



FOR RECYCLING
OF CONTAMINATED PLASTICS

WASHING PLANTS

CONCEPTION

Starting with size reduction and washing of slightly contaminated bottles/containers and films from packing materials, right through to heavy contaminated agricultural film NEUE HERBOLD offers complete turn-key recycling systems.



- efficient, wear resistant shredders and granulators specially designed for wet operations
- long lasting, energy efficient wash- and separating systems
- high performance centrifuges for separation of surface contaminations
- film silos for material storage in front of the pelletizer
- service, consulting and optimizing for existing recycling plants
- besides the on site operation NEUE HERBOLD also designs their washing system for mobile applications
- we would be pleased to optimize your present system

For special applications like PET bottle recycling, where highest material quality is requested NEUE HERBOLD also offers plant components like:

- hot-washing systems
- hot-wash system with separation of glue
- pneumatic separating systems like cascade sifters

The result of a well designed plant is clean and high quality regrind

The NEUE HERBOLD washing plants are based on modular conception and may be adapted or extended in accordance to material and customers special requirements.

Examples of materials processed by NEUE HERBOLD washing plants are:

- agricultural film
- industrial-, trade- and household film
- thin and stretch film
- HDPE bottles, oil bottles and containers
- canisters, bottle crates, waste bins
- PET bottles
- car bumper
- battery crates
- fiber materials like big bags, fishing nets and many other contaminated plastics
- drums, industrial-, trade- and household containers



HZR 1300

Pre-size reduction

Depending on material and degree of contamination NEUE HERBOLD has developed a new series of shredders that are from now on part of NEUE HERBOLD's delivery scope.

- one shaft shredders
- two shaft shredders
- multiple shaft shredders
- guillotines



RM 1100/2



GS 1500/1200

Opening of baled material

Especially for opening of various baled materials like bottles or household waste NEUE HERBOLD has developed the bale breaker type SB that allows downstream sifting of the material and manually or mechanical separation of rough contamination by vibrating screens or drum screens.



Size reduction and washing

NEUE HERBOLD granulators with double cross cutting system can be operated alternatively as dry granulators or as wash granulators.

Water injection during the cutting process results in precleaning of the material.



Wet granulator with maintenance platform. The prewashed and size reduced material drops into a friction washer and is then discharged into a mechanical dryer.



WT 5045

Pre-Separation of rough contamination

To prevent damages to the downstream grinding and washings systems, Neue Herbold offers prewash devices like the pre-wash drum type TW.

The pre-wash drum separates the shredded film from heavy contamination like stones, tire scrap and metals.



Friction washer
FW 560/3000

Friction separator
FA 600/3200



Separation step separation tank/swim-sink-separation

The dimension and shape of the NEUE HERBOLD separation tanks type TB are designed to prevent turbulences affecting the separation process.

Suitable discharge devices transport the material (floating / non floating) to the down stream systems. To guarantee a long-life cycle, the NEUE HERBOLD separation tanks are manufactured in stainless steel (steel grade 1.4301).



Separation tank with
chain scraper conveyor

Intensive washing, separating of the contaminated water, separation of organic contamination

The material which has been washed and size reduced in the wet granulator, falls into a dewatering screw which separates the dissolved contamination. For plastics with paper components a friction washer with fast rotating paddle screw is used, followed by an intensive washer, which separates the paper together with the dirty water.

Pre-wash Screw
ES 300



WASHING & SEPARATING

DRYING & SILO TECHNIQUE



Mechanical drying

The mechanical dryers manufactured by NEUE HERBOLD are drying aggregates operating on the centrifugal conception.

Drying results reached by these dryers do not require additional thermal drying for many types of material.

Thermal Drying

If required the mechanical dryer may be followed by a thermal drying process to reduce the moisture of the material.

The thermal dryer type TT is the suitable device for this application.

To guarantee an efficient energy consumption the heating zones of the dryer are controlled in a sequential mode.

The standard dryer is supplied with an electrical heating aggregate.



Storage / Ensilage

One major component of a recycling plant for plastic scrap is the storage of valuable substances.

NEUE HERBOLD supplies suitable silo systems for all kinds of regrind materials, especially for poor-flowing materials like film flakes or mono- and multifilaments.



Round silo



Film silo type FS

Film silos type FS



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