

A large, detailed fish is shown swimming in a circular tank. The fish is positioned on the left side of the frame, facing towards the right. The water is clear, and the fish's scales and fins are visible. The tank is illuminated from above, creating a bright, circular glow at the top of the image. The background is a deep blue color.

IGS INNOVATIVE
GAS SYSTEMS

OXYGEN EQUIPMENT FOR AQUACULTURE

OXYSWING® PSA OXYGEN GENERATORS

For aquaculture it is generally known that an optimal oxygen content, even at high water temperatures, allows:

- biomass enhancement;
- lower water exchange rates by water recirculation;
- reduced losses caused by pathologies.

Although oxygen is present in enormous quantity in the ambient air, when you need it separately, lots of money must be spent to buy it in gaseous or liquid form, not even mentioning other inconveniences like supply logistics, liquid oxygen evaporation and dangerous storage.

The solution is to produce the required oxygen on site.

OXYSWING® PSA oxygen generators give fish farmers the possibility to generate oxygen independently from gas suppliers at very competitive costs.

Product Flow Range: 1,3 - 120 Nm³/h
Available Purities: 90 to 95 vol.% O₂

ADVANTAGES

- Stable Purity
- Unlimited Capacity
- Safety (Low Pressure)
- Invariable O₂ Cost

OTHER SYSTEMS

	ADVANTAGES	DISADVANTAGES
Liquid Oxygen (LOX)	- Stable Purity	- Limited capacity/procurement/logistics - Evaporation losses - Installation in dedicated, closed areas - Only suitable for medium and large O ₂ - quantities - Vulnerable to price increases by gas supplier
High Pressure Cylinders or Cylinder Bundles	- Suitable for small O ₂ quantities	- Unstable purity - Limited capacity/procurement/logistics - Safety (high pressure, weight) - Cylinder handling - Vulnerable to price increases by gas supplier



HIGH RELIABILITY · LOWEST ENERGY CONSUMPTION · LOW MAINTENANCE

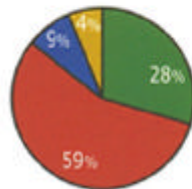


WHAT DO PSA GENERATORS COST YOU?

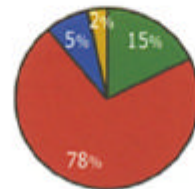
Assumptions

- OXYSWING® PSA System incl. Feed air system
- 93 vol.% oxygen purity
- 8.000 working hours/year
- 5 years depreciation
- Electricity at 0,10 Euro/kWh

SMALL
PSA SYSTEM



LARGE
PSA SYSTEM

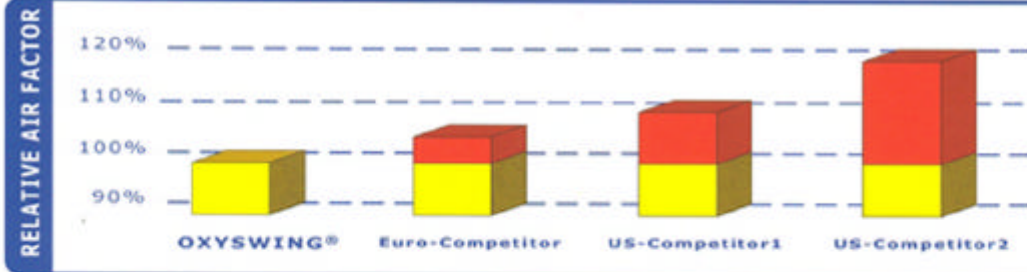


- Depreciation
- Energy
- Maintenance
- Insurance

Energy consumption is linked to the air factor.

OXYSWING® PSA Systems have lower air consumption than the other competitors systems.

HIGH AIR FACTOR = HIGH ENERGY CONSUMPTION



$$\text{AIR FACTOR} = \frac{\text{Air Consumption}}{\text{Product Flow}}$$

All our standard models can be enhanced by a series of optional features to allow the user to have a custom-built solution that meets his individual requirements.

IGS Italia produces complete oxygen generation systems for aquaculture. The plants can be supplied on skids or turnkey assembled inside ISO containers. All the component are selected according to the customer's specific environmental conditions.

Contact us for a consultancy.

We look forward assisting you in developing your specific solution.



IGS ITALIA s.r.l.

Via Giordania, 48 - 58100 Grosseto - Italy

Tel +39 (0564) 458041 / 42 Fax +39 (0564) 458043



Generon® IGS Inc.
16250 Tomball Parkway
Houston, TX 77086 USA
Tel.: +1.713.937.5200 Fax: +1.713.937.5250

Generon® IGS Europe
c/o Office Center K066 Königsallee 66
D-40212 Düsseldorf, Germany
Tel.: +49.211.86.69.15.55 Fax: +49.211.86.69.15.50

IGS Generon GUS
Entuziastov, 55-58 Balashikha
Moscow Region - 143900 Russia
Tel.: +7.495.525.6744 Mobile Phone: +7.903.689.8067

Generon IGS Middle East
c/o Esnaad / Adnoc Group P.O.Box 46121
Abu Dhabi, United Arab Emirates
Tel.: +971 2 6029 312 Fax: +971 2 6029 132

IGS SMC Asia Gas System Co. Ltd.
Shungfeng Rd., Shuangliu Aviation Harbor
Chengdu, Sichuan, P.R. China 610225
Tel.: +86.28.8588.2034 Fax: +86.28.8588.2037

IGS Asia Ltd.
2/3 Moo 14 Bangna Tower A 17th Floor, Bangna-Trad Rd.,
Bangplee Samutprakarn 10540 Thailand
Tel.: +66.2751.9495 Fax: +66.2751.9497

IGS Korea Ltd.
#403, Baegun Building, 366-14 Yatap-Dong, Bundang - Ku
Seongnam - City Korea 463-827
Tel.: +82.31.703.3115 Fax: +82.31.703.8435

www.igs-italia.com - info@igs-italia.com
www.igs-global.com - info@igs-global.com

Official OXYSWING® Distributor