Package Exelys – the plug and play thermal Hydrolysis solution

Veolia has developed a standard package Exelys for small to medium size Thermal Hydrolysis plants. Our plug and play solution is fabricated and tested offsite to minimise site installation and commissioning. It is delivered in pre-erected frames.

Benefits

• Plug & Play Product
• Fully pressure tested and FAT tested ex works
• Small footprint size
• Max capacity 12,000TDS/y
• Standard Exelys Process implementation
• Available with Heat recovery to achieve very low steam consumption

Operating Principle

Continuous thermal hydrolysis operating 24 hours a day with feed and removal levels that are adjustable in real time, Exelys™ operates under controlled temperature (165°C), pressure (7.5 bar) and duration time (between 20 to 30 minutes) conditions. The system is controlled by a PLC that modulates the steam flow rate in line with the amount of sludge processed.
Exelys Package with Heat Recovery

The Package Exelys is available with a Heat Recovery system to minimise the steam consumption (as low as 0.8t/tDS sludge) and increase the biogas available for electricity production or bio-methane injection in the grid.

Exelys Package Schematic

Exelys Package Range

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<tbody>
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<td>30 mins</td>
<td>8.1</td>
<td>14.5</td>
<td>22.7</td>
<td>35.7</td>
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Key Figures

- 30 to 50% more biogas produced
- 25 to 35% Less dried solids
- 100% existing digester capacity increase
- Enhanced treated sludge (Class A)
- Cake dryness increased by 5 units