The UK produces an increasing quantity of plastics, particularly PET and HDPE. The recycling of these plastics is becoming increasingly beneficial, both financially and environmentally. STADLER® has a fully developed system which contributes towards the production of food quality plastic flake.

STADLER® has proven its ability to remove film fraction from a rigid mixed fraction (see the “WRAP Domestic Mixed Plastic Packaging Waste Management Options”, final report).

STADLER® Plastic Sorting Plants are designed to process loose or pre-baled mixed plastic waste into highly pure PET and HDPE fractions, suitable for direct transfer into granulating and washing plants.

Innovation
Our product developers have proven their technical expertise and capacity for innovation time and again. STADLER® has received several innovation awards for intelligent sorting solutions.

True service only begins when the current project has been delivered; with strong support and service back up. We react quickly and reliably and carry out repairs in record time so that your downtimes are kept to a minimum. Service from STADLER® is based on your operational requirements.

For this reason, STADLER® is the right partner for you. Call us – we will provide you with all the information you need for your project.
STADLER® Process

The recycling of plastic bottles into a flake or pellet product has precipitated a demand for highly pure fractions suitable for washing and granulation processes.

STADLER® Plastic Sorting Plants are optimised for a seamless integration of the pre-treatment plants to the washing plant, guaranteeing maximum efficiency through a bespoke sorting process.

The bales are opened and the bottles are individualised, contaminants such as metal, tares, film and paper are removed in the first part of the process. The second stage separates plastic bottles by polymer and colour using near infrared technology. The layout and quantity of scanners is individually designed for each customer’s requirements. The task of each scanner can be changed and therefore gives the plant flexibility. The plant can be designed to remove the desired polymer types and colours.

The separated fractions are stored in automatic bunkers, buffering and transferring material directly to a washing plant for granulation or baled for plastic buyers.

Creating plastic fractions of this quality dramatically increases the value of the material and enables the production of a high quality washed flake or pellet.

Description of the plant:

The material entering the system is in the form of baled or loose mixed plastic bottles with contamination, the input mostly constituting PET and HDPE which have been separated through conventional material recovery systems or source segregation.

The material is processed in a pretreatment plant and divided into the required streams and the purity. The separated streams are then baled or transported to the washing process.

Bunker conveyors with separated fractions.