

FROM WRAPPERS TO RECYCLED FILMS

Low-density polyethylene

LDPE Recycling Process from Scratch

LDPE is part of the group referred to as flexible plastics. It is the material behind foil, bags, wrappers, film, trash bags and more. But did you know that these materials can be transformed into new products?

LET'S BREAK DOWN THE PROCESS:

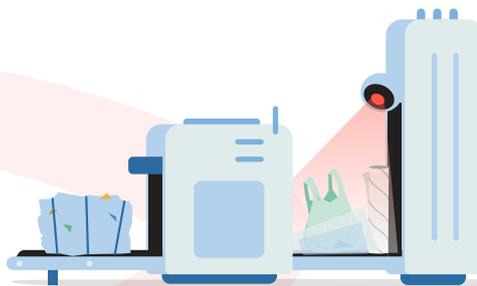
1. COLLECTION

Used LDPE packaging film is collected with other materials and brought to a sorting center.



2. SORTING

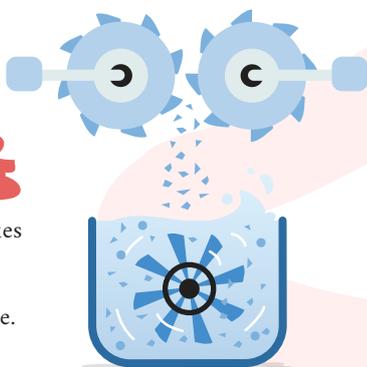
At the sorting center, films are separated from multi-material film, black film, and metals and pressed into bales for transport.



Packaging that combines different types of plastics and materials like aluminum and paper can't be recycled in a high-quality process and is discarded.

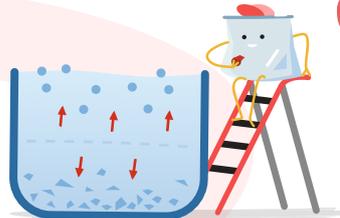
3. GRINDING & WASHING

The film is cut into flakes before it is washed to remove non-plastic residues like food waste.



4. DENSITY SEPARATION

In a flotation tank, materials are separated by density with films floating while heavier materials sink. In the case of LDPE, the material will float.



5. EXTRUSION

LDPE flakes are melted and filtered to form recycled pellets ready to be used in new products, such as wrapper films.

