ERIKS DEVELOPS STAINLESS STEEL HOSES AND CONNECTIONS FOR NEW BIOENERGY SYSTEM

Sustainable solution for chicken manure processing



MBIO-ENERGY INSTALLATIONS

CUSTOMER PROFILE

HoSt from Enschede is the Netherlands' biggest bioenergy system supplier. The company specialises in technologies for sustainable biomass energy and supplies such things as biogas systems, fluidised bed gasifiers, wood-fired boilers and cogeneration units.

CHALLENGE

The release of chicken manure is a huge problem, particularly in Southern European countries. Many farmers dump this illegally in the mountains, resulting in significant ammonia contamination of groundwater. This is, however, tolerated by governments as a good chicken manure processing method does not yet exist. HoSt took the lead in finding a sustainable solution and started work on a gasification system for chicken manure. As ERIKS specialises in the production of stainless steel hoses it was involved in the development from the early stages.

SOLUTION

ERIKS manufactured a selection of welded stainless steel hoses for this gasifier, capable of withstanding high temperatures. These stainless steel hoses with braiding are then fitted with connections using welders that are Lloyd's Register/Steam vessel inspectorate certificated. The high welding quality delivered by these welders means that these hoses meet 'Pressurised Equipment Directive (PED)' guidelines. The advantages of this welding method are unique: longer working life, even wall thickness, corrosion-free hose walls and improvements in vibration-resistance.

The fluidised bed gasifier now produces gas fuel that is first cleaned in various wash columns and then routed to a gas engine. The gas released from this Biomass energy system is intended for cogeneration. The installation processes approximately 3 m³ dried manure per hour (approx. 1,000 kWh).

OTHER BENEFITS

- Sustainable solution for the chicken manure waste problem
- Usable minerals for fertilisation are released in the form of dry ash

