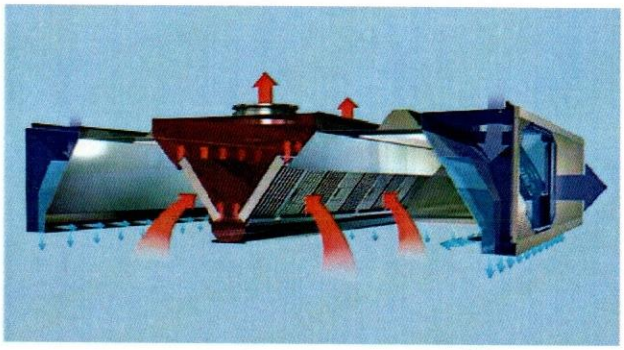
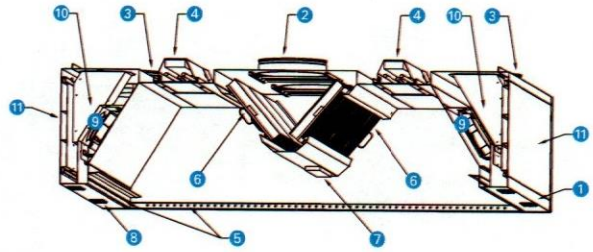
KVF-M DESCRIPTION





CODE	DESCRIPTION
1	Outer casing – visible parts in stainless steel AISI 304
2	Exhaust air connection and adjustment damper
3	Supply air connection and adjustment damper (type MSM)
4	Light fixture with electrical junction box
5	Capture Jet™ nozzles
6	KSA grease filter

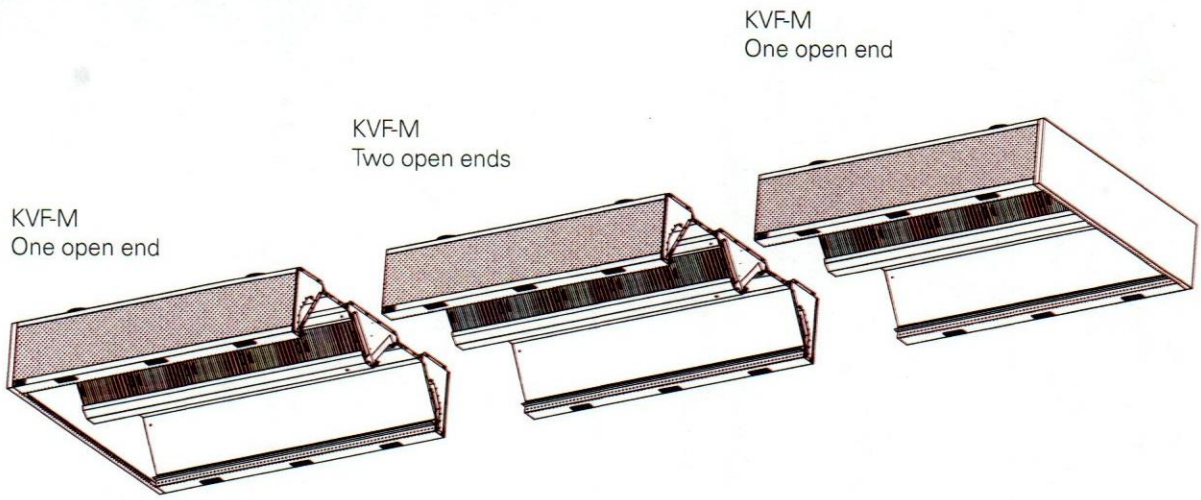
CODE	DESCRIPTION
7	Grease collection tray or drain tap
8	Personal supply air nozzles
9	Capture Jet™ fan
10	Capture Jet™ fan air inlet plenum (option)
11	Perforated front face

