OXYGEN *ON-SITE* GENERATION SYSTEMS

For AQUACULTURE

INDUSTRIAL

Ideal for Aquaculture / Fishfarming / Fish tanks / Hatcheries / Recirculating Aquaculture / Wellboats

The air we breathe is constituted by 78% N_2, 21% O_2 and other elements. Oxygen plays a vital role for all breathing organisms. In order to meet fishfarms Oxygen needs around the world, **SYSADVANCE** provides the best on-site generation solutions, helping fish farming industry to maintain its long-term sustainable growth and prosperity.

An Oxygen rich environment is necessary to grow healthy fish, so maintaining optimal conditions often requires additional oxygen. **SYSADVANCE** commitment to fish farming industry helps ensure that the best solution, either O_2 PSA or O_2 VSA on-site generation, is available where and when customers need.

Several studies show that adding Oxygen into water has a very positive effect on growth rates, feed conversion ratio and less mortality, significantly increase profitability.

SYSADVANCE can and will help you choose the suitable Oxygen generation solution for your fish farm Oxygen requirements.

SYSADVANCE | OXYGEN GENERATORS:

PSA VSA

A line of robust, reliable, efficient, fully automated and modular oxygen generators based on *Pressure Swing Adsorption* (PSA) or *Vacuum Swing Adsorption* (VSA) technology using state of the art Zeolite, allow a constant availability of Oxygen representing huge savings.

ADVANTAGES of producing your own Oxygen with **SYSADVANCE** O_2 generation solutions:

1 · Low power consumption for Oxygen production;
2 · Reduction of carbon footprint;
3 · Continuous availability – 24/7;
4 · Low maintenance systems;
5 · Heavy duty containerized systems for fast and easy start-up (*PLUG&PLAY*), operating within IDEAL conditions even in the harshest environments and remote locations.





sysadvance®

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PSA OXYGEN *ON-SITE* GENERATORS

CHARACTERISTICS AND FEATURES:

- PURITY 85 - 95%;
- EFFICIENCY: 0,95 kWh per m^3 @ 85% PURITY*;
- LOWER CAPEX;
- LCD DISPLAY;
- HIGH QUALITY & DURABLE COMPONENTS;
- GSM / LAN MONITORING;
- MULTIPLE SYSTEMS FOR HIGHER CAPACITIES.

*Energy consumption varies with the purity.

PSA MODEL	90% Flow O_2 (Sm^3/h)	93% Flow O_2 (Sm^3/h)	95% Flow O_2 (Sm^3/h)
OXYGEN **10C**	1,16	1,07	0,94
OXYGEN **25**	2,67	2,07	1,67
OXYGEN **35**	4,0	3,1	2,5
OXYGEN **50**	6,0	4,6	3,8
OXYGEN **70**	8,5	6,5	5,3
OXYGEN **80**	10,4	8,0	6,5
OXYGEN **90**	12,4	9,5	7,8
OXYGEN **110**	16,2	12,4	10,1
OXYGEN **150**	23,7	18,2	14,8
OXYGEN **200**	34,1	26,2	21,3
OXYGEN **300**	47,6	36,5	29,7
OXYGEN **400**	56,7	43,5	35,3
OXYGEN **500**	72,6	55,7	45,2
OXYGEN **800**	101,6	82,7	67,2

Other capacities available upon request.
Conversion factor: $1m^3$ of $O_2 \approx 1,4$ kg of O_2.

OPTIONALS:

- Remote monitoring;
- Touch screen HMI control unit with USB port;
- UPS module on control panel for continuous logging of data even in case of power failure;
- Digital outputs for alarms;
- Skid or container assembly for *PLUG&PLAY* & Easy integration.

THE LOWEST ENERGY CONSUMPTION

VSA OXYGEN *ON-SITE* GENERATORS

CHARACTERISTICS AND FEATURES:

- PURITY 90 - 93%;
- HIGH EFFICIENCY AND THE LOWEST ENERGY CONSUMPTION 0,40 kWh per m^3 @ 90%;
- LCD DISPLAY;
- HIGH QUALITY & DURABLE COMPONENTS;
- GSM / LAN MONITORING;
- MULTIPLE SYSTEMS FOR HIGHER CAPACITIES.

VSA MODEL	Flow @ 90% (Sm^3/h)	Flow @ 93% (Sm^3/h)	Power Consumption @ 90% @ 500 mbarg[1] (kWh/m^3)	Power Consumption @ 90% @ 8 barg[2] (kWh/m^3)
OXYGEN **VSA 20**	22	18	0,40	0,53
OXYGEN **VSA 30**	36	30	0,40	0,53
OXYGEN **VSA 60**	72	60	0,40	0,53
OXYGEN **VSA 90**	108	90	0,40	0,53
OXYGEN **VSA 120**	144	120	0,40	0,53

Performance stated at standard conditions: 15°C /1013,25mbar /40% RH;
Operation at different conditions can affect performance;
Power Requirements: 400VAC +/- 5%, 50Hz +/- 3%, 3-Phase;
[1] Power Consumption includes: Blower, Vacuum Pump and Control;
[2] All items on [1] + Oxygen Compression;
Purity may vary within +/- 2%;
Power Consumption and O2 Flow may vary within +/- 5%;
Other capacities available upon request;
Different outlet pressures available on request: 8 to 300barg;
Models and specifications are subject to change without notice.



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