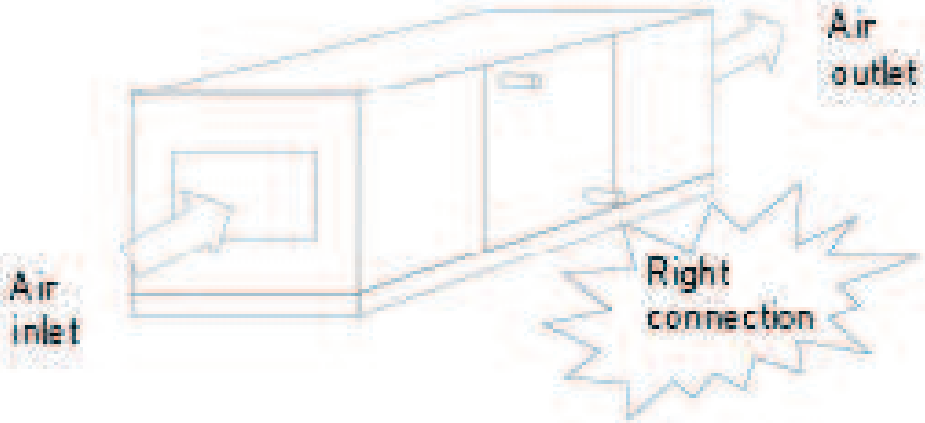
WI-HYGIENE

WOLF INTERNATIONAL

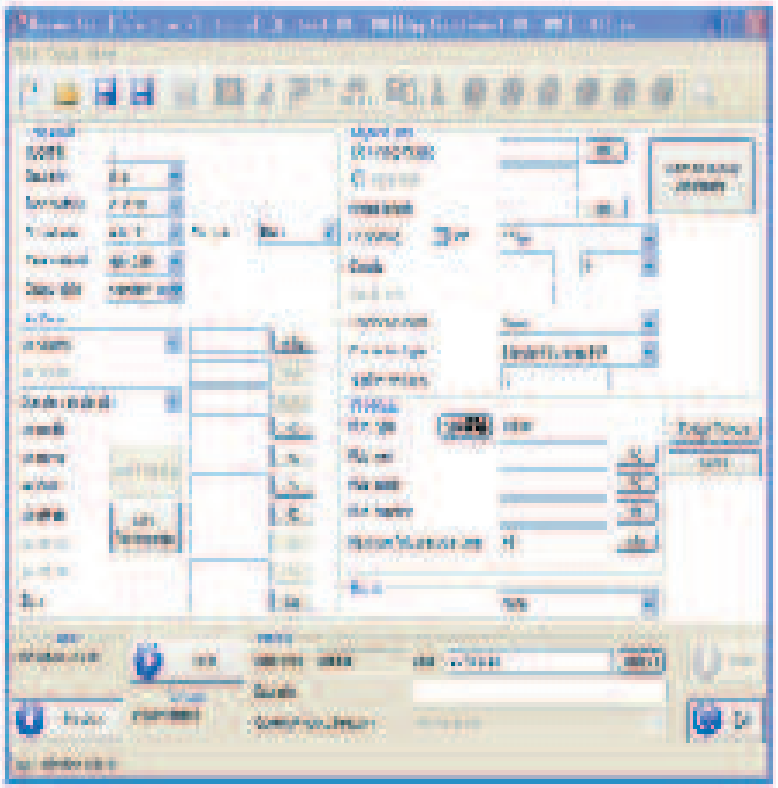
Nomenclature

A	Z	A	F	100	L	6	D	A	B	S	C	G4	SF	EH4
1	2	3	4	567	8	9	10	11	12	13	14	15	16	17

1. Factory code
2. Type: Z: Modular type
3. Series No.
4. Pannel thickness F:50mm
5-7. Nominal air flow(×100m3/h)
8. Pipe connection L: left connection R: right connection
9. Coil rows 4:4 rows 6:6 rows 8:8 rows
10. Blank: water coil D:DX coil
11. A:380V-3Ph-50Hz;B:380V-3Ph-60Hz;V:variable speed motor
12. Blank: white Al fin; B:blue fin
13. S:SUS304 drain pan
14. Blank: steel header; C:copper header
15. G4:2"G4 filter
16. Blank: steel coil frame;SF:SUS304 coil frame
17. EH4:electric heater 4KW



Facing air inlet side, if the pipe connectionis at the right side, then it is called Right connection. The above sketch is for Right Connection.



Computair--Famous Coil Software provider from U.K.

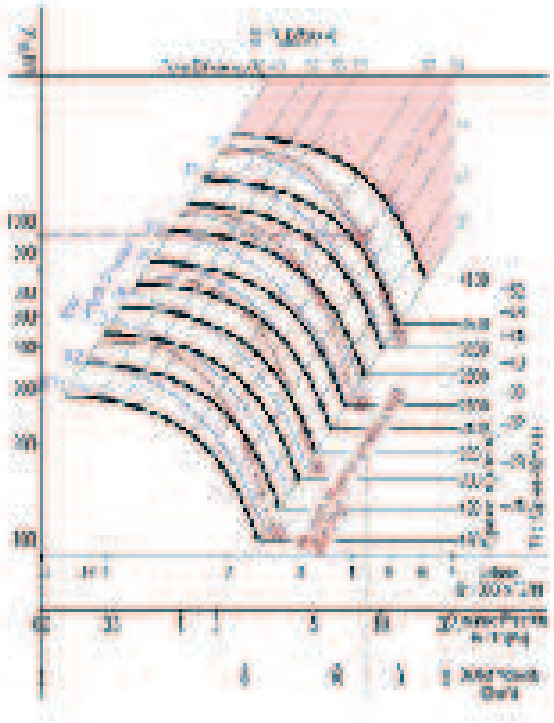
Technical selection form

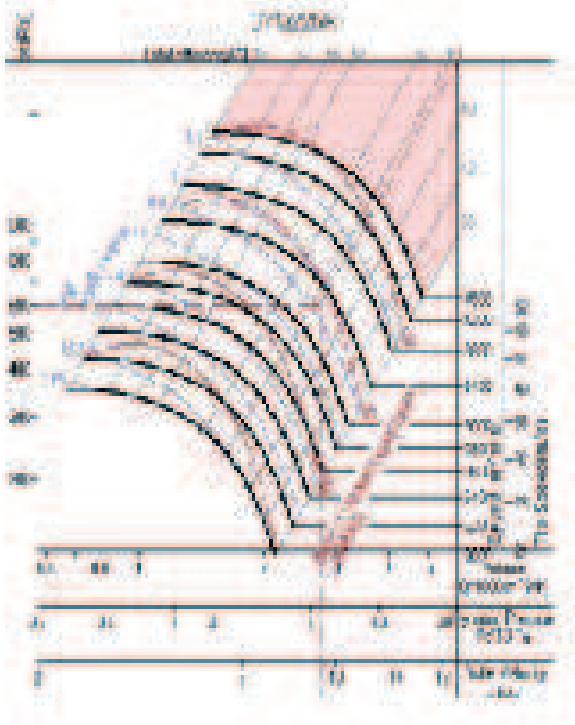
Basic Parameter			
Unit code	FAHU-04	qty	1
Model	ACAF30 -1207	installation type	V
Total air[m^3/h]	4395	Fresh air[m^3/h]	4395
ESP[Pa]	300	cooling capacity[KW]	36.33
Heating capacity/heater capacity[KW]	-	humidifying capacity[kg/h]	-
Pipe connection	L	Door direction	L
mode	modular		
Dimension[L*W*H]	3900*1255*835,1900*1255*755	weight	965
Casing			
insulation	50mm PU	outer panel	0.8mm painted colorful steel panel
Bottom inner panel	0.5mm galvanized steel	Other inner panel	0.5mm galvanized steel
Foundation material	metal plate	Foundation height	80mm
fresh air section			
fresh air inlet[W*L]	600*600mm	fresh air inlet type	alloy aluminum manual damper
fresh air inlet position	horizontal	air speed[m/s]	3.09
inspection door	full panel type hinge with lock	sight window	1pc
lamp with switch	36V/40W		
1st filter section			
brand	Huijing	class	G4.2"
type	flat	frame	galvanized frame
size	592*592*46	qty	1
size	490*592*46	qty	1
heat recovery wheel			
brand	Enventus	type	total heat
model	HM1-0-N-W-600-CS-R	motor	60W , 380V/3Ph/50Hz
fresh air volume[CMH]	4395	return air volume[CMH]	2729
fresh air pressure drop[Pa]	225		
outer size	900*900*290mm	inner width	1150mm
Access section			
inspection door	full panel type hinge with lock	sight window	1pc
lamp with switch	36V/40W		

