



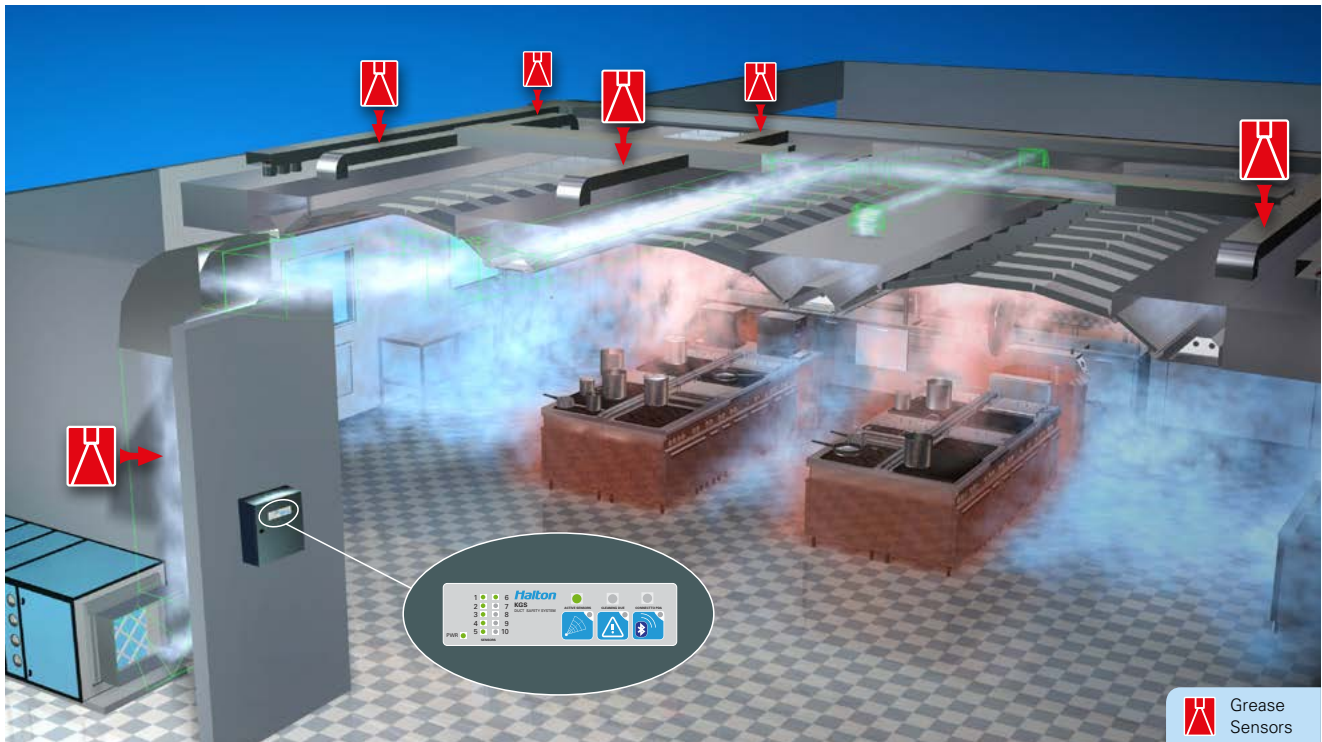
- **HACCP\* certified (PE-567-HM02I)**
- **Monitors the grease deposit levels in all ductwork**
- **Mitigates hygiene and fire safety concerns**
- **Allows operator to clean ductwork when required by grease deposit levels, not unnecessarily by schedule**
- **Adapted to both hoods and ventilated ceilings**
- **Compatible with new or existing exhaust ductwork**
- Optical grease sensing device not affected by ambient light
- Up to 10 grease sensors per system (extendable)
- Operates as a "stand alone" system
- KGS controls belong to Halton Foodservice Control Platform's (FCP)
- Intuitive user interface (Touch Screen as an option)
- Optional signal sent to Building Management System (BMS) via "volt free" contact
- Authorised service agents can connect to system via laptop or PDA
- Grease sensor and reflector assemblies are UL1978 listed. Control panels are ETL listed.

Halton's KGS Duct Safety & Monitoring System belongs to the Halton High Performance Kitchen concept. It monitors grease film deposits and provides an alarm to suggest cleaning is required.

This system provides an objective method for determining cleaning intervals based on grease deposit levels consistent with NFPA-96 guidelines for cleaning or local regulations. The system also indicates if cleaning has been done to a satisfactory level.

