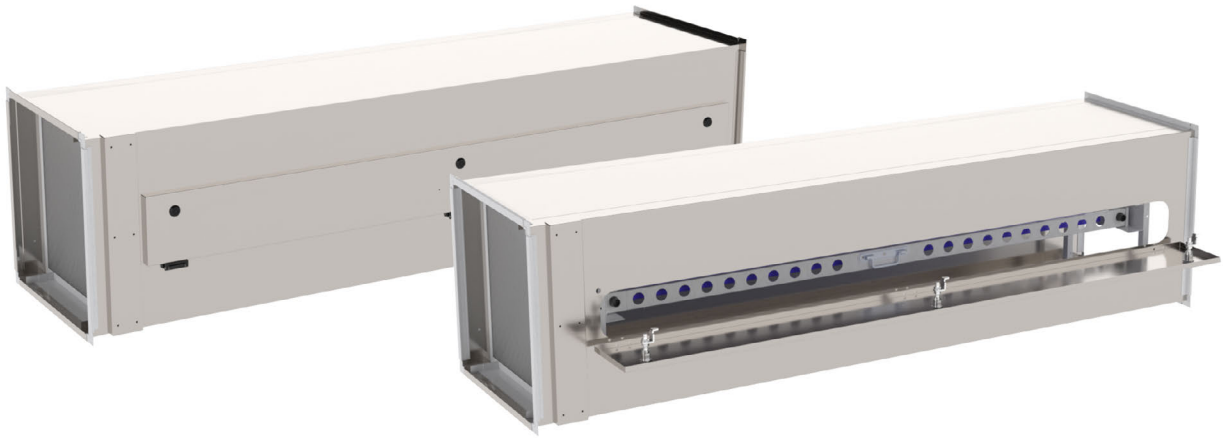


# RCT

## ReactAway - Duct Capture Ray™ UV-C unit

◦ For commercial kitchens ◦ Ideal for retrofit projects ◦ Advanced pollution control based on UV-C Capture Ray™ technology



Declaration(s) and certification(s)



## Main technologies and options



**Optional High Efficiency Prefiltration**  
Increases the final efficiency or grease and VOCs neutralization



**UV-C Capture Ray™**  
Neutralises grease vapors and particles

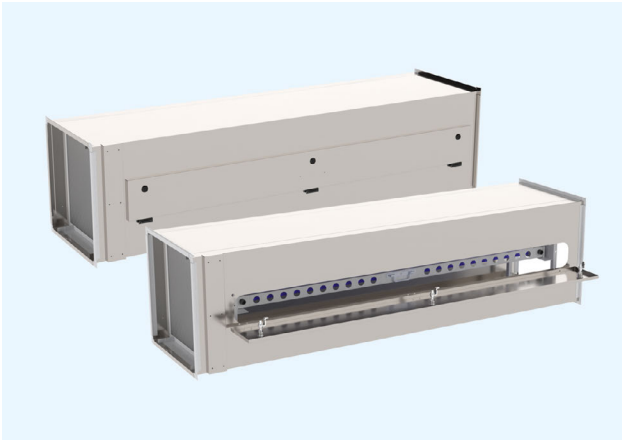


**Halton Mini Touch Screen**  
Intuitive LCD user interface



**Halton Connect™ (Option)**  
Cloud-based control platform with distant monitoring capabilities (1)

(1) The access to Halton Connect™ web portal is included in the 1-year warranty period. After this period, it is subjected to one of the Halton Care service offer.



## Applications

Halton **ReactAway** is a treatment unit equipped with **Capture Ray™** technology and designed to be installed on extract ducts from commercial kitchens.

**Capture Ray™** technology is used to reduce ductwork cleaning costs, enhance fire safety, and prevent the risk of legal actions from neighboring residents due to cooking odors discharged by commercial kitchens located in densely populated areas. It becomes essential when ductwork is difficult to access for cleaning or in heritage or classified buildings with strict fire safety requirements. It is commonly integrated into Halton's hoods and ventilated ceilings.

