AIRWOODS
Innovative Air Solution

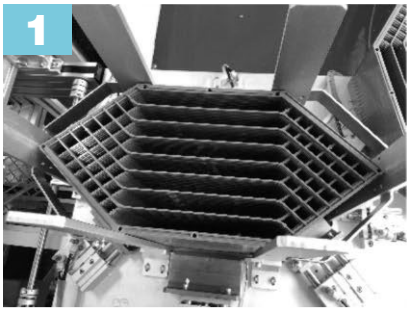
POLYMER MEMBRANE

WASHABLE AIR TO AIR HEAT EXCHANGER

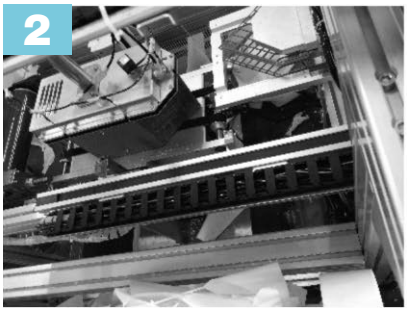
High-efficiency Fresh Air Solutions Provider

Guangzhou Airwoods Environment Technology Co., Ltd.

AUTOMATED ASSEMBLY LINE

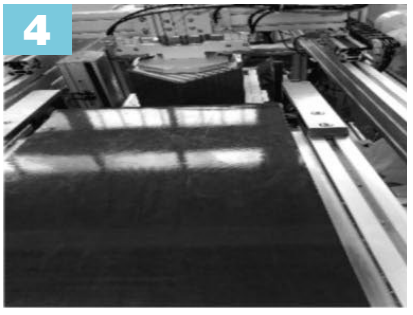


Material



Stacking 1

Stacking 2



Stacking 3

Installation of sheet metal

Finished product

HIGHLIGHT FEATURE

High strength

Anti-mold and Anti-bacterial

High stability

High air tightness

Longer service life

Washable

AIR TIGHTNESS & STABILITY

AIR VOLUME STABILITY

The core has high efficiency of moisture permeability and very low moisture absorption rate, so it has wide temperature adaptability (-30°~60°C) and good stability.

Therefore, the fresh air equipment has stable air volume and low noise in the use process.

AIR TIGHTNESS

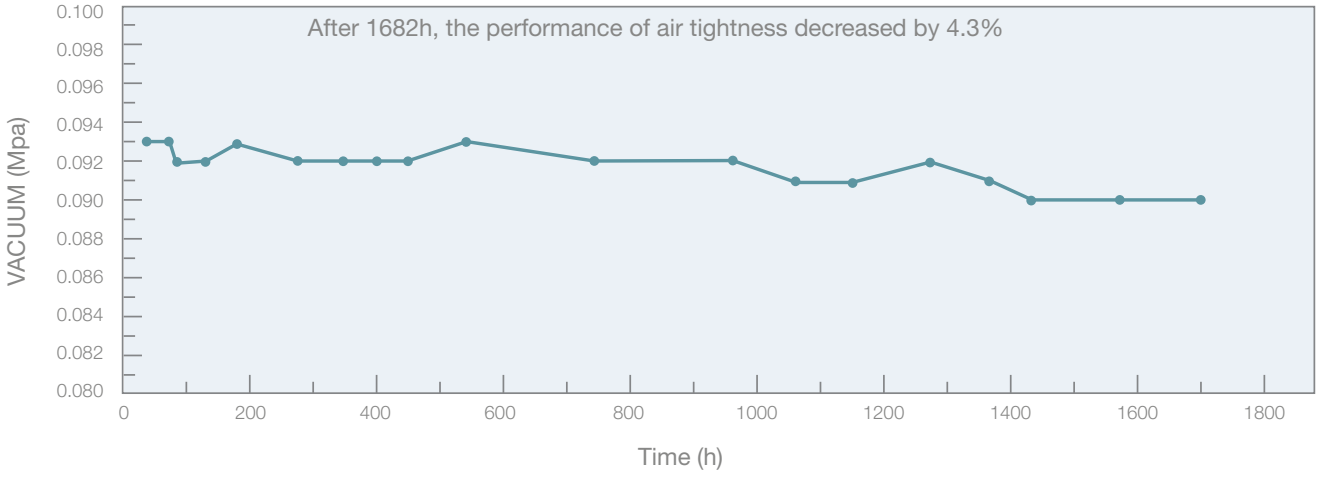
Tbe difference between polymer membrane core and paper core is that the polymer membrane has the characteristics of water per meability and airtight, and the air tightness more than 98%, which is much higher than that of the paper core.