2nd filter section			
brand	Huijing	class	F7, 15"
type	bag	frame	galvanized frame
size	592*592*381	qty	1
size	450*592*381	qty	1
cooling coil section			
model	3W 1008C - 980- 18H 18C	material of tubes	3/8", copper
fin material	aluminum	frame material	galvanized steel
drain pan	SUS304	qty	1
air flow(m3/h)	4395	face velocity(m/s)	2.77
rows&fpi	8	cooling capacity(kW)	56.33
Enter air temp(DB/WB) ℃	27/19.5	Leaving air temp(DB/WB) ℃	12.54/12.10
Water temp (inlet/leaving) ℃	7/12	Water flow raw(m3/h)	10
Fluid velocity(m/s)	2.22	Air pressure drop(Pa)	151.61
Water pressure drop(kPa)	81.96	Connection pipe DN*qty	DN40*2
Material of header	seamless steel	droplet eliminator	alloy aluminum material
supply fan section			
air flow(m3/h)	4395	TSP(Pa)	872
category	single fan with single motor	power supply	380V/3Ph/50Hz
fan brand	Yilida	motor brand	Siemens
fan model	SY0790R	motor model	3KW-2P
fan type	backward	motor type	inverter without VFD
Outlet velocity(m/s)	11.77m/s	inverter power(kW)	2.28kW
fan speed(rpm)	3761.55	fan max speed(rpm)	4100
inspection door	full panel type hinge with lock	sight window	1pc
lamp with switch	36V/40W	Anti-vibration	rubber
belt guard	N/A		
return air section			
size(L*W)	400*600mm	type	alloy aluminum manual damper
position	horizontal	air speed(m/s)	5.09
inspection door	full panel type hinge with lock	sight window	1pc
lamp with switch	36V/40W		

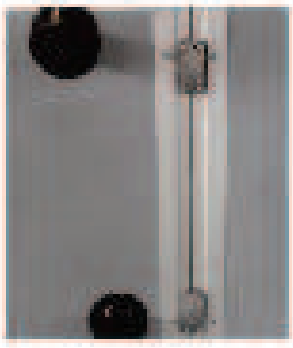
Selection

3rd filter section			
brand	Huijing	class	G4,2"
type	flat	frame	galvanized frame
size	592*592*46	qty	1
size	490*592*46	qty	1
return/exhaust air section			
air flow(m3/h)	2729	TSP(Pa)	600
category	single fan with single motor	power supply	380V/3Ph/50Hz
fan brand	Yilida	motor brand	Siemens
fan model	SYD225R	motor model	1.5KW -2P
fan type	backward	motor type	inverter without VFD
Outlet velocity(m/s)	9.16m/s	internal power(kW)	0.92kW
fan speed(rpm)	3336.2	fan max speed(rpm)	4500
inspection door	full panel type hinge with lock	sight window	1pc
lamp with switch	36V/5W	Anti-vibration	rubber
belt guard	N/A		





1]Airflow: 2,500- 200,000m3/h
2]Installation: Modular type
3]Standard coils: 4R, 6R, 8Rows
Custom coils depending on capacity can custom-made depend on cooling capacity with coil selection software by computair
4]A variety of functions for choice
5]Modular design: each modular size is 100mm multiples



Specification

The frames are made of aluminum alloy anodic oxidation treated to ensure extra anti corrosion withThermal Break (full peripheral self tight seal rubber Anti Cold Bridge is incorporated to have no thermal conductivity occurs from any internal to external surface). The profiles are connected by means of special high strenth Nylon corner pieces, to form the AHU sections. This type of construction has the following advantages:

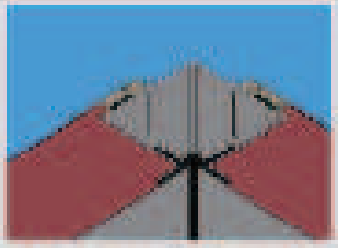
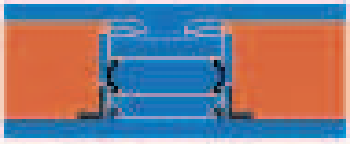
1|Excellent mechanical strength

2|Flexibility of construction and Low Air Leakage

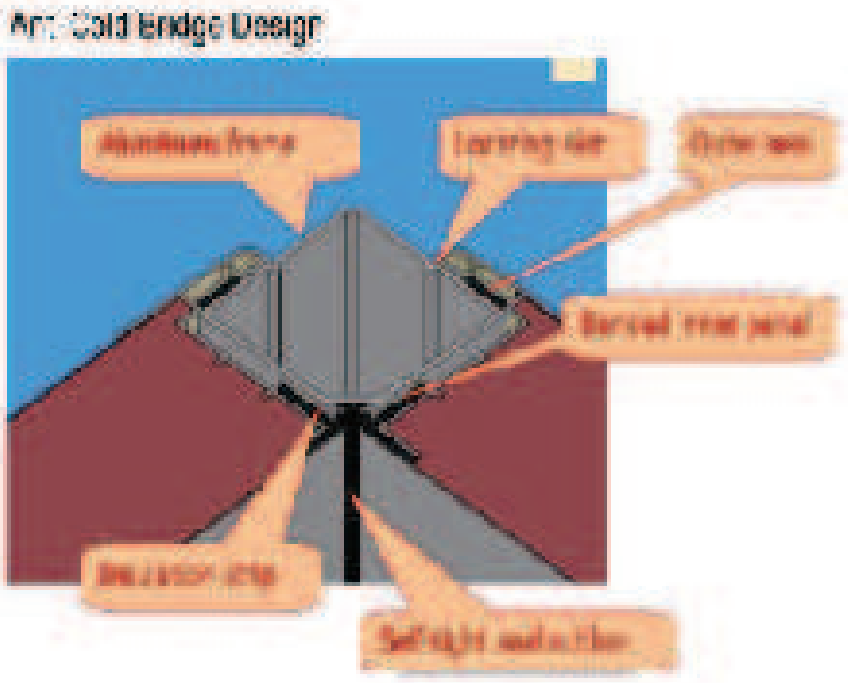
3|Perfect appearance and precise dimensions

4|Quick and precise installation of interior components

3|The possibility of completely dismantling the unit in case of difficult access and reassemble on site at minimum time and cost

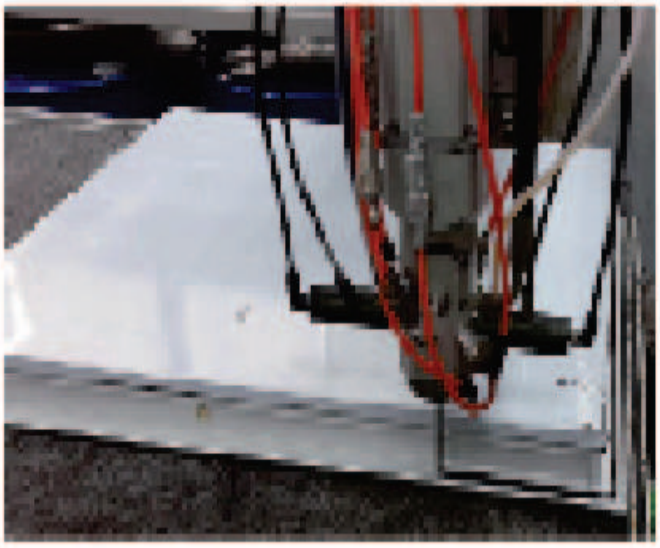
Item	Hammer's structure
Structure picture	
Structure strength	[illegible]
Sealing Performance	[illegible]
Flatness	[illegible] 
Corrison resistence	[illegible]
Anti cold bridge	Self-tight sealing, it has good sealing, no matter it is positive pressure or negative pressure. It can also cut off cold bridge.