The Halton **ReactAway** unit was specifically designed to retrofit existing kitchens with **Capture Ray™** technology, without major modifications to existing hoods or ventilated ceilings, while ensuring complete operational safety. It can also be used to complement Halton's **Capture Ray™** hoods or ventilated ceilings when additional UV capacity is needed to meet higher pollution control requirements.

After treatment, it is possible to recover heat from the extracted air, making **ReactAway** particularly suitable for projects targeting [LEED](#) (1), [BREEAM](#) (2), [DGNB](#) (3), [RE2020](#) (4), or other similar programs or certifications.

## Description

The **Capture Ray™** technology neutralizes fine grease particles, grease vapors and a significant portion of the VOCs that cannot be removed by any primary mechanical filtration.

It offers a unique combination of benefits, including reduced cleaning costs, enhanced hygiene, improved fire safety, and a lower environmental impact on the surrounding neighborhood.

### Substantial energy savings

- Enables sustainable heat recovery to preheat makeup air or water, generating substantial energy savings in HVAC operation and/or domestic hot water production.

### Improved safety, maintenance savings and respect for the neighborhood

- The **Capture Ray™** technology keeps the exhaust plenums and downstream ductwork virtually free of grease deposits. The ductwork cleaning operations are cut down to the minimum legal frequency (if applicable) or to the strict minimum.
- Combines significant savings on ductwork cleaning costs with optimized hygiene and fire safety

### Other benefits and features

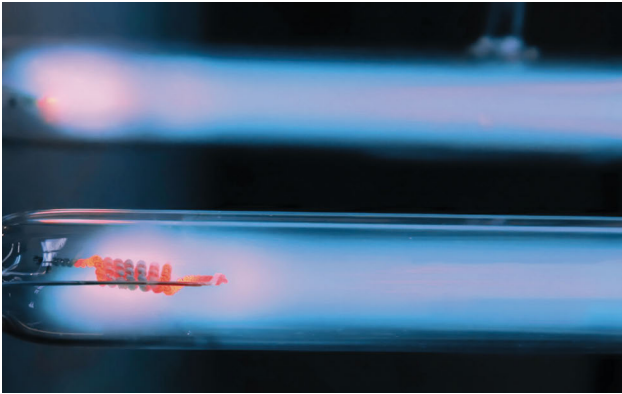
- Construction from stainless steel, 1.2 mm thick. Fully welded casing for improved robustness.
- Installation in ceiling voids or in a technical plant room. Vertical or horizontal position is supported.
- Optional outdoor horizontal installation includes covers for the ballast boxes and a cap above the UV lamp access door.
- Optional prefiltration to improve the UV-C neutralization process which achieves optimal efficiency on medium to small grease particles, grease vapors, and VOCs.
- Capacity from 1440 to 17280 m<sup>3</sup> h (400 to 4800 l/s). Higher capacities upon request.
- [option] Advanced 24/7 distant monitoring capabilities thanks to **Halton Connect** IoT (Internet of Things) platform.
- Highest value of ownership thanks to **Halton Connect & Care** smart services available as an option from kitchens commissioning.
- Total access security to UV-C lamps. Includes a verification of the correct closing of the access hatch to the UV lamps.
- Lamps lifetime: up to 20 months or 13,000 hours.
- The ballasts and controllers boxes can be mounted on the most suitable side of the unit or up to 1.5 m away.
- The unit is delivered with the 5" Halton Mini Touch Screen as user interface. It can be installed up to 100 m from the unit.
- When combined with other Halton connected technologies, the unit becomes part of the full **Halton Connect™** platform that includes the Halton Touch Screen.

(1) LEED - Leadership in Energy and Environmental Design (2) BREEAM - Building Research Establishment Environmental Assessment Method (3) DGNB - German Sustainable Building Council (4) RE2020 - French Environmental Regulation 2020 (5) EN 16282-2 Equipment for commercial kitchens - Components for ventilation in commercial kitchens - Part 2 : kitchen ventilation hoods - Design and safety requirements (6) HACCP - Hazard Analysis Critical Control Point



## Capture Ray™ technology

• UV-C grease and odors neutralization



The Capture Ray™ technology neutralizes fine grease particles, grease vapors and a significant portion of the VOCs that cannot be removed by any primary mechanical filtration.

