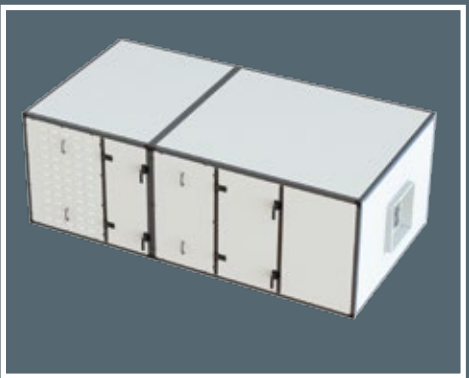
DEN RANGE

Compact Ecology Unit for Commercial Kitchen Ventilation

Technical introduction



DYNAIR®

Introduction to DEN range of Compact Ecology Unit

DYNAIR® is the industrial division of Maico Italia S.p.A. and is a well known brand name at global level in the industrial ventilation and plant engineering sector. Technological expertise, high production capacities, strong research and investment policies together with a personalized back-up service focused on customer needs have, for over 30 years, been the qualities that distinguish our company: Italian excellence renowned throughout the world and an industrial concern fortified by belonging to Maico Holding GmbH, the German group that leads the way in the ventilation industry.

Experience and high technology at your service

Living in a market in continuous evolution, DYNAIR® bases its force on a step by step project follow-up in close collaboration with the customer to create tailored and highly reliable solutions.

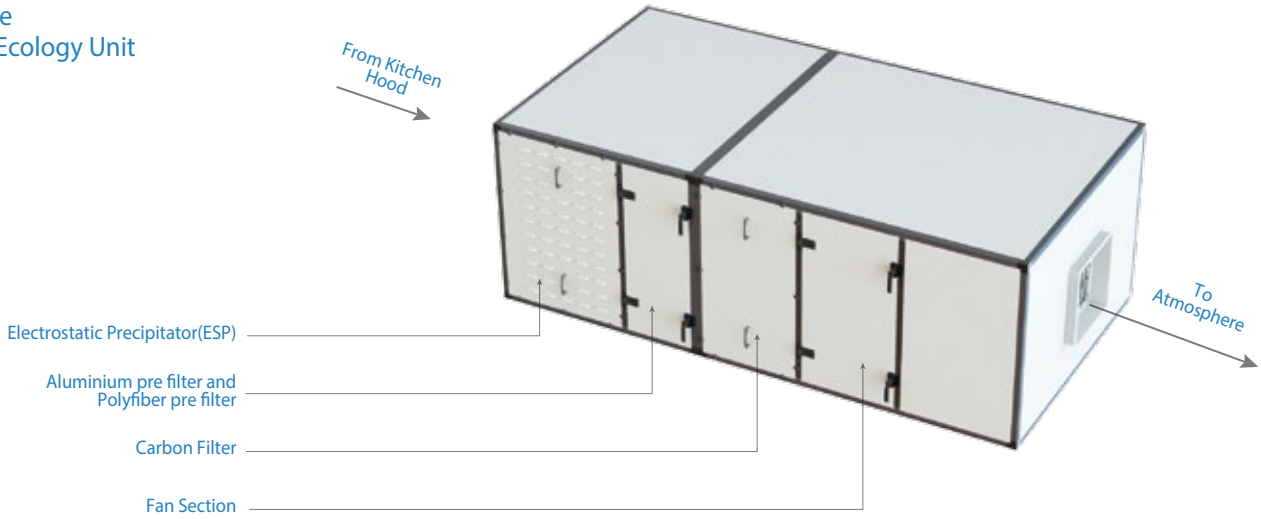
With the new and wide range of compact kitchen exhaust units(DEN), Dynair has diversified its current range of products to meet customers requirement in HVAC field. DYNAIR's products follow stringent policy of research and development. With safety as a priority during production.

Our Total Quality policy is ensured by standard working procedures, with tests and inspections during all production phases.

Maico Ventilation Pvt. Ltd is ISO 9001: 2015 company certified.

With our production capability, wide range of finished products and components warehouse, we ensure quick delivery to all our customers. Our staff is trained and dedicated to provide before and after technical plus sales services.

