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CONTINUOUS BUTTERMAKING - A PROCESS

CAPABILITY STUDY

A thesis presented in partial fulfilment
of the requirements for the degree
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"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.

SUMMARY

A process capability study was conducted on a Contimab 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.

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