



WEDA Insects

- Fully automatic feeding system
- Climate systems and humidity
- Production safety
- Dosing accuracy
- Processing of residual materials
- Maximum hygiene



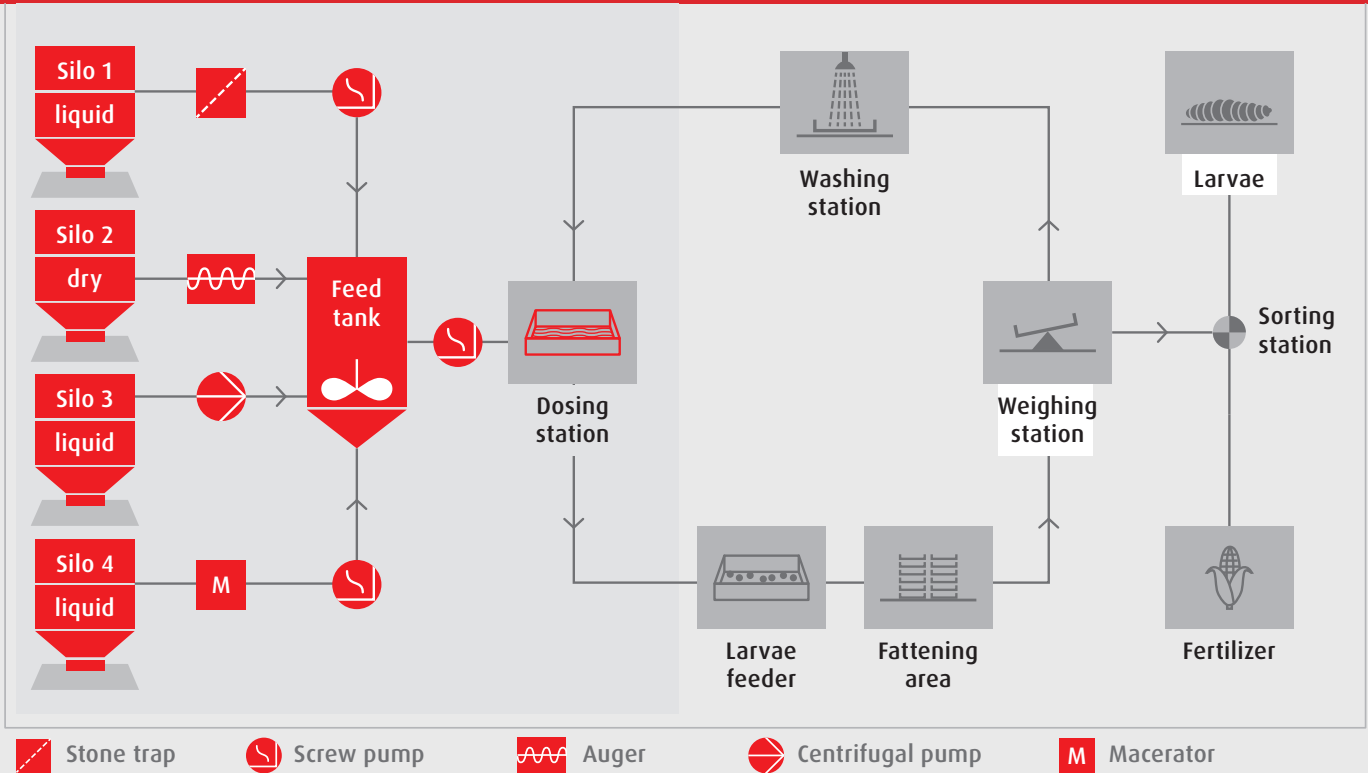
Larvae of the Black Soldier Fly (BSF)

Feeding insects efficiently

Due to the steadily growing global population, the demand for proteins is also expanding worldwide. The resulting increase in food production places enormous demands on the feed used for feeding livestock, poultry and fish.

One solution to this problem is insects as an alternative source of food. Larvae of the black soldier fly (BSF), for example, can play a crucial role in sustainable food production.

Larvae can feed on residues from the food industry and transform these into healthy and sustainable ingredients for feed and foodstuffs.