It offers a unique combination of benefits, including reduced cleaning costs, enhanced hygiene, improved fire safety, and a lower environmental impact on the surrounding neighborhood.

### Benefits

- The Capture Ray™ technology keeps the exhaust plenums and downstream ductwork virtually free of grease deposits. The ductwork cleaning operations are cut down to the minimum legal frequency (if applicable) or to the strict minimum.
- The hygiene and fire safety levels of the extract circuit are optimized to their highest standards.
- The Capture Ray™ technology also significantly reduces the odors discharged outdoor and thus lowers the kitchens' environmental impact on the neighborhood and the risk of complaints or legal action.
- An asset to establish a restaurant in dense urban sites i.e. in previously unfeasible locations or where they represent the highest turnover potential.
- When combined with PolluStop, airborne cooking odours will be minimized to a point that the ductwork can then follow the most direct and cost-effective route to outside, even at street level.
- It allows for the elimination of unsightly external or bulky internal vertical duct risers. It reduces the installation costs and increases the leasable space and corresponding revenues.
- The Capture Ray™ technology also allows for efficient heat recovery, sustainable over time.

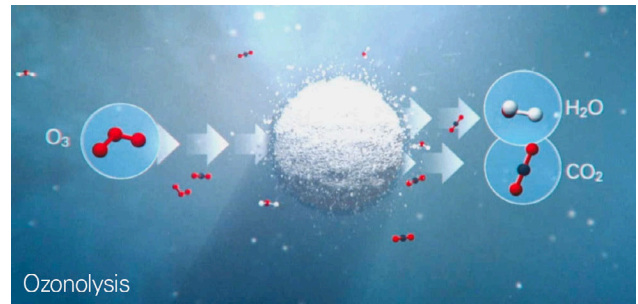
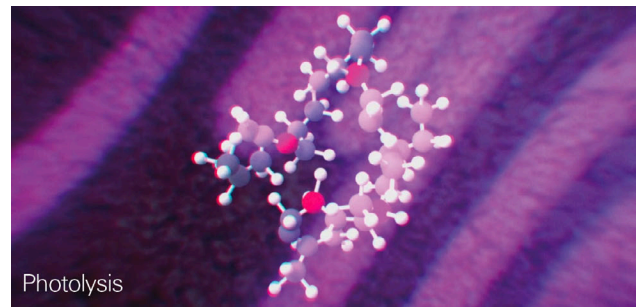
### How does it work?

Capture Ray™ technology is based on the use of UV-C lamps. The Neutralisation of grease particles and vapors depend on two simultaneous reactions.

Photolysis is the direct effect of UV-C radiation. It works by photodecomposition whereby grease molecules are broken down by photons.

Ozonolysis is the oxidation of the molecule fragments by the ozone generated by the lamps. The final products of this reaction are water, carbon dioxide, and an inert residue from a polymerization-like reaction. Since ozone is a gas, it is carried with the airflow, allowing oxidation to continue in the extract ductwork.

The UV-C lamps also neutralizes a portion of the VOCs, the second odor propagation vehicle with grease.

