Oxeo EcoPrevent FC
Tomorrow's fire protection – already today

Preventive, energy-efficient, emission-free!

With conventional oxygen reduction systems, an air compressor, compressed air preparation, and a nitrogen generator are required to permanently lower the oxygen level in the protection zone. This results in ongoing costs that can exceed the original investment in just a few years.

The hydrogen-based fuel cell technology Oxeo EcoPrevent FC is significantly more economical. It is the first fire prevention system to protect vulnerable protection zones from fire with an emission-free and thus climate-friendly solution whereby the nitrogen-rich exhaust air from a hydrogen-based fuel cell is fed into the room in order to create a "fire-safe" atmosphere and thus actively prevent open fires.

The high degree of efficiency ensures that the fuel cell can not only create sufficient quantities of nitrogen for fire protection using small quantities of hydrogen, but it also generates power and heat which can be used for profit. The weatherproof, durable and easy-to-maintain design reduces operating costs and thus further increases the cost-efficiency of the Oxeo EcoPrevent FC.

Advantages at a glance

- Delivers fire protection for areas such as compact storage facilities or deep-freeze warehouses, which are very expensive to protect with conventional fire prevention systems.
- Prevents interruptions due to fire damage and thus ensures availability of goods
- With an efficiency level in excess of 90%, it delivers outstanding performance and high energy efficiency
- Reduces CO_2 emissions by hundreds of tonnes each year compared to conventional oxygen-reduction systems
- Reduces dependence on network operators and fluctuating energy costs

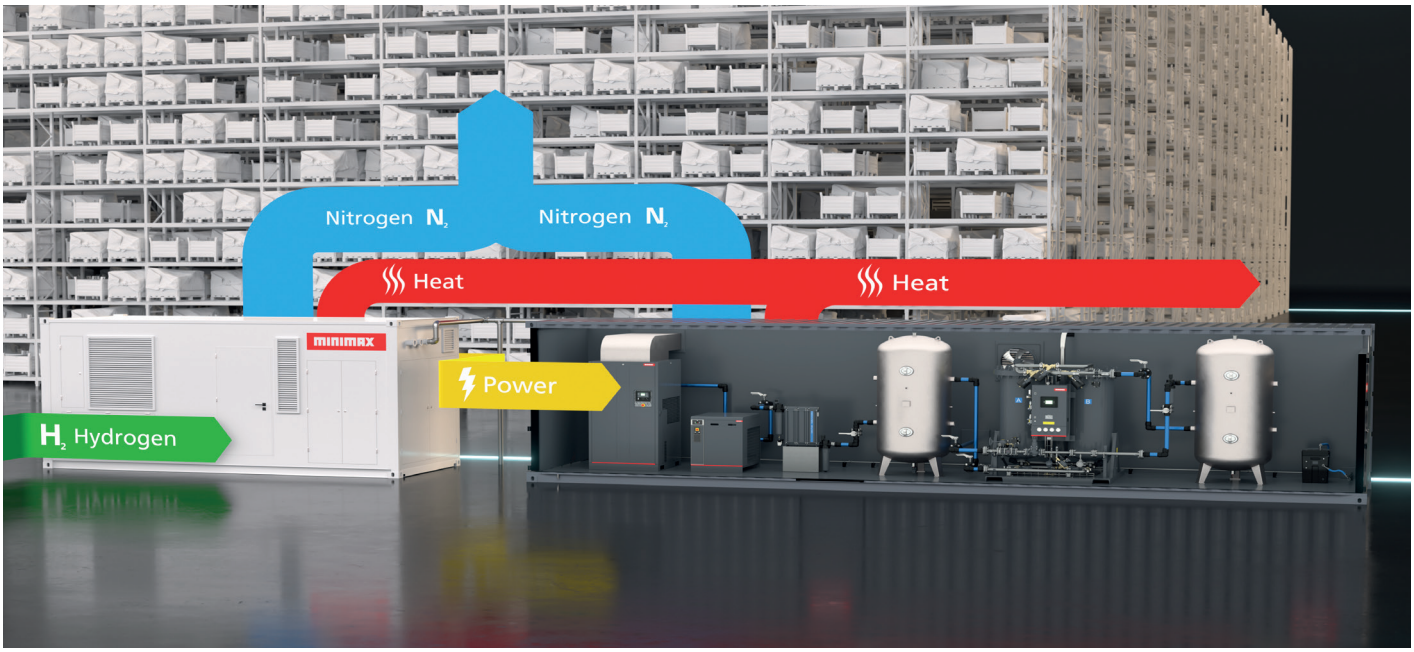
Safety for the warehouse plus return on investment

Oxeo EcoPrevent FC delivers fire protection and a return on invest! Energy and heat produced by the fuel cell can be used to operate other systems, which offers a range of benefits for the operator: As well as saving money, they also become less dependent on network operators and fluctuating energy prices. In addition, the warm water can also be fed into the heating circuit, which can lead to further cost savings. Fire protection is ensured at all times, even during a power cut, because in isolation operation, the fuel cell can also work as a standby generator.

Oxeo EcoPrevent FC also sets standards for installation and commissioning. The weatherproof container design means that the system can also be positioned outdoors, thus reducing procurement costs and enabling valuable inside space to be used for other purposes. The plug-&-play design of the fuel cell also enables quick commissioning and minimizes operational interruptions during installation.

Oxeo EcoPrevent FC eases the budget and protects the climate. With its emission-free operation, the system saves hundreds of tons of CO_2 each year compared to conventional oxygen-reduction systems and supports decarbonization of the business. The prevention of open fires also stops harmful substances escaping into the environment in the event of a fire.

Efficient fire prevention, even in large protection zones – the hybrid solution



With the Oxeo EcoPrevent FC/PG hybrid system Minimax delivers an efficient and, at the same time, climate-friendly solution which can cost-effectively protect even very large buildings such as, for example, high rack or deep-freeze warehouses. It combines the efficiency of the fuel cell with the proven high performance of nitrogen-generation systems that use PSA technology. The energy for the entire system comes from the fuel cell so that it can be operated cost efficiently and is independent of an external energy supply. The increased production capacities do not just provide significantly more nitrogen, but they can also ensure a "fire-safe" atmosphere, even in large buildings. The large quantity of warm water from both systems can also be used even more efficiently for heating.

Minimax makes the difference

- First fire prevention system with a hydrogen-powered fuel cell*
- The hybrid system effectively protects even large safety zones from fire
- Emission-free fire protection thanks to sustainable system design
- Enables cost-effective operation with the profitable usability of energy and heat

* *The fuel cell and its use of electricity and heat are not part of Minimax GmbH's scope of services*

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