

Inline cutting units and waste handling systems



 **MATHO**

Our Company

Based in the South of Germany, Matho is one of the leading manufacturers worldwide for inline cutting units and waste extraction systems especially for the labels, converting and packaging industries. The systems extract, cut and convey your production waste into a waste disposal of your choice. Thanks to the modular structured concept, Matho is in a position to cover customer wishes with great flexibility and to customize every system to the needs of the client.

Matho's waste removal systems always include an inline cutting unit. According to the plans of the customer we are able to offer local and bag-bounded solutions, solutions with screw compactors and centralised solutions for complete factories into baler or static compactors.

Please find below an overview of our three product series:

Cutter & Cutter modules



Matho produces unique inline cutting units for different materials and industries. The units are designed to fit into already existing waste extraction systems or as the „heart piece“ of every system from us.

TYPES	Ø INPUT & EXIT
GR-100	100mm
GR-160	160mm
GR-180	160mm
GR-200	200mm
GR-400	200mm

Compact systems



Local and stand alone systems into PE-bags, Big Bags or Screw compactors. Every system is equipped with a machine frame, transportation fan, material separator, cutting unit and electrical control box.

TYPES	CAPACITY
CB-50	1x 150 l PE-bag
CB-100.1	1x 300 l PE-bag
CB-100.2	2x 300 l PE-bags
CB-100.S	250 mm Screw compactor
CB-1000.1	1x 1000 l PE-bag
CB-1000.2	2x 1000 l PE-bags
CB-1000.S	380 mm Screw compactor
CB-2000.1	1x 2000 l PE-bag
CB-2000.2	2x 2000 l PE-bags