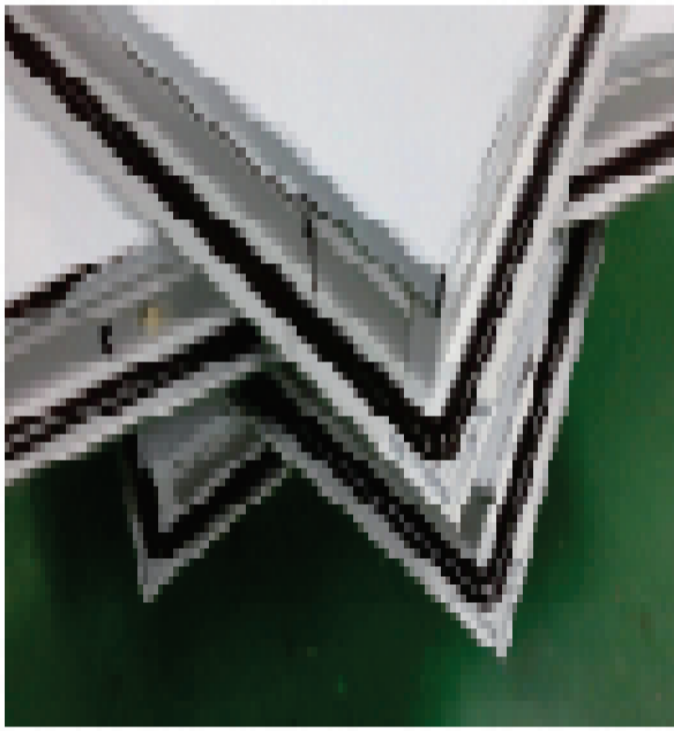
The sandwich design panels are of the double-skin type with PVC profile, a rigid insulation layer consisting of factory applied polyurethane layer injected between the panels, having density of 48 kg/m³. This type of material has excellent thermal insulation and noise reduction properties and adds extra mechanical strength and rigidity to the panels and meet NFPA-90A Flame spread and Smoke generation requirements. The panel thickness shall be 50 mm. The construction of the panels is made with galvanized sheet metal 0.5 mm thickness outer skin and 0.5 mm inner skin which optionally can be made from SUS (304 or 316) sheet metal for Hygienic Application. Other thikness (0.8mm or 1.0mm) for panel is option .The mechanical perfomance of the unit shall be as according to EN 1886 / Eurovent.

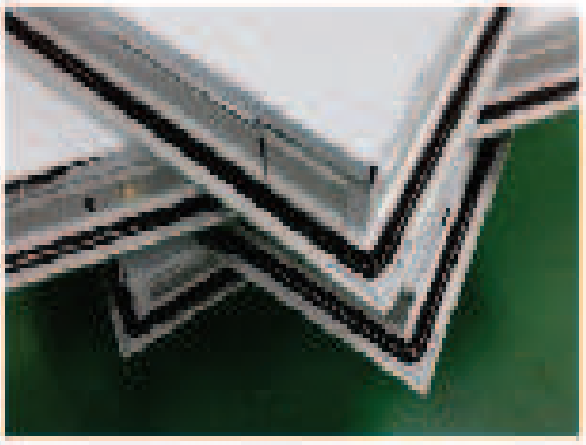


Three Dimension Dispensing Machine

The sealing strip has automatic three-dimensional dispensing equipment. By foaming craft, polyurethane material is coated on the panel. It has features with environmental protection, no smells, high sealed, no obvious connection, no glue coating, anti fire, no fall off and good resilience, ect. It can really solve the air leakge problem for big air volume and high pressure AHU







PDS

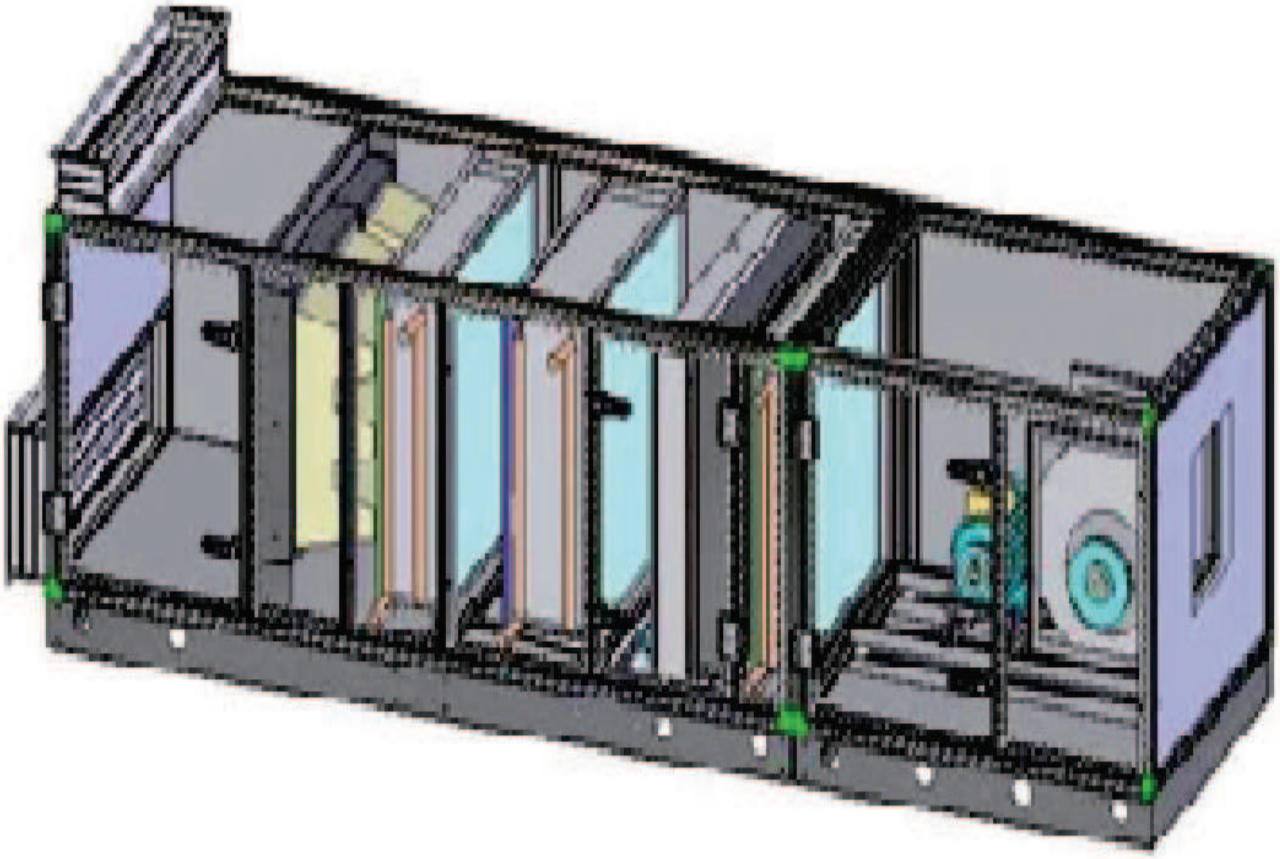
SGS

SGS

ROHS

AHU Sections

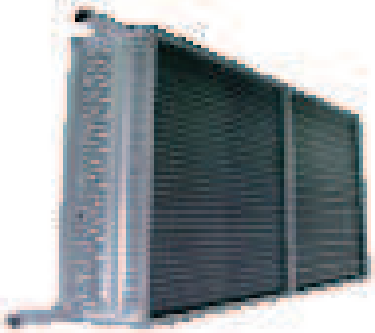
1.Mixing box
2.Plate primary filter
3.Bag primary filter
4.Bag secondary filter
5.Cooling coil
6.Heating coil
7.Vapor heating coil
8.Vapor humidifying
9.Wet film humdifying
10.Spray Humidifying
11.Fan set
12.Flow equalization
13.Silencer
14.Dehumidifier
15.Heat recovery
16.Air distributing
17.High efficient filter
18.Front air outlet
19.Top air outlet



No leakage--Hammer Special Coil Design

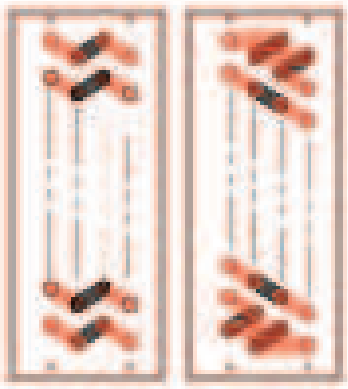
Can custom-made depend on cooling capacity with coil selection software by computair

Coil adopts the seamless copper tube and open window aluminum fin, form through 12 MPa water pressure expansion tube.



water coil/DX coil/Steam coil

Coil's winter anti freeze design, in the winter, when machine doesn't work, it can drain the water of cooling coil into none under the condition of natural drainage.

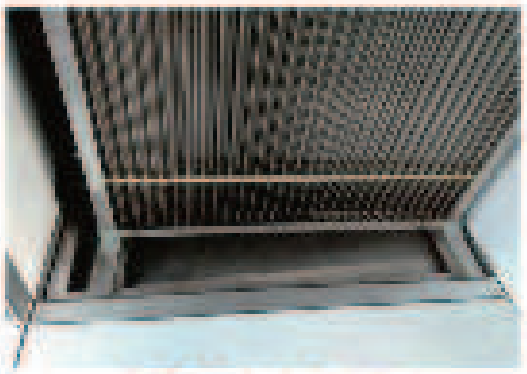


Coil Section Details

The chilled water coils are manufactured from seamless copper tubes 3/8" O.D and 0.3mm thicknesslother thickness is for option], with aluminum fins with thickness from 0.115mm up to 0.15mm depending on the FPI used. The standard for our calculations is 10 FPI and 0.115mm aluminum fin thickness. The fins can either be mil finish as standard or anti corrosion coated optional.Coil headers are made of seamless steel tubes to DIN 2440 and have parallel male threads according to DIN 2999. Optionally the headers can be made from seamless copper pipe according to ASTM 280. The coil casing is made of heavy gauge galvanized steel. All coils are factory tested with water pressure of 2.8Mpa. The capacity of the coil is software calculated according to AHRI Standard 410-2001 procedure and from an appropriate software. Two types of drain pan available.

