Imperial Park Anaerobic Digestion Plant



Middlesbrough



Type of building:

Engineers/ Specialist Planners:Moorehead Sutton & Laing

Completion: 2016

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Pecavoid® cellular void former was selected as an effective solution to combat slag heave during the construction of a new Anaerobic Digestion (AD) Plant.

There were deposits of blast furnace slag on the Imperial Park site up to 4m deep which posed a risk of ground heave, so a void needed to be created underneath the piled slab tank bases to accommodate the upwards expansion. Slag has been known to expand by 10-20% of its volume, but in this case only 50mm of movement was expected.

Pecavoid® CL105 15/22 was installed beneath the 350mm thick piled slab to create the required 50mm clear void.

The Anaerobic Digestion Plant will produce enough green electricity for the entire plant, with leftover power being sold back to the grid. The company's 100% recycled crushed glass can be used in anything from swimming pool filters to tarmac.

The plant will be able to treat various types of organic waste and is designed to give the operator high flexibility regarding the type of feedstock they want to digest. This will allow them to optimise its income and react to changing market conditions.

The generated electricity will be fed into the National Grid and the generated heat will be used to heat the digesters to 40° Celsius and to pasteurize the digestate so that is can be used on the land.

Imperial Park Anaerobic Digestion Plant



Middlesbrough Products used:





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