KGS is compatible with hoods or ventilated ceilings for new or existing kitchens. It is handled by Halton Foodservice Control Platform. Hence, it can be combined with any other system of Halton's High Performance Kitchen. Whatever the number of systems combined, the entire solution is handled by Halton's Touch Screen as unique user interface.

\* Hazard Analysis Critical Control Point



## Operation and Description

Halton's Duct Safety System is a signalling device that monitors the grease deposit levels in all ductwork. Once the level of grease exceeds the NFPA-96 threshold or a local regulation requirement, an alarm is displayed on the user interface or a signal is sent to the Building Management System (BMS) via a "volt free" contact. The operator is then alerted that it is recommended to clean the ductwork. Hence, fire safety and hygiene concerns are mitigated.

The system is based on the use of Grease Sensors, installed along the ductwork and inside the exhaust plenums of hoods or ventilated ceilings which cover the heaviest cooking appliances. The innovative optical system which equips the sensors is able to estimate the grease deposit level on the surface of the ductwork.

As soon as this level exceeds the system threshold, the user interface displays a visual alarm and shows which grease sensor(s) is concerned. Hence, it allows to execute the cleaning operations when it is really needed and not unnecessarily by schedule. Depending on the strategy applied before the installation of a KGS system (cleaning operations too frequent or not frequent enough), the kitchen manager benefits from money savings or from a total safe activity with minimum maintenance costs.

The KGS system controls belong to Halton Foodservice Control Platform (FCP) and can be therefore handled either by its standard user interface or by Halton's FCP Touch Screen.

# KGS system controls part of the Halton Foodservice Control Platform (FCP)

Halton's Foodservice Control Platform (FCP) has been developed to handle and manage all the innovative solutions of Halton's High Performance Kitchen (HPK) concept. Whatever the type and number of technologies installed in one kitchen, they can all be managed at the same time by this unique control system. The standard user interface of every technology is then replaced by a unique one: Halton's Touch Screen.

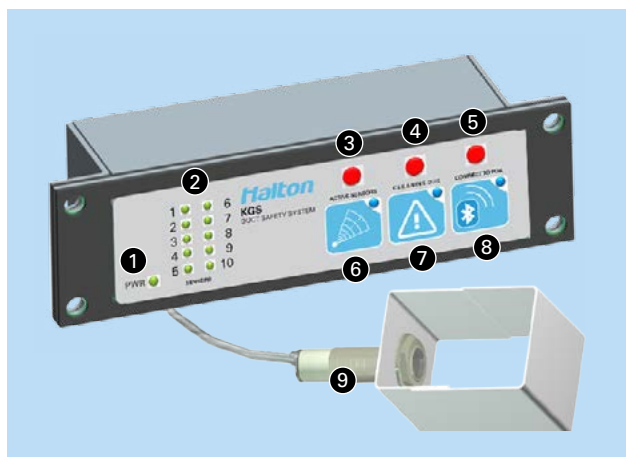
Halton's Touch Screen is not only able to handle several technologies at the same time, it constitutes also a powerful communication gateway. It can manage GSM functions, being controlled by a distant computer or even feed Halton F.O.R.M. (Facilities Optimization and Resource Management) system with detailed information. F.O.R.M. system is then able to provide a real time global status of the equipment, energy efficiency analysis or maintenance planning tools.

## Halton FCP's Touch Screen (option): an intuitive and fully communicative interface

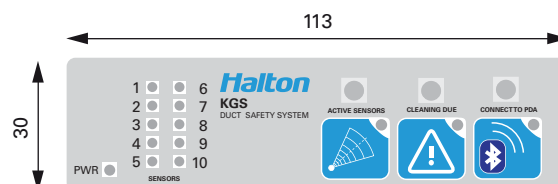


\* Facilities Optimization and Resource Management

## KGS DESCRIPTION



CODE	DESCRIPTION
1	Power light (green LED)
2	Sensor lights (green LED)
3	"Active Sensor" alarm light (red LED)
4	"Cleaning Due" alarm light (red LED)
5	PDA connection light (red LED)
6	Active Sensor button
7	"Clearing Required" button
8	"Bluetooth port" button
9	Grease sensor



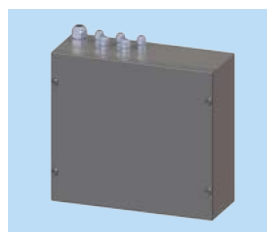
The controls of the KGS system are integrated inside a control panel. To simplify its installation, different models of control panels are available, completed by a remote display panel.