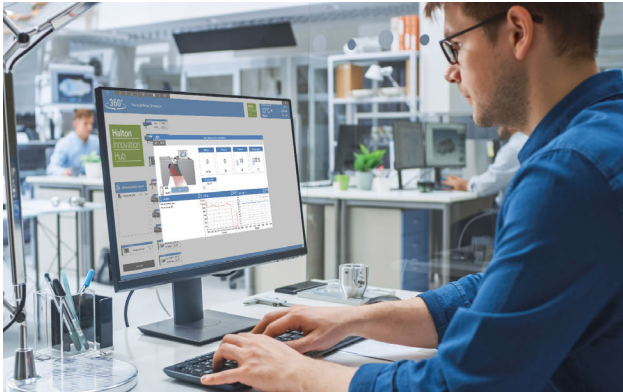


View inside an exhaust plenum fitted with UV-C lamps after several weeks of use



## Halton Connect™ (option)

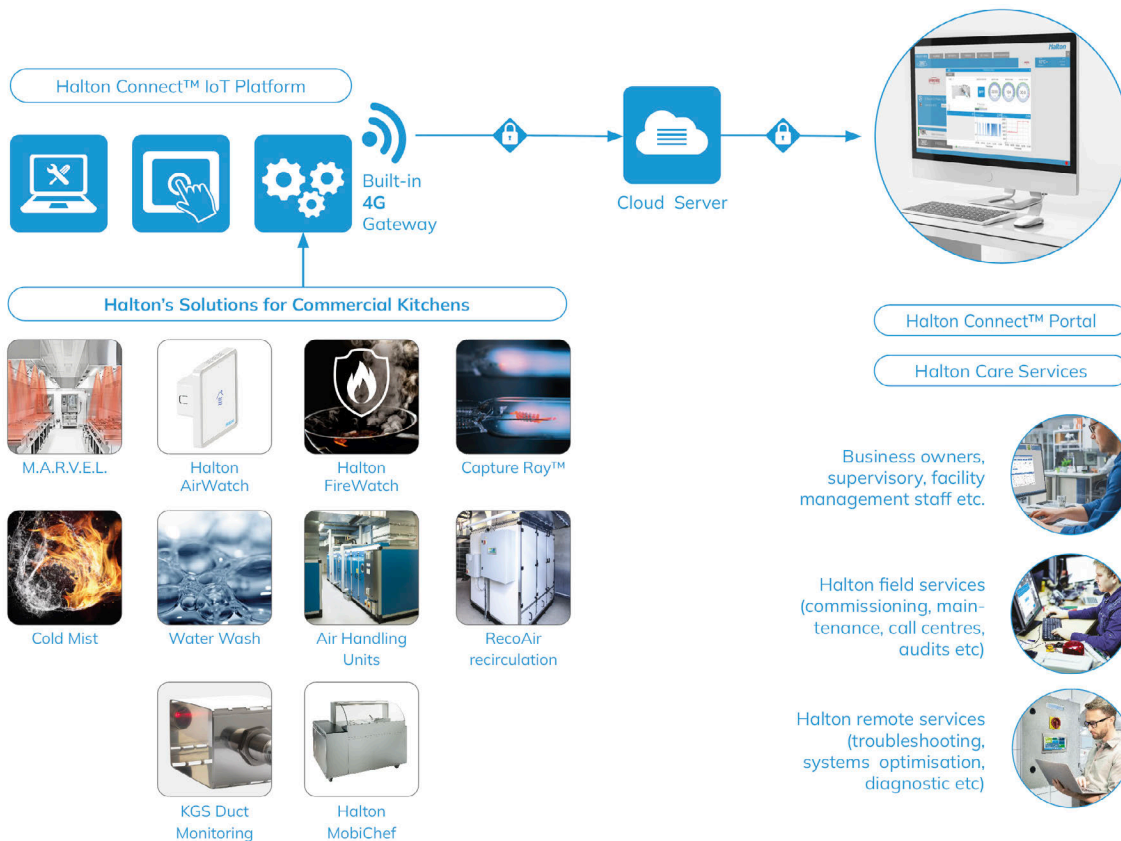
◦ Real time monitoring ◦ Insightful data & reports ◦ Enables predictive maintenance



Halton Connect™ is a state-of-the-art IoT (Internet of Things) platform whose core is an advanced cloud-based portal. It enables 24/7 remote monitoring of the solutions designed by Halton, allowing access to useful information along with powerful data analytics.

### Benefits

- 24/7 Monitoring of Halton Technologies and Solutions.
- Access to Halton Connect™ cloud-based portal included during the warranty period, with detailed data on connected solutions.
- Automatic fault notifications and simplified analytics reports.
- Optional advanced reports (energy/water savings, equipment usage, etc.).
- Enables expert analysis to optimize settings and maintain performance at design level or improve it throughout the life cycle.
- Secure, fully independent operation within the building.
- Supports Halton Care predictive maintenance based on real-time analytics. Visits and parts usage are optimized.
- Minimizes downtime from misuse or equipment failure.
- Optional software updates and maintenance for Halton Connect™.