1]Dry type with slop,The drain pan is fabricated of insulated 1.2mm thickness stainless steelwhich has V-slope arrangement for better drainage performance;2]Sinking type, The drain pan is fabricated of insulated 1.2mm thickness stainless steel. Sinking Drain pan is recommended for hygienic ahu which guarantees perfect water drainage performance.

Dry type with slop



Sinking type

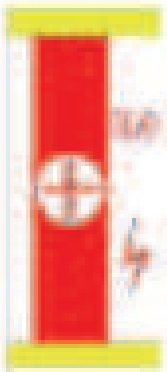
When the face velocity on the coil is above 2.5 m/s a droplet eliminator is installed in the coil section.

Theoretically the need of eliminator, depends on the sensible heat factor of the coil and the maximum velocity for various SHF as given in the table below.

Sensibile Heat Factor	1	0.9	0.8	0.7	0.6
Max. Face Velocity (M/S)	3	2.9	2.8	2.65	2.5

The eliminator is made from a special plastic profile secured on an epoxy painted sheet steel frame. Optionally the aluminium aloy profiles with SUS frame can be made. The eliminator assembly can be removed from the unit through an access panel in the coil section, in order to facilitate the maintenance and cleaning of the coil.

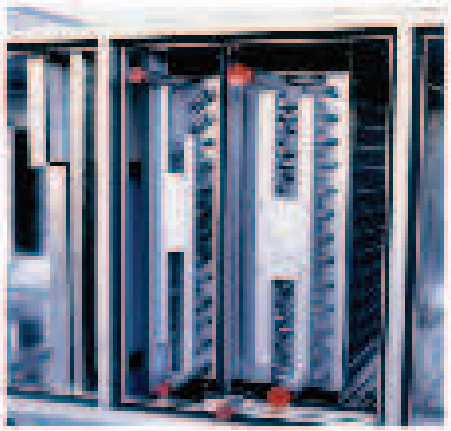
Heating coil section

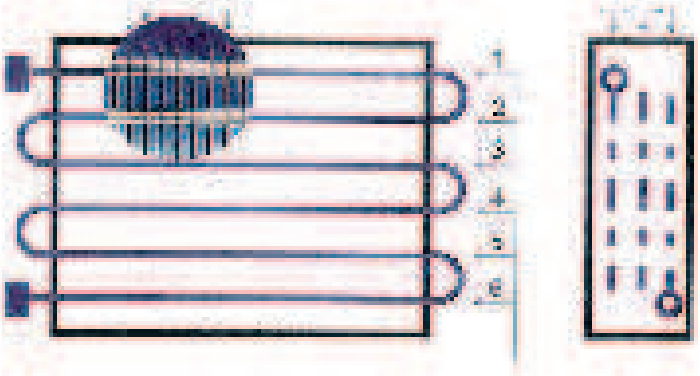


1, Hot water heating

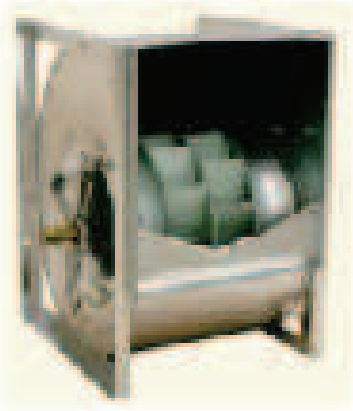
2, Steam heating

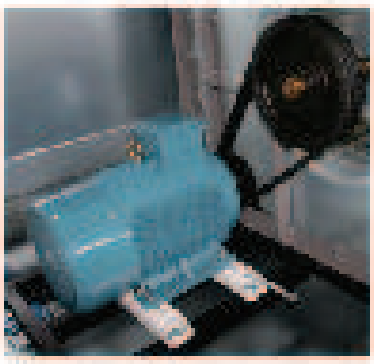
3, Electrical heating



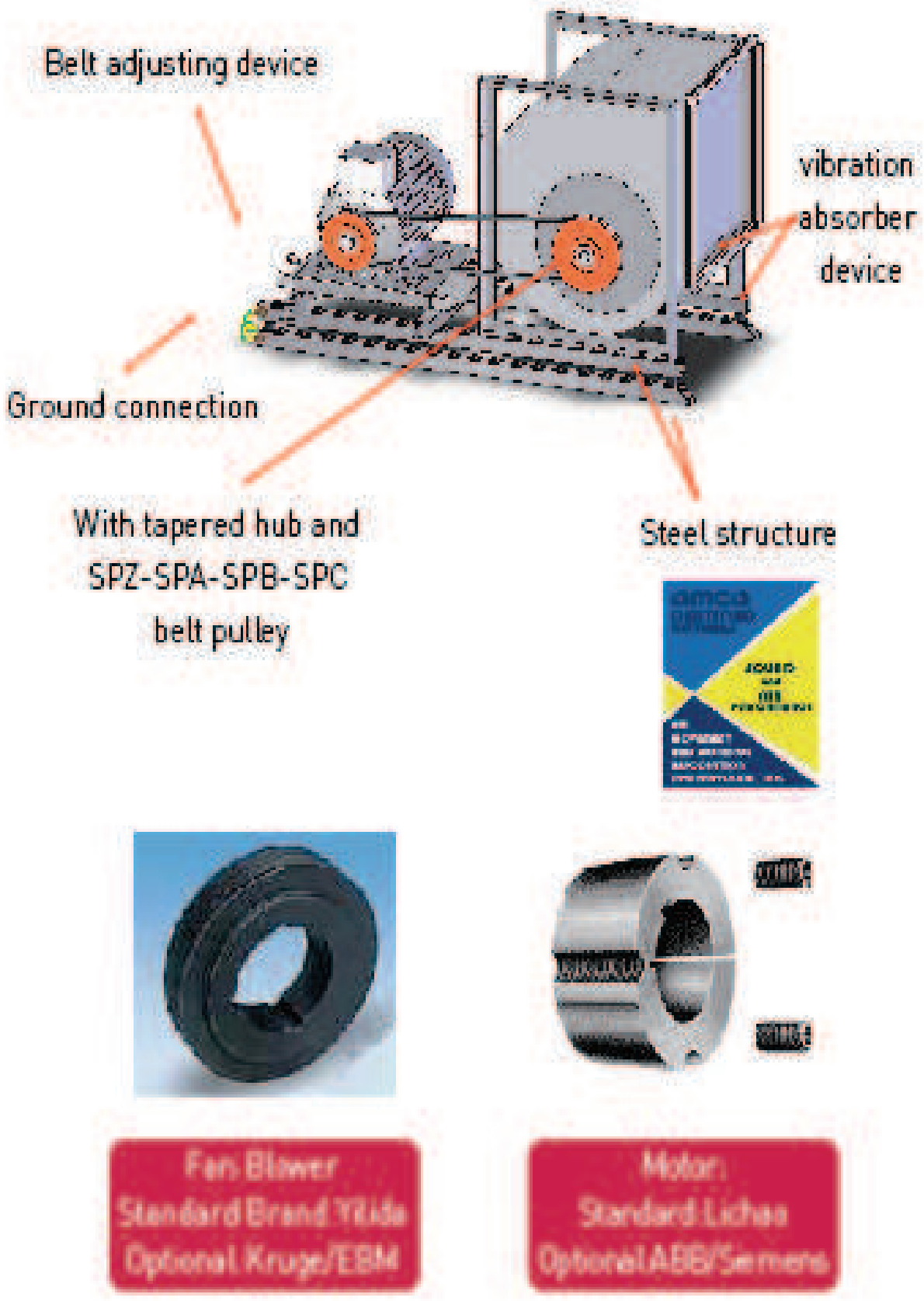


The Fans are double width, double inlet, with forward or backward curved impellers which are statically and dynamically balanced after manufacturing, thus eliminating any possibility of vibrations. The fan capacities are verified according to AMCA 210. The fan motors are totally enclosed fan cooled type (TEFC), IP54, class F insulation.Transmission is carried out via V-belts and pulleys. The pulleys are selected with tapper lock facility for easy installation and maintenance. The fan motor assembly is placed on a common base and is elastically suspended inside the unit, thus eliminating the need of external vibration isolators. The fan outlet is connected to the unit panel by means of a special canvas fabric, to avoid any transmission of vibration to the unit panel.