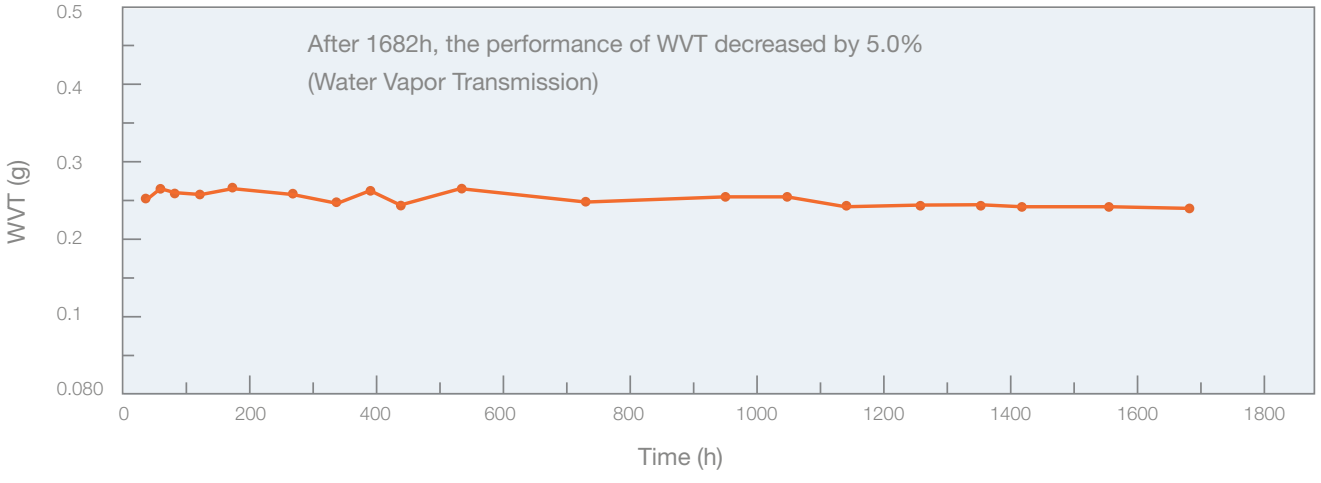
The test data result polymer membrane has a high repeatability and reproducibility.

ALTERNATING TEST, LOW TEMPERATURE WITHOUT FROSTING

Experienced high/ low-thermal shock for 200 times (1 cycle for 8 hours) under the temperature of -30 ~ 60 °C, and the humidity of 80%, there is no air leakage, deformation and other damages on the core.

Stored under the temperature of -30°C ~ 60°C for 15 days respectively, there is no air leakage, deformation and other damages on the core. Because of its high permeability to water molecules, no condensation water will form on the surface of the membrane, and condensation & ice blockage will not occur under extreme conditions such as sub-zero temperature.



