

eKO Shield product line

Products in the eKO Shield line are all environmentally friendly. Unlike simple masking products, which only work by covering the foul odours with other scented substances, the eKO Shield deodorizers chemically and physically interact with the molecules responsible for the unpleasant smells, neutralizing them.

In order to protect the health and safety of the operators in the plant, all eKO products used in the aerial dispersal phase (by nebulization) have UNIPRO and Farcoderm certification that they are not hazardous even in the event of repeated voluntary contact, although contact is almost always accidental.

The molecules responsible for the unpleasant smells are neutralized.



Chimec S.p.A. ITALY

Head Offices
Via delle Ande, 19
00144 ROMA
Tel. +39 06 91825 1 (switchboard)
Fax +39 06 5918943
Website: www.chimec.it
e-mail: info@chimec.it

**Commercial Offices
& Production Plant**
Via Ardeatina, km 22.500
S.Palomba
00040 Pomezia (ROMA)
Tel. +39 918251 (switchboard)
Fax +39 06 9194170

SUBSIDIARY COMPANIES
Chimec GmbH, GERMANY
Nußbaumstraße, 10
D-80336 München, GERMANY
Tel. +49 (0) 89 517019-0
Fax +49 (0) 89 517019-19
Email: zentrale@chimec.de

CHIMEC Asia Pacific Pte Ltd, SINGAPORE
Head Offices: 400, Orchard Road #21-06
238875, SINGAPORE
Tel. +65 6261.5975
Fax +65 6261.2025
e-mail: info@chimec.com.sg



Odours are one of the more noticeable negative aspects of the environmental impact of many industrial sites, waste disposal and treatment plants, biomass plants, biogas plants and hydrocarbon storage tanks. Generally speaking, even though it has not been unequivocally shown that they have a direct effect on one's health, odours are the cause of persistent nuisance for the nearby residents, becoming a source of conflict for both existing plants and in the selection of sites for new plants.

Odours are the cause of persistent nuisance

IPPC (Integrated Pollution Prevention and Control)

The IPPC, European directive 96/61/EC, followed by 2010/75/EU, is designed to reduce emissions in all environmental sectors (air, water, soil, rubbish). It includes the criteria for integrated authorisation (AIA) for new and existing plants, as well as plant operating criteria, for different types of emissions. To obtain authorisation, the IPPC directive involves use of the Best Available Techniques (BAT: Best Available Techniques) for preventing pollution and delegates issue of a BAT reference document, BREF (Best REFerence) document, to successive decrees.



Innovative Technology for Odorous Emissions

eko Program

For the last 10 years, the Chimec R&D department has been studying innovative solutions to the problem of odour emissions. Chimec has now fine tuned a complete program for the monitoring and treatment of odour emissions, designed to identify the areas most responsible for emissions, proposing, when necessary, “ad hoc” solutions for the reduction of odours.

The eKO Program is divided into four main phases:

- **“Odour mapping”**, after defining topographic and meteorological aspects, a survey of the odours is performed.
- **“Odour characterization”**, a qualitative and quantitative analysis of the odour detected. Analytical instruments for detecting H₂S, VOC, mercaptans, etc. are used for this purpose. Along with traditional methods, Chimec can also perform dynamic olfactometry testing.
- **“Intervention assessment”**, both structural and physical-chemical, depending on the issues involved.
- **“Monitoring”**, Chimec considers monitoring of odour emissions using on and off line systems to be an integral part of its treatment program.

Monitoring systems are chosen according to the needs of the plant and include:

E.O.I. Electronic Olfactory Instruments: able to provide a “fingerprint” of the odour and recognise it, particularly suitable for monitoring.

SensElab: a single control unit for recording connected to the detectors for specific substances located in various areas of the plant.

The continuous monitoring of the site, in synergy with the treatment program, is an important and objective tool for dialoguing with the local committees and with the organizations that check atmospheric pollution.

