RECP Best Practice Catalogue

Flow measurement of final product and recycled products

Developed within the framework of MED TEST II

UNITED NATIONS





SECTOR:	Food & Beverage
SUBSECTOR:	Bakery and farinaceous products
PRODUCTS	Couscous (fine and medium), short pasta (small pellets, Tlitli, elbows of different sizes, vermicelli, macaroni, bird tongue, snail).
CATEGORY	Process control or modification
APPLICABILITY	Process
COMPANY SIZE	147 employees







Description of the problem (Base scenario):

It has been found that critical parameters such as final product throughput and post-mix feed rates are not recorded or tracked. This situation has a negative influence on the control of the production process and leads to an increase in losses and rates of recycled products and consequently a decrease in productivity. This last is estimated to be 1%

Description of the Solution

Measuring flow of the final product and recycled products for process monitoring and control, by installing a "Solid Flow" or "Pico Flow" system.

The results of analyses combined with the use of statistical means enable a better control the process and increase in productivity.







Economic Benefits

From feedback (from other companies), an increase in productivity of around 1% is possible one year after implementation, which means:

- 1% more product with the same energy input
- 1% more product in the same amount of time
- Reduced water consumption (reduction in recycled dry product)

The economic benefit is estimated at 1% of turnover, or € 14,800/year

Environmental Benefits

Energy consumption reduced by 1%

Water consumption reduced

CO₂ emissions reduced

Not relevant

Health and safety impact







Capital investments & financial indicators	Cost: € 20,000 for 3 units with software Return on investment: 1.4 year
Suppliers	Imported
Other aspects	Quality stabilisation
Implementation	