Central systems

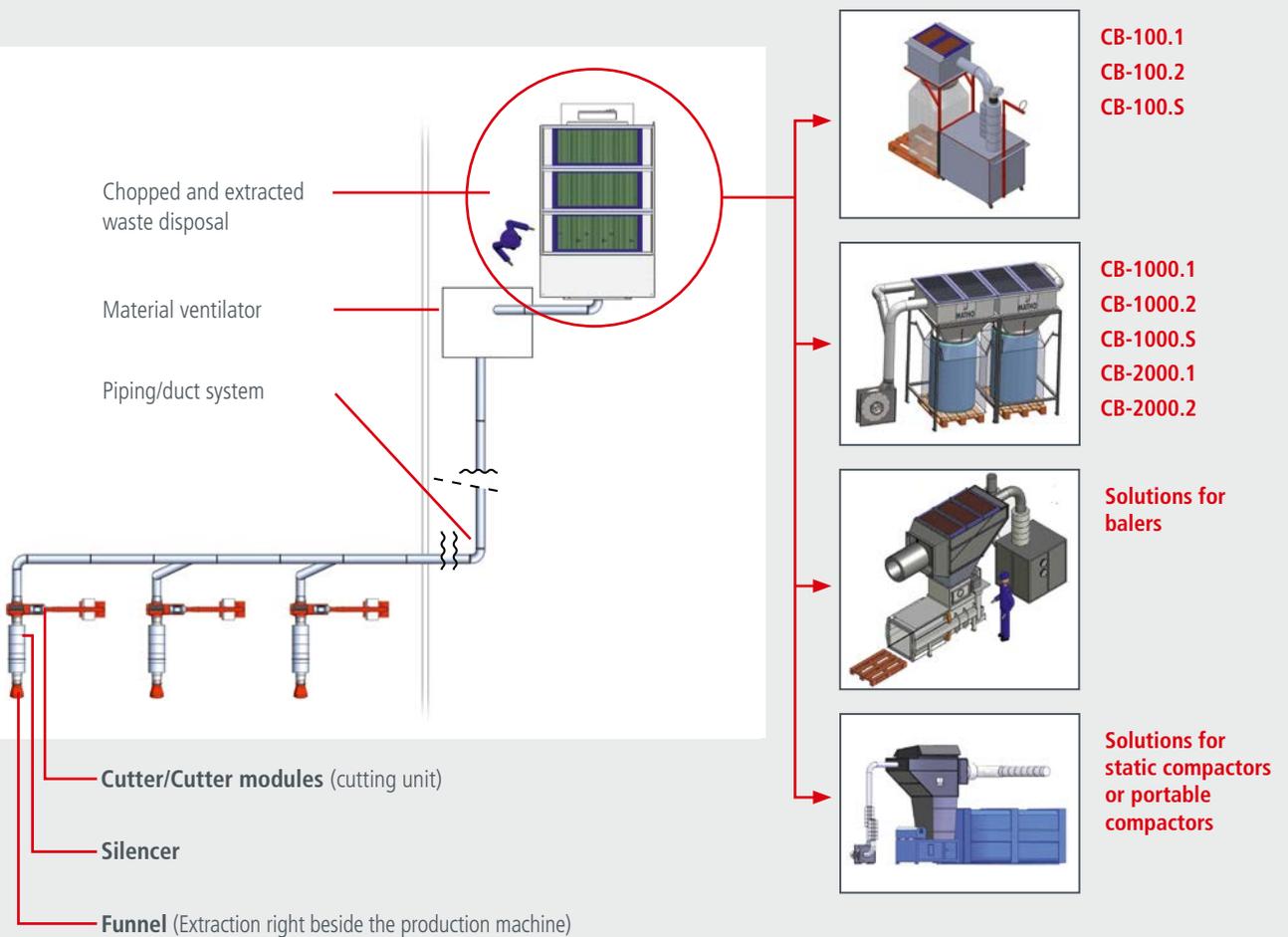


Our central systems are dedicated to extract and cut the waste of plenty of production machines centralized from the complete production site. There are a lot of different disposal solutions available, either new ones or already existing ones (baler, static compactors, portable compactors, screw compactors, etc.).

General system function

Inside the production facility

Inside or outside the plant



Cutter & Cutter modules

Wide range of cutting units for an integration in already existing or new extraction systems with different tubing cross sections. With these inline cutters we are able to cover many applications and cut a lot of different materials at lowest air resistance, highest throughput rates and very high reliability.

Single inline cutting units

TYPES

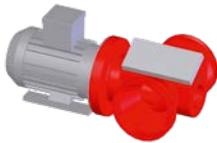
GR-100

GR-160

GR-180

GR-200

GR-400



Complete cutting module for non- or self-adhesive matrix waste

TYPES

MCM-160

MCM-180

MCM-200

MCM-400



Complete cutting module for non- or self-adhesive edge trim waste

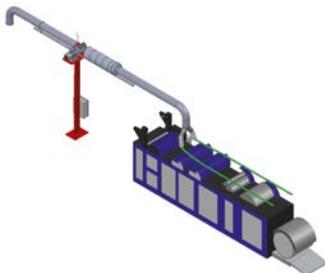
TYPES

TCM-100

TCM-160

TCM-180

TCM-200



Application:

Extraction and cutting of one self-adhesive matrix and two non-adhesive edge trims using a bypass pipe

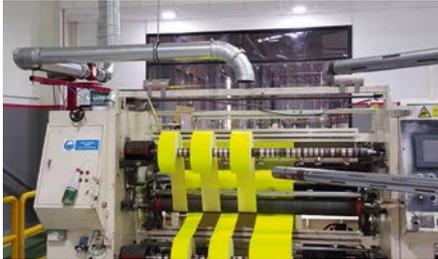
Solution: **MCM-160**

Typical applications in industrial production:



Application:
Extraction and cutting of eight non-adhesive edge trims with two TCM-160s from four packaging lines

Solution: 2x TCM-160



Application:
Extraction and cutting of two self-adhesive edge trims from a high-speed slitter

Solution: TCM-160



Application:
Extraction and cutting of one self-adhesive matrix, including a large rewind roll

Solution: MCM-200



Application:
Waste removal system for four edge trims from two high-speed slitters in customer company colours

Solution: 2x TCM-180



Application:
TCM-160 for two non-adhesive edge trims connected to a large waste extraction system

Solution: TCM-160



Application: Cutting system for self-adhesive matrix and trims

Solution: MCM-200



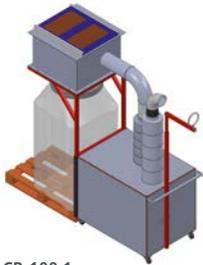
Application: TCM-160 installed below the roof for four edge trims from two label slitters

Solution: TCM-160

Compact systems

This series covers the complete range of compact and bag-bounded waste extraction systems, every time including an inline cutting unit. We supply any size, from small and portable with single collection bag to machine group solutions with double collection bags or screw compactors.

