

CUTBACK IN PRODUCTION COSTS THROUGH REDUCTION OF RAW MATERIAL WASTE

**Company: Panificadora Campinense
Campina Grande – Paraíba – Brazil**

ABSTRACT

The bakery, Panificadora Campinense, was founded in the 1980's, in the city of Campina Grande, Paraíba, Brazil. Its main products are: bread, pastries, biscuits, cakes, and other wheat-based products. Nowadays, the company employs 15 people, distributed as follows: 8 people in the customer service; 3 in the production of bread and 4 in the production of pastry. During the production of bread, in the rolling step, there is waste of wheat flour caused by the dusting of the dough. This waste reached the amount of two fifty-kg sacks of flour per week. After the GHK workshop, the staff members were more aware of this problem and realize the need for changes and reduction in waste generation.

THE CHALLENGE

During the rolling step, in which the dough is unified forming sheets to produce *massa sovada* (Portuguese sweet bread) and other special breads, the baker dust the dough with flour. At this moment, up to two sacks of flour are wasted every week.

APPLYING THE GOOD HOUSE KEEPING GUIDE

The entrepreneur found out about Good House Keeping Guide and PREMA Methodology participating in a series of workshops ran by CEPIS (Centro de Produção Industrial Sustentável). A special attention was paid to the Materials Checklist, which suggests efficient use of materials, evaluation of environmental impacts, control of consumption, and identification of losses in order to avoid waste originated from likings and spills. Good house keeping principles were used to identify simple and quickly implementable non-cost measures, which could be easily carried out by the company.



TAKEN ACTIONS

- * Raising awareness of manager and staff members.
- * Daily mixture of flour and water to prepare products, which was done on each third day.

BEFORE



AFTER



ECONOMICAL BENEFITS

Investment	There was no investment, but a change in the manager's attitude and a raise of staff members' awareness.
Annual cost avoidance	<ul style="list-style-type: none"> - Sack of wheat flour R\$ 90.00 - Waste of two sacks per week = R\$ 9.360.00/year - Waste of ½ sack per week = R\$ 2.160.00/year - Savings: R\$ 7.200.00/year
Amortization	–

ENVIRONMENTAL BENEFITS

As staff members are aware of problems and as there was a change of the practice of wheat flour and water mixture on each third day for a daily mixture of the needed amount, the process was improved, reducing the waste of flour from two to half a sack per week. The environmental benefit is a reduction in the waste of flour of 3.900kg/year as with a reduction in the generation of nylon plastic sacks per year.

ORGANAZATIONAL IMPROVEMENTS

The space used to store the packing material was emptied and was given another destination; productivity gains due to better employment of working force and improvements in the organizational aspect, what turned the working environment into a cleaner place and helped staff members meet higher levels of satisfaction.

FURTHER INFORMATION:

PREMANet

Profitable Environmental Management
(ex-GTZ: Programa Piloto para a Promoção da Gestão Ambiental no Setor Privado dos Países em Vias de Desenvolvimento - P3U, da GTZ).

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