - 10 nos. Ram Diameter 150mm
- Working Size 1200x2400mm



Sheet Press System





1X1 Meter Combined Sheet Press

This machine can make multiple sheets of 1.5 x 1.5 Meter

Recycling around 13-30 kg of plastic per sheet.

Suitable for LDPE, HDPE, PP, PS, ABS

- Jack Capacity: 20 Ton Automatic Hydraulic
- 6 Heating Zone with 50 plates heater Sync With Master Control Panels
- **20 Ton Automatic Hydraulic for Hot & Cold Press**
- Aluminum Platform 1000x1000 MM



1.5X1.5 Meter Combined Sheet Press

This machine can make multiple sheets of 1.5 x 1.5 Meter

Recycling around 13-30 kg of plastic per sheet.

Suitable for LDPE, HDPE, PP, PS, ABS

- Jack Capacity: 20 Ton Automatic Hydraulic
- 6 Heating Zone with 50 plates heater Sync With Master Control Panels
- **Combined Dual Jack system for Hot & Cold Press**
- Aluminum Platform 1500x1500 MM



Injection Machine





Manual Injection machine

Images and dimensions may change in actual machine

Technical specification

- Operation: Manual
- Hand Powered Rack & Pinion System
- 1 Heating Zone Sync With Master Control Panel
- Capacity: 50gm/strock



Automatic Injection machine

Images and dimensions may change in actual machine

Technical specification

- Operation: Semi Automatic
- Super Polished EN41B Barrel And Tie Rod
- 2 Heating Zone Sync With Master Control Panel
- Manual Jack Mounted Mould filling station
- Capacity: 100-150gm/strock