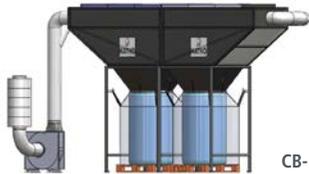
The systems are dedicated for the extraction and cutting of trims, adhesive matrix and punched waste in the packaging and converting industries.



CB-100.1



CB-1000.1



CB-1000.2



TYPES	CAPACITY
CB-50	1x 150 PE-bag
CB-100.1	1x 300 PE-bag
CB-100.2	2x 300 PE-bags
CB-100.S	250 mm Screw compactor
CB-1000.1	1x 1000 PE-bag
CB-1000.2	2x 1000 PE-bags
CB-1000.S	380 mm Screw compactor
CB-2000.1	1x 2000 PE-bag
CB-2000.2	2x 2000 PE-bags

Application:

Extraction and cutting of four edge trims from two high-speed slitters, including a compact dust filter system

Solution: **CB-1000.1**

Typical applications in industrial production:



Application:
Extraction and cutting system for one self-adhesive matrix machine
Solution: CB-1000.1



Application:
Cutting and extraction for a 410 mm wide self-adhesive matrix into a screw compactor
Solution: CB-1000.S



Application:
Double big bag system for twelve edge trims from six slitting machines
Solution: CB-1000.2



Application:
Extraction and cutting system for ten production lines in the flexible packaging industry
Solution: CB-2000.2



Application:
Moveable extraction system for self-adhesive matrix including inline cutting unit
Solution: CB-100.1



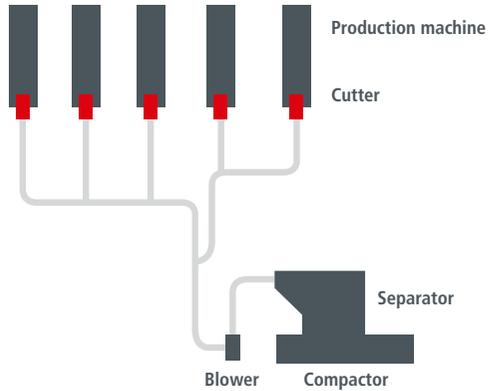
Application:
Moveable waste extraction system for matrix and edge trim waste
Solution: CB-100.1

Central systems

Complete waste extraction systems for a large amount of production waste. We offer individual solutions for almost all customer requirements and almost every location. Most of our central systems are completely customized.

