

GOOD HOUSE KEEPING BRINGING EFFICIENCY TO THE BAKING PROCESS

Panificadora Alvorecer, João Pessoa - Paraíba -Brasil

ABSTRACT

The Bakery Alvorecer is located in the city of João Pessoa, in Paraíba state, Brazil. Nowadays it has 08 direct employees. The organizational environment and the attendance have been considered as an attractive to the company's day-to-day life. In the baking process, the company had an oven based on firewood that had high heat losses, implying directly on the execution time of this stage, besides the fuel consumption raise. After the GHK workshop, the entrepreneur invested in the oven's sealing and achieved to considerably reduce the firewood consumption.

THE CHALLENGE

The baking stage of the bakery products is determinant to the final quality of it, besides being responsible for the impact to the environment through the wood consumption, generation of combustion gases and ashes. The bakery's oven had bad sealing conditions, causing heat losses through the doors and walls implying, though, in a fuel consumption increase and a raise in the employees work place's temperature.

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 monitoring the material consumption, regularly raising and assessing the losses. 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

- * Modification of the oven (construction of walls and ceiling for isolation);
- * Installation of an exhaust fan in the production;
- * Firewood consumption reduction.

BEFORE



AFTER



ENVIRONMENTAL BENEFITS

After the oven's modification, especially with the installation of the new isolation system, it was possible to reduce the firewood consumption in 50%, which is a considerable reduction, especially in what is concerned to the decrease of the environmental impact previously generated.

ECONOMICAL BENEFITS

| | |
|-----------------------------------|---|
| Previous cost of wood consumption | § R\$ 600,00/month |
| Investment | § R\$ 500,00 (modification) |
| Annual cost avoidance | § R\$ 300,00/month = R\$ 3.600,00/year |
| Amortization | Immediate |

ORGANIZATIONAL IMPROVEMENTS

The modification of the oven action allowed a reduction of the temperature on the work place near the oven for the employees, improving, though, the thermal comfort to them and its productivity.

FURTHER INFORMATION:

PREMAnet

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

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