Fan Section Details

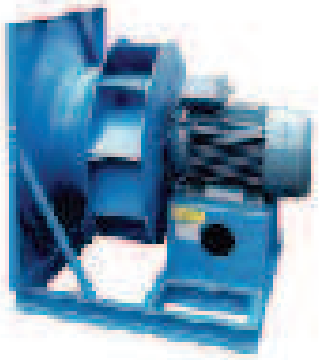


Access door is provided for maintenance purposes with the option of sight glass to be fitted on the door. The door is suspended on high quality special hinges and has locks operating with tool as per machinery safety directive 2006/42/EC.

Optional parts for fan section

1)Plug fan
2)VFD fan
3)Belt guard
4)External Power Switch for the Motor with Padlock
5)Interior Light with External Switch
6)Spring Isolators Instead of Rubber Type which are the standard

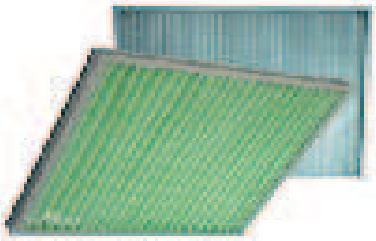
Standard:
15-250 Rubber type
280-2000:Spring type



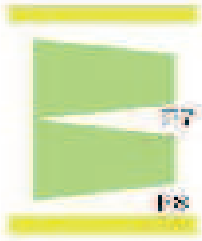
Filter Section

Primary filter section ☆ BIBO type is available

Three types:plate type, folding type and bag type.
Material of frame: paper, aluminum frame and galvanized steel
Filter material: non-woven fabrics, nylon mesh, activated carbon filter material, metal mesh
Filter efficiency: 80%(for dust particle>=5um)
Initial resistance of filter:<=50Pa
Max. allowed air velocityV=4.2m/s

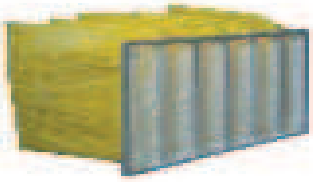


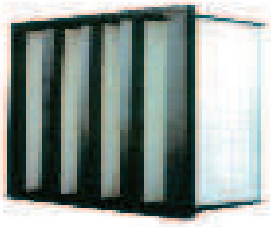
Secondary filter section ☆ BIBO type is available



Secondary fitler belongs to F series filter.
F series filter includes:
1、Bag type
F5, F6, F7, F8, F9
2、non-bag type
FB (plate filter) ,
FS (diaphragm filter) ,
FV (combined filter) .

	Particle Keeping Average [%]		Particle Keeping Average[%]	
Panel Filter	G1	Dm<65	EU1	Dm<65
	G2	65<Dm<80	EU2	65<Dm<80
	G3	80<Dm<90	EU3	80<Dm<90
	G4	90<Dm	EU4	90<Dm
	Particle Keeping Average [%]		Particle Keeping Average[%]	
Bag/Compact Filter	F5	40<Dm<60	EU5	40<Dm<60
	F6	60<Dm<80	EU6	60<Dm<80
	F7	80<Dm<90	EU7	80<Dm<90
	F8	90<Dm<95	EU8	90<Dm<95
	F9	95<Dm	EU9	95<Dm





Hepa Filter section ☆ BIBO type is available

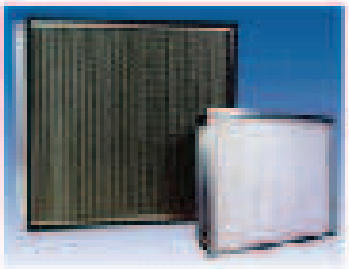
Hepa efficiency filter adopts superfine glass fiber filter paper or polypropylene filter paper as filter material, It can be widely used in the general filtering of electronics, pharmacy, hospital, food industry, etc. It can also be used for places of resistance to high temperature.

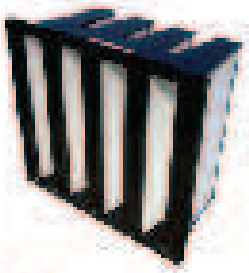
Features

1、The unique seamless sealing technology of super-high efficiency filter make the sealing effect better, more durable and not easy to leak.

2、One-by-one laser scanning count MPPS efficiency: 95%-99.95% (EN1882) .

3、Filtering level: H10-H12 (EN1882).





Standard brand Huijing
Optional Camfil/Mayair

The bag filters and pre filter are fixed in common frame,can be easily removable from rear side of the unit, whereby an extra space is given for filter removal which is always done in the dusty air side of the unit. The filters are installed tightly by holding clip, in order not to have air leakage. The fixed frame of pre and bag filters can be provided separately upon request.

Optional Parts for Filters Section

1. Differential pressure gauge: Pointer type and Red oil type differential pressure gauge

2. Differential pressure switch

Red oil type differential pressure gauge

Pointer type differential pressure gauge

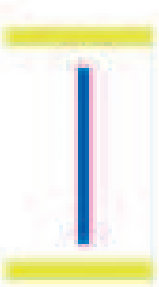
Humidifier section

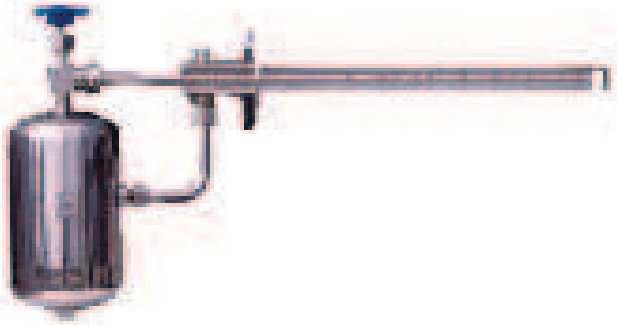
Common way of humidification :

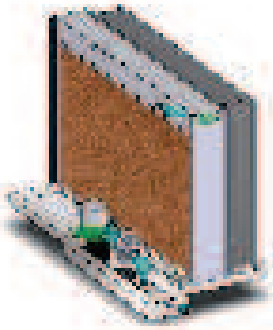
1、Dry steam heating: requested steam heating 0.1～0.4MPa, advantage: stability, high efficiency, long life, high control precision.

2、Wet film humidification: certain requirements in water quality, advantage: clean and no noise, disadvantage: small humidification quantity, easy to mildew and rot and breed bacteria

3、Electrode type humidification: certain requirements in water quality , can't use deionized water, purified water and distilled water, water tep. 4～40 ℃, water supply pressure is 0.1 ~ 1.0 MPa.

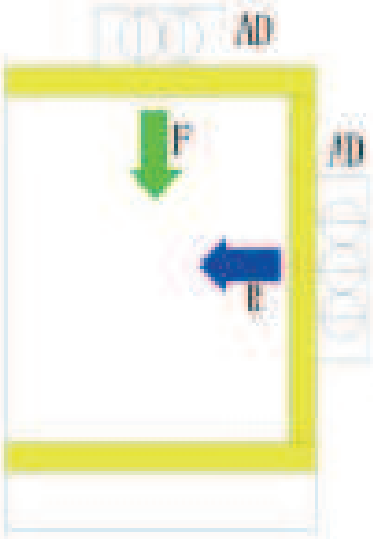






Mixing Box

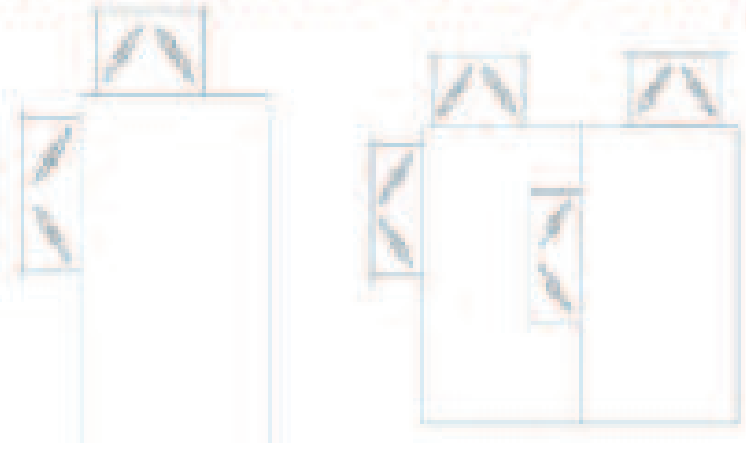
The mixing box can either be single or double type depending on the operational design of the unit. The dampers which are installed in the unit are selected with maximum velocity 5 m/s, when the full air flow is passing through each of them. The operation of the dampers is made through independent handles for each of them. As an option the movement of the dampers can be made motorized as per customer request.



