

## Proprietary Technology

# DYNACYCLE RCO

(\* ) 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

- Lower capital and operating costs
- Compact design
- Significantly less NOx produced compared to thermal systems
- Durable and flexible
- Proven technology



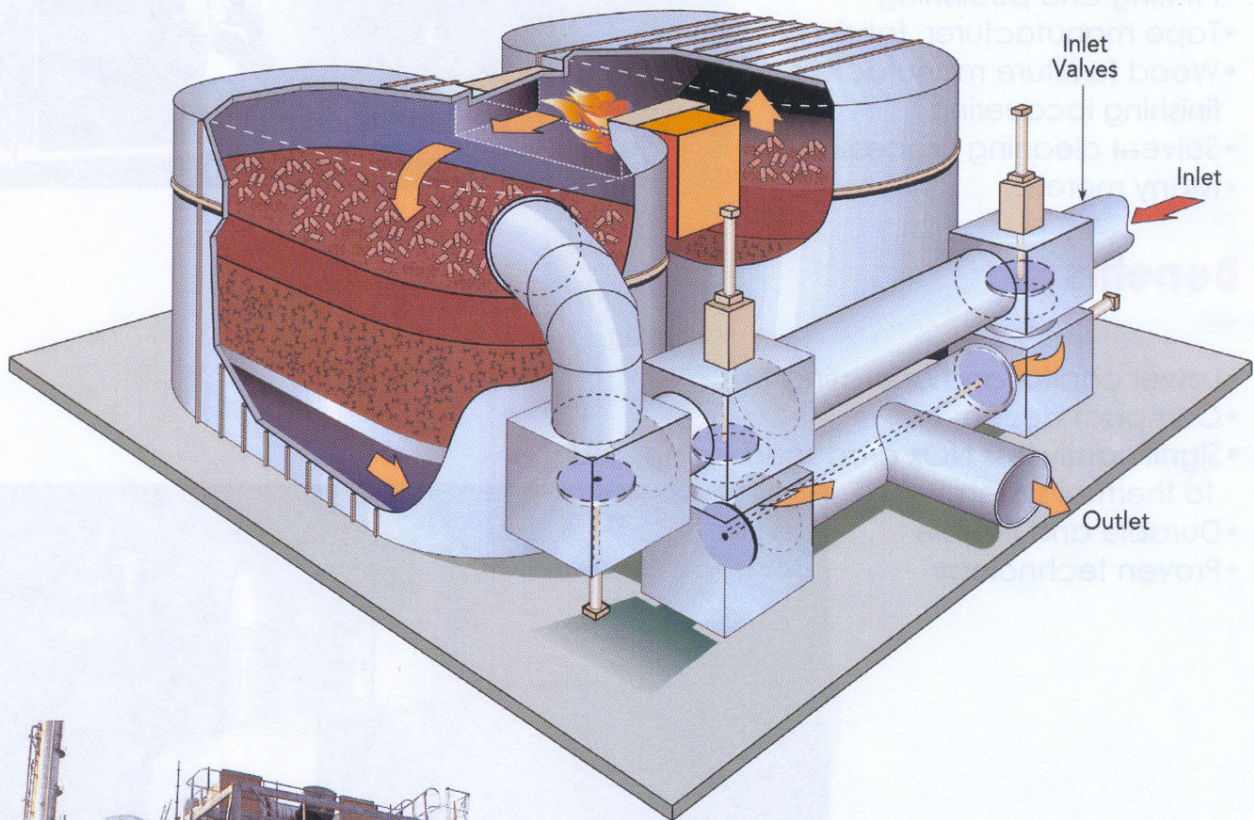


## How it works

The VOC's are oxidized to CO<sub>2</sub> and water in a catalyst bed at temperatures as high as 400°C that is located between two beds of inert, ceramic packing. In case high removal efficiency is required, a purge system is used, it is by-passing the inlet bed during a few seconds while it is purged with clean air. It allows to reduce concentration peaks during flow switching.

The direction of the flow through the two beds is periodically reversed to trap process heat where it is needed most i.e. in the catalyst. The first ceramic bed acts to preheat the incoming gas and the second ceramic bed is used to recover the heat from the air stream before it leaves the system. When the first bed has cooled to a minimum, the flow is reversed and the bed becomes the outlet or second ceramic bed, being regenerated for the next cycle as it picks up process heat from the existing air stream.

This process is repeated, with the net result being the most efficient oxidation process to date.



**Among the references worldwide we can count the following clients: Repsol (Spain), Shell (Netherlands), Siemens (Austria), Bayer (Italy), GE Plastics (USA), Formosa (Taiwan), Ford (USA), Flanamat (B),...**