QUICK SELECTION DATA

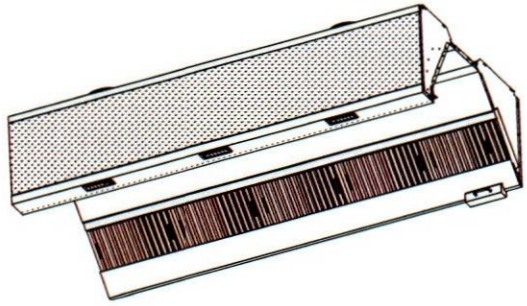
L1 (active length)	L (section length)	Recommended Exhaust air volume*		Recommended make up air volume		Capture Jet air volume (with width = 1700)	
		l/s	m³/h	H = 555	H = 400	l/s	m³/h
1500	1600	840 ... 1308	3030 ... 4716	200 l/s or 720 m³/h per linear meter of front face MSM 100% open ΔPst = 48 to 52 Pa	157 l/s or 565 m³/h per linear meter of front face MSM 100% open ΔPst = 45 to 70 Pa	44	158
2000	2100	1120 ... 1744	4040 ... 6288			52	188
2500	2600	1400 ... 2180	5050 ... 7860			61	218
5000	5100	2800 ... 4360	10100 ... 15720			102	368
7500	7600	4200 ... 6540	15150 ... 23580			144	518
10000	10100	5600 ... 8720	20200 ... 31440			186	668

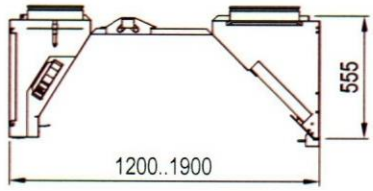
* Minimum at a T.A.B.™ reading of 50 Pa (505 m³/h or 140 l/s per filter)... maximum at a T.A.B.™ reading of 120 Pa (786 m³/h or 218 l/s per filter)

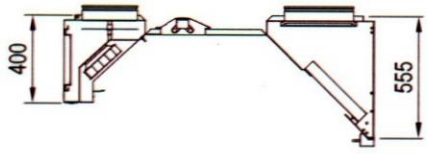
ASSEMBLY OF MODULAR SECTIONS

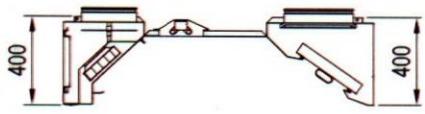


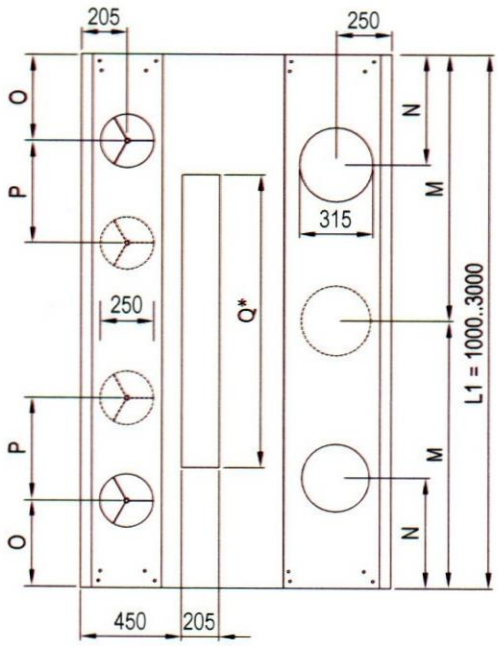
DIMENSIONS KVF (2 opened ends)











The dimensions below are for modular sections only; larger hoods are assembled using a combination of separate modules, which makes transportation and site handling easier.

LOCATION OF CONNECTIONS (mm)

For typical sizes

	Exhaust			Supply		Light
	1 Ø315	2 Ø315	3 Ø315	2Ø250	4 Ø250	
L	M	N	M, N	O	P	Q*
1600	L1/2	325	-	450	-	720
2100	L1/2	450	-	450	500	1320
2600	-	450	L1/2, 450	450	500	1320
3100	-	450	L1/2, 450	-	500	1320

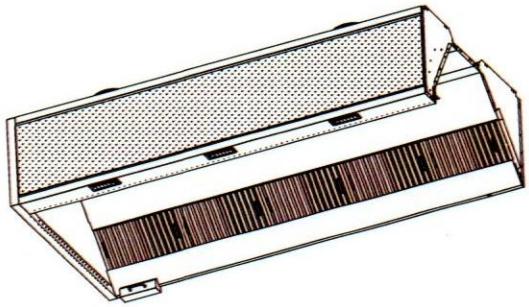
* 720 (L1<=1500, 2x18W), 1320 (L1>1500, 2x36W)

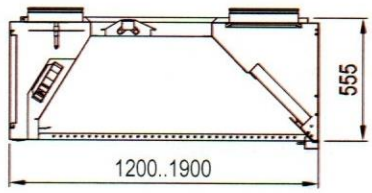
- Number of exhaust and supply connections to be determined based on the sections length and on the calculation of the exhaust airflow rates depending on the cooking appliances.
- Other air supply possibilities of the Capture Jet fan and on request.
- Other connection configurations for exhaust and supply on request.

