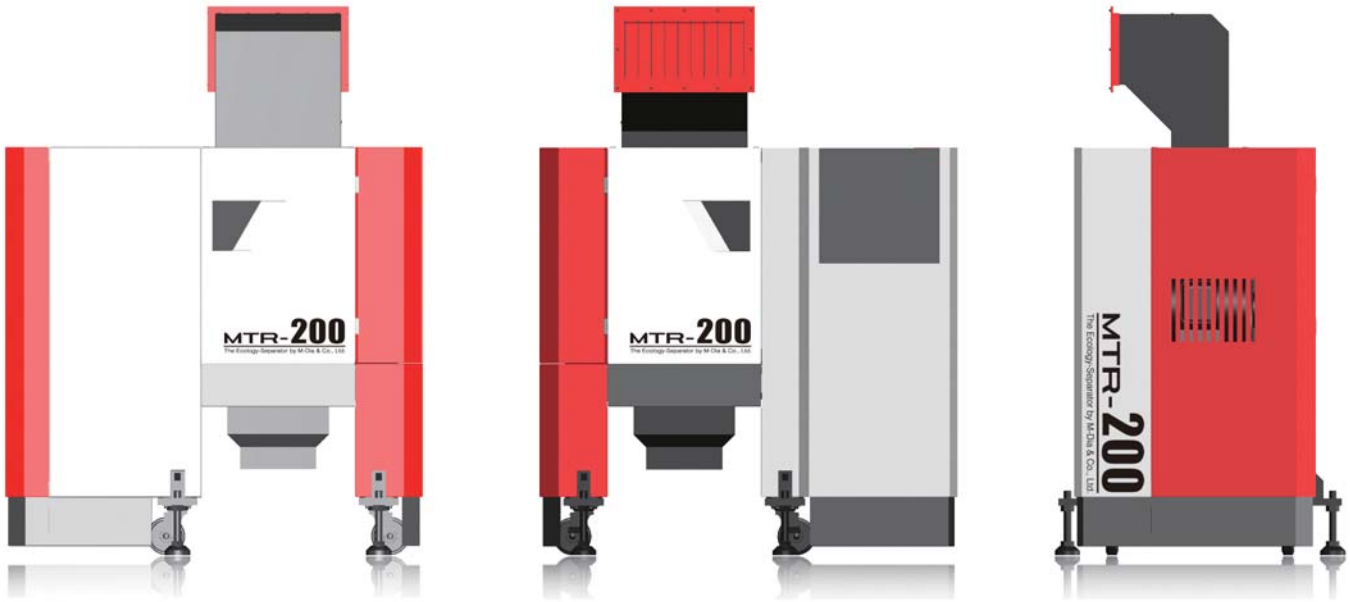
The Eco-Separator

From M-DIA & Co., Ltd



Company Info:

M-DIA & Co., Ltd was founded as a private company in June of 1979 as a maintenace/service shop for hydraulics and tool related machinery. We now offer global environmental services and perform social contributions through recycling technologies and manufacturing.
Through our experiences from maintenace, overhaul, and rebuilding, we have developed the know-how required to create a revolution in recycling machinery. Our flagship product, “The Eco-Separator,” is our best proof of this. M-DIA is constantly living up to CSR (company social responsbility), focusing on environmental solutions, and pursuing a renewable industrial economy.

Company Profile:

Company Name	M-DIA & Co., Ltd
Head Office	87-3 Wakasugi, Kamiichimachi, Nakaniikawagun, Toyama Pref., Japan 930-0314
Date of Foundation	June 1979
Establishment	November 21, 2005
President	Hiroyoshi Mori
Main partner Banks	The Hokuriku Bank, Ltd. The First Bank of Toyama
Main Plant Address	551-2 Nakamura Namerikawa City, Toyama Pref., Japan 936-0002
Work Content	Maintenance and repair service for machinery. New design, production, and sale for machinery. Repair, overhaul and re-building of used-machines. Manufacturing for recycling plants and equipment. Development and engineering for recycling plants. Research and development for recycled materials.

