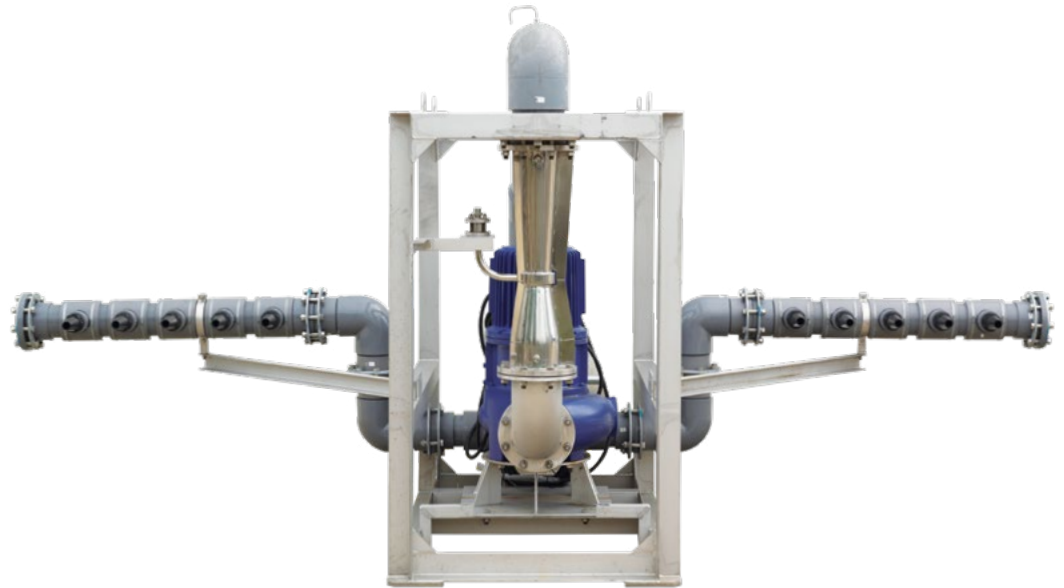


## Drop-In VITOX<sup>®</sup> System. Efficient Oxygen Dissolution for Aeration Plants.



BOC's Drop-in VITOX unit comes pre-assembled

### Introduction Efficient Oxygen dissolution for aeration plants

BOC's Drop-In VITOX systems have been used to provide rapid solutions to activated sludge wastewater treatment plant problems all over the world and in all types of industrial and municipal situations.

Drop-In units are the ideal solution to permanent or intermittent (seasonal or diurnal) overloading or Oxygenation shortfall. The units consume no power or Oxygen until the dissolved oxygen levels drop below agreed pre-sets and then start up automatically dissolving just the amount of oxygen required by the biomass.

**Description** Drop-In VITOX units can be used to uprate activated sludge plants fitted with mechanical surface aerators, fine bubble diffusers or jet aeration systems. Additionally as the units can provide mixing with or without Oxygenation, they can be used for nitrification/de-nitrification processes.

This VITOX technology can be used for improving the performance of Membrane bioreactors (MBRs) where standard aeration systems often struggle to keep the higher biomass concentrations satisfied with sufficient dissolved Oxygen.

Where plants are upgraded with VITOX technology, improvements in BOD, COD and ammonia removal are immediately achieved as the installation is typically completed within one day and usually with no existing plant downtime.

Sludge settlement and membrane separation performance can also be enhanced and as a consequence of all these improvements, surplus sludge production is also reduced.

As well as improving the oxygen transfer for wastewater treatment, units have been used in many river, lake and canal oxygenation projects around the world.

Many water utilities having owned such units over the last 10–15 years re-deploy them at different sites, with BOC providing assistance with their re-location.

Units are manufactured in stainless steel and the pumps are cast iron. They are suitable for all types of effluents of varying pH's and temperatures. They are also available for rent or purchase in two sizes (DIV-1 & DIV-2.4), details of which are provided in the table overleaf.

**Technical Data**

	DIV-1	DIV-2.4
Nominal dissolution (kg/day oxygen)	0-1000	0-2400
Boost capability (kg/day oxygen)	1300	3000
Height (mm)	1700	2300
Depth (mm)	1635	2000
Width (cage) (mm)	1000	1200
Width (with sparge bar) (mm)	3560	3830
Weight (kg)	670	1520
Pump motor (kW)	23	51
Absorbed power (kW)	17	39

**Benefits**

- Efficient Oxygen dissolution for aeration plants
- Provides immediate capacity upgrade
- Low power costs
- No down time
- Fast installation
- Excellent controllability
- Flexible and reliable
- Silent operation
- No foaming or aerosols

**More information**

Would you like to know more about our Drop-In VITOX System and other gas application technologies for wastewater treatment? Experts from BOC are at your service. Just contact your local BOC representative or call our Customer Service Centre on 0800 111 333. Alternatively, visit our website [boconline.co.uk](http://boconline.co.uk)

**BOC Limited**

Customer Service Centre, Priestley Road, Worsley, Manchester M28 2UT, United Kingdom  
 UK Tel 0800 111 333, Fax 0800 111 555, ROI Tel 01 409 1800, Fax 01 409 1801, [boconline.co.uk](http://boconline.co.uk), [boconline.ie](http://boconline.ie)