

Recycling line for

PVC window profiles and post consumer windows

hamos WRS









The **hamos WRS** recycling line has been conceived specially for processing of PVC window profiles. Regrind material from both production waste as well as used windows can be recycled. The PVC has such high purity after separation that it can be directly processed again by coextrusion into new profiles.

hamos PVC window recycling lines offer you the following advantages:

- Closed material circuit from PVC waste to new profiles!
- Highest levels of PVC purity
- Separation of rubber, wood, glass, metal, etc.
- Glass fibres and PVC containing glass fibres can be separated
- Fully automatic turnkey system
- Separation of black seals from dark PVC
- Dry separation process
- High throughput possible in 24/7 operation
- Separation irrespective of specific gravity
- Low energy consumption and low staffing level

Performance data

- For PVC regrind material with particle size <10 mm
- Throughput up to several tonnes per hour
- Complete material logistic system (feeding silos, conveyor systems, etc.) available
- Automatic filling in Big Bags
- Standard WRS 1000 and WRS 2000 lines for 1,000 kg/h and 2,000 kg/h

hamos supplies leading worldwide window recyclers!



Function

Clean rigid PVC regrind from recycling of PVC window profiles is a valuable raw material that can be used again for new PVC window profiles. Contamination such as seal rubber, nylon (polyamide), flexible PVC, etc. is however problematic. Such contamination can influence the application possibilities of PVC recyclate or even prevent recyclate use.

The hamos WRS window recycling line has been conceived specially for processing of PVC window profiles, profile off-cuts and used windows and it functions in the following way:

The PVC profile off-cuts are first shredded and dust then removed. Dry operation hamos EKS electrostatic separators separate practically all contamination from the PVC regrind material. Fully automatic separation takes place irrespective of colour and specific gravity. Different electrostatic charges on rigid PVC compared to those on rubber and other plastics are exploited for separation. In this way other contamination such as, e.g. metals, wood, glass and mineral contaminants are also separated to some extent.

The PVC recyclate has typical purity of over 99.5% after electrostatic separation.

SEA PIXEL optoelectric colour sorters are installed downline for further enhancement of the purity and/or improvement of the brightness (whiteness). Coloured particles are recognised optically and blown out of the line entirely automatically. Aside from white PVC, coloured PVC (e.g. brown) can be produced in high purity.

hamos WRS turnkey PVC window recycling lines can be constructed as follows:

- Shredding of PVC profiles by cutting mills (granulators)
- hamos KWS for separation of extremely fine metal particles, wood, cardboard, conductive rubber, etc.
- hamos DRS for dust removal from materials by integration of zigzag sifters (classifiers)
- hamos EKS for electrostatic separation of
 - Rubber and flexible PVC seals
 - Foreign plastics
 - Glass fibres
- Intermediate material storage in buffer containers or silos
- Extremely high performance magnets and/or electronic equipment for removal of all metals
- Automatic filling in Big Bags
- Complete material logistics system for fully automatic operation in 3 shifts

Our offer

You are interested in a separation test in our technical department? Then please take up contact with us. We will gladly show you which additional value your PVC can have when it is free of contamination.

Do you have questions or tasks to be fulfilled concerning the subjects of separation and recycling? Speak with us. We will gladly help you!

All data and images in this catalogue are purely indicative and have no legal validity. The producer reserves the right to apply changes or introduce other information at any time and to do so without prior notice.

hamos GmbH Recycling- und Separationstechnik Im Thal 17 82377 Penzberg / Germany

Phone: +49 8856 / 9261-0 Fax: +49 8856 / 9261-99

marketing@hamos.com www.hamos.com Your local agent / representative