

Long Term Conditioner - LTC



Van Aarsen designs, produces and supplies hygienic conditioners and other equipment for the animal feed, pet food and aqua feed industry, based on 60 years experience. As the world 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, and 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 and 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 Conditioner

- Steam mixer and hygienic conditioner built together in one unit
- 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 wearage as well as minimum contamination



- Low construction height, distance between inlet and outlet is only 700 mm
- Up to 25% higher capacity (tonnes per hour) of the pelletmill
- Up to 20% less energy consumption of the pelletmills when comparing LTC 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 LTC consists of the following main components, which are built together as one unit on a steel frame:

- Steam mixer
 - Mixer body and end plates manufactured in stainless steel
 - Mixer shaft manufactured in stainless steel
 - Adjustable and interchangeable wear-resistant mixer pins
 - Steam lock by stainless steel screw blades at mixer product inlet
 - Injection system for steam, which will result in a max. meal temperature of 90°C
 - Hinged door with door switch, conform CE-norms
 - Mixer body complete with insulation
- Automatic steam quantity control consisting of an electric-pneumatic valve, water separator, motor-operated control valve and connection for steam piping. A digital temperature controller actuates the motor-operated control valve.
- Retention vessel with built-in pellet mill feeder
 - Vessel body, inspection door and end plates are manufactured in stainless steel as well as the pipe-shaft with screw blades.
 - The outer vessel body is provided with an electrically heated system and insulation.
 - The tubular housing has large, hinged, clean-out doors.

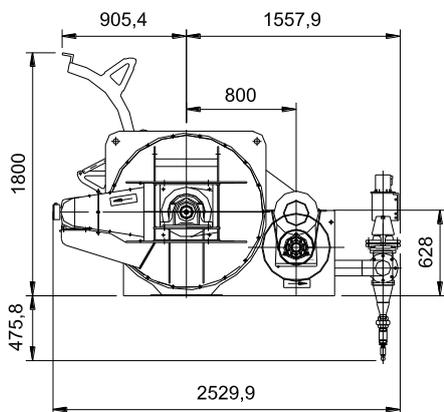
- Pellet mill feeding disk which guarantees a constant load of the pellet mill.
- Adjustment of the flow through capacity is achieved by means of a frequency controller, which drives a separate geared motor.
- According to CE safety regulations

Design Options

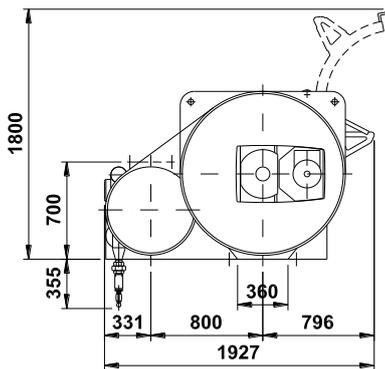
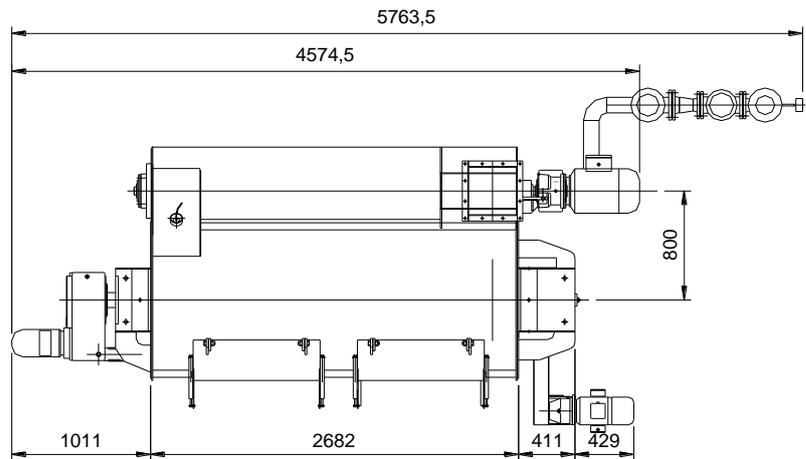
- Capacities varying from 17.5 – 70 m³/h
- Pellet mill or line automation
- Product indicator in the outlet for optimal control
- Speed control on the pellet mill feeding disc
- Transport frame under and surrounding the Long Term Conditioner for transport safety

Hygienic operation

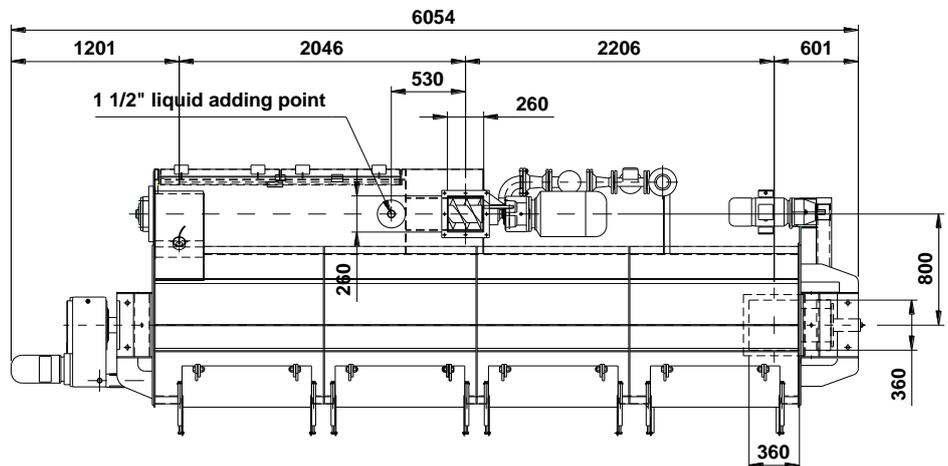
- The LTC housing, mixing paddles, retention screw and feeding disc are easy to clean within a short time through the accessible inspection doors.
- The body parts of the LTC series that come into contact with the processed materials are manufactured in corrosion-resistant steel.



LTC 1200



LTC 2300



	LTC 1200	LTC 2300
Weight (without product)	3.750 kg	5.500 kg
Maximum product volume inside	1.165 ltr.	2.330 ltr.
Drive retention vessel	1.1 / 1.5 kW	2.2 / 3.0 kW
Drive extraction disk	1.5 / 2.2 kW	3.0 / 4.0 kW
Drive steam mixer	9.2 / 15 kW	9.2 / 15 kW