Product Info:

Purpose:

The foremost characteristic of the Eco-Separator is the ability to separate similar materials from a concoction of dissimilar materials.

Capabilities:

The Eco-Separator can separate metal, rubber, plastic, wood, paper, glass and others.

Endurance:

The quality of structure and design in the cutting tools used in our machines makes our machines very durable and assurance of longevity. The cutting tools themselves are easy to change; and therefore, can be considered a cost savings parameter against maintenance services. The size of materials recycled will be adjustable according to be requested.

Process Examples:

Ex 1.) Optical Fiber Cable → Separate/Crushing → Recycle

Optical Fiber Cable

Wire (Steel)

Cord (Plastic & Fiber)

Separate/Crushing

Ex 2.) Electrical Cable → Separate/Crushing → Recycle

Electrical Cable

Cord (Rubber) + Wire (Cu) shards

Separate/Crushing

Ex 3.) Automobile Tire → Separate/Crushing → Recycle

Tire

Fiber strands (Rubber)

Separate/Crushing

Ex 4.) Automobile Radiator → Separate /Crushing → Recycle

Heat Exchanger

Aluminum & Copper

Separate/Crushing

Ex 5.) Cardboard Pipe → Separate/Crushing → Recycle

Cardboard Pipe

Iron & Paper

Separate/Crushing

RECYCLING PLANT

Ex 6.) Pallet
→ Separate/Crushing → Recycle

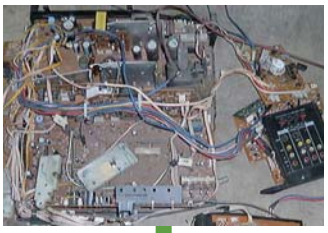
Wooden Pallet

Nails & Splinters

Separate/Crushing

Ex 7.) Electronic Parts
→ Separate/Crushing → Recycle

Electronic Parts



Misc. Plastic & Ferrous scrap

Separate/Crushing

Examples of Grain Size adjustment:

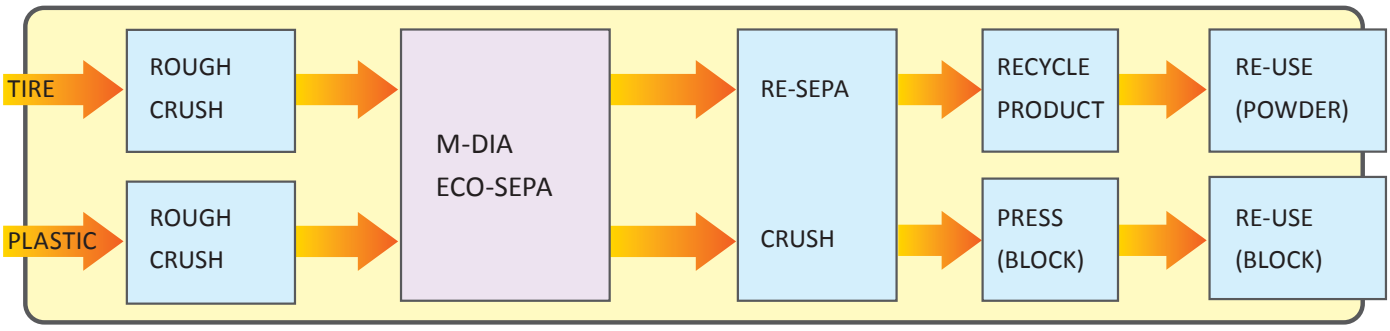
Grain size can be adjusted by changing the screen size.

Wood (Φ20 ～Φ30)

Plastic (Φ10 ～Φ40)

Recycling Flow Chart:

For scrap Tire and Plastic.