## Halton Care (option)

◦ Smart services for commercial kitchens



Halton Care is a premium service offer supported by Halton's qualified field teams and trusted partners, with Halton Connect™ at its core. It is designed to help maintain peak system performance, reduce operating costs, and provide long-term peace of mind.

### Why choose Halton Care Smart Services?

Services are often seen as a cost. But when ventilation and Indoor Environmental Quality (IEQ) technologies are poorly maintained, operational issues escalate—often resulting in higher expenses and disruptions, especially in demanding environments like commercial kitchens.

With Halton Care Smart Services, Halton systems are properly maintained, which translates into tangible savings and greater reliability:

- Reduced energy use and spare part needs.
- Lower cleaning and maintenance costs.
- Prevention of hidden or irreversible equipment damage.
- Fewer staff absences due to better working conditions.

- No revenue loss from unexpected downtime.
- Elimination of nuisance complaints from the surroundings.
- Enhanced hygiene and fire safety etc.

The Halton Connect™ web portal provides valuable, real-time data to Halton engineers and service teams. This enables predictive maintenance and continuous optimization:

- Remote diagnostics and fine-tuning of system settings.
- Visits planned based on actual system needs.
- Optimized spare parts usage and maintenance scheduling.
- Recommendations for operational efficiency and staff wellbeing.
- Insights for better kitchen performance and cost control.

### Who better than Halton for Halton products?

Halton's service teams work closely with end users, R&D, manufacturing, and installation teams. This unique synergy allows us to improve our solutions continuously—not only in terms of performance, but also in usability and ease of maintenance.

### Remote-first, streamlined maintenance

Thanks to Halton Connect™, most system issues can be resolved remotely—either through guided support to on-site staff or direct software/configuration updates. On-site visits are limited to essential tasks like consumables replacement and periodic general maintenance.