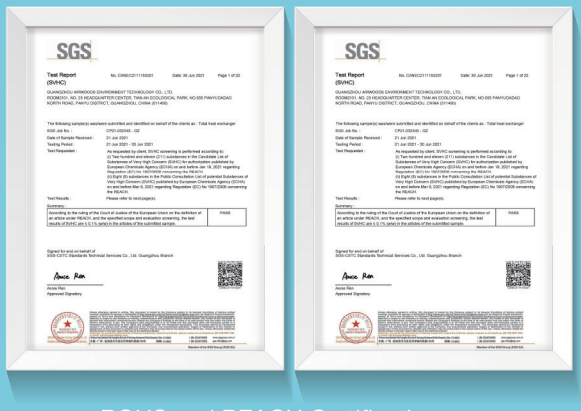


WASHABLE

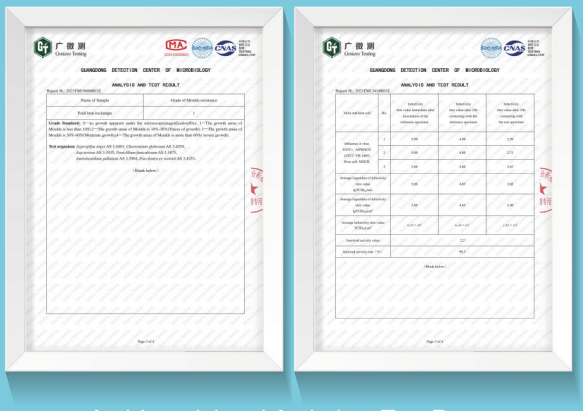
Since the modified polymer materials is added to the functional membrane of the energy recovery core, the surface friction coefficient is smaller, so the dust particles will not adhere to the surface of the membrane, which makes it no need to be cleaned frequently.

If it needs to be cleaned, you can use tap water to clean it simply. After drying it, it can be used again (it can be washed several times).

CERTIFICATIONS & TEST REPORTS

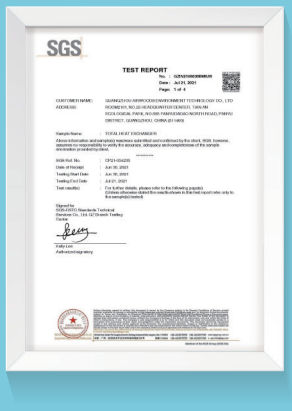


ROHS and REACH Certifications



Anti-baterial and Anti-virus Test Report

Antimicrobial Test Report



UL94 Fire Retardent Test Report

Performance Test Report

CROSS-COUNTER FLOW

TOTAL HEAT EXCHANGER

- Sensible and latent heat recovery
- Total separation of fresh & exhaust air streams
- Heat recovery efficiency up to 90%
- Enthalpy recovery efficiency up to 85%
- Parameters to ensure high SEC class level
- Easy installation and handling

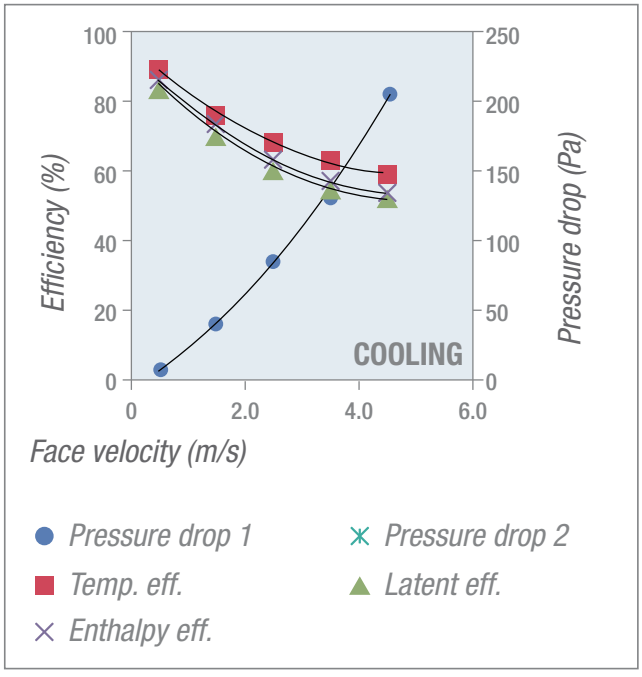
PERFORMANCE CHART

The performance chart is for AXT-IL series.

Tests are according to GB/T 21087.