Optional parts for Mixing Box Section:

a. Aluminum alloy air damper
b. Motorized damper (On/Off)
c. Motorized damper(Modulating type)
d.36V maintenance lights and sight glass

SINGLE MIXING BOX DOUBLE MIXING BOX

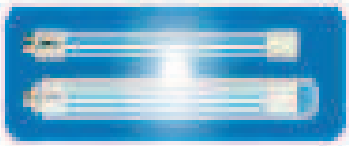


Sterilization section

According to the demand of sterilization, equipped with UV sterilization, electrostatic sterilization or ozone sterilization.

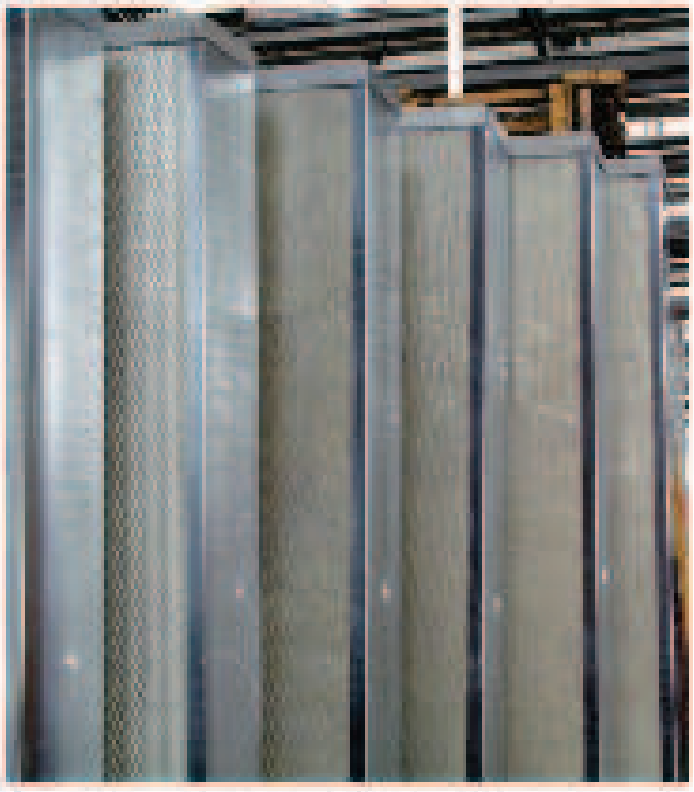
☆ Amount of ozone is calculated according to the volume of air supply area.

UV sterilizer



Electrostatic sterilizer

Sound Attenuator



Using the chip resistance sound attenuator to make noise control under national standard allowing range

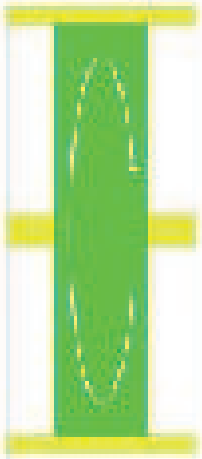
Features: Sturdy and durable, stable performance, beautiful appearance, easy to maintain

Charactoristics: Good (high, medium, low) frequency noise elimination performance and small resistance loss

Type: Impedance sound attenuator mainly uses sound-absorbing porous material to low the noise.

This section is for air to air plate heat exchangers or rotary heat exchangers to be installed. In case of plate heat exchanger, epoxy painted drain pan is installed in both supply and return side of the unit, whereby face and bypass damper can be installed optionally in the supply section of the unit.
The calculation of the performance of the heat exchanger is made with special software from the manufacturer and the selection is made to a maximum face velocity on the exchanger 4 m/s.

Heat wheels - recovery 60% - 80%



It makes energy loss to a minimum, through rotating wheel heat recovery device.

When system requires a lot of fresh air, heat exchanger can pre-cool fresh air in the summer or pre-heat fresh air in the winter.

It saves cooling or heat load of main engine in order to reduce energy consumption.

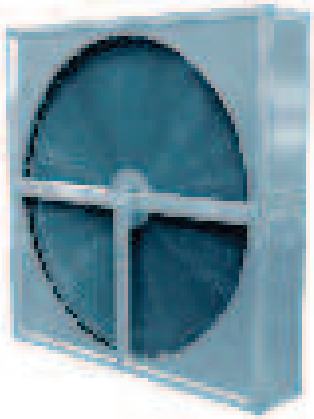
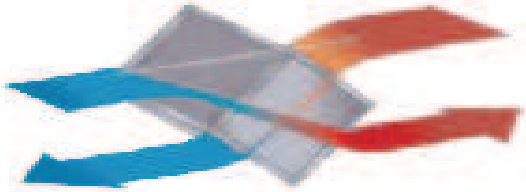
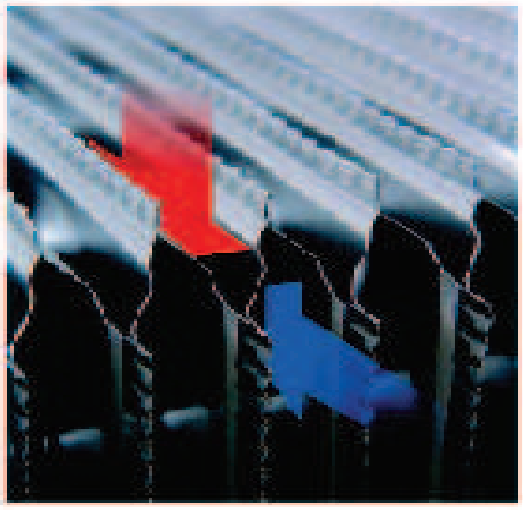


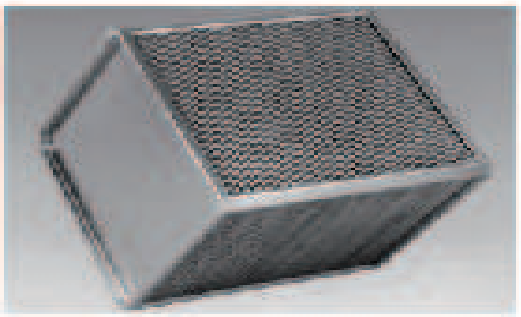
Plate heat recovery

Fin can be coated aluminum and health level of stainless steel #316

Different length and sizes meet internal space of different AHU .