Real-time system data collected

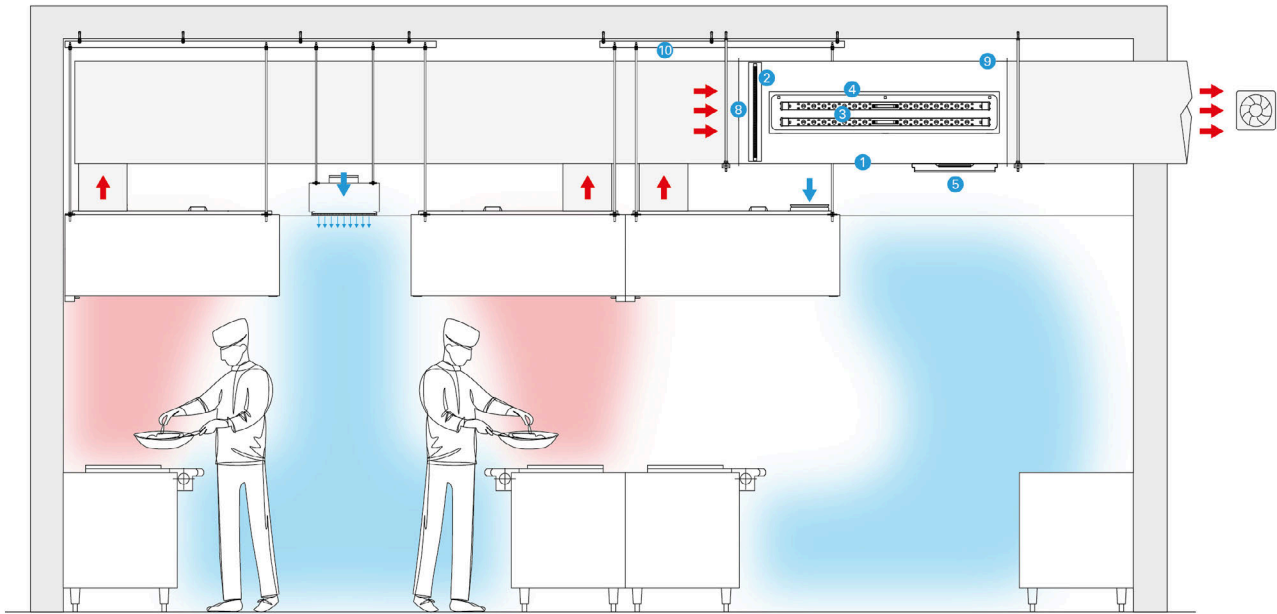


Remote diagnostics and optimization by Halton experts

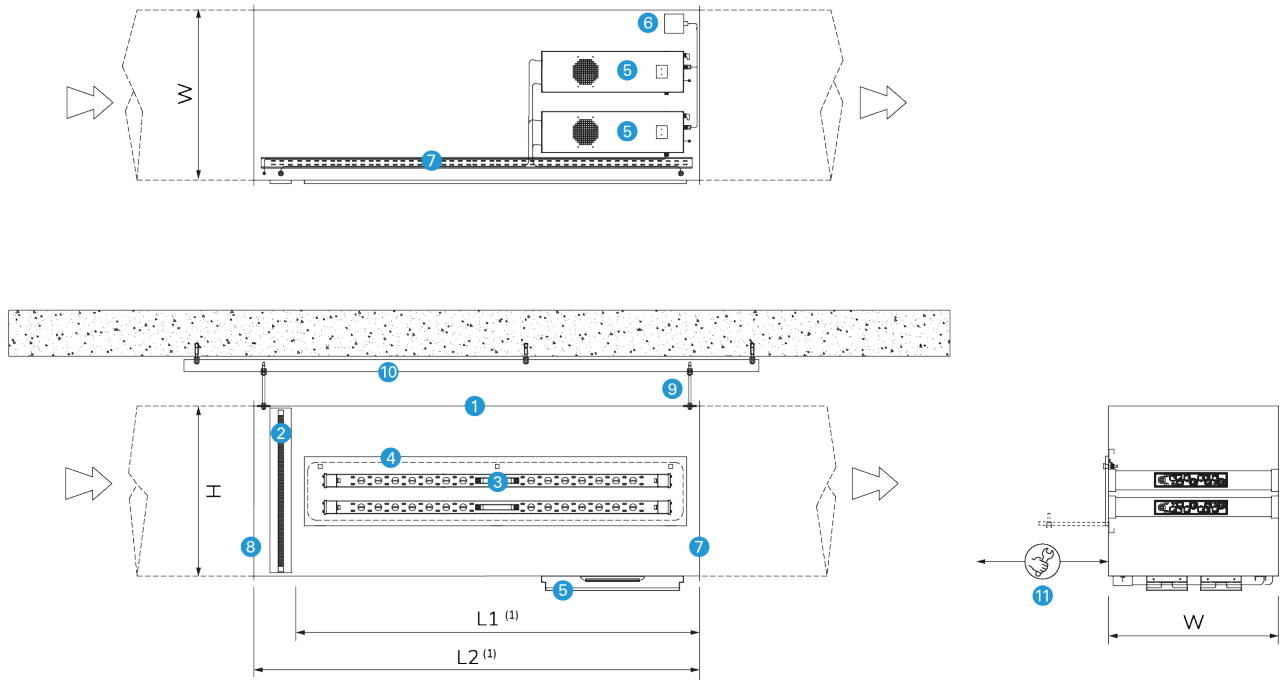


Targeted on-site maintenance only when necessary

## Construction and dimensions



- |  |  |  |
|--|--|--|
| 1. ReactAway casing constructed from stainless steel 1mm thick.                | 5. UV box with controllers and ballasts. | 10. Supporting ceiling profile.  |
| 2. Optional mesh filters.  | 6. Power supply junction box.            | 11. Minimum clearance required for unit maintenance (see manufacturing drawing). |
| 3. UV racks. Number of racks and lamps per rack according to customer service. | 7. Cable tray.                           |  |
| 4. Access hatch to the UV racks.   | 8. Rectangular connection with flange.   |  |
|  | 9. Suspension threaded rods.             |  |



