

# Cake Cooling

## Case Study

**BETTYS AND TAYLORS OF HARROGATE –  
COOLING SYSTEM LESS THAN 30°C IN 45 MINUTES.**

Bettys and Taylors of Harrogate, the well-known craft bakers of Yorkshire, had a problem with cake cooling, they called upon the services of Penmann Climatic Systems to design and deliver a turnkey solution.

**Problem:** With increased demand for their Yorkshire Tea Loaf and Ginger Cakes from the main UK retailers, Bettys were faced with the problem of how to rapidly cool their cakes on racks when they exit their Double D Revorack Ovens to enable them to be packed, whilst at the same time not compromising the high quality of their product.

**Solution:** They engaged the services of Penmann Climatic Systems, a company with over 30 years experience of providing cooling solutions to the food industry. They were firstly able to conduct on site product cooling trials using Penmann's mobile product test unit to establish the best cooling regime for each product. Penmann worked closely with Bettys production and quality team to establish the optimum cooling conditions.



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### Key Features

- ❖ Increased throughput achieved without compromising quality
- ❖ Product cooled to less than 30°C in less than 45 minutes
- ❖ Custom designed baffle arrangement to ensure effective airflow
- ❖ System designed to fit into existing production space
- ❖ Consistent all year round product now achievable



Based on the optimum cooling conditions, this was agreed, Penmann were able to design a rack cooling system not only to cope with the volume of product being produced but also to fit into the production space available. These were subsequently ordered and successfully installed and commissioned by Penmann. The result being Bettys was able to cope with the increased volume of produce and consistent product throughout the year.

The final system had the capacity to cool product to less than 30°C in 45 minutes. The Cooler design can easily be used to cool similar racked product to improve production throughput.



**Penmann**  
Climatic Systems

Highfield, Pool Road,  
Pool in Wharfedale,  
Otley, Leeds,  
West Yorkshire,  
LS21 1EG

T : 0113 202 7300

F : 0113 202 7301

E : [office@penmann.co.uk](mailto:office@penmann.co.uk)

Web : [www.penmann.co.uk](http://www.penmann.co.uk)