

Meal Processing by Fluidised Bed Desolventiser – The First Step to Functional Rape Seed Proteins

Karl-Heinz Leidt¹; Lothar Mörl²; Frank Pudel¹; Klaus Weigel³; Reinhard Zettl³

¹ PPM Pilot Pflanzenöltechnologie Magdeburg e.V., Magdeburg, Germany

² Otto-von-Guericke-Universität Magdeburg, Germany

³ Dr. Weigel Anlagenbau GmbH, Magdeburg, Germany

In a conventional desolventiser/toaster the meal is treated under conditions which lead to the denaturation of the contained proteins. Such proteins have lost their techno-functional potential and are not suited for applications out of animal feeding.

A more gentle meal processing is possible by using the fluidised bed technology. Generally there are two different options to remove the solvent from the meal: a) by nitrogen or b) by superheated hexane.

The presentation will describe the developed pilot scale fluidised bed desolventiser and will give results from test trials with rapeseed meal concerning to the obtainable hexane content and protein quality.