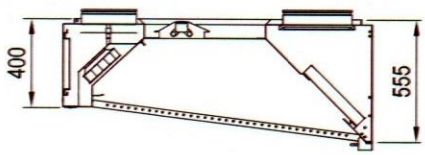
WEIGHT (h=555 mm, kg)

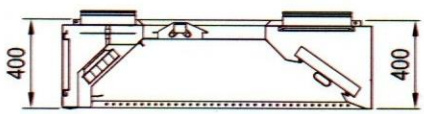
L/B	1100	1300	1500	1700	1900
1100	86	91	97	107	113
1600	114	119	125	136	141
2100	141	147	152	164	170
2600	169	174	180	193	199
3100	196	202	207	222	228

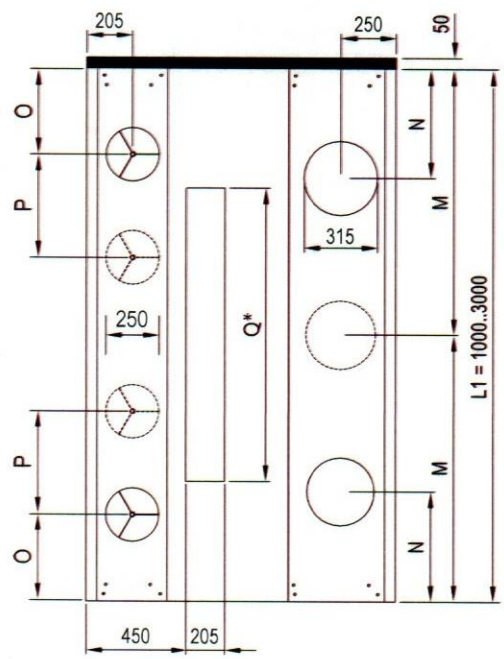
DIMENSIONS KVF (1 closed end)











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LOCATION OF CONNECTIONS (mm)

For typical sizes

	Exhaust			Supply		Light
	1 Ø315	2 Ø315	3 Ø315	2Ø250	4 Ø250	
L	M	N	M, N	O	P	Q*
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2100	L1/2	450	-	450	500	1320
2600	-	450	L1/2, 450	450	500	1320
3100	-	450	L1/2, 450	-	500	1320

* 720 (L1<=1500, 2x18W), 1320 (L1>1500, 2x36W)

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WEIGHT (h=555 mm, kg)

L/B	1100	1300	1500	1700	1900
1100	86	91	97	107	113
1600	114	119	125	136	141
2100	141	147	152	164	170
2600	169	174	180	193	199
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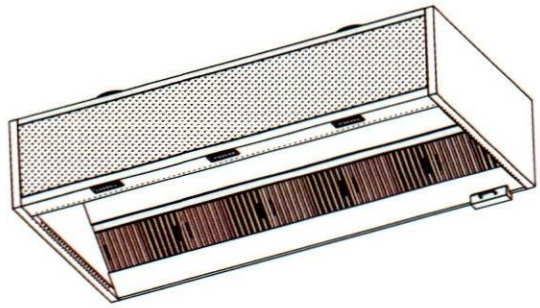
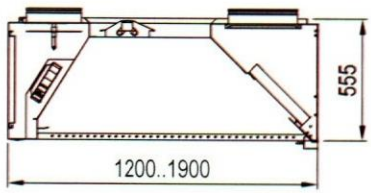
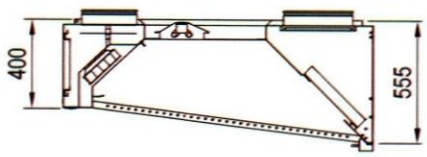
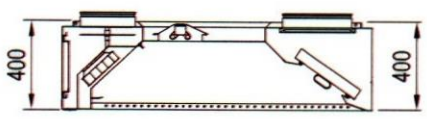
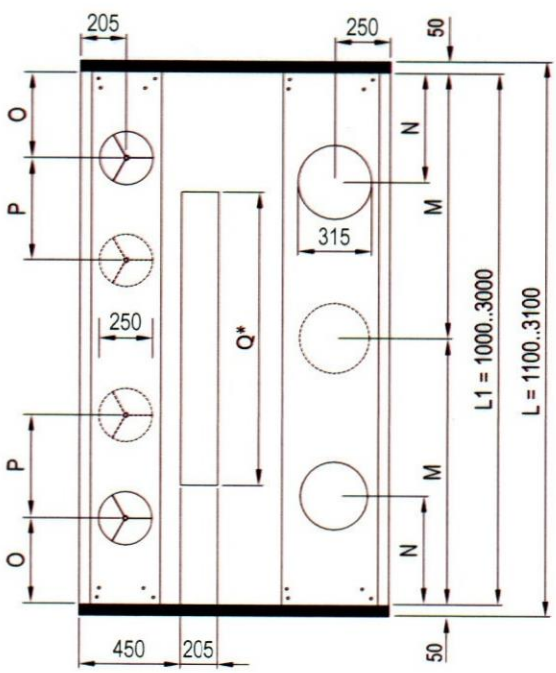
DIMENSIONS KVF (2 closed ends)











