

## Long term vessel LTV



LTV 3000, with steam mixer mounted on top

**Van Aarsen designs, produces and supplies hygienic conditioners and other equipment for the animal feed, pet food and aqua feed industry, based on more than 60 years of experience. As the world's first, Van Aarsen developed a machine which guarantees, with success, first in - first out of the supplied material.**

Conditioning is the result of the variables moisture, temperature and time. As moisture and temperature are related, time is the ultimate variable when optimising nutritional quality of the feed, as well as improving pellet quality.

Besides these aspects, also bio-security needs to be considered. This is a point of attention, especially when conditioning the feed. A longer conditioning time with the right temperature and moisture results in a better hygiene status and therefore increases feed safety.

### Features of the Long Term Vessel

- Up to 4 minutes retention time
- Up to 90° C constant temperature
- First in - first out guarantee
- Suitable for heat treatment of mash
- Individually driven, frequency controlled, pellet mill feeding device
- Very low energy consumption (approx. 1 kWh/ton)
- Frequency controlled drives to achieve necessary retention times

- Manufactured in stainless steel for low wear as well as minimising contamination
- Up to 25% higher capacity (tonnes per hour) of the pellet mill
- Up to 20% less energy consumption of the pellet mills when comparing steam mixer plus LTV with e.g. a double steam mixer
- Better physical (hardness and durability) and chemical (gelatinisation, pathogenic germs, etc.) quality of the pellets and mash
- Higher liquid addition rates possible
- Wider range of raw materials can be processed
- Better performance of the animals (production as well as health status)

### Design

- The LTV should be located below a steam mixer. The steam mixer heats the product to the desired temperature by directly injecting steam into it.
- If the building is limited in height, Van Aarsen also has the unique Long Term Conditioner, a machine where the retention time vessel and the steam mixer are combined in a single machine
- Design according to CE safety regulations

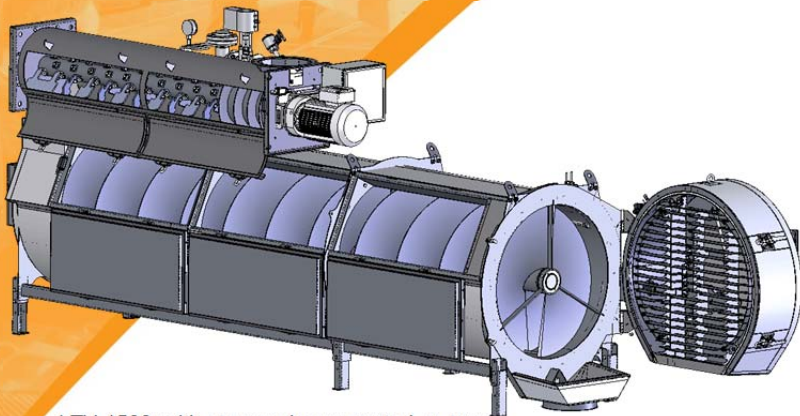
The LTV consists of the following two main components, which are built together as one unit:

- Retention vessel with built-in feeding device for the pellet mill
  - The vessel body, inspection door, end plates and the pipe-shaft with screw blades are made of stainless steel
  - The outer vessel body is provided with an electrical heated system and insulation
- Pellet mill-feeding device, which guarantees a constant load of the pellet mill. The flow-through capacity is adjusted with a frequency controller, which drives a separate geared motor.



