

ABSTRACT

Fresh milk has a very limited shelf life and is easily spoiled. Therefore milk preserves manufacturing different products, which have a significant shelf life. Concentrated milk products are obtained through partial water removal, which is one of the concentrated dairy products that is used in confectionary, bakery, dairy and catering enterprises.

International Dairy Products Limited is manufactured three-package type of sweetened condensed milk(SCM) products as Metal cans, Teashop pack, and Drums where their viscosity is different from each others. The quality of the product mainly depends on the viscosity. Viscosity development of SCM is mainly done in the vanderploge, which can store about 5400kg of SCM at one time. It is known as a batch. After concentration within the vanderploge the batch is pumped in to the cooling tanks. This process is known as batch break. Proper viscosity determination is essential before this operation, Otherwise can not achieve proper viscosity in the final product.

Desirable viscosity achievement can be done using a viscometer. The factory is used a viscometer to measure the viscosity of the sweetened condensed milk which is called STV viscometer. But it takes long time (i.e. the sample should be kept at 20⁰C for 4 hours before get reading). However the rapid measurements of the viscosity during production can be achieved by using VT 500 viscometer.

Therefore acceptability of the VT 500 viscometer has been determined by correlation coefficient and the correct range of viscosity also determined for the VT 500 viscometer.

The correct viscosity range for Metal cans was 821-858mPa.s, for Drums 894930mPa.s and for Teashop pack 967-1000mPa.s.