We solve problems

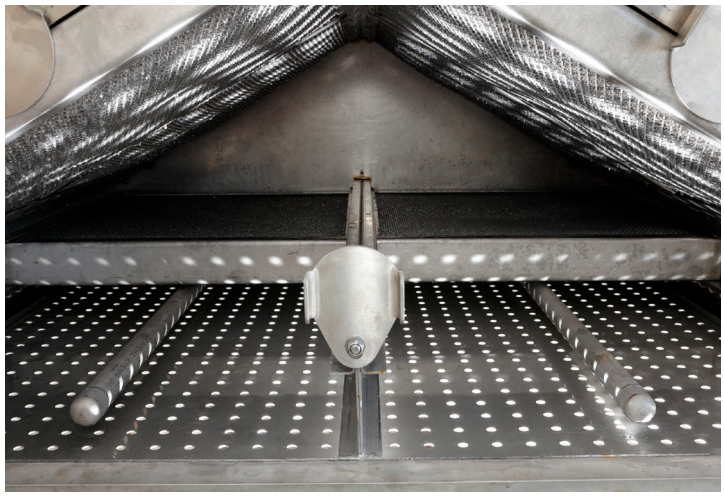
Liquid Gas Contact Scrubber (LGC)

FEG

Clarity through simplicity

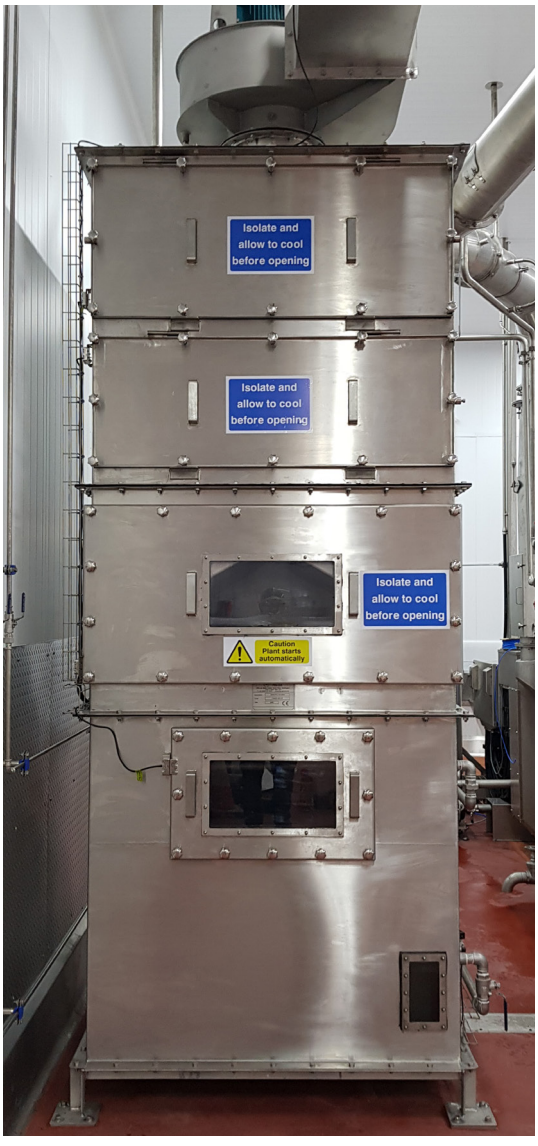
Odour Abatement

Odour and oil mist emissions from applications such as frying, cooking, coating and seasoning within the food industry can cause major problems and lead to complaints to Environmental Health.



Odour is subjective and different people will pick up different odours and have different threshold levels. Removing one identified compound or obvious smell will often unmask others that had not been noticeable previously. These processes often produce sticky particulate, fat droplets and oil mist which is hard to filter with traditional methods and coat nearby buildings and roofs. Oil mist in ducts can cause hygiene and maintenance issues and uncontrolled oil mist build up can lead to factory fires.

FEG Approach



One size does not fit all.

The LGC Scrubber's flexible and modular multi-stage design ensures that the specific requirements of the application are accommodated. The unique design of this scrubber ensures that the client benefits from a practical and low maintenance solution which delivers compliance with the requirements of **BAT** (Best Available Techniques).

