



# Swiss Gas Conversion Technology

Plant engineering and environmental systems



**HOFSTETTER**





# Swiss technology with vision

**Wherever there is a build-up of gas that has to be captured to prevent it from escaping into the atmosphere, Hofstetter has the ideal solution, technically and economically. With premium Swiss technology, your success is guaranteed.**

Protection for the climate and environment is not only enshrined in much of our legislation, it is also our moral obligation to create a better world for our children. Our vision of becoming one of the world's leading players in the environmentally sound handling of gas emissions goes hand in hand with these obligations. This spurs us on to develop, build and implement the best plants in the world for the gas utilisation and disposal of gas. Our top priorities are quality, reliability and innovation.

Taking a long-term view on treating the Earth responsibly is vitally important nowadays. By using greenhouse gases as sources of energy, we can replace fossil fuels in generating power. We enable our customers to make direct use of these gases, and protect the environment at the same time.





# Where gases escape, we have the clean solution

**Numerous processes in today's industries generate gas and off-gas. Allowing these emissions to escape into the air is harmful to the environment and illegal in most countries. There is, however, a positive side to combustible gases. These are today's new sources of energy. By using high-tech systems, it is now quite simple to use these gases to generate electricity.**

## **Landfill**

In many countries, waste is stored in secure landfill sites. Micro-organisms deep within the site break down the waste material and cause gas to be released. Hofstetter compressor stations can be used to extract the gas from the disposal site and take it for utilisation like producing electricity, heat or CO<sub>2</sub> credits. Any surplus gas is burnt off in an environmentally sound way by our high-temperature flares.

## **Coal Mine**

When coal is extracted from mines, mine gas is released which consists mainly of methane. Powerful Hofstetter equipment can be used to prevent that this gas is released in the atmosphere. There are a number of reasons why using the mine gas makes sense. The main issue is the safety of the miners. Another benefit is being able to use mine gas economically as a fuel for generating electricity.

## **An-Digestion**

At sewage treatment works, in anaerobic conditions sewage gas is generated which has a very high calorific value. Similarly, the fermentation process of biomass, in biogas plants to generate power is a hot topic nowadays. Hofstetter can supply gas treatment and conversion solution for your biogas system, tailor-made to meet a wide variety of requirements.

## **Industrial**

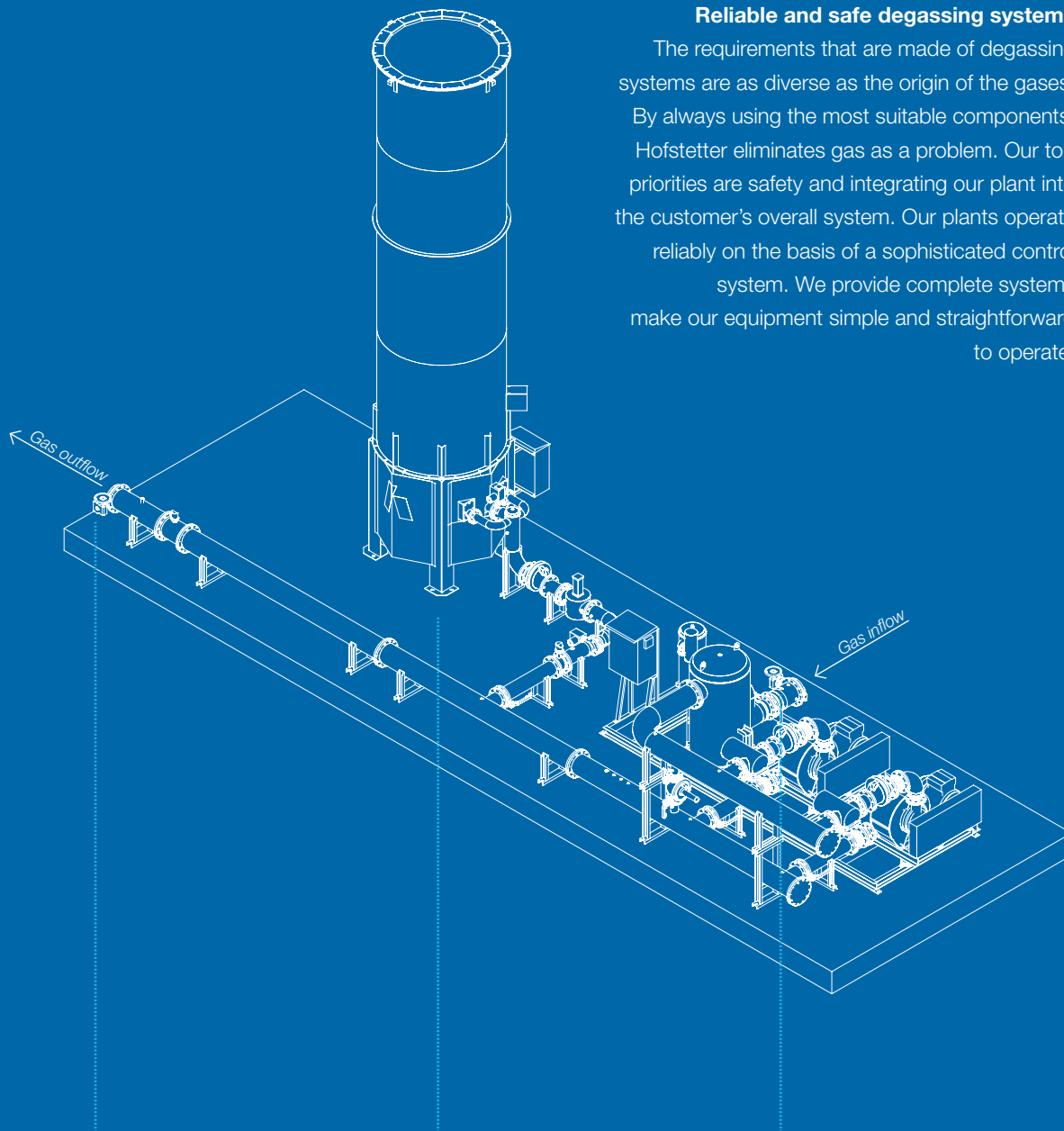
Process gases, wood gases and vapours from petrochemical processing are just a few examples of combustible gases that occur in the industry. The gases are purified in complex processes. It is important that the process is not interrupted if part of the system breaks down or requires inspection. That is why Hofstetter's customers use specifically customised flare burners either as their main system or as a backup for disposing of industrial gases.