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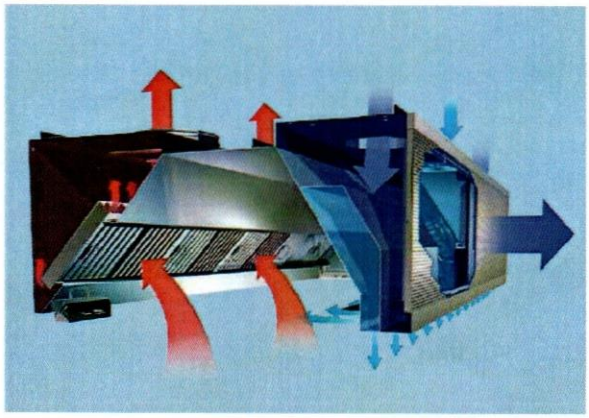
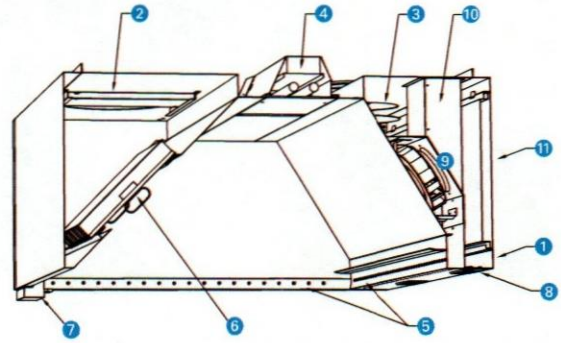
3100	196	202	207	222	228

KVF DESCRIPTION





CODE	DESCRIPTION
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CODE	DESCRIPTION
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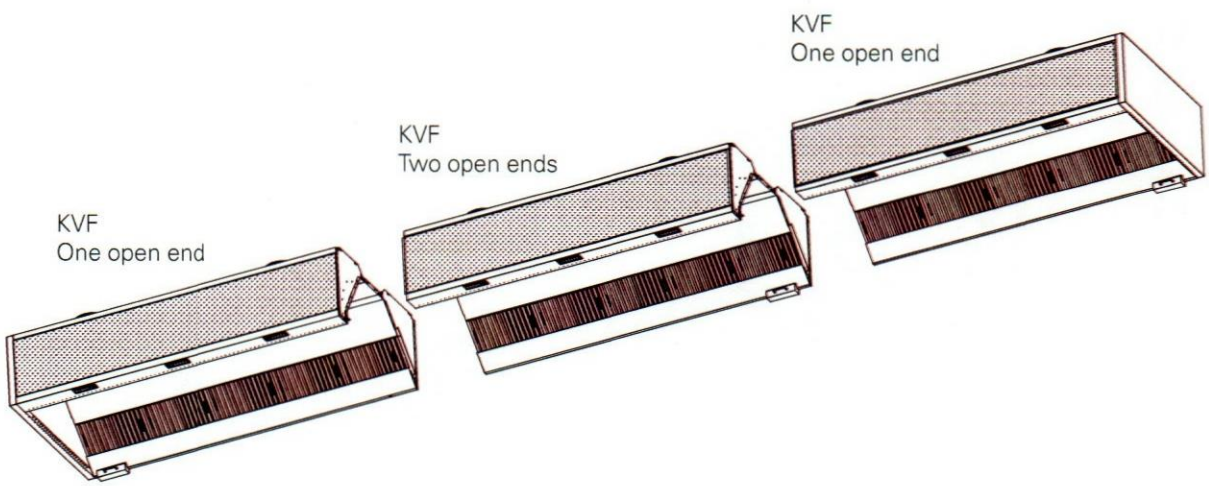
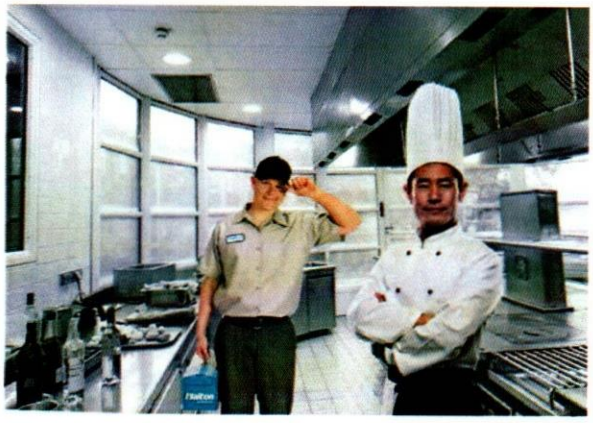
QUICK SELECTION DATA

