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CONTINUOUS BUTTERMAKING - A PROCESS

CAPABILITY STUDY

A thesis presented in partial fulfilment of the requirements for the degree of Master of Technology in Industrial Management at Massey University

Dean Thomas John Stockwell
1972
"If you can measure that of which you speak, and you can express it by a number, you know something of your subject, but if you cannot measure it, your knowledge is meagre and unsatisfactory"

Lord Kelvin.
A process capability study was conducted on a Continab MC 30 continuous buttermaking machine. The compositional parameters of butter moisture and salt content were considered.

The initial investigation showed that compositional variation with respect to time was significantly greater than variation within the product at any one instant. A significant correlation was found between variations in moisture and salt content and it was considered that variation in both moisture and salt content was strongly influenced by the variable performance of the salt slurry injection system.

The preceding results suggested examination of the salt slurry injection pressure and linear extrusion speed of the butter ribbon. A complex relationship was seen to exist between these factors and the product composition; possible explanations are considered.
I wish to thank the Supervisory panel Professor J.K. Scott, Dean of the Faculty of Food Science and Biotechnology; Dr. R. Dolby and Mr. S. Jebson of the New Zealand Dairy Research Institute, for their guidance during this work. I would like to include special thanks to Mr. K. Noonan, Department of Industrial Management and Engineering, who has helped in innumerable ways during the project and in particular for his help during sampling runs.

I am also grateful to Mr. M. Foot and Mr. D. Kingsbeer, Department of Industrial Management and Engineering, for assistance with measurement equipment and also during sampling runs.

I am indebted to the Manawatu Cooperative Dairy Company Limited for use of facilities during the study. In particular I would like to thank Mr. G.E. Baker, General Manager, and Mr. E. Petch, Manager of the Butter Factory, without whose support this project would not have been possible.

Thanks are also due to:—
Staff members of the Faculty of Food Science and Biotechnology for assistance in many ways.
Mr. R. Russell, New Zealand Dairy Research Institute for information with regard to continuous churn operation.
The Massey University Computer Unit for help in data processing.
Mr. P. Herbert of the Massey University Printery for printing of diagrams and figures.
Mr. R. Leitch of the Massey University Photographic Unit for photographs contained in the thesis.

I wish to acknowledge financial support from New Zealand Cooperative Dairy Company and Mauri Brothers and Thompson Limited.

Finally, I am most grateful to Mrs. B.R. Robertson for typing of the script and assistance during printing of the final copy.

D.T.J. Stockwell
(November, 1972)
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