

Maintenance of RTO and RCO Systems

Solutions for optimal energy and environmental functioning



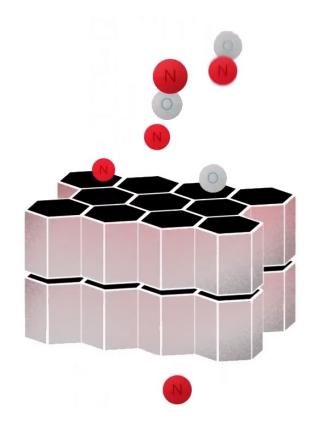


APPLICATIONS

Solutions for periodical and general maintenance of your RTO and RCO Systems







EXAMPLES OF USE:

During the operation of regenerative systems for post-combustion (RNV/RTO), the combustion residues are deposited on ceramic honeycomb elements. Loading of the deposits lead to a reduction in capabilities of RTO & RCO systems. Therefore, honeycombs should be regularly cleaned and, if necessary, replaced.

APPLICATIONS BY INDUSTRY:

- paint shops (combustion of base varnishes...)
- polyurethane foam (pulverisation of separation agents)
- production of batteries (production of electric circuits)
- cement production (NO $_{\rm x}$ deposits in furnaces and exchangers,...)

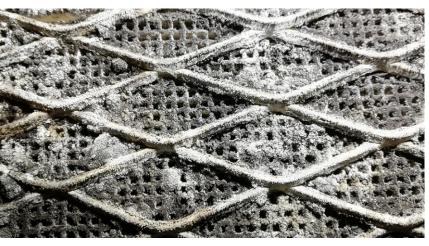
WECLEAN:

- volatile organic compounds (VOC)
- ammonia (NH₃)
- hydrogen sulphide (H₂S)
- polycicyclic aromatic hydrocarbons (PAH)
- nitrogen oxides (NO_x)
- polychlorinated dibenzo-p-dioxins (PCDD/F)
- dust
- carbon monoxide (CO)
- hydrogen cyanide (HCN)
- carbon disulphide/carbonyl sulphide (CS2/COS)

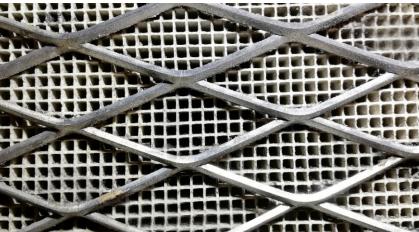


ADVANTAGES

Up to 30% better energy efficiency of RTO and RCO systems and a lower level of emissions.









Ceramic honeycomb of an RTO incinerator prior to cleaning (above) and after cleaning (below).

Cleaning with dry ice inside a incinerator (above) and the system for cleaning inaccessible places in low mounted combustion chambers (below).

HIGHLIGHTS:

- we reduce energy consumption
 multistage process of blast cleaning and
 non-abrasive cleaning, thus ensuring 30% better
 flux and energy efficiency
- we adhere to standards and protocols
 all our maintenance work and procedures are in
 line with the standards and protocols of the
 manufacturers of equipment and our clients
- we clean inaccessible places
 we have also developed a system for cleaning
 inaccessible places, which, following the end of
 the procedure, we check using a camera

• no damage on equipment
we ensure total safety of the maintenance process, without
any damage to ceramic puclei and equipment (valves)

any damage to ceramic nuclei and equipment (valves, impellers, electrics, pneumatics...)

- without water or chemicals
 we use a completely dry procedure to clean RTOs & RCOs,
 which ensures that, once the maintenance procedure has
 been completed, the apparatus can be immediately restarted
 - shorter downtime
 we organise project work in two or more shifts, thus ensuring
 the shortest possible downtime of equipment



OUR SERVICES

We keep RTO and RCO Systems in the best possible condition.



1 ABOUT US

We are a leading company in the field of surface treatment in South-East Europe. We are based in Slovenia and cooporate with some of the most important domestic and global partners. For years, we have been providing a range of indispensable services for our clients in all branches of industry, ensuring smooth-runing, quality, safe and clean production process.



