

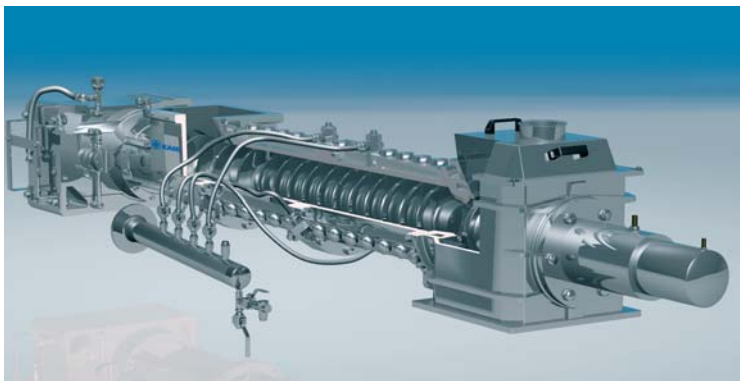
# Hydrothermal Treatment in the Compound Feed Industry

Mixtures  
Compound feed  
Individual components



Hygienic treatment  
Sterilization  
Decontamination

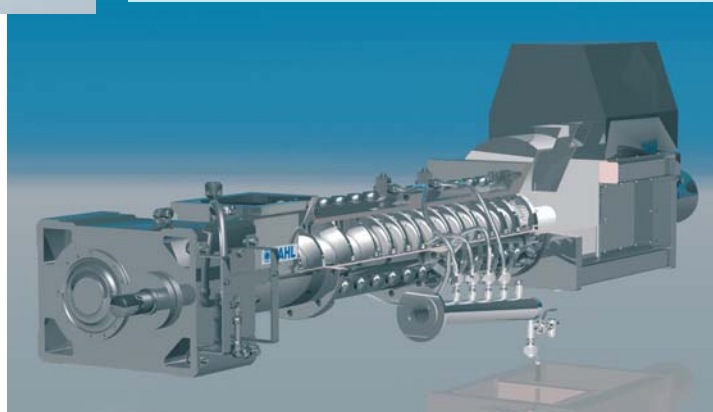
## Expander



The **KAHL Annular Gap Expander** was successfully introduced into the compound feed industry more than 20 years ago and since then it has constantly been improved. Today this machine has become one of the most interesting production plant components due to its high flexibility of application in the compound feed industry and the innovations of product such as Expandat®.

## Extruder

The **KAHL Extruder OEE** was developed to improve the versatility of the annular gap expander and adds to the flexibility of production – due to simple and fast changing of the outlet head from hydraulically adjustable cone to hydraulically adjustable die with cutting device. The shape of the extruded product, for dog feed for example, can be varied.



## Sterilizer



### KAHL Hydrothermal Sterilizer

The sterilizer is appropriate for the hygienic treatment of coarsely structured meal feed, such as layer or pig feed. A commercial sterility is reached.

The feed is free of pathogenic bacteria, such as:

- coliform bacteria
- E-Coli bacteria
- salmonellae
- campylobacter

## Hydrothermal Reactor



### Hydrothermal Reactor

The reactor is suitable for improving the product characteristics and for reducing harmful components inhibiting digestion: urease, trypsin, phasins, glucosinolates, gossypol etc. A careful and uniform product treatment is achieved by means of temperature, moisture, retention time and mechanical treatment which can be controlled separately.



**AMANDUS KAHL GmbH & Co. KG**

Dieselstrasse 5-9

D-21465 Reinbek / Hamburg

Phone: +49 (0)40 727 71 - 0

Fax: +49 (0)40 727 71 - 100

info@amandus-kahl-group.de

[www.akahl.de](http://www.akahl.de)