L1 (active length)	L (section length)	Recommended Exhaust air volume*		Recommended make up air volume		Capture Jet air volume (with width = 1300)	
		l/s	m³/h	H = 555	H = 400	l/s	m³/h
1500	1600	420 ... 654	1515 ... 2358	200 l/s or 720 m³/h per linear meter of section MSM 100% open ΔPst = 48 to 52 Pa	157 l/s or 565 m³/h per linear meter of section MSM 100% open ΔPst = 45 to 70 Pa	27	97
2000	2100	560 ... 872	2020 ... 3144			31	112
2500	2600	700 ... 1090	2525 ... 3930			35	127
5000	5100	1400 ... 2180	5050 ... 7860			56	202
7500	7600	2100 ... 3270	7575 ... 11790			77	277
10000	10100	2800 ... 4360	10100 ... 15720			98	352

* Minimum at a T.A.B.™ reading of 50 Pa (505 m³/h or 140 l/s per filter)... maximum at a T.A.B.™ reading of 120 Pa (786 m³/h or 218 l/s per filter)

ASSEMBLY OF MODULAR SECTIONS





Commissioning, Safety and Maintenance

- HACCP certified (PE-567-HM02I)
- Components are easy to access and clean
- Maximum hygiene and maintenance

The Capture Jet™ hoods are designed to reduce the number of external stainless steel components thus reducing the number of joints to be cleaned for maximum hygiene. The joints of the lower edge are fully welded to be liquid-tight, avoiding harmful dripping of condensation. The bottom edge of the exhaust plenum is aerodynamically designed to limit the condensation risk and also improve the hood efficiency. The light lens allows for an easy access above the hood.

Testing And Balancing (T.A.B.™) taps allow fast control of the exhaust and supply airflows during the commissioning phase or maintenance operations during the life cycle of the kitchen.

All these features give to the Capture Jet™ hoods a high level of hygiene, safety and ease of maintenance.

KVF/1311/UK

Front Face Low Velocity Air Compensation

- Draught-free makeup air
- High comfort levels for users

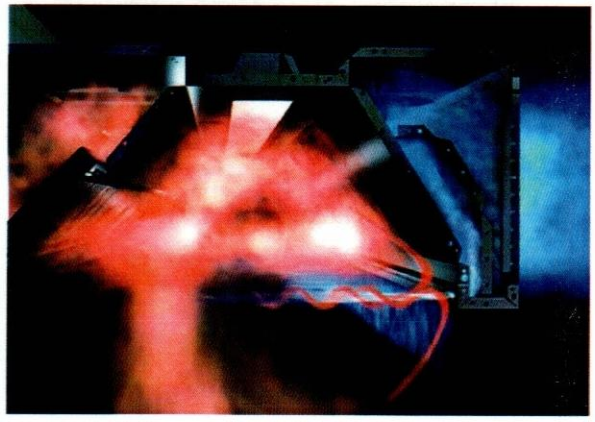
The KVF front faces are designed to spread fresh air through the kitchen with the displacement principle, at a very low velocity. The absence of draughts not only helps to avoid dispersing convective flows from the cooking equipment but also guarantees comfort to the chef. The supply air plenum is insulated using non-fibre-releasing material to prevent vapours from condensing on the inner face of the hood above the cooking equipment.