*State-of-the-art degassing unit with high-temperature combustion, England.*

# Systematic degassing

## Reliable and safe degassing systems

The requirements that are made of degassing systems are as diverse as the origin of the gases. By always using the most suitable components, Hofstetter eliminates gas as a problem. Our top priorities are safety and integrating our plant into the customer's overall system. Our plants operate reliably on the basis of a sophisticated control system. We provide complete systems make our equipment simple and straightforward to operate.



*Gas outflow: The gas is prepared for further use (e.g. in gas generators). The Hofstetter equipment checks the medium for pressure, temperature, composition and excess.*

*The key component in Hofstetter systems is the compact gas treatment unit with condensate separator, compressor, control system and high-temperature flare for safe combustion.*

*Gas inflow: The gas from landfill sites, biogas plants, coal mines or industrial processes is supplied by the customer. The requirements for Hofstetter systems are as diverse as the sources of the gas.*



# Maximum efficiency in all fields

**Hofstetter products are used everywhere where combustible gases have to be collected, cleaned, transported or disposed of. Our top priority is for all the components of the system to work perfectly together to achieve maximum safety and compliance with gas emissions regulations.**

Our specialist expertise covers the whole range of areas of application. Our primary aim is to comply with the requirements specified by the customer. Hofstetter systems are of outstandingly high quality. This leads to maximum efficiency and an extra long service life.

Since the Kyoto Protocol came into effect, trading in greenhouse gas emissions has become big business. In order for the so-called CO<sub>2</sub> certificates to be validated by the accreditation centres, the gas has to be not only processed in an environmentally sound way but also measured and recorded in great detail. In addition to its gas treatment and gas conversion systems, Hofstetter can also supply a complete monitoring, measuring and recording unit for the Clean Development Mechanism (CDM) and Joint Implementation (JI) projects.

Today the production of green energy in the form of electricity, heat and/or green gas is a growing contributor to provide the world with a sustainable source of energy. Hofstetter's units are designed for maximum efficiency providing our customers with the best returns on their investment.