### Master Control Panel with display

This control panel is stand-alone. It can handle up to 10 sensors. On it's own, it is used ideally for kitchens with

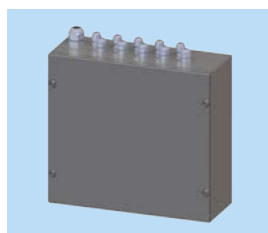
a single cooking area. To simplify the wiring in complex or large kitchens, it can be combined with a slave control panel.



### Slave Control Panel

The slave control panel has to be systematically connected to a master control panel. It allows to split the sensors installed on

the ductwork into several groups to simplify the wiring, depending on the kitchen configuration.



### Master Control Panel without display

This control panel has to be combined with a remote display. It can handle up to 10 sensors. On it's own, it is

used ideally for kitchens with a single cooking area. To simplify the wiring in complex or big kitchens, it can be combined with a slave control panel.



### Remote display panel

It allows to separate the display from the controls. A master control panel - and possible slave control panel(s) - can then be

installed inside the bulkhead, depending on the kitchen configuration. It can also handle up to 10 sensors.

## Notes



[www.halton.com/foodservice](http://www.halton.com/foodservice)

#### Halton Foodservice International

##### France

Halton SAS  
Technoparc Futura  
BP 102  
62402 Béthune Cedex  
Tel. +33 (0)1 80 51 64 00  
Fax +33 (0)3 21 64 55 10  
[foodservice@halton.fr](mailto:foodservice@halton.fr)  
[www.halton.fr](http://www.halton.fr)

##### Germany

Halton Foodservice GmbH  
Tiroler Str. 60  
83242 Reit im Winkl  
Tel. +49 8640 8080  
Fax +49 8640 80888  
[info.de@halton.com](mailto:info.de@halton.com)  
[www.halton.de](http://www.halton.de)

##### USA

Halton Co.  
101 Industrial Drive  
Scottsville, KY 42164  
Tel. +1 270 2375600  
Fax + 1 270 2375700  
[info@haltoncompany.com](mailto:info@haltoncompany.com)  
[www.haltoncompany.com](http://www.haltoncompany.com)

##### Asia Pacific

Halton Group Asia Sdn Bhd  
PT 26064  
Persiaran Teknologi Subang  
Subang Hi-Tech Industrial Park  
47500 Subang Jaya,  
Selangor Malaysia  
Tel. +60 3 5622 8800  
Fax +60 3 5622 8888  
[sales@halton.com.my](mailto:sales@halton.com.my)  
[www.halton.com](http://www.halton.com)

##### United Kingdom

Halton Foodservice Ltd  
11 Laker Road  
Airport Industrial Estate  
Rochester, Kent ME1 3QX  
Tel. +44 1634 666 111  
Fax +44 1634 666 333  
[foodservice@halton.co.uk](mailto:foodservice@halton.co.uk)  
[www.halton.co.uk](http://www.halton.co.uk)

##### Japan

Halton Co. Ltd.  
Hatagaya ART-II 2F  
1-20-11 Hatagaya  
Shibuya-ku  
Tokyo 151-0072  
Tel. + 81 3 6804 7297  
Fax + 81 3 6804 7298  
[salestech.jp@halton.com](mailto:salestech.jp@halton.com)  
[www.halton.jp](http://www.halton.jp)

##### Canada

Halton Indoor Climate  
Systems, Ltd.  
1021 Brevik Place  
Mississauga, Ontario  
L4W 3R7  
Tel. + 905 624 0301  
Fax + 905 624 5547  
[info@haltoncanada.com](mailto:info@haltoncanada.com)  
[www.haltoncanada.com](http://www.haltoncanada.com)

##### Middle-East

Halton Middle-East FZE  
Jebel Ali Free Zone  
Office/Warehouse S3B3WH08  
P.O. Box 18116  
Dubai  
United Arab Emirates  
Tel. + 971 (0)4 813 8900  
Fax + 971 (0)4 813 8901  
[sales@halton.ae](mailto:sales@halton.ae)  
[www.halton.com](http://www.halton.com)

The company has a policy of continuous product development, therefore we reserve the right to modify design and specifications without notice. For more information, please contact your nearest Halton agency. To find it: [www.halton.com/locations](http://www.halton.com/locations)