LTV 3000

# Datasheet



LTV 4500, with steam mixer mounted on top

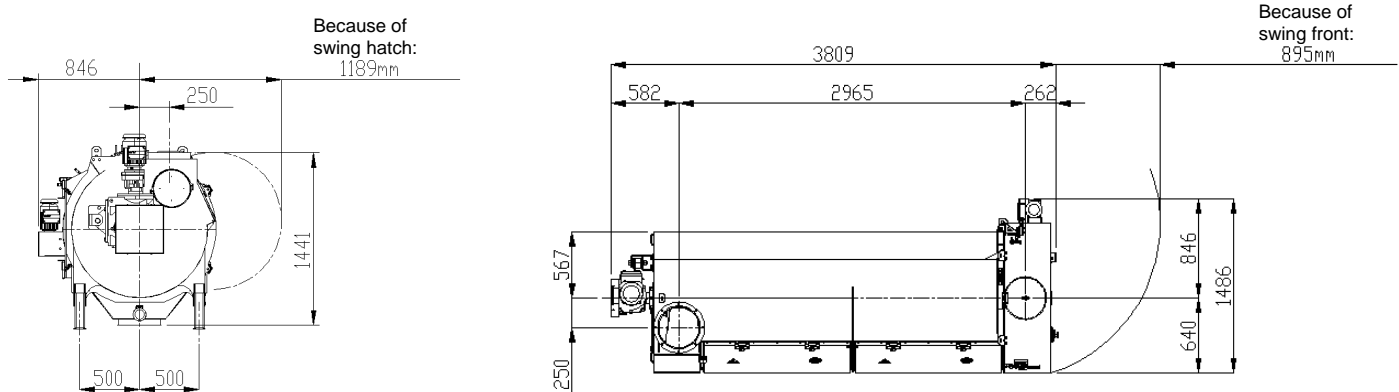
## Design Options

- Capacities varying from 24 to 144 m<sup>3</sup>/h
- Pellet mill or line automation
- Product indicator in the outlet, for optimal control
- Speed control on the pellet mill feeding device

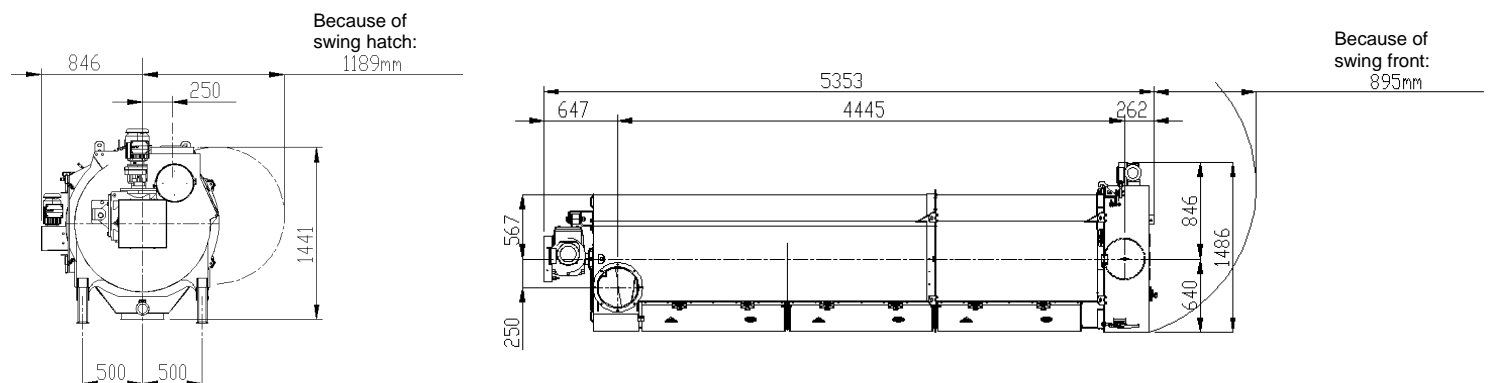
## Hygienic operation

- The LTV housing, retention screw and the pellet mill feeding device are easy to clean via the large inspection doors
- The body parts of the LTV that come into contact with the product are manufactured from corrosion-resistant steel

## LTV 3000. Retention time 1-4 minutes (1 minute: 96 m<sup>3</sup>/h and 4 minutes: 24 m<sup>3</sup>/h).



## LTV 4500. Retention time 2-4 minutes (1 minute: 144 m<sup>3</sup>/h and 4 minutes: 36 m<sup>3</sup>/h).



	LTV 3000	LTV 4500
Weight (without product)	1400 kg	1900 kg
Maximum product volume inside	1.600 ltr.	2.400 ltr.
Drive retention vessel	1.1 kW	1.5 kW
Drive pellet mill feeding device	0.55 kW	0.55 kW