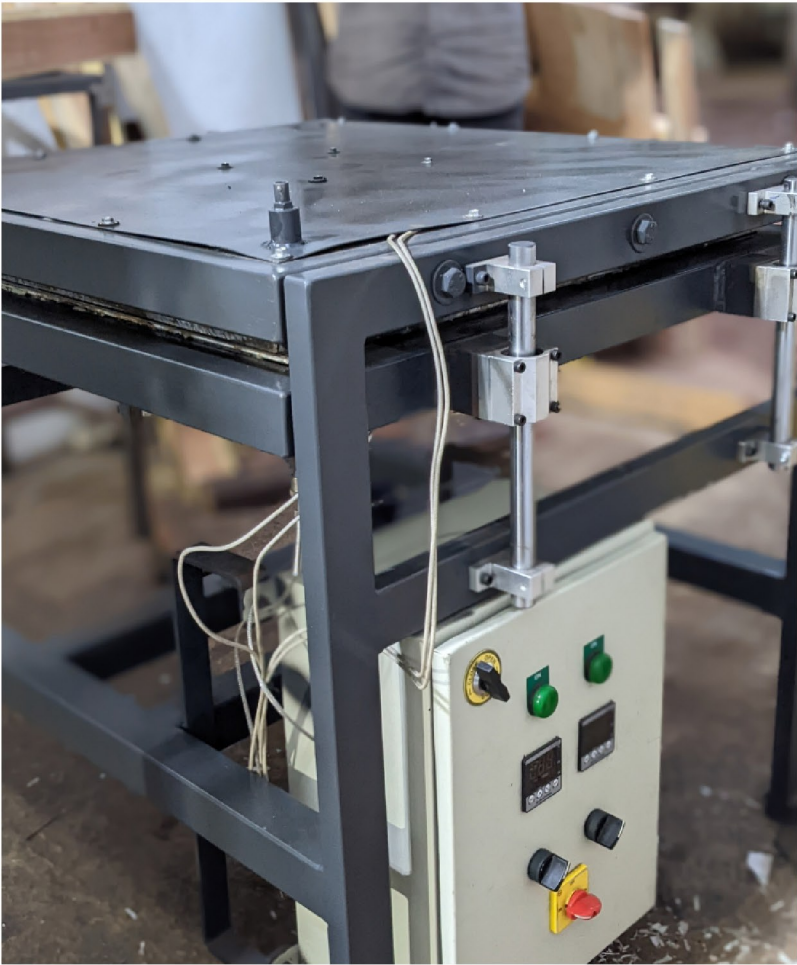


Fully automatic Injection machine

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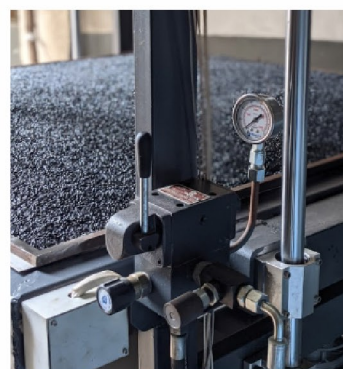
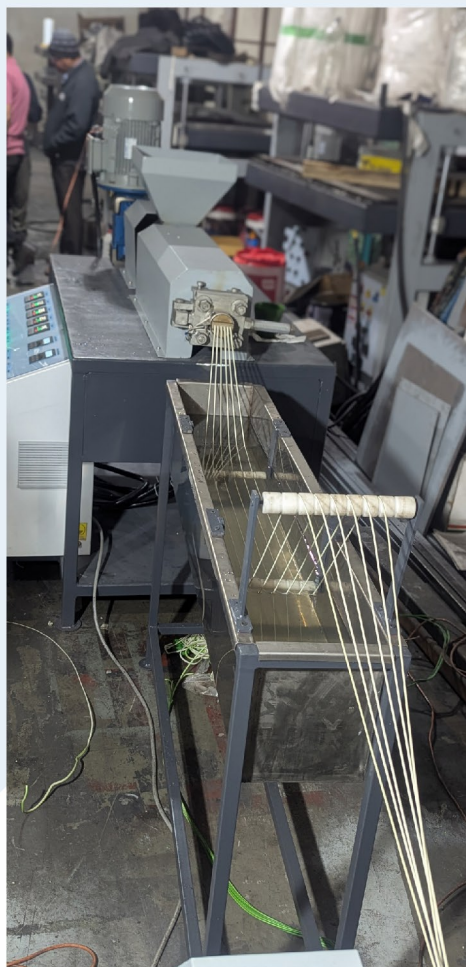
Technical specification

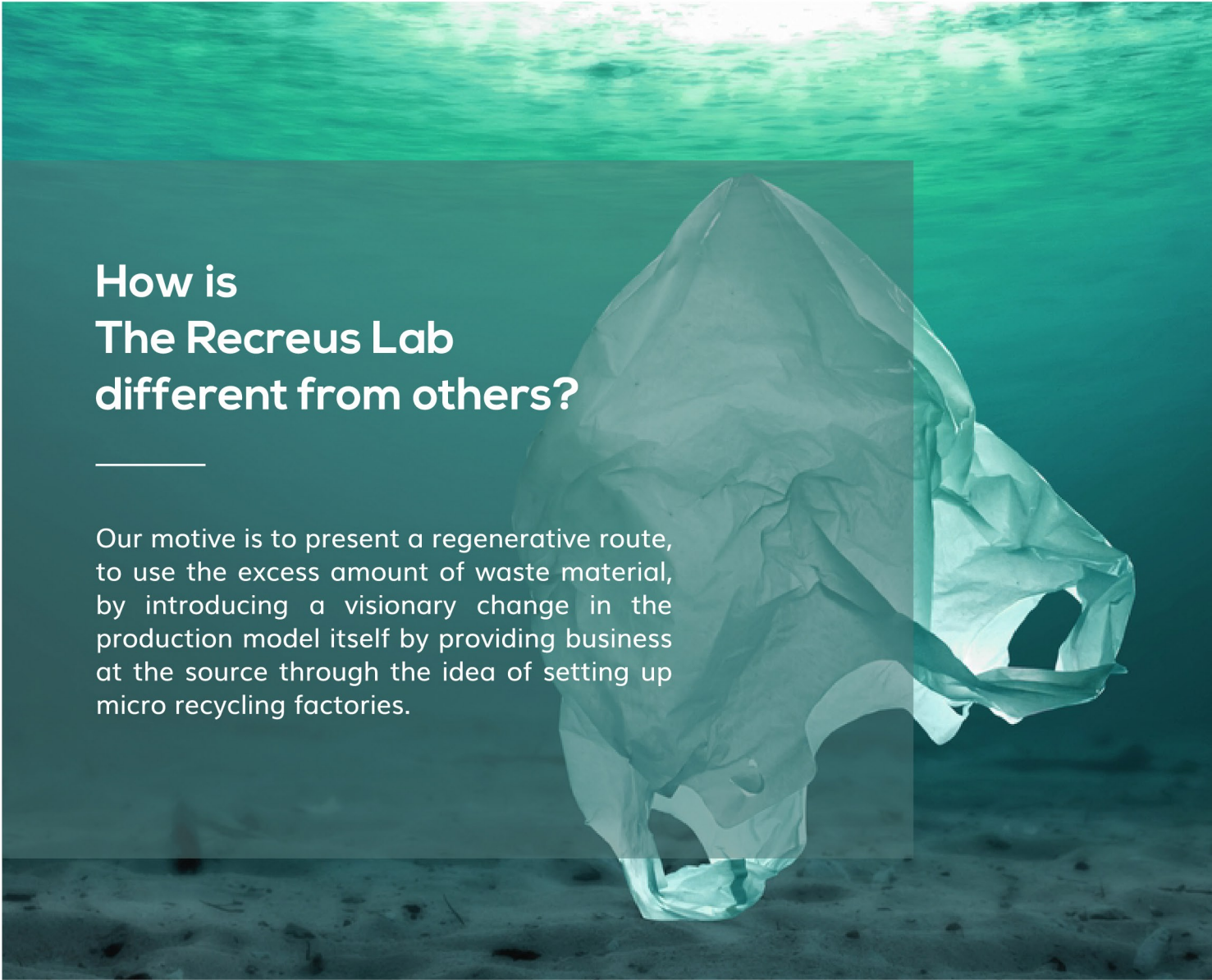
- Operation: Fully Automatic
- Super Polished EN41B Barrel And Tie Rod
- 2 Heating Zone Sync With Master Control Panel
- Automatic Jack Mounted Mould filling station
- Capacity: 400-500gm/strock





