

Abstract

When we carry out a heat penetration test, we gather and then correlate heating and cooling data on a semilogarithmic graph format. The heat penetration data are used to establish the f_h and j_h values to be utilized in the design of heat processes. In the manual, "Procedures for Carrying Out a Heat Penetration Test and the Analysis of the Resulting Data", we have attempted to bring together an organized presentation of information on the heating and cooling of foods, in containers.

The heat penetration analysis process is a useful tool in any operation where we are heating or cooling objects.

The information in this manual has been gathered from published articles and personal correspondence from persons actively engaged in carrying out heat penetration measurements at universities, government laboratories, the laboratories of can manufacturers, and the Food Products Association.

A large portion of the detail that is included in this manual has been derived from the personal experience of the author in making heat penetration measurements resulting from all types of products.