

CalorMatic®

Multi-Purpose Heat Processor



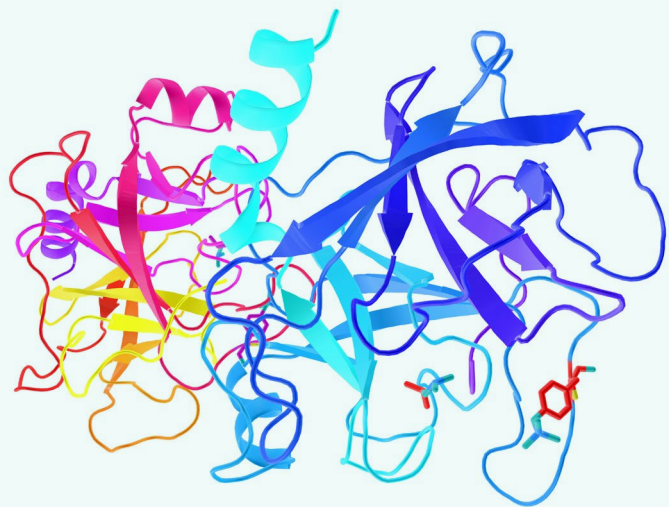
Sweet Manufacturing has designed and perfected the fluidized bed drying system that guarantees a uniform and constant thermal process for the **DRYING** or **ROASTING** of **grains**.

- » **Contributing to maximizing the nutritional value and obtaining a highly digestible product.**

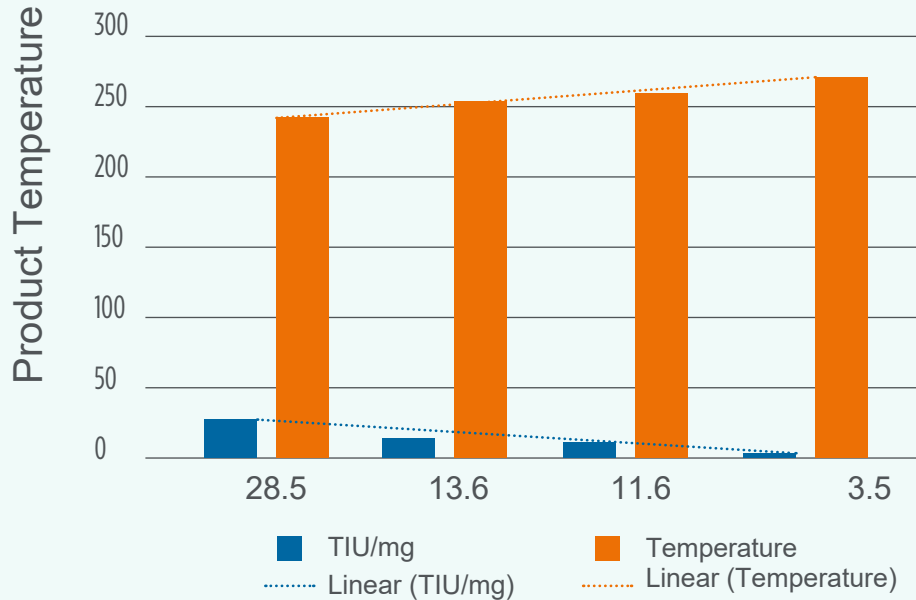
The main objective is to **submit soybeans to a heat treatment to achieve a product with a homogeneous temperature with optimal protein quality, high availability of oil and a minimal content of antinutritional factors.**



Among them is a reduction of the presence of the enzyme urease, an inhibitor of trypsin, methionine neutralizer, and lipoxidase enzyme.



Temperature TIU/mg (Trypsin Inhibitor Unit)



Nutrition Analysis Center

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Eurofins Sample Code: 104-2019-04180419
Sample Description: whole soybeans
Client Sample Code: 1277
PO Number:
Client Code: QD0001049

Entry Date: 04/18/2019
Reporting Date: 04/20/2019

277F (136C)

CERTIFICATE OF ANALYSIS

AR-19-QD-065537-01

Test	Result	Completed: 04/20/2019
QD237 - Trypsin Inhibitor AOCS Ba 12-75 Trypsin inhibitor	3,500 TIU/g	

Respectfully Submitted,
Eurofins Scientific Inc.

Desiree Childs
Evening Manager

Results shown in this report relate solely to the item submitted for analysis.
All results are reported on an "As Received" basis unless otherwise stated.
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Eurofins Scientific, Inc. Measurement of Uncertainty can be obtained upon request.



At the same time, you get in this process:
**42% crude protein, 18% fat, 7% fiber,
50% rumen bypass protein and 2.5% lysine.**

During our analysis of roasted soybeans, **it reached 0.25 pH units of urease activity** with a reduction of at least 85% of the trypsin inhibitor at 3.5 TIU / g per sample.



In this way nutritional problems are avoided in chicken diets. The most important thing is that you obtain a **28% gain in chicken weight** at 21 days, when 90% deactivation of trypsin inhibitors is guaranteed.

Additionally, the **CalorMatic®** is an indispensable component in the mechanical oil extraction process, because it conditions the soybeans before they enter the extruder. Reducing antinutritional factors and guaranteeing the correct moisture so that the press can perform efficient extraction.

This process reduces the mechanical power required by the extruder contributing to an energy savings and an increase in capacity. Likewise, it reduces wear on the extruder and its moving parts.



Benefits of soy roasting:

- » Uniform drying
- » Disables trypsin inhibitors
- » Increases food palatability
- » Increases nutritional value
- » Increases gelatinization of starches

- » Kills Bacteria
- » Increases metabolizable energy
- » Low production cost per ton
- » Minimum space required for installation
- » High versatility and flexibility
- » High efficiency by heating with dry air
- » Efficient and easy to transport





The **CalorMatic**[®] also allows processing or drying of several types of cereals or products such as: Corn, Soybeans, Seeds, Rice, Wood Chips, Tapioca, Oyster Shells, and Eggshells, among many others.

» The **CalorMatic**[®] has models and capabilities that go from 2 to 18 MTPH depending on the moisture input.

At **Sweet**, we offer our experience to give you the best technical support and provide a solution that increases the efficiency of your process.

Visit our webpage or contact us at:

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