

# Halia<sup>®</sup> Venturi Aeration System



"Pure oxygen, when used for aeration in aerobic biological processes, can offer cost savings either as a simple retrofit to extend the capacity of an existing treatment plant, or as part of a new installation."

UK & Ireland Water Systems Business Development Manager

### The key to an efficient pure oxygen system is highly effective dissolution of gaseous oxygen to the aqueous phase and the biomass.

In the Halia® Venturi Aeration System, waste water is pumped from the aeration basin through a venturi where pure oxygen gas is injected. The oxygen-rich stream is returned to the aeration basin using unique liquid-liquid ejectors. These ejectors maximise oxygen dissolution and ensure homogenous distribution of the oxygen and mixing energy throughout the basin. Halia® Venturi Aeration is designed taking the customer's process into consideration, to achieve >90% utilisation of oxygen delivered.

#### Air Products Halia® Venturi Aeration System

can be the most cost effective solution when used ...

- to increase the treatment capacity of an existing plant
- where space is limited for installation of a new treatment plant
- for more efficient settling
- to reduce odours and emission of Volatile Organic Compounds (VOCs)
- to reduce foaming and aerosols
- for treatment of a seasonal or variable load
- for new biological process conditions.

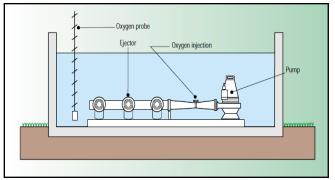
#### Halia<sup>®</sup> Venturi Aeration equipment offers ...

- High oxygen transfer efficiency (>90% under suitable conditions)
- Low energy consumption
- (5-6 kgO<sub>2</sub>/kWh)
- Low capital investment
- Drop In version available
- Short term and rental options
- Fast delivery and easy installation
- Aeration basin mixing
- Wide operating range

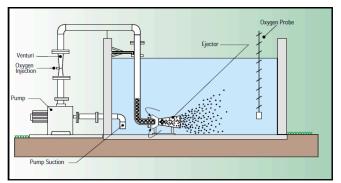
#### Drop in standard equipment range

| Model | DO (Kg/day) | Power (kW) |
|-------|-------------|------------|
| 65    | 1500-1900   | 13.7       |
| 100   | 2400-2900   | 19.6       |

Fixed installations are bespoke



Air Products Halia<sup>®</sup> Venturi Aeration System – drop in installation



Air Products Halia<sup>®</sup> Venturi Aeration System – fixed installation

## For more information, please contact us at:

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