DEN Range
Compact Ecology Unit

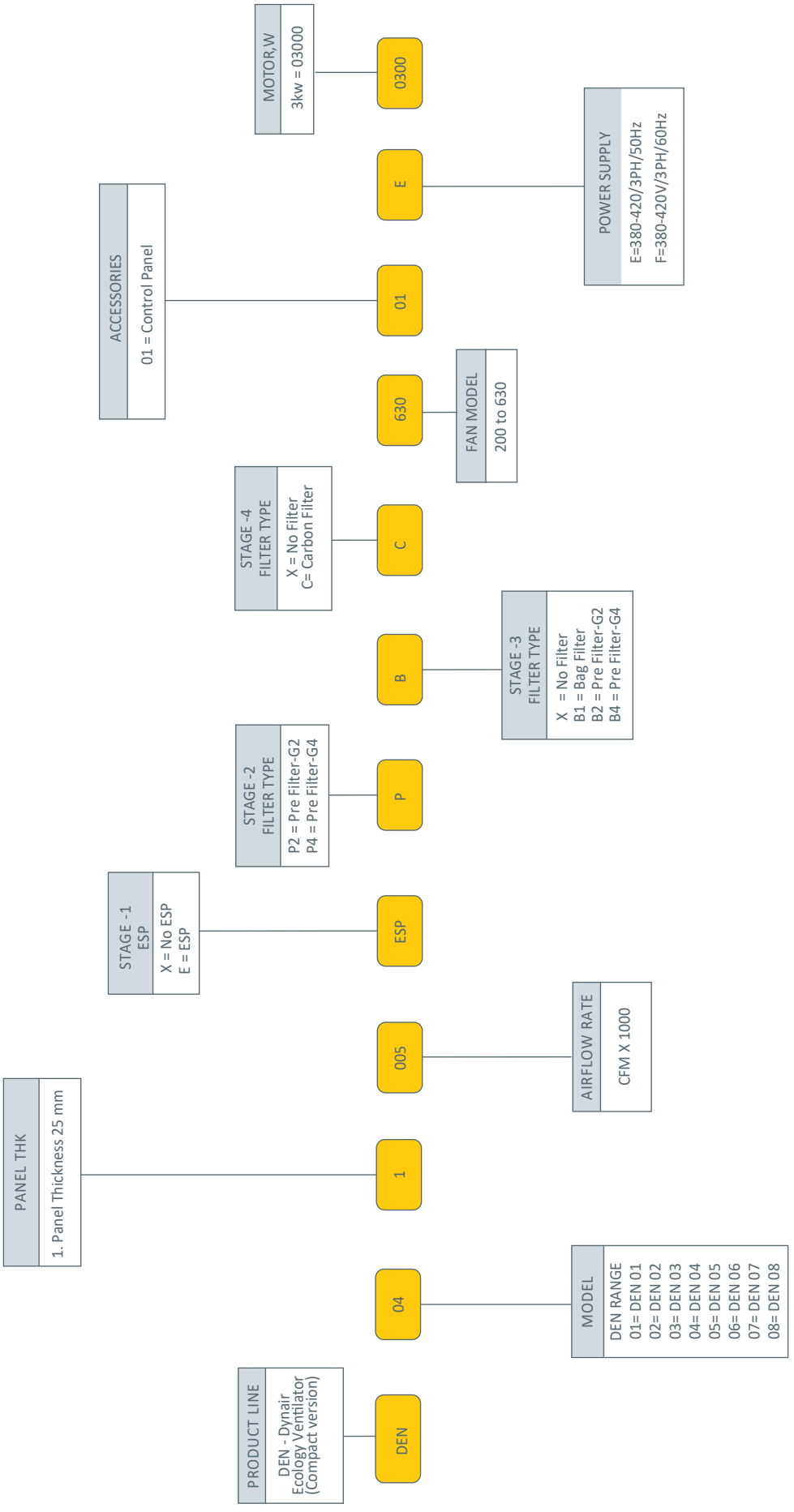


GENERAL DESCRIPTION

An efficient & economical solution to exhaust contaminated air from kitchen hood.
They are suitable for conveying kitchen exhaust air, upto a maximum temperature of 80°C.
The removal of grease from the exhaust air flow is a very important part of commercial kitchen operation. If there is no proper grease trap at kitchen hood it could:

1. Increase fire hazard at exhaust duct.
2. Increase the frequency of expensive duct cleaning.
3. Create bad odor in or near the restaurant surroundings.
4. Increase the collection of grease on the roof top which could cause deterioration of roof material (Filter Bank), These problems can be greatly reduced through the use of proper grease trap device at kitchen hood itself.