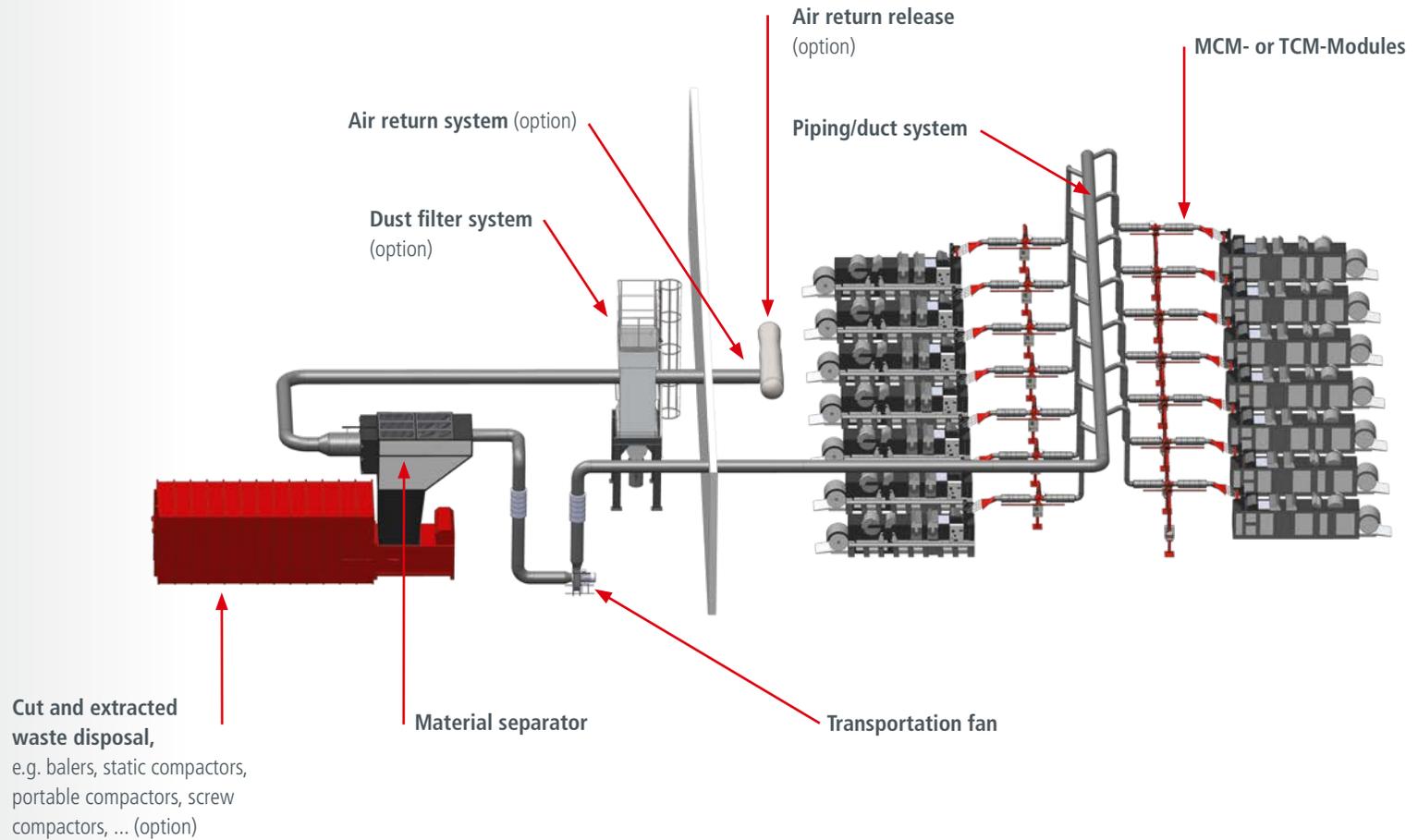
Usually the chopped waste material is transported via a main pipe system and a transportation fan to a baler or a static compactor inside or outside the building, either as a new storage device or an already existing one.

A dust filter and an air return system are optional available. The central systems can be extended easily, just if you plan to start with the extraction of one machine in the beginning with the option to add all other existing machines in the future.



Application:
Central waste removal system for matrix machines into a static compactor

Central systems: General system function



Typical applications in industrial production:



Application: Matrix removal system into a static compactor including an air return system and a sound enclosure for the transportation fan



Application:
Waste extraction system for five matrix machines into a baler



Application:
Outside system of a large label matrix removal system



Application: Large matrix removal system for ten machines including a baler



Application:
Extraction system for different high-speed slitters into a special customer bin



Application:
Waste removal system using an already existing static compactor



Benefits:

- Maximum speed of the production machine possible
- Reduction of waste volume thanks to the integrated cutting unit
- Therefore less disposal costs, as volume is smaller and less container changes
- Waste separation option enables customer to recycle materials
- Extraction of irregular shaped matrix forms at higher production speeds
- Less stops of the production line, as waste is continuously extracted and no matrix breaks
- Reduction of labour costs, as nobody has to take care of the waste
- Less material costs, as customer can reduce the trim width to a minimum (narrower label stock)
- Increased cleanliness
- Improved production process (24/7 non stop production)
- Increased operational work safety (no heavy matrix rolls lifting)

Options for central systems:



Steel structure for portable compactors

Sound enclosure for transportation fans



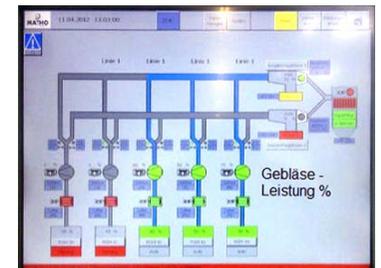
Dust filter system

Dust filter system



Air return system: Air release inside the building

Electro-pneumatically valve system (PLC controlled)





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