Component supply

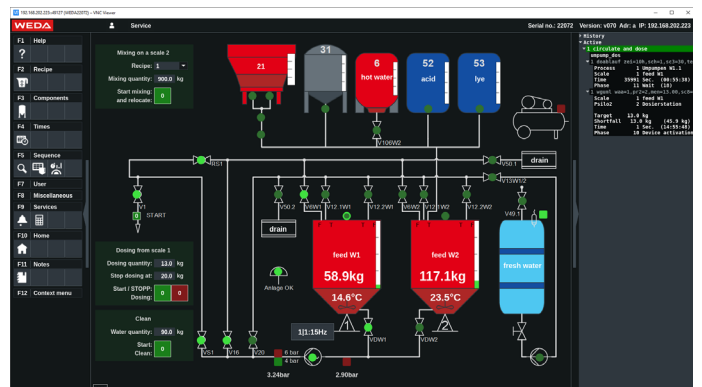
Experience from agriculture

From tradition and with many years of experience, WEDA provides innovative technical solutions on a worldwide basis. Since its foundation in 1934, the manufacturer of products for pig husbandry has developed to become the market leader for modern housing and feeding technologies.

The principle of WEDA insect feed systems is based on liquid feeding technology for pig breeding. WEDA has been developing and producing own technologies for weighing, crushing, pumping and distributing liquid feed since the 1970s, and even its computer programmes based on Linux are self-developed and programmed.



Liquid Feeding technology made by WEDA



Computer System 4PX Larvae: Easy to understand, all system data at a glance



WEDA Insect feeding



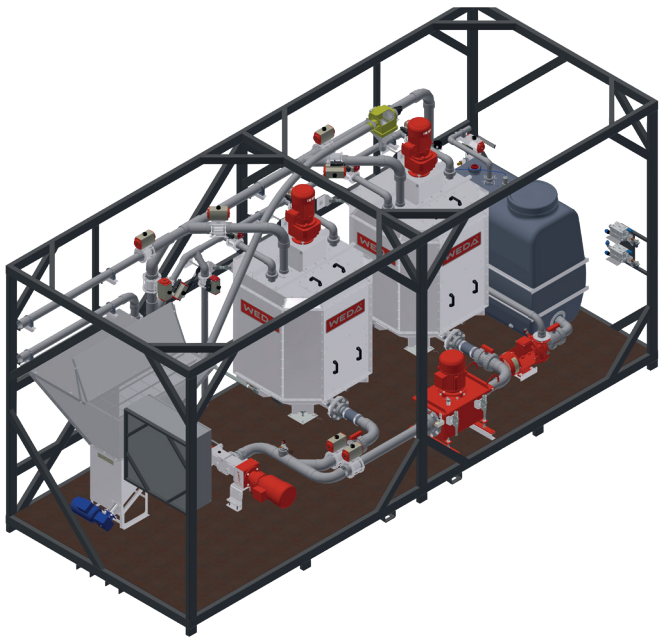
Dosing out precisely: The food must have a dry substance ratio and remain flowable

