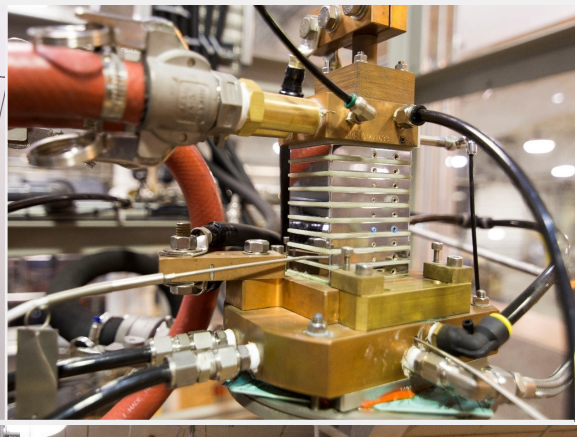
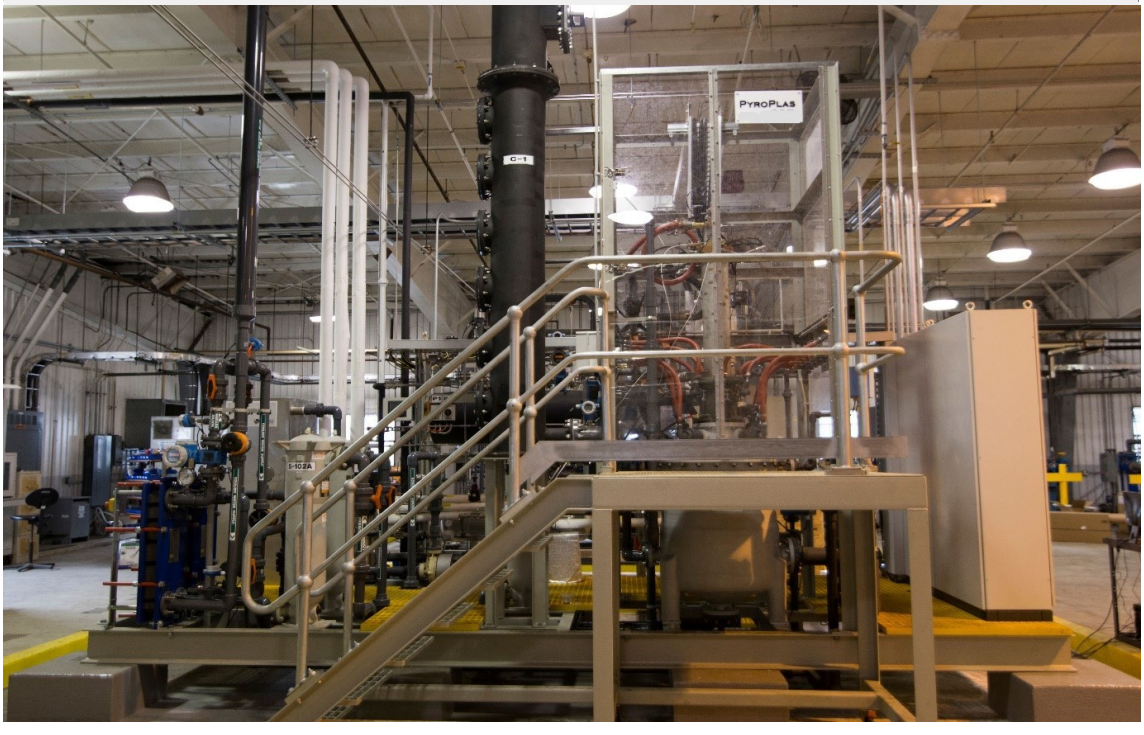
econ INDUSTRIES

Case Study

Destruction of Ozone Depleting Substances (ODSs)





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Zero industrial waste … !

Destruction of Ozone Depleting Substances

PyroPlas Technology

ODSs are substances that cause the depletion of the ozone layer. Depletion is typically caused by the photo-dissociation of halocarbons and catalytic destruction of ozone by the resulting atomic halogens. The majority of these halocarbons are man-made and have such serious affects to the ozone requiring control synchronized by the Montreal Protocol.

The Protocol sets out a mandatory schedule to phase out ODSs with binding obligations for developed and developing countries. With substances like Chlorofluorocarbons (CFCs), Halons and Methyl Bromide already phased out, the protocol's focus now looks to Hydrofluorocarbons (HFCs).

Our client, an industry leader in the supply and lifecycle management of refrigerants, industrial gases, halons and fire suppressants, made a clear decision to destroy these redundant gases to the highest standards. They utilise PyroPlasto destroy these redundant gases to a destruction efficiency of 99.9999%. The PyroPlas operates with high transparency allowing for simple audit trails and evidence of high quality destruction. The compact footprint of the PyroPlas allowed for easy siting at an existing facility for efficient and discreet operation.

Performance data

Operation:	Continuous feed
Operating Temperature :	> 3,200 °C
Residence Time :	30 miliseconds
Plant Utilisation :	> 90%
Destruction Removal Efficiency (DRE):	99.9999%

Design characteristics

- Superior waste mixing supporting a high destruction efficiency
- High temperatures producing a high destruction efficiency
- Excellent heat transfer systems allowing for lower system thermal inertia
- Compact Process and extremely safe operation
- Emissions to the atmosphere are substantially lower than existing and proposed international standards
- Servicing is simple, clean and inexpensive
- The PyroPlas can be shut down and back up and running in less than half an hour