Nomenclature



Filtration System and Construction

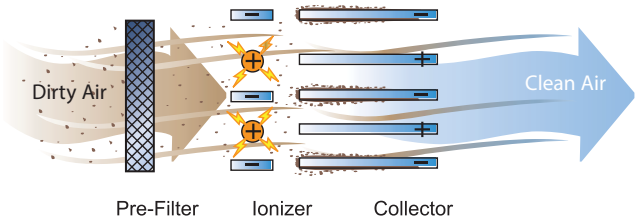
FILTRATION SYSTEM:

A. Stage of filtration

Four stage filtration system, which includes:

Stage 1 : Electrostatic Precipitator

Air is drawn by the motor/blower through a filter bank which traps large dust particles. The remaining particles, some as small as 0.01 microns, pass into a strong electrical field (ionizing section) where the particulate receives an electrical charge. The charged particles then pass into a collector plate section made up of a series of equally spaced parallel plates. Each alternate plate is charged with the same polarity as the particles, which repel, while the interleaving plates are grounded, which attract and collect.



Stage 2 : Aluminium Filter:

1.	EN 779	: G2
2.	Arrestance (ASHRAE 52.1)	: 60-80%
3.	MERV Rating (ASHRAE 52.2)	: MERV4
4.	Eurovent	: EU2

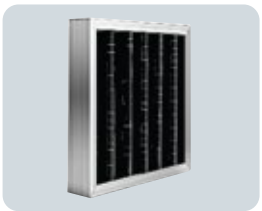
Stage 3 : Polyfiber Filter:

1.	EN 779	: G4
2.	Arrestance (ASHRAE 52.1)	: 90-94%
3.	MERV Rating (ASHRAE 52.2)	: MERV8
4.	Eurovent	: EU4

Stage 4 : Carbon Filter:

Durable non-woven polyester base media, impregnated with activated carbon.

The unique combination of high quality activated carbon and polyester affords odour and particulate trapping efficiency while maintaining excellent airflow properties.



FAN SECTION:

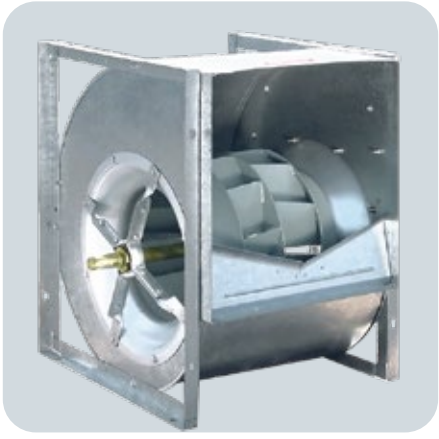
- DEN series are with DIDW,fan which allows obtaining two orientations (0° & b 90°) with the same fan.
- The key features associated with DEN:
  - AMCA certified fan for air and sound
  - PPGI casing, suitable for outdoor installation
  - Backward curved impellers are made of cold-rolled sheet steel
  - Statically & dynamically balanced
  - Fan & motor assembly mounted on a common base frame and isolated from the main structure by anti vibration mounts and flexible joint on inlet and outlet (optional)
  - DIDW backward curved type fan
  - Standard accessories with inspection door & drain plug for periodic maintenance
  - Powder coated impeller, (non-sticky)

CONSTRUCTION:

- Pentapost design and have strong three way angel joints of reinforced nylon corners to form a rigid frame structure. Rigidframe work comprises an assembly of externally chamfered extruded aluminium profile and nylon corner joint, double skin, Inner skin G.I 0.5 and Outer skin pre painted G.I 0.5 .
- TEFC, 3 phase induction motors are provided with high efficiency IE2. All the motors are as per IEC standards.

ACCESSORIES:

- Control panel (motor starter, status panel for filter bank) Optional.



