

Leader in ventilation and heat recovery

ATREA in numbers

operates over 25 years in HVAC industry exports to over 20 countries

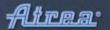
200 has o

has over 200 employees









LEADER IN VENTILATION AND HEAT RECOVERY







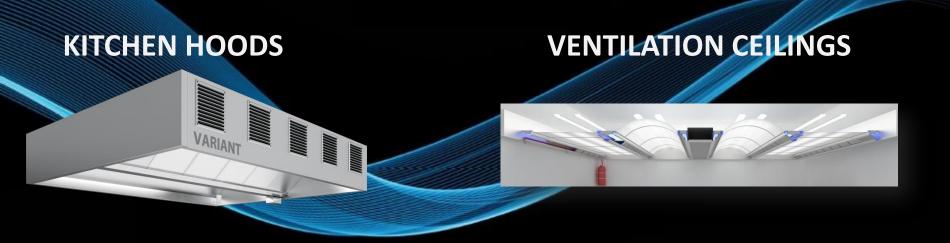


## **PRESENTATION SUMMARY**

- 1) Introduction of kitchen ventilation systems
- 2) Ventilation ceilings
- 3) Kitchen hoods
- 4) Accessories
- 5) Ventilation unit
- 6) Control system
- 7) Selection software
- 8) About competitors
- 9) Orders
- 10) Questions?



## **PRODUCT PORTFOLIO**



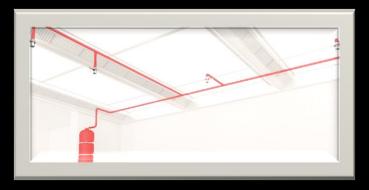
### **FILTERS**



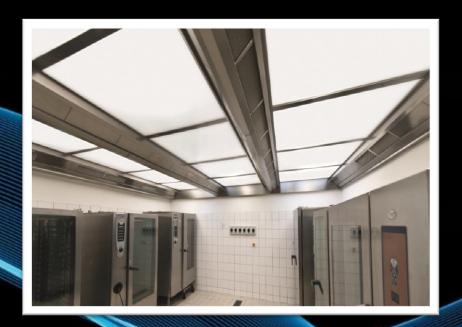
**UV-C lamps** 



SELF-EXTINGUISHING SYSTEM



## **VENTILATION CEILING vs. KITCHEN HOOD**





#### **CEILING**

- -suitable for a kitchen with many appliances
- -whole space is closed; the whole room gets ventilated
- -possible to move the appliances

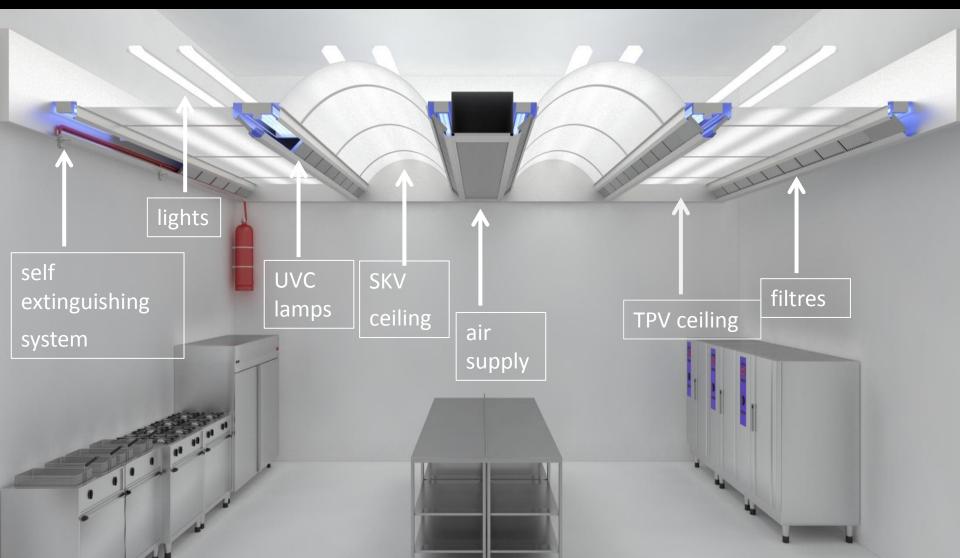
#### **HOOD**

- -local installation; right above the appliance
- -only one spot is being ventilated

## **VENTILATION CEILINGS**

SKV TPV TPV TPV-N

Exclusive



## **Kitchen line**













## **VENTILATION CEILINGS**

### **Business**

## Engineering

- Attractive design
- O Low purchase price
- O Easy maintenance
- Pleasant environment for the cooks
- Light weight
- Brightens up the space
- Air-tight (closed extraction system)

- Ventilates the entire area of the kitchen
- Hygienic air exchange
- High filtration efficiency
- O Europe-wide TÜV certification
- Integrated supply of fresh air
- O Integrated light for the whole area
- Perfect protection for the building construction