*Biogas burner for safe combustion of an-digestion gas.*



*Compact mine gas compressor station in a container.*



*Modular degassing plant for landfill sites, with high-temperature combustion.*

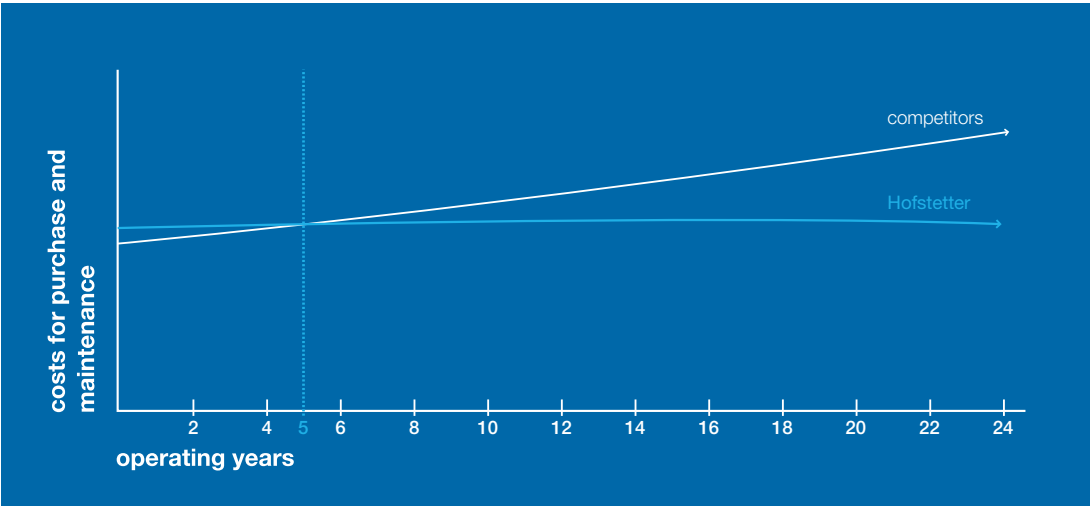
# Swiss quality – it pays for itself

**Hofstetter works with premium materials and develops top-quality solutions that are perfectly designed to suit the operating conditions. Gas emissions comply with the legal requirements in every operating situation – even after the plant has been running for countless hours.**

The strength of our company is built on the fact that we concentrate on plant engineering, gas treatment and conversion technology. This is the best way for us to focus our knowledge and experience, so we can ensure that we continue providing our customers with Swiss quality state-of-the-art products.

Our products and system solutions are consistently measured against international benchmarks and optimised accordingly. This generates synergy effects, giving us a technological advantage and our customers a competitive edge.

We put all our expertise and commitment into our products, for the benefit of our customers. We constantly strive to extend our innovative lead. We achieve this by being highly flexible and responding quickly to customers' needs.



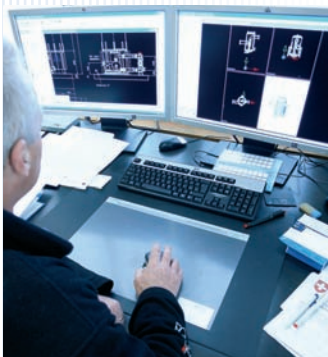
*"Any additional price paid for the outstanding Swiss quality of the Hofstetter systems is offset after less than 5 years by lower maintenance costs" J.M. Guerbe Prodeval S.A.S.*



# Low running and maintenance costs secure your profits

**As our customer, you benefit from the longevity and the low operating and maintenance costs of our systems. The high quality ensures that the unit operate reliably with little downtime. Risks and costs are reduced so that your long-term profits are increased.**

We have over three decades of specific engineering expertise, so we can always find the right complete solution to any problem. Our philosophy is to achieve maximum operating benefit in the minimum amount of space. The plant is delivered pre-assembled and ready for use. It is quickly and easily installed and commissioned on site. It is easy to use, meaning that you save on training costs and can sort out any problems quickly. Day in, day out, we strive to provide you with the best possible product.



*Our development engineers seize on new ideas and test out how to apply them.*



*Our products are for guaranteed accuracy and reliability.*



*Innovations feed constantly into our production processes and are put to practical use.*







# Steady progress based on flexibility

**Hofstetter is a leading company in its field, with over 1,500 systems installed worldwide. Working closely with our customers inspires us to be innovative and constantly move forward. Through our extensive network of partners, we are able to have direct contact with our customers, and in many countries we have our own specialists available locally.**

Our services extend from design, consultancy and manufacture through to commissioning and customer service. We use the latter as an important source of information, helping us to maintain the highest standards for our products, in terms of both technology and quality. Thanks to our flexible marketing and engineering processes, we are able to react quickly and efficiently to customer requirements. Specific customer requests always reawaken the pioneering spirit in our highly motivated staff, who commit their knowledge, skills and imaginative ideas to meeting them.



*Over 1,500 Hofstetter units installed worldwide.*



# History of our successful development

## Hofstetter

In 1975, the family enterprise K. + U. Hofstetter AG founded Hofstetter Umwelttechnik AG. The company operated cement and gravel works and worked at this time with partners, including landfill site operators, to develop degassing systems to overcome the odour problem. Thanks to the company's gifted engineers, there followed a new generation of modern degassing plants for landfill sites, with the focus on combustion technology. Soon Hofstetter became the first port of call for customers seeking solutions for extracting and disposing of gases from landfill sites. With visionary farsightedness, creative inventiveness and enormous energy, Hofstetter Umwelttechnik AG has developed to become today one of the world's leading providers of gas treatment and conversion systems.

Today Hofstetter is covering the globe with companies in: The Netherlands, Switzerland, Columbia and Malaysia

More information at [www.hofstetter-uwat.com](http://www.hofstetter-uwat.com)



### **Hofstetter Umwelttechnik AG**

Hindelbank  
Switzerland

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Amsterdam  
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