The concept: crushing, processing, maintaining flowability and precise dosing

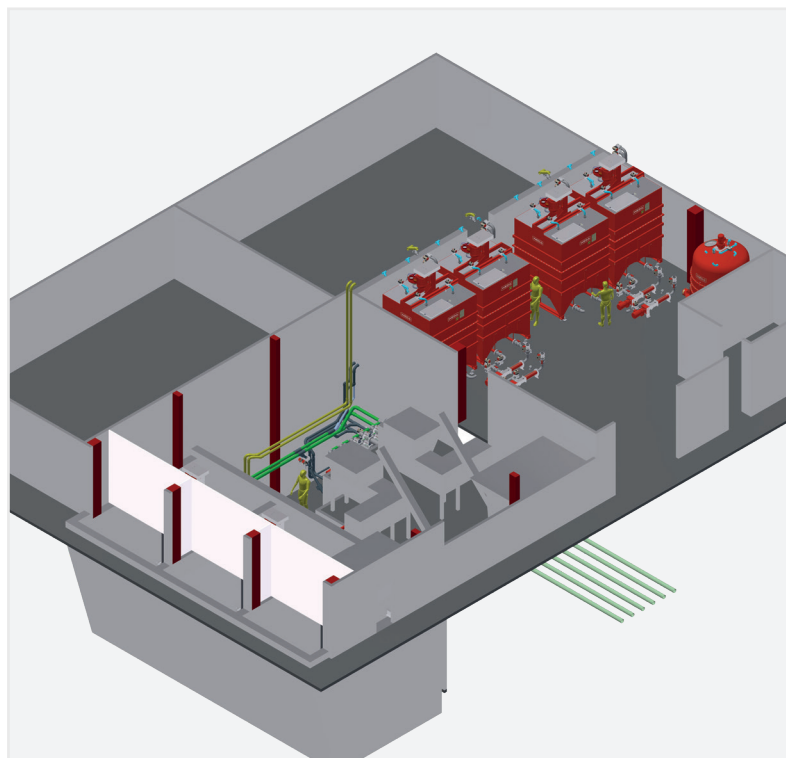
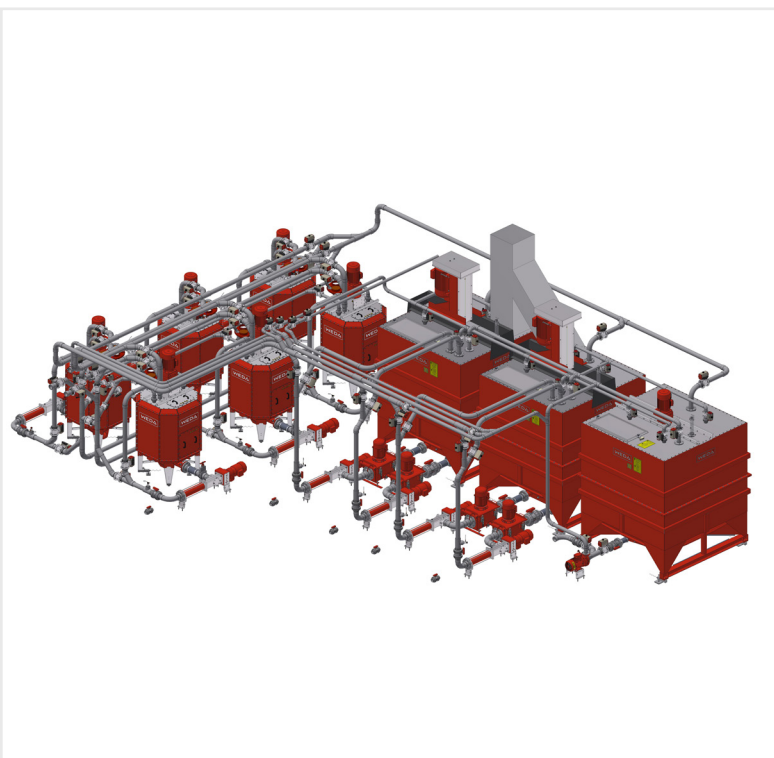
In the insect-feeding process flow it is particularly important that by-products such as food waste (for example different types of vegetables and fruit) are reduced to less than 3 millimetres in size. The mass must then be prepared and mixed such that it has a high dry substance ratio and remains flowable at the same time, allowing for quick and precise dosing. In pig farming similar challenges occur, except that the mass itself can be more liquid. Based on many years of experience in this field, WEDA offers proven technologies adapted from crushing technology, agitator technology, weighing and dosing.



Dosing station



From sketch to reality: Farm scale insect feeding system (modular design). Plant size up to 10t substrate per day.



Industrial Scale insect feeding: Automated parallel plant. Plant size up to 130t per day (left) or up to 500t per day (right)- including WEDA screw pumps, macerators and cutting agitators