Gallery

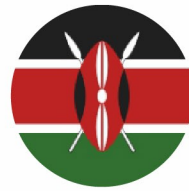
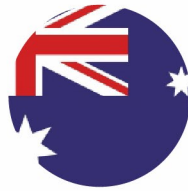
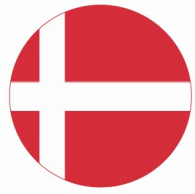
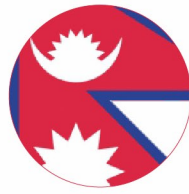
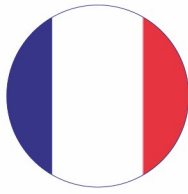
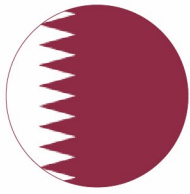
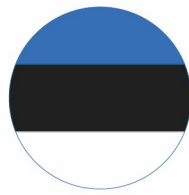
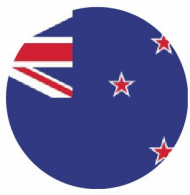


A white plastic bag is shown floating underwater. The background is a deep greenish-blue, suggesting the ocean floor or a deep sea environment. The bag is crumpled and has some air trapped inside, making it look like a small, white, irregular shape. The lighting is soft, highlighting the texture of the plastic.

How is The Recreus Lab different from others?

Our motive is to present a regenerative route, to use the excess amount of waste material, by introducing a visionary change in the production model itself by providing business at the source through the idea of setting up micro recycling factories.

























India generates 5.6 million tonnes of plastic waste annually. We aim to change the attitude of the way our Indian population feels about plastic waste by incorporating them into a part of a circular economy. We are also looking at providing basic education and generating rural employment through the same. Our goal is to work towards greener earth by focusing on creating a circular cycle of consumption of used plastic to make worthwhile products rather than demand virgin plastic. We are looking forward to cultivating a healthy and sustainable environment where we turn plastic into an invaluable material for business rather than discarding it, burning it, or letting it break down on the earth's surface for a million years



Why should you choose us?

We are your fellow citizens on the road to accomplishing our mission along with you all towards a circular economy on a global level through sustainable waste management and innovative methods of recycling. Our approach is environment-friendly and we firmly believe that recycling plastic is a game-changer and contributes to a greener environment by turning waste into productive items.

I OUR CLIENTS



www.therecreuslab.com