Taiwanese company automates plastic bottle sorting

Tong Yi
(Taiwan)

Product:
VARISORT N

All over the world waste plastics are a highly complex recycling subject. Nowhere else is there such a large number of different materials that need to be sorted. The pure sorting of waste plastics and their returning into the raw material cycle is particularly relevant both from an ecological and economical point of view. The correct sorting technology is of outstanding importance here.

In the sorting of plastic bottles into pure plastic fractions the Taiwanese recycling company Tong Yi is serviced by Sesotec Pte.Ltd., Singapore, together with the distribution partner Uniplast Corporation. Tong Yi automates plastic bottle sorting with the Sesotec VARISORT N recycling sorting system.
Tong Yi specified the sorting requirements that have to be met. Test material from Tong Yi was sorted in the technical laboratory at the Sesotec headquarters in Germany. The customer thus had the opportunity to convince himself of the results and capabilities of the recycling sorting systems.

Optimal sorting solution for individual recycling requirements

Tong Yi uses the VARISORT N recycling sorting system – based on multispectral analysis – for the reliable sorting of plastic bottles, and thus gets two high-quality plastic fractions, PE and PET.

A special challenge at Tong Yi is that the bottles to be sorted are transported on the conveyor belt in unpressed form. This leads to additional rotation of the bottles, which is countered by a special belt design. The conveyor belt with a length of five metres furthermore is used to singularize the whole bottles that should be sorted, which further increases the reject accuracy in the separation process.
The VARISORT version that is installed at Tong Yi features a three-shaft design, which means that three fractions can be separated in one sorting process. Fraction 1 contains PE, fraction 2 PET, and fraction 3 the other plastics and materials.

Depending on future sorting requirements and materials the customer can retrofit his existing system with additional sensors. This combination of different sensor types apart from plastics separation also allows applications in the fields of colour sorting and metal separation.

Sesotec - an overview
The Sesotec group is one of the leading manufacturers of machines and systems for contaminant detection and material sorting. Product sales primarily focus on the food, plastics, and recycling industries. Sesotec’s global presence includes subsidiaries in Great Britain, Singapore, China, USA, France, Italy (2), India, Canada, Thailand, a representative office in Turkey, and more than 60 partners all over the world.

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