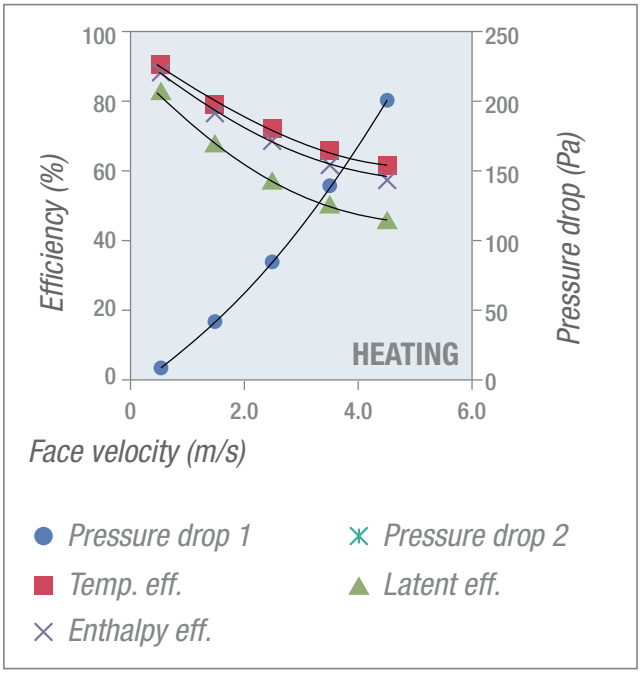
Cooling Conditions:

- Indoor DB 27°C/WB 19.5°C
- Outdoor DB 35°C/WB 28°C



Heating Conditions:

- Indoor DB 21°C/WB 13°C
- Outdoor DB 2°C/WB 1°C



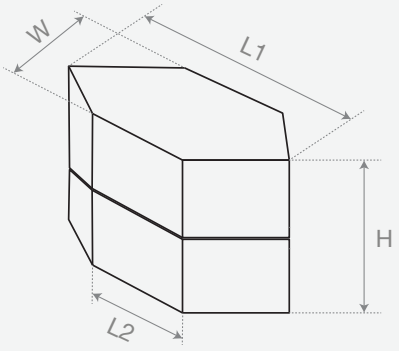
We can provide selection reports for the specified models.

HEAT EXCHANGER

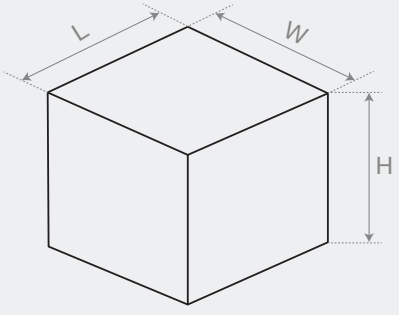
INJECTION SERIES

DIMENSIONS

MODEL	DIMENSIONS (MM) L1*L2*W	SPACING (MM)	TYPE
AXT-IL-252 / 90 / 218 - H*- 2.6	252.4*90.4*218	2.6	
AXT-IL-258 / 131 / 200 - H- 2.3	258*131*200	2.3	
AXT-IL-326 / 100 / 226 - H- 2.5	326*100*226	2.5	
AXT-IL-357 / 137 / 170 - H- 2.5	357*137*170	2.5	
AXT-IL-366 / 196 / 366 - H- 2.5	366 * 196 * 366	2.5	
AXT-IL-380 /110 /230 - H- 2.3	380 * 110 * 230	2.3	
AXT-IL-400 /200 / 200 - H- 2.35	400 * 200 * 200	2.35	
AXT-IL-440 / 200 / 200 - H- 2.5	440 * 200 * 200	2.4	
AXT-IL-458 / 160 / 260 - H- 2.5	458 * 160 * 260	2.5	
AXT-IL-495 / 150 / 200 – H - 2.5	495 * 150 * 200	2.5	
AXT-IL-506 / 194 / 506 – H - 2.5	506 * 194 * 506	2.5	
AXT- IW -128 / 128 - H- 2.3	128 * 128	2.3	
AXT- IW -140 / 140 - H- 2.3	140 * 140	2.3	
AXT- IW - 164 / 164 - H- 2.6	164 * 164	2.6	
AXT- IW - 250 / 250 - H- 2.5	250*250	2.5	
AXT- IW - 350 / 350 - H- 2.7	350*350	2.7	
AXT- IW - 350 / 350 - H- 2.7	350*350	2	



