



Gas treatment plants (RTO)

Engineering at service
of sustainability



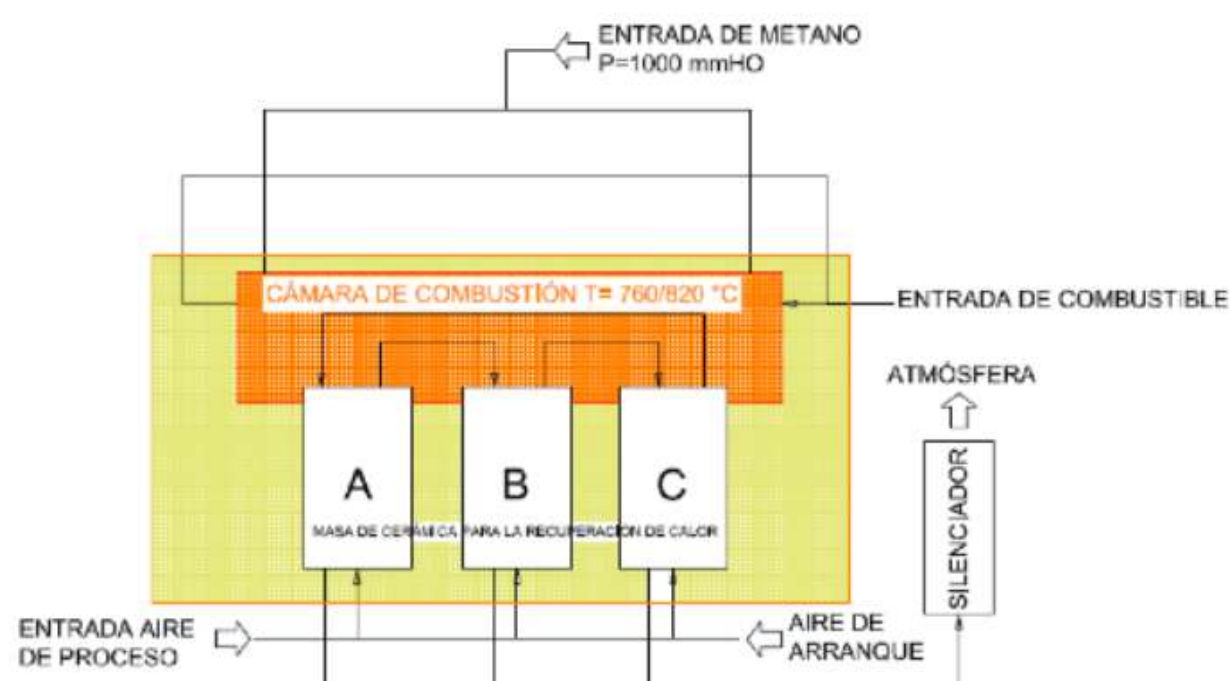
Gas treatment plants (RTO)

KERN SD

designs and supplies scrubber plants (RTO - Regenerative Thermal Oxydator) for the treatment of gaseous effluents.

- KERN SD has its **own know-how and technology** to support its customers in the **development of integrated gas treatment solutions** from the initial stages to implementation and commissioning.
- **Regenerative thermal oxidation (RTO)** is the best solution currently available for the effective removal of VCOs (volatile organic compounds) and odours, due to three main factors:
 - High thermal efficiency
 - High percentage removal of volatile organic compounds
 - High flexibility: the type and amount of impurities can be changed without changing the plant efficiency

This technology consists of subjecting the contaminated gas to high temperatures for the necessary time and in the presence of oxygen in order to carry out the following oxidation reaction.





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PLANT FEATURES

Output	From 3.000 Nm ³ /h to 250.000 Nm ³ /h
Thermal efficiency	90 – 95%
Operating temperature	800°C – 900°C (free of halogenated compounds) 1.100°C (with halogenated compounds)
Materials	Built with high quality materials
Monitoring	Fully automated and monitored plants

- ON-SITE PRODUCTION
- FIXED PLANTS
- AUTOMATIC CONTROL
- SAFE OPERATION
- ECONOMIC SAVINGS (low operating and maintenance costs)
- HIGH ENERGY EFFICIENCY
- NO ENVIRONMENTAL IMPACT

Gas treatment plants (RTO)

Volatile organic compounds (VOCs) are emitted as gases by certain solids or liquids. VOCs include a variety of chemicals, some of which can have short- and long-term adverse health effects.

SOME APPLICATIONS

OF GAS TREATMENT

- **Manufacture of paints and varnishes**
- **Automotive industry**
- **Coatings and surface treatments**
- **Printing, flexographic and rotogravure industries**
- **Packaging manufacturing**
- **Food industry**
- **Wood coatings**
- **Chemical and pharmaceutical industry**
- **Petrochemical industry, Oil & Gas**