# KITCHEN HOODS



1)Air extraction



1)Air extraction

2) Filtration

3)Lighting

4)Off the shelf delivery



1)Air extraction

2)Filtration

3)Lighting

4)Fully welded



## **KITCHEN HOODS**



1)Air extraction

2)Filtration

3)Lighting

4)Air supply



1)Air extraction

2)Filtration

3)Lighting

4)Air supply

5)Heat recovery



### **KITCHEN HOODS**

- -possible to connect from the top / side (only Kubus, Grande, Variant)
- -duct throats can be round or square
- -all hoods are from **stainless steel** (according to VDI2052)
- -lowest standard size 800x800mm
- -2200x4000mm is the biggest hood size that could be delivered in one piece
- -assembly of 1 hood: +/- 1 day, 3 people







- Extraction and air supply hood
- Light LED, by choice with wireless control
- Connection and size depends on your choice

Height is 435 mm

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# **KITCHEN HOODS – reference project**



### **OPTIMA - NEW**





- Innovation of the DiNER hood
- Integrated heat exchanger
- Hot-water or electric heating
- Fully automatic system

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# **DESIGNING** standards

#### **VDI 2052**

- -recommendation only
- -released in August 2015
- -most important:
  - 1)hood overlaps (dishwashers and cooking spots 300mm; convection ovens with doors (200mm on the sides, 600mm on the side with the doo)s)
  - 2)hood should be fully welded (air tight)
  - 3)allowed inclination of filtres is 35 degrees
- new European standard is currently being set
- -we have the documents for objecting, able to provide

#### **Factors affecting final calculation:**

- 1) Kitchen space
- 2) Kitchen space strain
- 3) Kitchen equipment layout



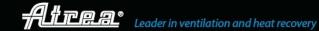
# ACCESSORIES filtres - how it works



- -steam and fat go through the filtres
- -necessary to clean the whole system every 6 months
- -Atrea can provide cleaning + extend warranty + change textile air diffuser

Condensate = 2 ways how to get rid of it

- 1)a little tub (empty every day, easy)
- 2)drainage



# **ACCESSORIES** filtres - efficiency

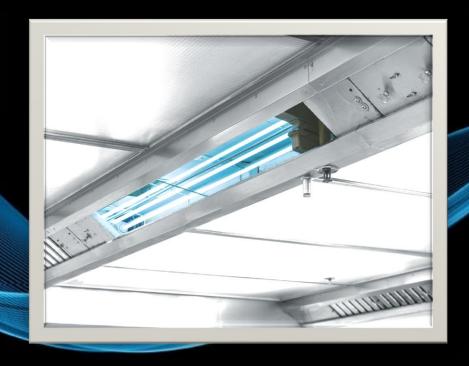


1 norms for efficiency measuring:

### <u>TNO</u>

- -competitors declare "efficiency up to 97%" = TNO
- -graph as a result of measuring, (gradual release of aerosol particles)

# ACCESSORIES UV-C lamps



- -behind filter (not necessary)
- -destroys fat, smells (99,9% efficiency)
- -34 years function, 5 years warranty

- -must run together with the ventilation
- -safety protection against reaching UVC

# ACCESSORIES LED lights



- -low purchase and operating cost
- -optimal luminosity (better than standard T8)
- -made by external company
- -standard for TPV Exclusive and new "DiNER"
- -for other products available for an additional charge



# ACCESSORIES self-extinguishing system

- -protection for the ventilation system and the appliances
- -automatically detects fire and starts extinguishing
- -temperature or smoke sensors in the air ducts

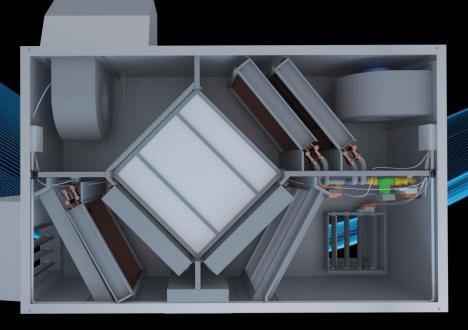


#### Consists of:

- 1) self-extinguishing system
- 2) stored fire extinguisher
- 3) automatic nozzles



## **VENTILATION UNIT**



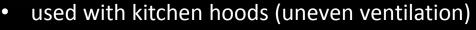
-recommended to use ATREA unit (complete ventilation system from one producer!)

-crossflow heat exchanger (bigger and smoother channels) according to VDI2052

-inside/rooftop/upright – up to the project



# **CONTROL SYSTEM RD5-k module**



controls zone dampers and fan performance

1 module for 3-4 appliances
up to 5 temperature & 4 humidity sensors per module

• 0-10V output







## Thank you for your attention