

## Proprietary Technology

# DYNACYCLE RTO

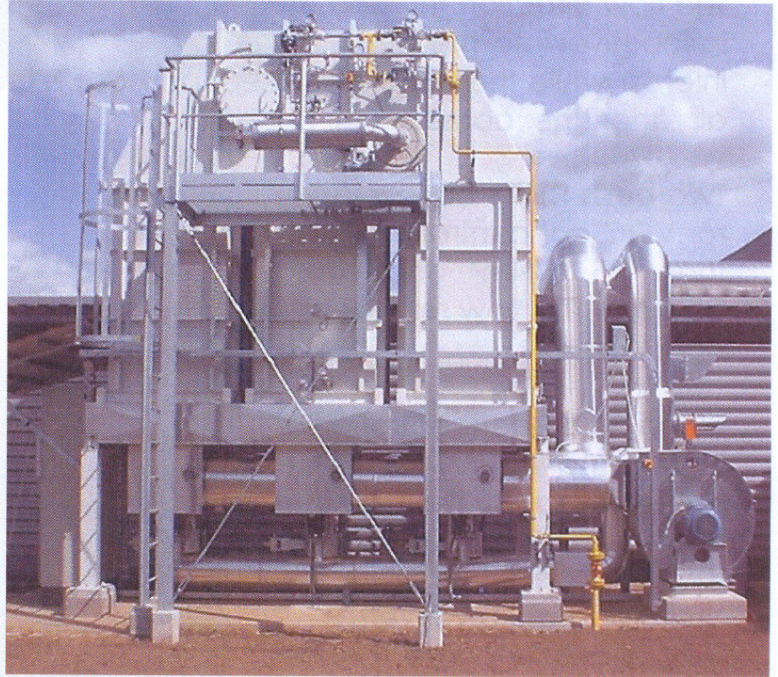
(\* ) Technology developed by and acquired from **MONSANTO**

## Applications

- Polymer and resins manufacture
- Organic chemical production
- Petroleum refining
- Plastics processors
- Rubber chemicals production
- Paint and painting systems
- Printing and publishing
- Tape manufacturer, fabric coating
- Wood furniture manufacture, finishing lacquering
- Solvent cleaning processes
- Many more....

## Benefits

- Relative low capital cost
- Moderate operating cost if VOC concentration is above 1.5 g/Nm<sup>3</sup>
- No risk of poisoning
- Compact design
- Durable and flexible



## How it works

The VOC's are oxidized to CO<sub>2</sub> and water in a combustion chamber at temperature as high as 820°C. High heat recovery rate is reached thanks to the use of ceramic packing, configured in two beds at least, which are alternatively operated to absorb and reconstitute the heat. A burner system is setting the air at the necessary value in order to achieve very high VOC removal efficiency.

The flow direction through the beds is changed as a function of heat accumulation level into the beds: the inlet bed (first bed) is reconstituting the heat to the inlet air while the outlet bed (second bed) is recovering heat from the heated air after the combustion cham-

Two beds RTO's can be used for VOC concentration lower than 1.5 g/Nm<sup>3</sup> and when peaks at the flow reverse are admitted.

When VOC concentration is higher and when this peak is not allowed, a third bed is used. In this configuration, the third bed becomes the outlet bed at flow reverse. That allows to purge the first bed in order to make it clean



**Among the references worldwide we can count the following clients: DCM (Belgium), Siemens (Austria), Bayer (Italy), GE Plastics (USA), Ford (USA), Philips (USA),...**