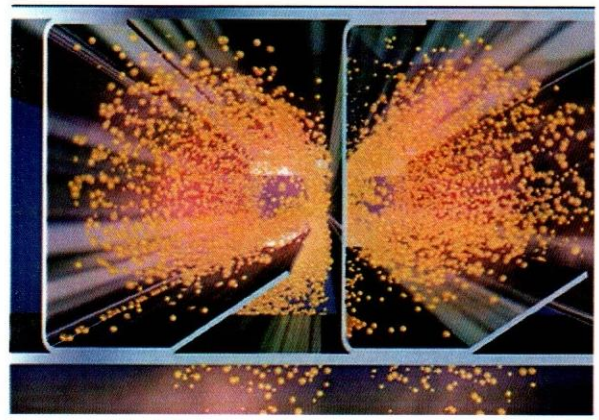
Individual supply nozzles are adjustable to produce punctual small fresh air curtains near the cooking equipment, which helps to reduce the effect of the radiant heat given off by some of them.

Comfort Limit Height

- Total control of air quality in the work area
- Wellbeing and productivity

The front face low velocity supply allows the kitchen air to be renewed on the principle of air displacement. Fresh air naturally falls to the ground and fills the working area from that level. The absence of flow disturbances prevents this fresh air from spreading the convective flows generated by the cooking equipment. A comfort limit then naturally appears du to the kitchen air stratification. Below the limit height, air quality remains optimal.





KVF/1311/UK

Double and Peripheral Capture Jet™ Technology

- Reduces exhaust airflows and energy consumption by 30% to 40% due to higher capture and containment efficiency
- Better indoor air quality and comfort

The Capture Jet™ technology consists of two sets of nozzles, one vertical and one horizontal.

- The horizontal nozzles push vapours back towards the filters.
- The vertical nozzles increase the containment volume and prevents vapours escaping from cooking areas.

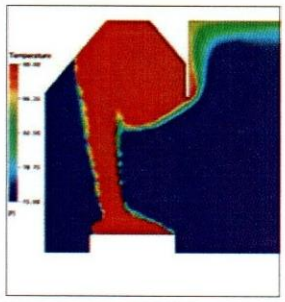
The bottom edge of the exhaust plenum is aerodynamically designed not to disturb the rising up of the thermal plumes, thus further improving the Capture Jets action.

KSA Cyclonic Filters

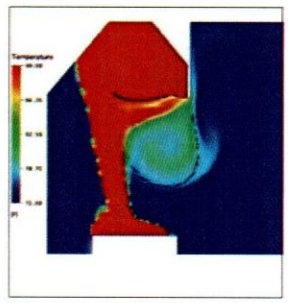
- Minimisation of grease deposits in the ducts
- Enhanced hygiene and safety

The KSA cyclonic filters is made of multiple honeycomb profiles. This special shape forces the air to swirl inside the profiles. The centrifuge effect is significant and, above all, continuous – especially in comparison to the action of traditional filters. Particles are thus pushed against the profiles. The collected condensation flows naturally towards the extraction plenum drains.

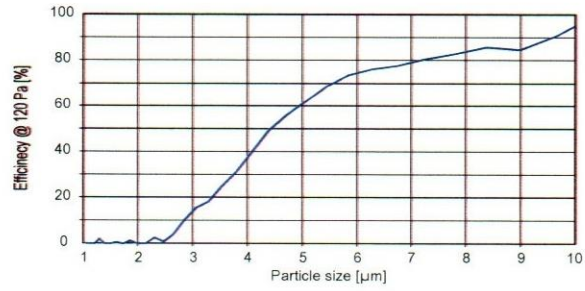
The KSA filters are 95% efficient for the removal of 10 µm particles. They are UL-accredited as flame-resistant (Underwriter Laboratories) and have NSF hygiene and safety approval (National Sanitation Foundation, USA).