MAICO INDIA

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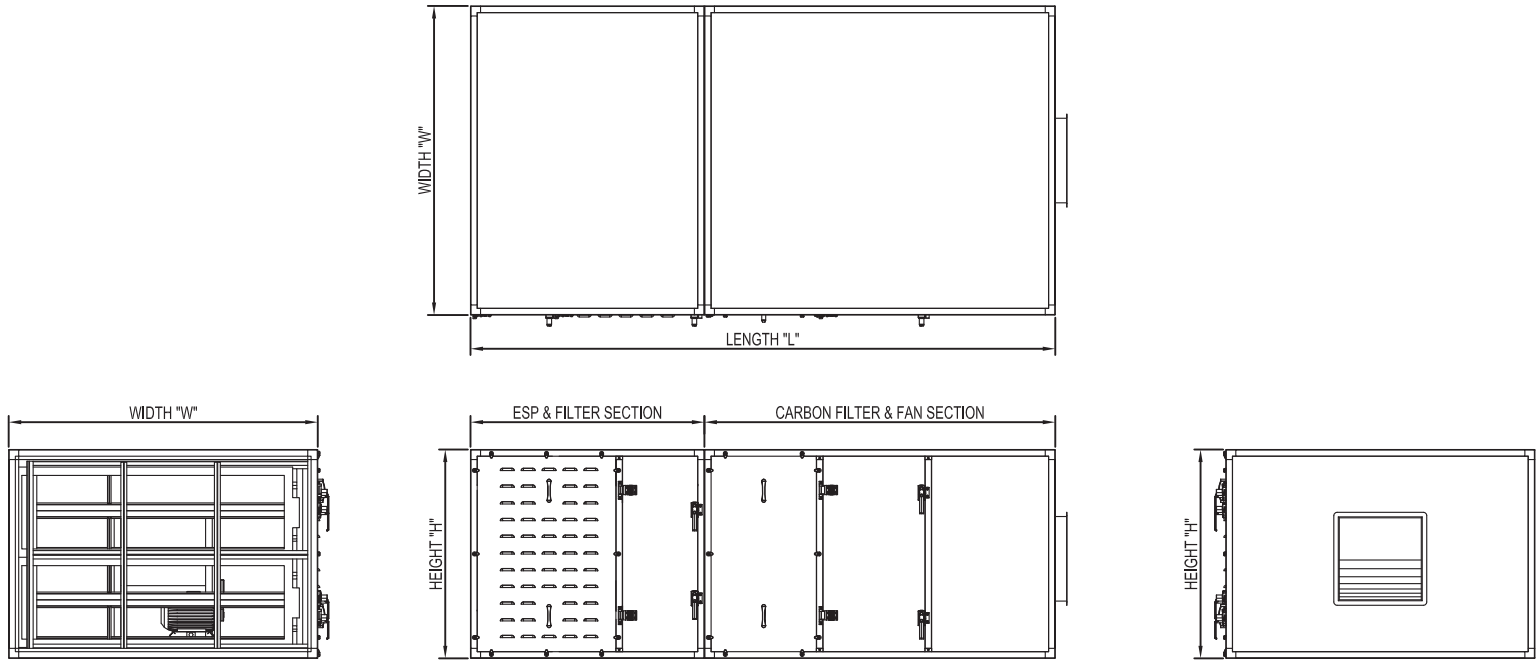
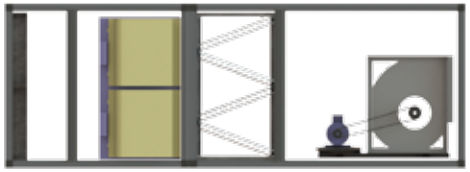
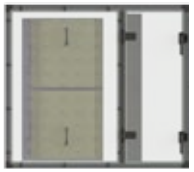
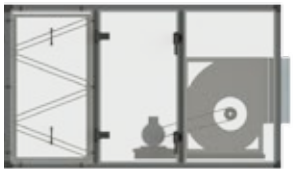
Project name:
Quotation no. :



	Comments:		Unit No :	DYNAIR®
			Unit Desc : DEN	
	Exh air	Project Name:	Qty Units:	Date:- 14-11-2016
Scale: not drawn to scale	Sup air :		No. of Sections: 02	Engineer:- M.S.

DYNAIR®

Ecology Unit
Dimensional Details

							
DEN Model	Airflow Rate		Height	Width	ESP	ESP+Pre1+Pre2	Carbon filter+Blower & Motor (DIDW)
	CFM	CMH	A	B	MODEL	L1	L 2
DEN-1	2000	3400	700	850	D 2500 B X 1	1400	1600
DEN-2	3000	5100	800	1400	D 5000 B X 1	1400	1600
DEN-3	4000	6800	800	1400	D 5000 B X 1	1400	1900
DEN-4	6000	10200	1000	1900	D 7500 B x 1	1400	1900
DEN-5	7500	12750	1250	1900	D 7500 B x 2	1400	2100
DEN-6	10000	17000	1250	1900	D 7500 B x 2	1400	2100
DEN-7	12000	20400	1400	1900	D 7500 B x 2	1400	2350
DEN-8	15000	25500	1820	1900	D 7500 B x 3	1400	2460

Note :-

1) All Dimensions are in mm.
2) Lengths Shown are of Individual Module.
3) Please consider these dimensions for 25mm panel.
4) Add 100 mm in the Ecology unit height for base channel.
5) Dynair reserve the right, while leaving the essential characteristics the same, to modify the data, photograph and enything else shows in the above without prior warning.

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MAICO
INDIA

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