WEDA Insect feeding



Climate control unit „Veco.Mate“



Computer system „Excellent 4PX Larvae“

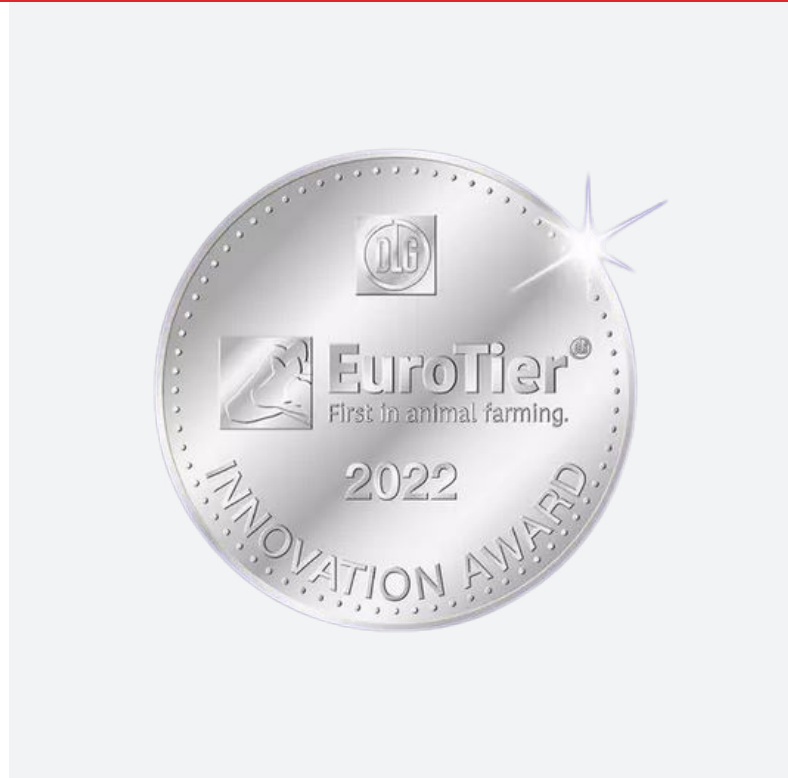
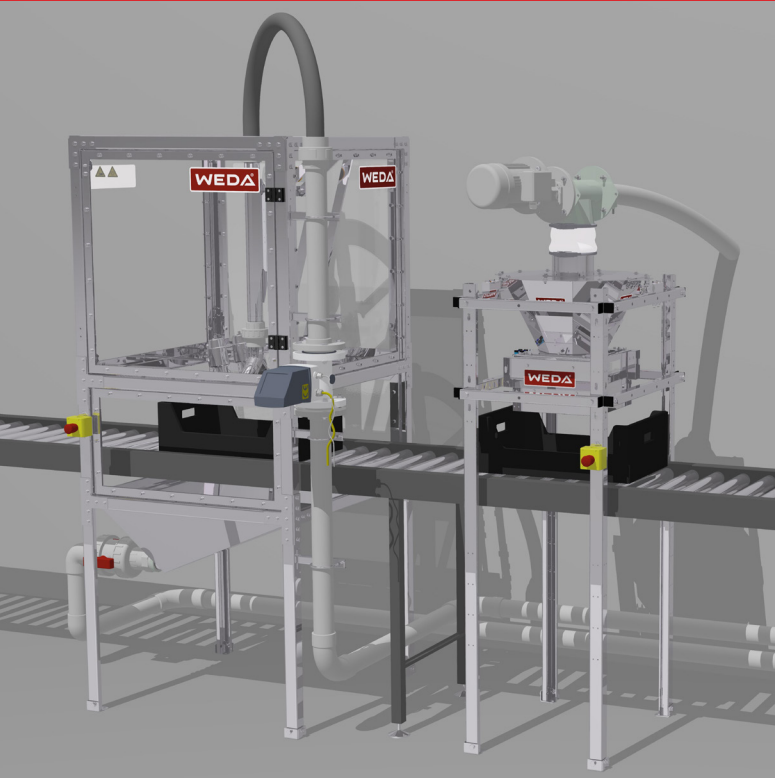
Climate control

The Climate control unit „Veco.Mate“ from WEDA enables a healthy environment and rearing process for your insects. It provides optimal conditions for the farming process, like the ideal temperature and humidity in the insect growing room.

Veco.Mate regulates and observes the ventilation and heating for reduction of noxious gases such as ammonia, carbon dioxide or hydrogen sulfide. The software is compatible with the „Excellent 4PX“ feeding control system which can be operated intuitively through understandable icons. Based on the helpful WEDA service team and online dial-in option, settings, questions or problems can be solved easily.

Regulates and observes:

- Ventilation
- Heating
- Climate
- and much more...



Dry.Sec: Automated insect feeding parallel plant

Awarded: Dry.Sec wins DLG Innovation Award in silver

In production plants for insect larvae, incorrect dosing can occur, for example, when feeding the black soldier fly (BSF), as a result of which the young larvae drown in the substrate if it is too liquid. With the newly developed **Dry.Sec** dosing station, a fully automatic, rapid and precise re-dosing of the dry, organic material is possible. An island of this material is formed on which the young larvae are placed in the following step.

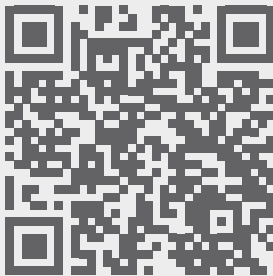
The substrate should have a high dry matter content and still remain flowable so that it can be dosed out precisely and quickly and the soldier flies can eat it well. However, if the liquid content is too high, the young larvae may drown in the substrate.

The newly developed **Dry.Sec** dosing station precisely refeeds dry organic material. The novelty is that in this second step, the dry material is added to the liquid mass. An island is formed on which the young larvae are placed and can be fattened without damage. The advantages of this solution are obvious: If a higher dry substance is required in the feed, this can be achieved exactly to the gram thanks to the **Dry.Sec**. By adding a small amount of dry feed, any required dry matter content can be fed. Another advantage is that with a higher dry matter content of the feed, less moisture has to be evaporated in the final fattening process. This saves energy. The **Dry.Sec** thus leads to a safe fattening of the young larvae and a safe management, as it reduces the losses of young larvae enormously.

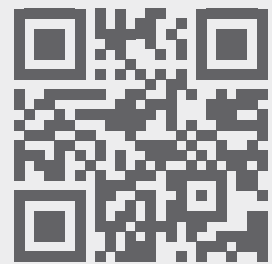
This innovation convinced the DLG at the 2022 EuroTier trade show to award it with the DLG Innovation Award in silver.



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Video: WEDA Insect dosing system



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