Benefits

- Suitable for internal or external installations
- Recirculation of liquor reduces costs and lowers environmental footprint
- Tackles Legionella
- BAT (Best Available Techniques) compliant
- Low maintenance and can incorporate CIP systems
- Provides a fire barrier accepted by insurance companies
- No cleaning of ducts after scrubber
- Flexible and compact - can be mounted at fryer offtakes

LGC Scrubber Features

A. Inlet:

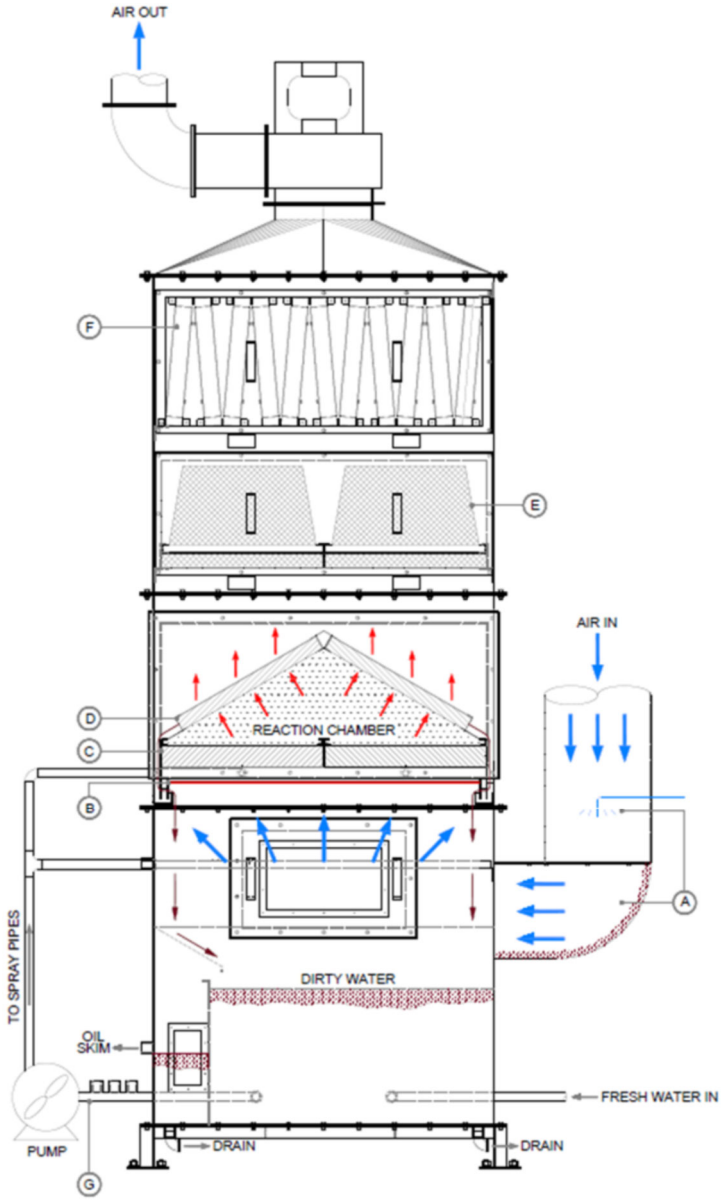
- Large and heavy droplets and particulate drop out directly into the sump due to the inlet design.
- Cooling and condensing of the gas stream.

B. Impingement Scrubbing:

- High impact wet primary scrubbing of particulate, mists and droplets.
- Breaks up water sheet for effective scrubbing in next stage.
- High energy wet primary scrubbing.

C. Liquid Gas Contact:

- Effective cooling and condensing in irrigated reaction pad and contact chamber.
- Water soluble compounds are effectively collected.
- Chemical scrubbing option at this stage.
- Liquor returns to the sump for recirculation.
- Complete fire barrier.



D. Mist Eliminator:

- High Efficiency mist eliminators stop carry over of droplets.
- Collected liquor returns to the sump.
- No contamination due to carry over of droplets emitting to atmosphere.

E. Coalescing and Fine Filtration:

- Coalescing mists into larger droplets to improve capture and final filtration of sub-micron particulates or mists.

F. Activated Carbon Filters:

- Gas scrubbing for odour removal.

G. Recirculation and Dosing:

- Dosing with detergents or hypochlorite and caustic are standard options.
- This can give chemical scrubbing for odour removal, control of Legionella and hygiene cleaning of the scrubber.

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