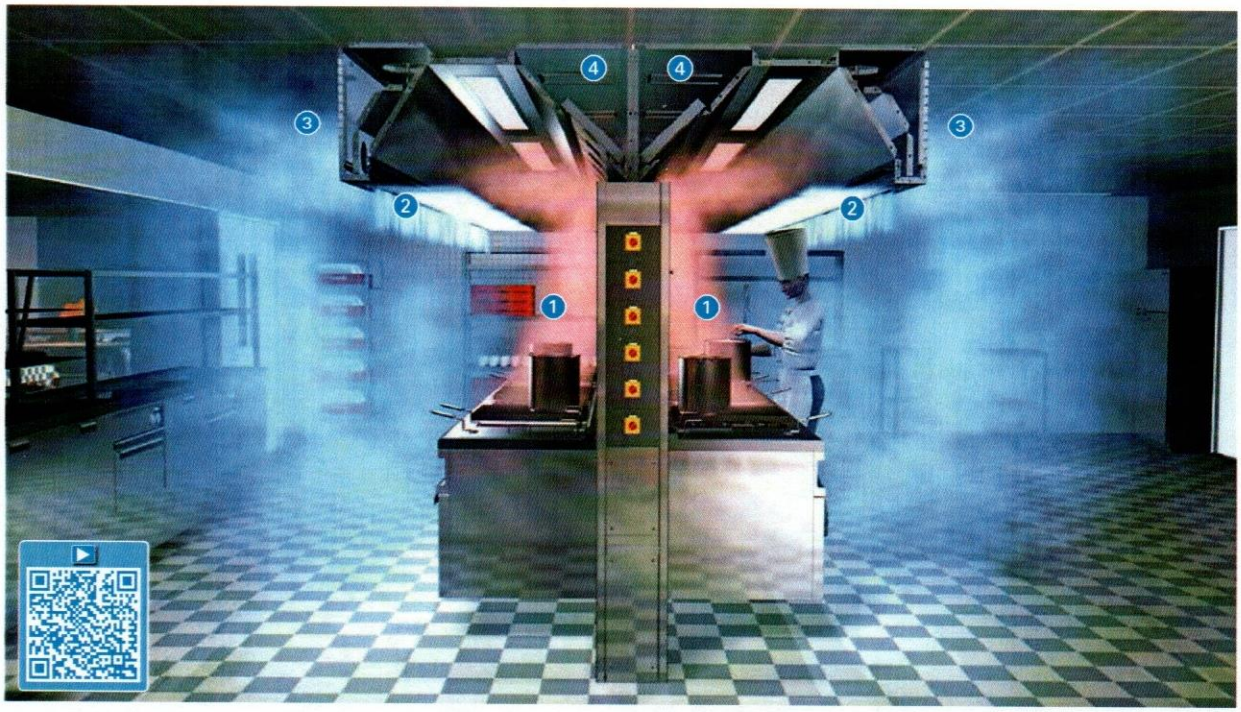
WITHOUT Capture Jets
Heat spilling



WITH Capture Jets
Capture & containment



Efficiency curve of the KSA cyclonic filters based on the VDI 2052 method (part 1) «Ventilation Equipment for kitchens. Determination of Capture Efficiency of Aerosol Separators in Kitchen Exhaust»



KVF/1311/UK

Operation and Description

Cooking equipment generates large plumes of hot air, loaded with grease particles, grease vapours, water, and odours. These plumes or convective flows (1) naturally rise toward the kitchen ceiling.

The combination of the peripheral, horizontal and vertical Capture Jets (2) with the low velocity air supply (3) allows convective flows to rise freely and be removed by the extraction plenum (4) as quickly as possible. The profile of the inside of the hood in association with the action of the Capture Jets allows effective containment of both regular and sudden outputs of smoke or steam. The Capture Jet™ technology, the low velocity supply and the internal shape of the hood ensure the best capture and containment capacity thus reducing the exhaust airflows by 30% to 40%.

