

RECP Best Practice Catalogue

*Changing from volumetric packaging to
packaging by weight*

*Developed within the framework of MED TEST II
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UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



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Best practice - Changing from volumetric packaging to packaging by weight

SECTOR: **Food & Beverage**

SUBSECTOR: Processing and preserving of fruit and vegetables

PRODUCTS

- Potato pellets, cereal pellets
- Potato chips, cereal chips, puffed corn, puffed wheat
- Beverages

CATEGORY **Process control or modification**

APPLICABILITY Process

COMPANY NAME

COMPANY SIZE

The company employs around 200 full-time workers.

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Description of the problem (Base scenario):

Due to its irregular shape, packaging of the final product was done filling it up by volume. However, material balances showed that the packed weight is on average 20% higher than required (monitoring showed that the output is in average 4 extra grams to the standardised 20 grams). The extra amount of product is not covered by the product price which means a loss of profit in turn. Root cause of this loss is the inconsistent product density.

Description of the solution

The company decided to replace the existing volumetric packaging technology with a new system based on weighting of the product. Shifting to weight packaging resulted in more efficient standardized production with a fixed weight, and an increase in productivity.

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Economic Benefits Reduction of product loss (not paid by customer) by 20%. (400 ton/yr)

TOTAL Saving: 954,880 EUR/yr

Environmental Benefits	Resource productivity related to product sold increased by 20% (400ton/yr)
Health and safety impact	N.A
Capital investments & financial indicators	190,500 Euro Capital investment 0,2 year PBP
Suppliers	-
Other aspects	This project achieves other positive impacts such as: <ul style="list-style-type: none">• Decrease of product loss according to process filling control.• Increase number of pieces produced for the same original batch size.• Increase of profitability.

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Implementation

The company implemented the measure and appreciated such a big saving with payback 0.2 year as a result of changing the method of packing by volume to packaging by weight.