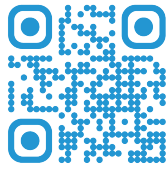
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	L1 <sup>(1)</sup> [mm]	L2 <sup>(1)</sup> [mm]	W [mm]	H [mm]	→ [m³/h]	→ [m³/s]	UV ↕		I [A]	P [W]	[kg]
RCT-4S	1200	1400	400	400	1440	0.4	UVR4S	4x	0.85	205	34
RCT-6S	1200	1400	400	400	2160	0.6	UVR6S	6x	1.21	293	35
RCT-8S	1200	1400	450	450	2880	0.8	UVR8S	8x	1.56	377	38
RCT-4L	1900	2100	450	450	2880	0.8	UVR4L	4x	1.51	364	50
RCT-6L	1900	2100	550	550	4320	1.2	UVR6L	6x	2.15	519	56
RCT-8L	1900	2100	650	650	5760	1.6	UVR8L	8x	2.78	670	64
RCT-6L2	1900	2100	800	800	8640	2.4	2x UVR6L	12x	4.3	1038	92
RCT-8L2	1900	2100	900	900	11520	3.2	2x UVR8L	16x	5.56	1340	99
RCT-6L3	1900	2100	950	950	12960	3.6	3x UVR6L	18x	6.45	1557	111
RCT-8L3	1900	2100	1100	1100	17280	4.8	3x UVR8L	24x	8.34	2010	123


(1) L1 is the unit length without the optional mesh filters; L2 includes them.


**Note:** Other duct sizes and flow rates upon request.

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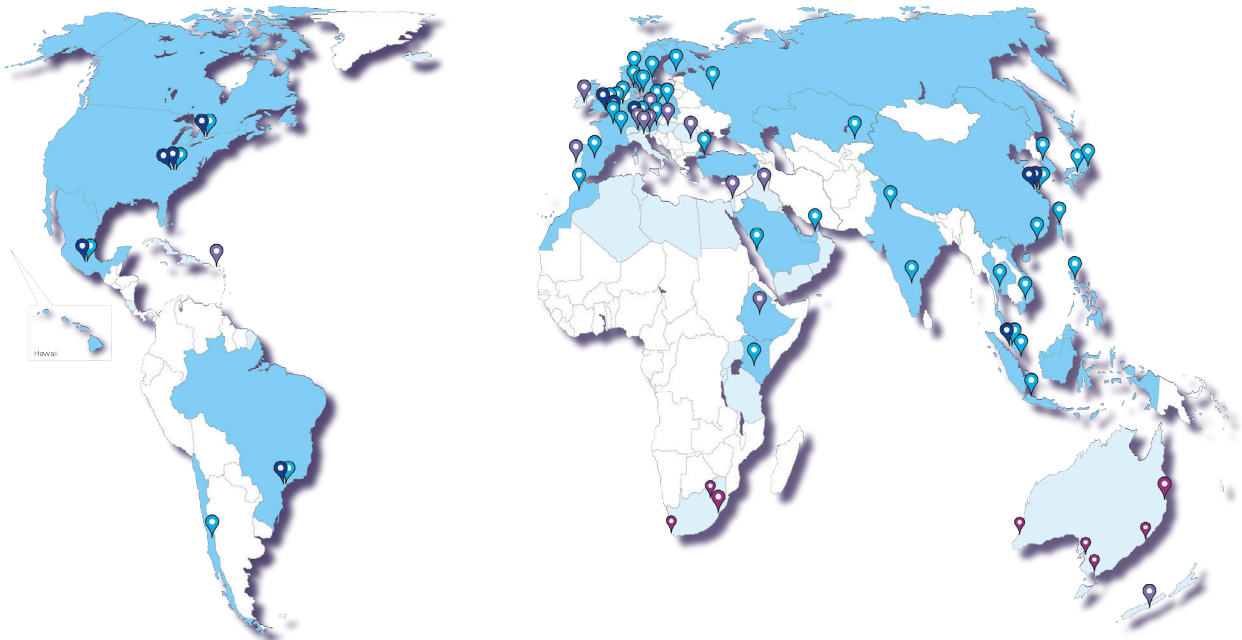
## Halton Manufacturing and Sales Facilities in the world

 Sales and service centers

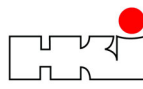
 Representatives

 Factories

 Manufacturing licences



## Halton Foodservice partnerships



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