

RECP Best Practice Catalogue

*Improved technical specifications for
hot fill preforms*

Developed within the framework of MED TEST II



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



The SwitchMed Programme is
funded by the European Union

Best Practice - Improved technical specifications for hot fill preforms

SECTOR:	Food & Beverage
SUBSECTOR:	Manufacture of beverages
PRODUCTS	Still drinks, carbonated drinks and fruity drinks in PET packaging and cans
CATEGORY	Technology upgrade/Eco-innovation
APPLICABILITY	Process
COMPANY SIZE	330



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Description of the problem (Base scenario):

In the PET 3 line, when producing 1-litre bottles, the volume adjustment of the product poured by the filler is greater than one litre to ensure total filling without leaving a head space (air pocket). Exceeding the target volume (up to 25 ml deviation from the filling tolerance) is due to the expansion of the bottles due to hot filling while the bottles that are not of good quality to hot fill.
This situation leads to a loss in raw materials.

Description of the Solution

The improvement measure consists of, in consultation with the preform suppliers, adapting the size of the bottle to the required volume and to review the quality of the preform to reduce the expansion.

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Economic Benefits

Savings of the finished product comes to 38,648 litres/year, which is:
A financial savings of 9,880 €/year

Environmental Benefits

Water and raw materials savings (sugar, juice concentrate, etc.)

Health and safety impact

Not relevant



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Capital investments & financial indicators	No investment, but probably higher preform costs Return on investment: not applicable
Suppliers	Current suppliers of preforms
Other aspects	No technical barriers
Implementation	