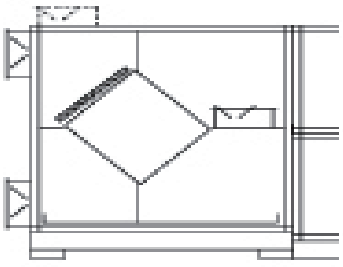


Heat wheels – recovery 60% - 80%

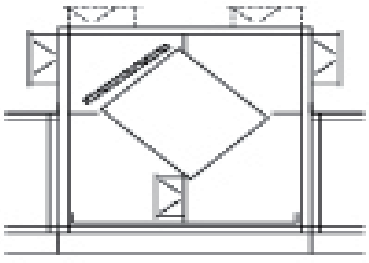
With or without damping cycles

With or without by-pass section

Different layout and the location of the damper



double deck

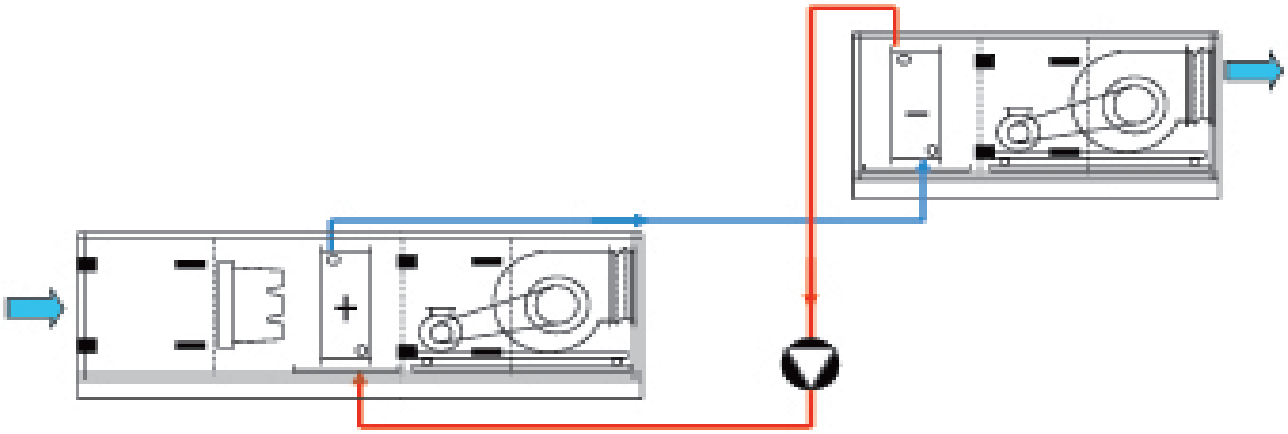


single deck

* Mounting G3 or G4 or F6 or F7 filter at the fresh inlet

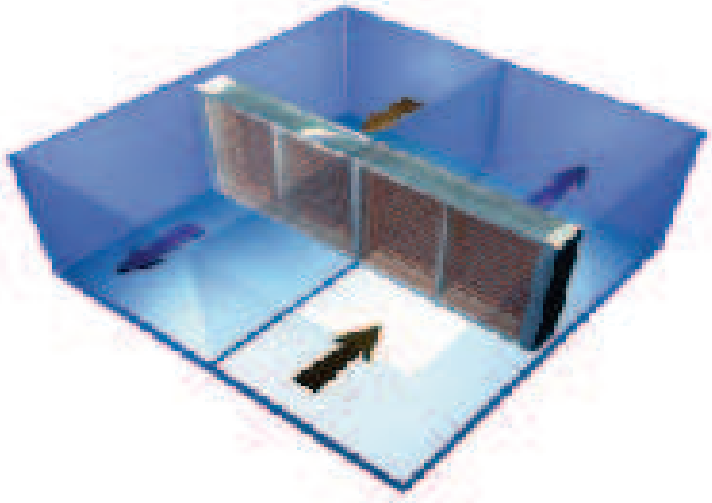
Round Around coils – recovery 30% - 50%

Setting 6 or 8 rows coil in exhaust air units and air supply units at the same time. Through pump cycle, processing heat exchange of exhaust air and air supply between two coils. It is usually applied for places which is far apart from exhaust air units and air supply units.



Heat pipe for heat recovery

The heat pipes may be arranged side by side at right angles to the direction of the gas flow, or may be arranged vertically with the heat above the lower portion. In addition, its flexible mounting dimensions are suitable for all types of pipes and AHUs, making heat pipes ideal for heat recovery.



Heat Pipe

Compare with :

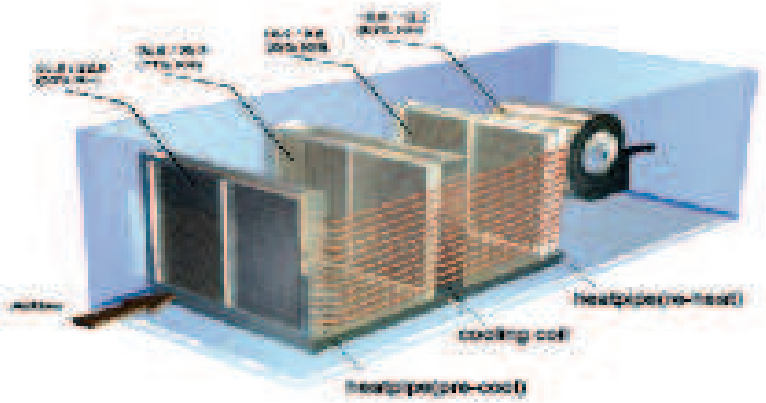
Coil type: The price is relatively low, but the pump and water tank need to be configured to operate. Not only that, but when used in cold climates, antifreeze must also be injected to prevent frost from reducing its benefits.

Plate type: Although the recovery effect is good, it is too bulky and difficult to clean. Once they accumulate condensate, they can cause mold growth.

Wheel type: requires frequent maintenance, and is easy to cause cross-contamination, can not effectively eliminate condensate

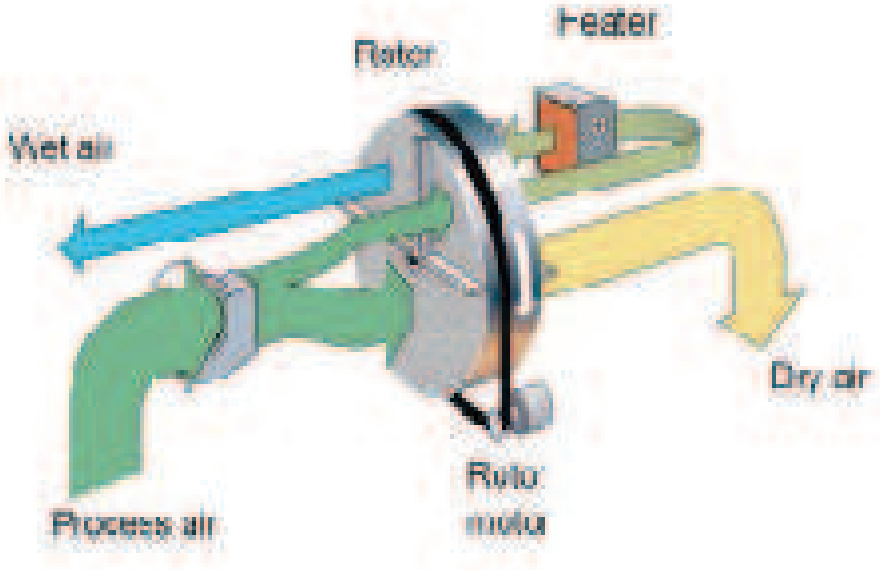
Heat pipe heat recovery has no active and consumable parts, high efficiency, low air pressure drop, easy to discharge condensate, no direct energy demand, no cross-contamination.

Heat pipe for dehumidification



By placing the heat pipes in front of and behind the cooling coils (as shown above), some of the sensible heat in the air is removed before the cooling coils are encountered. These pre-cooled air represent the required relief for the desiccant cooling coils. Reduced cooling capacity, providing more submerged cooling capacity and excellent dehumidification capacity. Finally, the "too cold" air passes through the reheat section of the heat pipe to bring the air temperature to a comfortable supply condition.

1. Super silica gel / molecular sieve wheel;
2. The rotor honeycomb carrier is a ceramic fiber;
3. Has good water resistance and fire resistance;
4. The moisture absorbent is chemically synthesized to form a strong, moisture absorption and deep moisture absorption depth;
5. The combination of moisture absorbent and fiber has good performance and has a mission life of more than ten years;
6. The wheel seal adopts special heat-resistant and wear-resistant sealing strips;
7. The stainless steel chain transmission mode can avoid the stall caused by the wheel slip, thus preventing the wheel from being damaged due to local high temperature;
8. Regeneration method: electric heating, steam heating



Fan Tables

model AZAT AZAF	Nominal air flow m³/h	Coil face area m²	Face velocity (m/s)						
			2.0	2.25	2.5	2.75	3.0	3.25	3.5
25	2500	0.280	2016	2268	2520	2772	3024	3276	3528
30	3000	0.360	2592	2916	3240	3564	3888	4212	4536
40	4000	0.450	3240	3645	4050	4455	4860	5265	5670
50	5000	0.550	3960	4455	4950	5445	5940	6435	6930
60	6000	0.650	4680	5265	5850	6435	7020	7605	8190
70	7000	0.743	5346	6014	6683	7351	8019	8687	9356
80	8000	0.842	6059	6816	7574	8331	9088	9846	10603
90	9000	0.927	6671	7505	8339	9172	10006	10840	11674
100	10000	1.012	7283	8193	9104	10014	10924	11835	12745
120	12000	1.250	8996	10121	11246	12370	13495	14619	15744
150	15000	1.565	11264	12672	14081	15489	16897	18305	19713
180	18000	1.838	13230	14884	16538	18191	19845	21499	23153
200	20000	1.963	14130	15896	17663	19429	21195	22961	24728
230	23000	2.347	16898	19010	21123	23235	25347	27459	29572
250	25000	2.480	17858	20091	22323	24555	26787	29020	31252
280	28000	2.747	19778	22251	24723	27195	29668	32140	34612
300	30000	2.943	21191	23840	26489	29138	31787	34436	37085
350	35000	3.385	24349	27415	30461	33507	36553	39599	42645
400	40000	4.045	29124	32764	36405	40045	43685	47326	50966
450	45000	4.512	32484	36545	40605	44666	48726	52787	56847
500	50000	4.880	35136	39528	43920	48312	52704	57096	61488
550	55000	5.377	38716	43555	48395	53234	58074	62913	67752
600	60000	5.849	42113	47377	52641	57905	63169	68433	73697
650	65000	6.340	45647	51353	57059	62764	68470	74176	79882
700	70000	6.901	49686	55897	62108	68319	74529	80740	86951
750	75000	7.430	53492	60179	66866	73552	80239	86925	93612
800	80000	7.887	56784	63882	70980	78078	85176	92274	99372
900	90000	8.792	63299	71212	79124	87037	94949	102861	110774
1000	100000	9.735	70089	78850	87611	96372	105133	113894	122655
1100	110000	10.801	77770	87491	97212	106933	116655	126376	136097
1200	120000	11.848	85451	96132	106813	117495	128176	138857	149539
1300	130000	12.716	91554	102999	114443	125887	137331	148776	160220
1400	140000	13.564	97638	109865	122072	134280	146487	158694	170901
1500	150000	14.173	102047	114803	127559	140315	153071	165826	178582
1600	160000	15.059	108425	121978	135531	149084	162637	176191	189744
1700	170000	16.031	115420	129848	144275	158703	173130	187558	201985
1800	180000	16.974	122210	137484	152762	168038	183314	198591	213867
2000	200000	18.640	134211	150987	167764	184540	201317	218093	234869