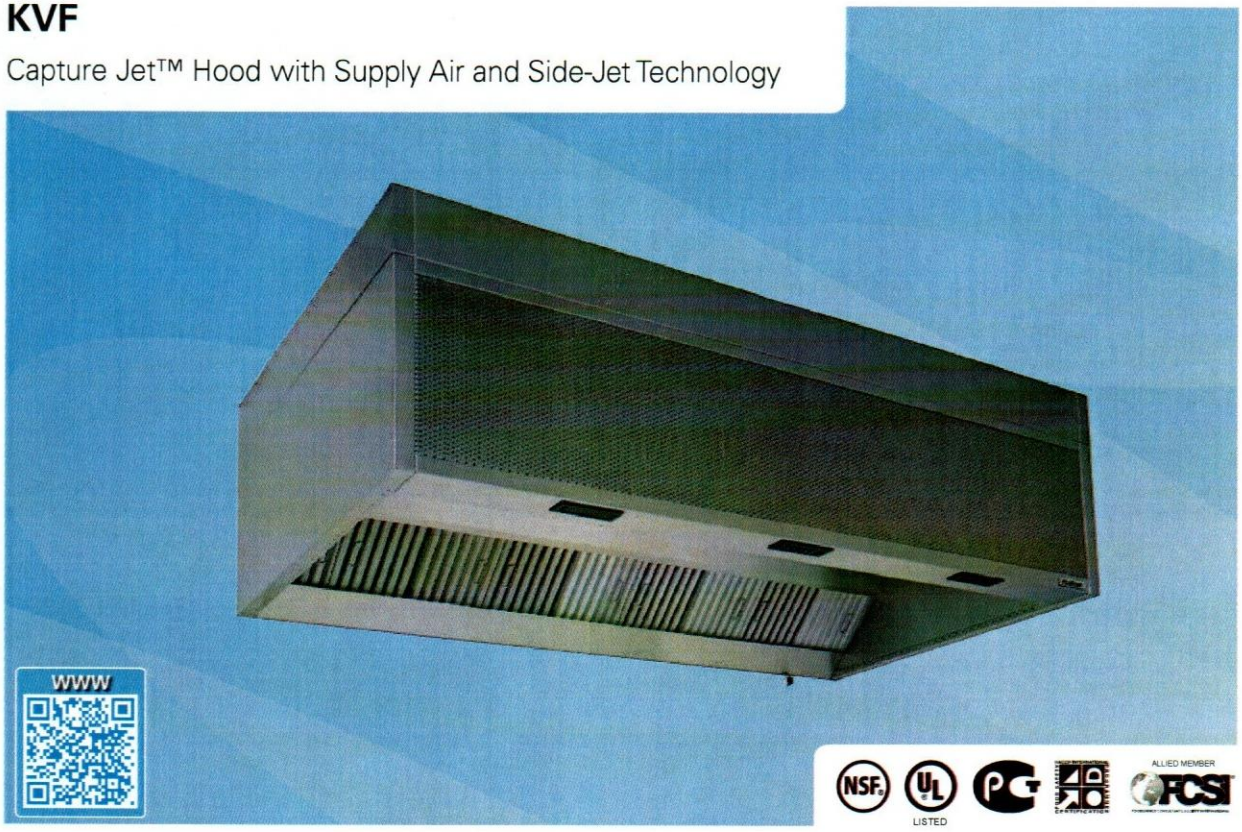
The KVF kitchen hood comprises a supply fascia unit (3) with control damper type MSM, a Capture Jet™ unit with front and side jets, a Capture Jet™ centrifugal fan, an IP65 light fitting, adjustable exhaust dampers, airflow measurement taps and KSA grease filters. All visible parts of the hood are manufactured from polished stainless steel AISI 304. Joints on the lower edge are fully welded.

Testing And Balancing (T.A.B.™) taps for flow measurement are fitted to the exhaust and supply air plenums.

KVF

Capture Jet™ Hood with Supply Air and Side-Jet Technology

KVF/1311/UK



- **HACCP* certified (PE-567-HM02I)**
- **30 to 40% reduction in exhaust airflow rates thanks to the Capture Jet™ technology**
- **High-efficiency KSA multi-cyclone filters (UL, NSF and LPS 1263 classified)**
- **Prevention of the build-up of grease deposits, which pose a serious hygiene and fire hazard**
- **Draught-free integrated supply air system for enhanced smoke capture and comfort**
- Performance tested independently in accordance with the ASTM 1704 standard
- Exhaust airflow rates based on ASTM performance and a calculation method of the real heat loads
- Equipped with Accuflow monitoring device, ensuring the hoods are running at designed airflows
- Effective commissioning due to "ready to install" standard delivery packages
- Stainless steel construction with seamless design for improved hygiene and fire safety.

The KVF hood with the new generation of peripheral, vertical and horizontal Capture Jet™ technology is a highly efficient kitchen ventilation hood that removes contaminated air and excess heat emitted by cooking equipment, while delivering compensation air to the kitchen at low velocity. Overall, the system requires 30% to 40% less exhaust air volume than traditional hoods do to remove an equal heat load.

KVF hoods are equipped of displacement units integrated on their front face. Compensation air is delivered at a low velocity thus further improving hood efficiency and providing a comfortable and clean environment for the chef.

The filtration is ensured by high-efficiency KSA multi-cyclone filters, UL and NSF classified. KSA filters remove up to 95% of particles with a size of 10 microns or above thus reducing grease deposits and cleaning costs while improving hygiene and safety.

Capture Jet hoods are delivered "ready to install" allowing effective installation and commissioning. Standard delivery includes lighting, integrated Capture Jet™ fan, Testing and Balancing taps and balancing dampers.

* Hazard Analysis Critical Control Point