2 WHERE WE OPERATE

We have more than 10 years' experience in the area of maintenance of incinerators and have successfully realised over 50 RTO and RCO maintenance projects.

In order to achieve excellent technical and time responsiveness, we carry out services within a 1,200 kilometre range from our headquarters in Slovenia.

locations of our references
Blast Tehnik headquarters





3 CAPACITIES

- 12 machines for dry ice cleaning
- 2 machines for dry snow cleaning
- 5 mobile diesel compressors
- 2 mobile electric compressors
- 6 high-vacuum suction systems
- 4 mobile filtrations systems

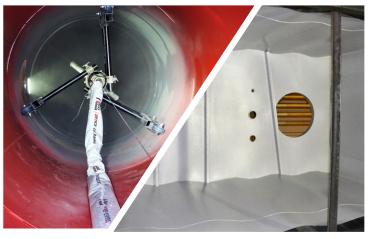


Cleaning of thermal wheel (dia. 5 meters) with dry ice (left); cleaned and uncleaned parts of the honeycomb of a thermal exchanger (right)

4 DRY ICE CLEANING

For EFFECTIVE, DAMAGE-FREE CLEANING of ceramics and other parts of equipment (valves, pistons, electronics, pneumatics...) we use a process of cleaning with dry ice.

It is an entirely DRY CLEANING PROCESS. Once cleaning has finished, the EQUIPMENT CAN BE RESTARTED IMMEDIATELY, thus DOWNTIME on incinerators IS REDUCED BY 30%.



Automatic sandblasting of the interiror of an energy pipeline with a diameter of 1.100 mm (left); sandblasted surface (Sa3) in RTO interior.

5 SANDBLASTING AND PAINTING

We carry out a comprehensive renewal of the surface during the phase of restoration work on the internal and external structural parts of RTOs

By sandblasting we remove rust, old paint and dirt and roughen the surface to achieve optimum adherence of the paint.

We use various paints and paint application systems (manual, pistol, airless...) based on our customers' requirements.



Replacement of ceramic "saddles" (left) and replacement of ceramic blocks on an RCO incinerator in a cement production (right).

6 REPLACING CERAMICS

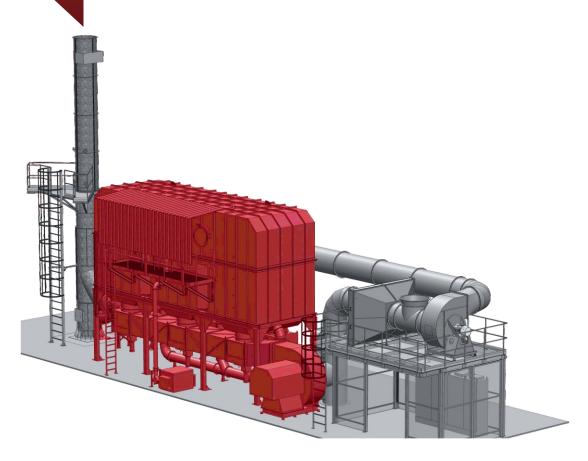
Based on the standards and protocols of manufacturers of incinerators, as part of our general service procedures we carry out disassembly, cleaning and, as required, also replacement of ceramic fillers (ceramic blocks & saddles).

For fast and safe transport, we use fast-assembly conveyer belts.

Zero Emissions and Optimal Use of Energy.









 $Regular\,main tenance\,and\,cleaning\,of\,RTO\,systems\,in\,paint\,shops\,is\,a\,condition\,for\,reliable\,operation\,and\,optimal\,energy\,efficiency.$

In carrying out these kind of projects, it is essential to have a partner who is perfectly adapted to our time and technical requirements...

Blast Tehnik has proven to be a reliable long-term partner, with whom we have now successfully carried out more than 30 cleaning and other service procedures on our RTO.



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