

Description of the innovative Triple Pak project

The Applicant's own enterprise is aimed at developing, optimizing, validating and implementing an innovative, at least on a European scale, high-performance automated and robotic technology for producing three-layer knurled premium garbage bags. The implemented technology allowing for the production of 3 layers of film independently will allow application in the central, supporting part of the regranulate even by 70%, significantly strengthening the product, limiting the adverse impact of plastics on the environment and increasing the strength parameters of the product.

The leading innovation in the project will be product innovation (production of products of quality and performance parameters not currently offered in Europe). Equally important from the technological point of view will be the innovation process including automation and robotization of production towards implementation in Polipak Sp. z o.o. elements of the concept of Industry 4.0. Currently, garbage bags are made of a single-layer film, which practically prevents the production of a strong, aesthetic, fragrant, functional and cheap product at the same time. Each of the indicated features and functions is the result of using a different raw material in the production process. Their integration from a technological point of view is only possible in a product consisting of several layers.

The qualitative effect is reinforced by the use of the product knurl system, which optically thickens the product, making it more resistant to breaking, dragging, puncturing and other damage. Thanks to this, the project result is a response to market demand in terms of price, functionality, usability and ecological values. As a result of the research process into the economic practice of Polipak Sp. z o.o. patent-pending technology, unique at least on a European scale, for producing bags with currently unavailable quality parameters will be introduced.

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