Remarks:

Max.AZAT model is AZAT-400

model AZAT AZAF	Nominal air flow	Return air condition			Fresh air condition		
		4R	6R	8R	4R	6R	8R
	m³/h	Cooling capacity kW					
25	2500	14.5	18.4	22.7	32.5	39.9	46.4
30	3000	16.8	20.8	26	38	49.5	54.8
40	4000	24.2	30	34.3	48.9	64.6	72.6
50	5000	28.5	38.3	43.6	62.3	77.6	87.9
60	6000	35.5	47.2	54.1	76.3	96.8	112
70	7000	41.3	56	61.4	90.4	115	132
80	8000	45.6	59	72.6	98.6	130	144
90	9000	51.1	68.7	80.5	115	149	164
100	10000	58.7	78.4	91.4	122	160	185
120	12000	70	93.6	109	152	191	221
150	15000	86.8	116	136	189	238	275
180	18000	104	139	163	224	284	330
200	20000	121	160	186	249	323	373
230	23000	143	184	216	303	372	418
250	25000	154	201	230	321	402	452
280	28000	171	224	257	338	431	490
300	30000	182	238	274	361	460	524
350	35000	211	277	319	421	536	610
400	40000	241	316	364	480	611	696
450	45000	275	360	413	546	693	788
500	50000	304	399	458	605	769	875
550	55000	317	426	494	737	872	956
600	60000	346	465	528	804	952	1043
650	65000	364	509	581	824	1044	1187
700	70000	392	548	626	888	1125	1278
750	75000	428	572	675	962	1217	1380
800	80000	456	631	720	1026	1298	1472
900	90000	508	705	806	1143	1449	1647
1000	100000	573	789	900	1282	1624	1842
1100	110000	647	861	949	1313	1824	2059
1200	120000	713	909	1043	1451	2000	2255
1300	130000	765	1018	1121	1242	2154	2433
1400	140000	818	1045	1202	1327	2307	2610
1500	150000	885	1130	1298	1439	2486	2808
1600	160000	952	1214	1393	1552	2664	3007
1700	170000	1020	1298	1489	1665	2842	3205
1800	180000	1087	1382	1584	1779	3020	3403
2000	200000	1178	1568	1790	2039	3407	3825

Remarks:

1. Cooling condition: inlet/outlet water temperature is 7/12 ℃ ; Return air condition: inlet air temperature 27 ℃DB/19.5 ℃WB ; Fresh air condition: inlet air temperature 35 ℃DB/28 ℃WB.
2. Different working condition demands hould contact factory for selection and pricing.

Heating Capacity Tables

model AZAT AZAF	Nominal air flow	Return air condition				Fresh air condition			
		1R	2R	3R	4R	1R	2R	3R	4R
		Heating capacity							
	m³/h	kW							
25	2500	9	16	23	27	12	20	28	33
30	3000	12	21	29	33	16	25	34	41
40	4000	17	25	36	44	20	32	45	52
50	5000	21	32	46	55	25	40	56	65
60	6000	25	42	57	67	31	50	68	81
70	7000	30	49	67	78	36	58	80	94
80	8000	35	57	79	91	43	70	94	110
90	9000	36	62	86	102	47	76	104	123
100	10000	42	69	96	114	52	85	116	136
120	12000	51	84	118	136	64	103	141	164
150	15000	66	108	148	172	80	132	178	206
180	18000	80	129	176	206	97	157	214	244
200	20000	81	143	196	230	99	176	238	275
230	23000	96	166	225	262	117	204	275	314
250	25000	112	181	246	288	133	220	297	345
280	28000	125	203	280	320	153	248	335	384
300	30000	135	219	300	345	165	269	356	411
350	35000	157	256	349	400	192	309	410	480
400	40000	181	296	395	458	220	357	473	549
450	45000	205	330	446	520	240	405	531	627
500	50000	218	373	494	576	266	435	582	686
550	55000	239	410	545	632	294	477	658	756
600	60000	261	448	595	689	320	520	718	824
650	65000	257	426	591	680	318	517	700	814
700	70000	277	459	636	732	343	557	754	877
750	75000	302	491	679	788	370	599	801	929
800	80000	322	524	724	840	395	639	854	991
900	90000	362	589	818	939	444	721	959	1115
1000	100000	403	657	900	1046	493	809	1060	1245
1100	110000	448	730	1002	1144	548	891	1181	1374
1200	120000	495	801	1074	1249	600	978	1296	1498
1300	130000	536	872	1180	1358	648	1059	1398	1618
1400	140000	582	941	1272	1464	676	1142	1507	1742
1500	150000	621	1017	1380	1576	719	1233	1637	1893
1600	160000	671	1102	1470	1703	780	1296	1755	2046
1700	170000	686	1188	1575	1832	844	1377	1893	2174
1800	180000	737	1273	1685	1959	904	1469	2030	2324
2000	200000	831	1367	1899	2197	1017	1663	2269	2615

Remarks

3. Cooling condition: inlet/outlet water temperature is 60/50℃;
   Return air condition: inlet air temperature 15℃ DB;
   Fresh air condition: inlet air temperature 7℃ DB.
4. Different working condition demands should contact factory for selection and pricing.

Control System is an option -------which can be designed according to specific projects demand

Electric-equipped electrical box;

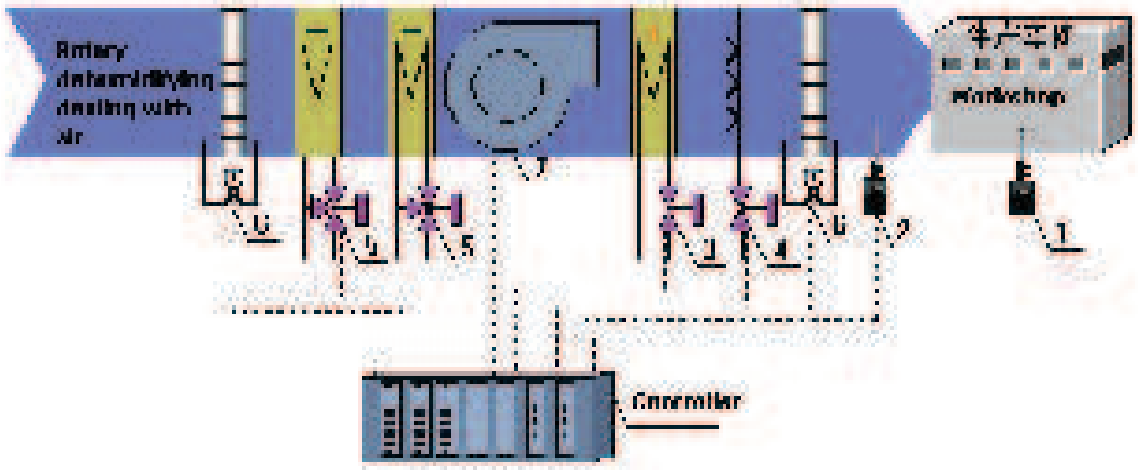
Common diagram of motor, electric heating, electrode type humidifier, ozone generator and inspection and repair lights, etc in AHU offers convenience for installation and usage.

Control Instruction ;

☆ Constant temperature and humidity control
☆ ON/OFF control
☆ Touch screen system--PLC control

Control brand:
Plc Standard Brand; Siemens

Low humidity and constant temp. in pharmaceutical industry



Providing a complete control system

System control box(microcomputer controller, sensors, actuators) and power control box

Item	Description	Parameter specification
1	High precision temperature and humidity sensor	Temp. range:0～50℃,Humidity range:0～100%R.H.
2	High precision temperature and humidity sensor	Temp. range:0～50℃,Humidity range:0～100%R.H.
3	Heating control valve and actuator	Proportional-integral control .
4	Humidity control valve and actuator	Proportional-integral control.
5	Chilled water three-way valve and actuator	Proportional-integral control.
6	Differential pressure switch	Setting between 50～300Pa,passive contact alarm.
7	Supply fan	Fan start-stop mode: direct start

Main Office :
WOLFrost International LLP
India & Far East

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www.wolfmep.com

Regional Sales & After Sales Sevice Contact :
WOLF International - SAIF ZONE
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