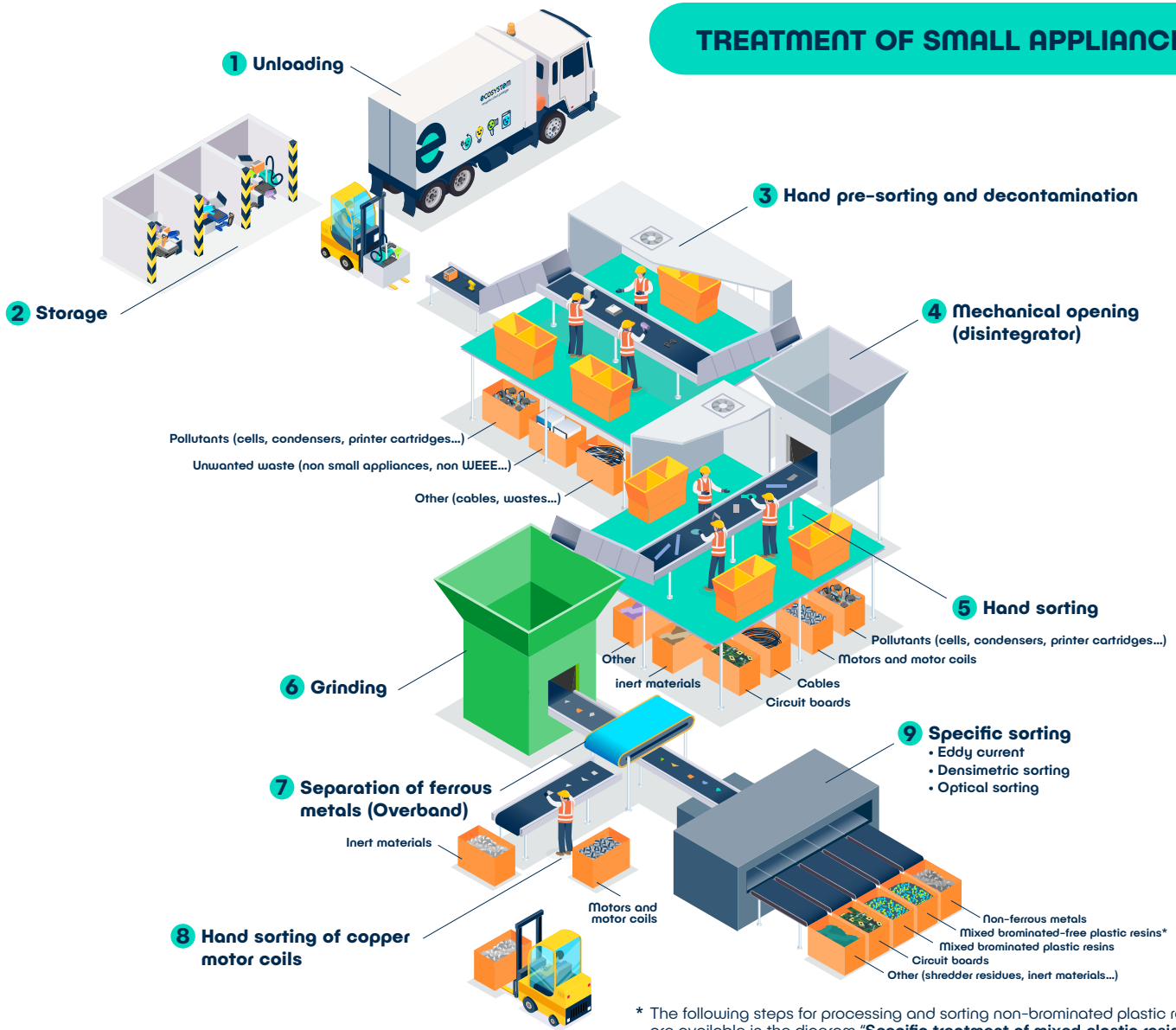


TREATMENT OF SMALL APPLIANCES



* The following steps for processing and sorting non-brominated plastic resins are available in the diagram "Specific treatment of mixed plastic resins"

1 Unloading

The equipment is unloaded in dedicated secure areas.

2 Storage

The equipment is stored pending treatment. Storage takes place in such a way as to ensure the line is regularly supplied, and to handle the volumes to be treated.

3 Hand pre-sorting and decontamination

Hand pre-sorting enables operators to remove various regulated substances and components (cells, batteries...) requiring further specific treatments, and to extract different fractions (cables, unwanted materials, etc.) that do not need to, or must not go into the disintegrator.

4 Mechanical opening (disintegrator)

The equipment passes through a disintegrator that opens and breaks it into several fragments, to ensure inside components are easily accessible and released.

5 Hand sorting

Hand sorting enables operators to remove different fractions (pollutants, cables, motors and motor coils, etc.) that require further specific treatments, or must not go into the grinding machine.

6 Grinding

The grinding machine turns the remaining fractions into smaller manageable pieces so they can be easily sorted during the following stages.

7 Separation of ferrous metals (Overband)

An overband magnetic separator attracts and removes magnetic fractions (ferrous metals)

8 Hand sorting of copper motor coils

An operator manually separates motors and motor coils from the other fractions of ferrous metals.

9 Specific sorting

Different sorting procedures may be combined to separate the remaining fractions into more homogeneous categories:

- **Eddy current:** non-ferrous metals are separated using magnetic fields.
- **Densimetric sorting:** for example, using a vibratory grid that separates light and heavy fractions, or the flotation technique that selectively sorts fractions according to their density and ability to float.
- **Optical sorting:** different optical instruments (infra-red systems, x-rays...) are used to detect fractions including plastic, cards, wires.

All the extracted fractions are then treated specifically in three different ways:

- Recycling in order to produce new materials (preferred solution),
- Energy or material recovery,
- Disposal in compliance with the relevant regulations.