Food Waste to Biomethane Plant

Pontefract , England (UK)

Project data

Commissioning:	Ocotber 2019
Construction time:	6 months
Input materials:	80,000t feedstock • approx. 55% food waste • approx. 30% grass & hybrid rye • approx. 15% slurry, manure & chicken litter

Technical data

Entry system:	2 Push floor dosing feeder (200 & 110m³) + 2 **MULTI**Mix
Pre-storage tanks:	3x 342m³ with stainless steel floor 2x 100m³ fibreglass tanks
Digester:	4x 6,848m³ (Ø 31.5m, H: 8.8m)
Production of raw biogas:	approx. 1,850Nm³/h
Processed biomethane:	approx. 850Nm³/h
Methane content (CH_4):	>99%
Biogas upgrading:	Membrane technology
Miscellaneous:	Separation, pasteurisation, 330kW CHP for heat supply

Characteristics

The plant went into operation after a record construction period of just six months and feeds c7.3 million cubic meters of biomethane into the British gas distribution network every year. With the amount of the environmentally friendly natural gas equivalent, around 9,600 households are sustainably supplied with energy. Recovering valueable energy from food waste and and agricultural waste, biomethane plants such as those from Lanes Farm Energy play an ever increasing role in the energy mix in UK and around the world.

Two push floor dosing feeders, each with a **MULTI**Mix, ensure that the digesters are continuously filled.

The stainless steel pre-storage tanks are equipped with a stainless steel floor.

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As of February 2020