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Production Line for High-Quality Re-granulate from Printed Foil Waste in Closed Circuit at the POLIPAK Co.*

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Abstract

The technology for producing high-quality re-granulate from the company's own, printed film production waste in a closed circle, is discussed. The closed-circuit production process ensures the processing and re-use of 100% of own waste, generated in the enterprise. A prototype of an automated, innovative production line demonstration plant for the production of re-granulate is described, allowing all processing steps in the production of waste to be efficiently combined, including by increasing the degree of automation (AGV robots) in the various stages of the recycling process. The installation works are situated in a newly built production plant in Środa Wielkopolska (Poland).

Keywords: automation, recycling, foil, Industry 4.0.