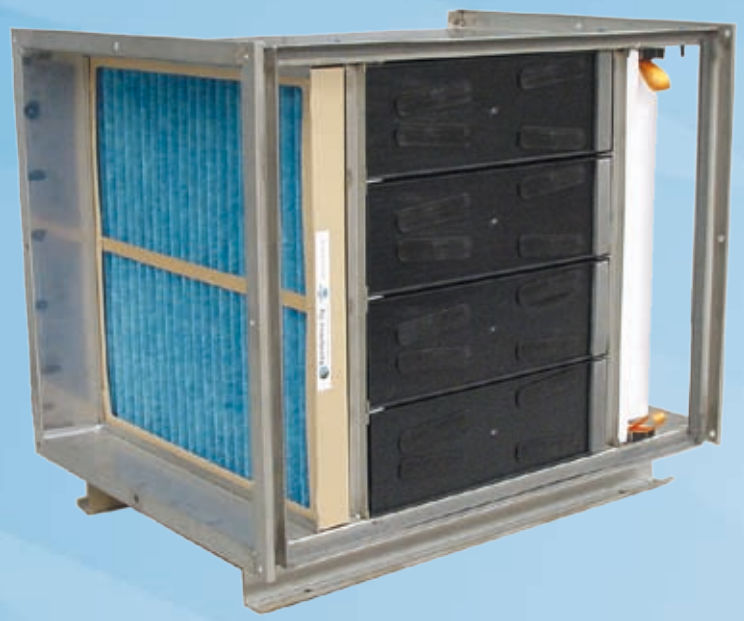
CL-K

Chemical air cleaners



Applications

CL-K air cleaner for circulation air provides comprehensive design possibilities for the control of both particle and gaseous concentrations. Halton Chem air cleaners are designed for purification of intake and circulation air in air-conditioning systems installed in facilities with major odour problems and high corrosion concentrations, such as electrical and instrument facilities, IT control rooms and computer centres, as well as electronic equipment facilities.

Construction

CL-K air cleaner comprises CL 15M modules that can be delivered either empty or filled with potassium permanganate pellets (CL ALOX 6), activated carbon pellets (CL CARB 9) or as requested by the customer.

Quality and environment

Operations are guided by the ISO 9001:2001 quality certificate and the ISO 14001 environmental certificate.

Technical data

Modules

Type	CL 15M
Filtration efficiency	99 %
Contact time Dwell time	0.07 - 0.25 s
Dimensions	600 x 150 x 440 mm
Pulp volume	ca 15 l
Material	SPS plastic (environmentally friendly recycled plastic)

Filtering material

E.g. CL ALOX 6 or CL CARB 9 cf. chemical filters

Particle filters

Prefilter	e.g. CL-KS 66 F5-48
Final filter	e.g. CL-SLP 66 F9-100
Differential pressure gage	Magnehelic 2000

Air cleaner frame

Material	acid-resistant (or galvanized) steel, powder paint
Connection type	flange / slip connection

Operating and service instructions for

Chemical air cleaner CL-K

Air cleaner CL-K comprises filter modules type CL 15M mounted in the same filter rack and usually also prefilters and final filters. Depending on the impurities, as the filtering material can be used for example CL ALOX 6 or CL CARB 9. In single-stage systems the recommended filtering material is CL ALOX 6. This makes it possible to monitor the fouling of the filter and to estimate when the filtering material needs to be replaced.

Refill

Procedure:
- make sure you have a sufficient amount of filtering material available
- remove the modules from the filter housing
- pour the filtering material through the openings at the end of the modules
- when the module is full, shake it carefully
- add filtering material to fill the module to the top
- if required, wear a respirator mask or ensure sufficient ventilation in the area
- place the module in the cleaner (pay attention to the arrow at the end of the module)
- press the modules against the gaskets on the cleaner using the clamping mechanism
- mount the filter access door and close it tightly
- start the fan
- record the refill

Replacement of filtering material

The replacement of the chemical filtering material is determined on the basis of monitoring results. The filter stages shall be replaced based on the life cycle analysis of the materials.
Procedure:
- stop the fan
- remove the access door
- remove the filter modules
- drain the used material into canisters
- if required, wear a respirator mask or ensure sufficient ventilation in the area
- fill the modules and place them in the cleaner (cf. refill)
- close the access door tightly
- start the fan
- record the replacement

Sampling

Procedure:
- remove one module from the filter
- pour the filtering material in a dish, stir it
- take a sample (ca 200 g)
- pour the material back into the module, refill if necessary with new material and place the module back in the filter
- start the fan
- fill in the sampling form
- The deterioration of chemical filtering material is monitored by means of regular sampling (e.g. at intervals of 6 months). The sample is analysed and the results used to determine the replacement time.
- Send the sample and the form to Halton Chem for analysis. The analysis results will be sent to you within ca 2 weeks after the sample has been received

Refill volumes

CL-K ca 15 l / 1 x CL 15M module

One filtering material container:

- CL ALOX 6 ca 15 kg
- CL CARB 9 ca 10 kg

Prefilters and final filters

Prefilters and final filters connected to or integrated into the air cleaner should be monitored and serviced in the same way as all other particle filters in airconditioning systems, usually on the basis of differential pressure measurements.