RECYCLING PLANT

Recycle Products:

Optical Fiber Cable

Examples of Recycle Product:

Recycled Pellets

Recycled Injection Parts

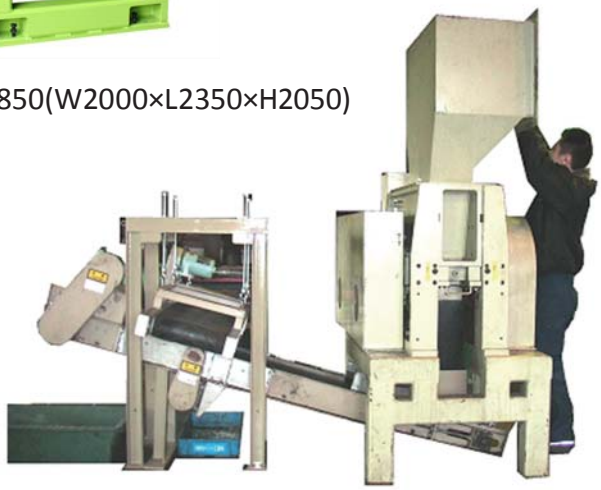
Other

Eco-Separator line-up:

Model: MTR-1450(W3000×L3500×H3150)

Model : MTR-850(W2000×L2350×H2050)

Model: MTR-400(W1250×L2350×H2050)



Model: MTR-200 (Magnetic Type Conveyor)
(W2600×D1700×H2300)

Standard Specification:

- Using special single axle shredder for separation.
- Wide range function including crushing, hammering, bursting, and cutting.
- Wide loader tank. (Feeder is not required).
- Low maintenance cost (Changing just cutter tool available).
- Compact machine size makes space and total cost saving.

Optional Specification:

- Reverse-Rotation Device.
- Motor speed (rpm) controlled by inverter.
- Overload and over capacity control device.
- Safety device against mixed foreign object in original material.

Separation Ratio:

Material recycled	Diameter (Phi/ϕ)	Separation Ratio
Scrap Tire	Max.250mm ϕ30	98%
Optical Fiber Cable	Max.300mm ϕ10	96%
Wooden Pallet	Max.500mm ϕ25	99%

*The Separation Ratio is subject to change given material type and size.

Capacity:

Model No.	Motor	Capacity (Plastic)	Capacity (Tire)
MTR-200	7.5kw/11kw	0.2 ~0.4t/H	0.2 ~ 0.3t/H
MTR-400	22kw/37kw	0.4 ~ 0.8t/H	0.3 ~ 0.5t/H
MTR-850	37kw/55kw	0.8 ~ 1.5t/H	0.5 ~ 1.0t/H
MTR-1450	75kw/90kw	3.0 ~ 5.0t/H	1.5 ~ 2.0t/H

*Capacity is subject to change given material type and size.

Sizes:

Model No.	Dimension (mm)	Hopper Size (mm)	Weight (t)
MTR-200	900×1700×1600	W222×L525	1.5
MTR-400	1250×2350×2050	W414×L710	4.5
MTR-850	2000×2350×2050	W798×L710	7
MTR-1450	3000×3500×3150	W1470×L710	11

*Capacity is subject to change given material type and size.

※Dimension: W x L x H (mm)
※Machine size and dimension is for reference only.
※Hopper is not included in the standard specification.
※All specifications are subject to change without notice.

Unavailable material types for the above machines:

※Casting and Forging products.
※Metal and Steel block. (Less than 6 mm sizes are available).
※Dust, Sand, Glass, Concrete Blocks.
※Materials controlled by the Government.

Patent applied

Japan: 3029620 / U.S.A.: US6481650B1 / China: 120494 / Korea: 10-0677868

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Creating Confidence and Trust

Manufacturing and Sales:
M-DIA & Co., Ltd
551-2 Nakamura Namerikawa-City,
Toyama Pref., Japan 936-0002
Phone: 81-76-476-0062
Fax: 81-76-476-0063
http://www.m-dia.com/

Maintenance and Repair Service:
M-TECHNO & Co., Ltd
Same address as above
http://www.m-tecno.com/

Located in Namerikawa City (Toyama Prefecture, Japan), a very famous and beautiful mountain area in the Japanese Tateyama Alps, is M-DIA & Co., Ltd, a pioneer in recycling machinery with their flagship machine, the Eco-Separator.

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