

GAS CLEANING EQUIPMENT



■ VOLATILE ORGANIC COMPOUND CLEANING

The need to care for the environment and raised social concern and awareness have given rise to legislation on the emission of Volatile Organic Components (VOCs), applicable in many strial sectors.

Thermal oxidation is a technology consisting of subjecting exhaust streams polluted with VOCs to sufficient temperature and residency time to totally remove contaminants. Destruction efficacy is greater than 99%.

Kalfrisa performs the engineering development and manufacture of this type of facilities and offers specific integrated solutions to meet the requirements of each situation.



RELIABILITY



EFFICIENCY



■ RECUPERATIVE THERMAL OXIDATION

Recuperative thermal oxidation is a technology that carries out the destruction of volatile organic compounds in an oxidation chamber providing adequate conditions of temperature, residency time and turbulence of the mixture.

This technology is suitable for treating gases with high VOC concentrations and also for residual liquids. In addition, it allows most of the energy generated through combustion to be recovered either in the form of steam, thermal fluid or hot air.

■ COMPLEMENTARY PURIFICATION SYSTEMS

As well as volatile organic compounds other pollutants may be present, such as suspended particles or halogen compounds. In addition to thermal oxidation Kalfrisa offers alternative abatement technologies, enabling us to provide specific solutions for each case:

- Zeolite roto-concentrators
- Active carbon filters
- Gas scrubbers and neutralization systems
- Particle filters

■ REGENERATIVE THERMAL OXIDATION

WHERE WE ARE

- Paints, varnishes, and dyes
- Chemical and pharmaceutical industry
- Automotive industry
- Flexography and graphic arts
- Surface coatings
- Biogas upgrading process
- Gas & Oil industry



ENERGY RECOVERY

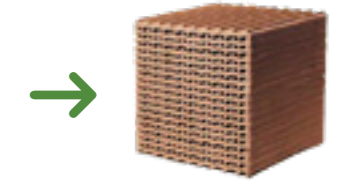
In some cases, there is surplus energy after thermal oxidation, which can be used at a later stage for different purposes, such as:

- Heating air
- Generating hot water
- Thermal oil

BURNERS

Our equipment incorporates the most advanced combustion systems and the latest alternative technologies to fossil fuels.

- Natural gas or polyfuel burners
- Biogas burners
- Burners apt for hydrogen
- Electrical heating systems



CERAMIC MATERIAL

Very high-quality ceramic filling which allows greater energy accumulation and a very high Exchange Surface, which gives our units an overall thermal efficiency greater than 95%.

WHY KALFRISA?

- 24/7 operation
- Customised control system
- Remote connection for immediate technical assistance
- Custom design
- Maximum tightness of switching valves.
- Low operating and maintenance costs

EXPERIENCE, PASSION AND RESPONSIBILITY

KALFRISA

360°

EXPERIENCE
KNOWLEDGE
IMPLICATION

The knowledge and expertise we have acquired over more than 50 years of experience working with energy and environment techniques at industrial plants means that we offer our customers reliable, cost-effective solutions.

All our units are designed and manufactured in compliance with the applicable Regulations. Providing a 360° service is the key to competing for European market leadership.

Kalfrisa has its own proprietary technologies, and its designs, develops, manufactures, commissions, and provides technical after-sales service for its equipment. Experience, expertise and involvement are the three pillars on which we base our activities.

Kalfrisa guarantees an optimal match of its equipment to customers' requirements, adapting its designs to meet the different technical specifications of each project.

Kalfrisa's commitment to excellence is underpinned by ISO 9001:2015 quality certification as well as the implementation of a work philosophy based on external and internal quality standards.



AFTER SALES SERVICE WITH THE BEST WARRANTY

■ TECHNICAL SUPPORT SERVICE

Maximum experience and a full team of qualified professionals at your service.

Troubleshooting and on-call telephone service 365 days/year.

■ MAINTENANCE AND OPERATION CONTRACTS

Coordination of scheduled visits to customers to assess and guarantee correct operation of equipment. Possibility of priority troubleshooting service.

■ WE ARE CONNECTED

All our units include remote connection systems for real-time monitoring of operation.

Prevention and immediate repair of faults or breakdowns.

INTEGRATED PROJECT MANAGEMENT

Our engineering division and technical office analyse the characteristics of each individual project to offer technological solutions that best adapt to our customers' requirements.

We manage all the phases of the project, from the development and general design of equipment to its mounting and commissioning at our client's site.

We have our own production facilities for the manufacture of all our units, ensuring quality and fully guaranteeing all of our projects.



KALFRISA

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