

CUTBACK IN PRODUCTION COSTS BY USING RECYCLED WOOD IN THE OVEN

Panificadora Pão da Vida, Campina Grande - Paraíba -Brasil

ABSTRACT

Pão da Vida bakery was founded in 2002, at Campina Grande city in Paraíba state, Brazil. Presently it has 9 fix employees, 05 of them in the production process and 04 in the attendance. The bakery produces, on its majority, breads, crackers and cakes, attending local district residents. At the baking process of its products, the company used 100% of sugar cane bricket, what represented a higher cost for the company and an increase of the workplace temperature during the process. After the GHK Workshop, the entrepreneur started to replace part of the bricket for recycled wood, reducing costs for the company.

THE CHALLENGE

The company used in its oven sugar cane brickets that, despite being environmentally correct, it has a relatively high cost. Recycled wood has a lower unit cost, presenting good heat power for the demanded baking process and it is a medium potential polluter.

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. 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

- * Modify the physical structure (reform and painting);
- * Divide the production (specific area for pastries);
- * Replace 20% of the brickets for recycled wood.

BEFORE



AFTER



ECONOMICAL BENEFITS

After the replacement of part of the used bricks for recycled wood, the company realized the following economical gains:

Previous bricks' monthly consumption cost	§ R\$ 100,00/bag of 40 kg of bricket § 10 bags/month x R\$ 100,00 = R\$ 1.000,00/month = R\$ 12.000,00/year
Investment	§ R\$ 100,00/ bag of 40 kg of bricket § 08 bags/month x R\$ 100,00 = R\$ 800,00/month = R\$ 9.600,00/ayear § R\$ 2,50/bag of 20 kg of recycled wood § 04 bags/month x R\$ 2,50 = R\$ 10,00/month = R\$ 120,00/year
Annual cost avoidance	§ 02 bags of 40 kg of bricks § 02 bags of 40 kg/month x R\$ 100,00 = R\$ 200,00/month = R\$ 2.400,00/year § R\$ 12.000,00 – (R\$ 120,00 + R\$ 9600,00) = R\$ 2.280,00/year
Amortization	Immediate

ORGANIZATIONAL IMPROVEMENTS

By replacing part of the used bricket for recycled wood, there was a reduction of the furnace's door temperature, improving the thermal comfort in the production área for the employees. Today, the company has the same production, using less wood.

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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