Cross-counter flow



Cross flow

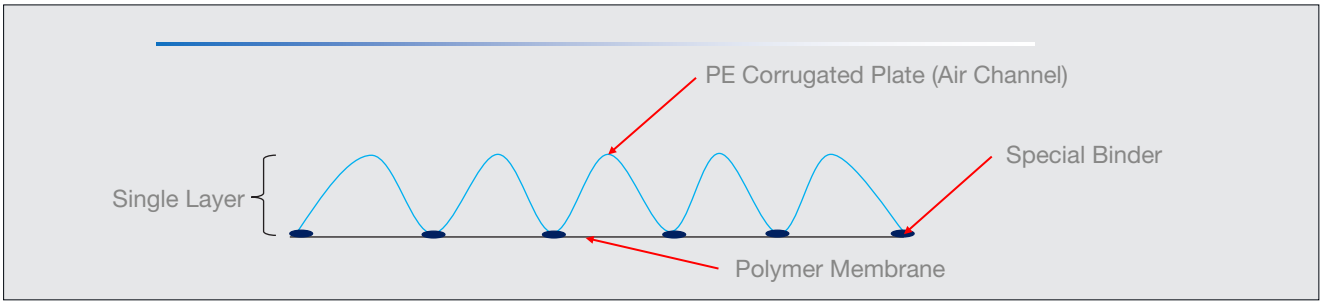
Note: H is customized.

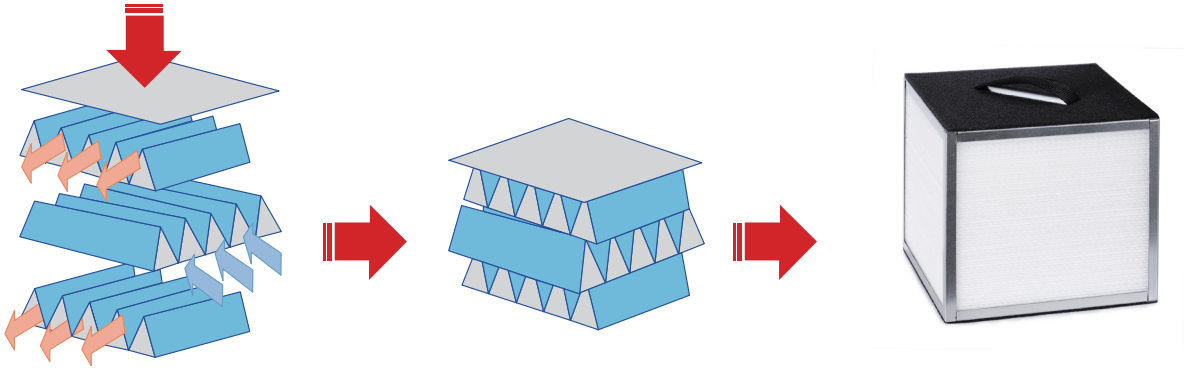
(CUSTOMIZED)

CORRUGATED SERIES

STRUCTURE

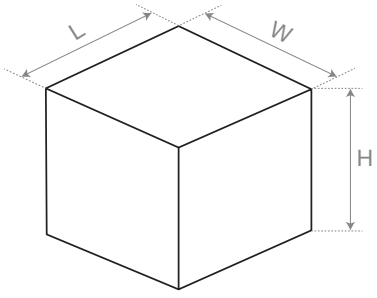
Each layer on the stack is composite of PE corrugated plate and polymer membrane. The flat plates and the corrugated plates form channels for fresh or exhaust air stream. When the two air steams passing through the exchanger crossly with temperature difference, the energy is recovered. Each channel is totally separated to minimize cross contamination.





MATERIALS

Material of sensible/total heat exchanger: galvanized steel plate frame + PE corrugated plate + Polymer membrane.



SPECIFICATIONS

*PS: The dimensions can be customized according to specific requirements. For bigger size, we can combine some heat exchanger modules together to make a big one.

TYPE	SERIES NO.	L*W (MM)	H (MM)	SPACING(MM)	HEAT RECOVERY TYPE
Cross flow	AXS-CW/AXT-CW	No more than 950*950	No more than 1200	1.8/2.5/3.5/5.0	Sensible/Total heat type

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