



Best Effectiveness with **TAESUNG**



New Technology

Active introduction of developed new technology and new technique



Quality

Customer satisfaction with the excellent quality



Cost reduction

Realization of Customer surprise with cost reduction and on-time delivery



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MADE IN KOREA

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全热交换芯
显热交换芯

BETTER ENVIRONMENT
BEST INDOOR AIR QUALITY



ERV & HRV CORE



Fine-X-Vent
高效 — 节能 — 健康

全热交换芯
显热交换芯

特点



高质量的原材料

- 采用最高水准的原材料，保证高效率
- 均选用环保材料，不含有任何有害物质
- 拥有良好的阻燃性，安全性高
- 抗菌防霉，耐腐蚀能力强



高水品的加工能力

- 加工工艺精湛，外观精致
- 掌握先进的切割技术，切面平整，有效减少压阻
- 组装技术高超，气密性好



高品质的服务

- 具备专业的选型软件，可为客户提供产品设计方案
- 独有的实验设备，及时应对产品的多种问题

Maintain strict quality control of membranes

严格的质量管理—保证最高水准的品质

Type	Material	AIR PERMEABILITY(Seconds)	WATER PERMEABILITY (g/m ² day)	THICKNESS(μm)
ERV	Paper	5,000 ↑	3,000 ↑	35-50
	Polymer	∞	2,800 ↑	25-50
HRV	Plastic	∞	-	35-50

Water Permeability @ 30°C, 80% RH



<Moisture Permeability Test>



<Air Permeability Test>

Benefit of TAESUNG CORE

Recover Heat and Moisture with TAESUNG			
Raw Materials 原材料	Specialized materials for ERV and HRV cores. Environment friendly materials	专为全热/显热交换芯开发的特殊材料 环境友好型绿色材料	
Quality 质量	Reliable durability & stability Specialized line cutting process Low pressure drop	可信赖的耐久度以及稳定性 专门的线切割过程 低压差	
Cost Saving 节约成本	Trouble free operation ← No moving parts. Rapid payback ← high level of effectiveness	无故障操作，无移动部分 快速的回报，高效	
Certification 相关认证	RoHS UL94 ASTM G-21 AHRI KCL	Environmentally-friendly Flammability Anti-fungus Efficient Antibacterial	亲环境 防燃性 防霉性 高效率 抗菌

All qualified 均合格

Certificate



RoHS (SS40)



UL94



ASTM G-21



AHRI



KCL

Best Performance

Energy Saving

Healthy

ERV & HRV CORE

全热交换芯

纸质 四边形全热交换芯

Fine-X-Vent

Energy Recovery Ventilator Core



特点

- ◆ 膜材经过特殊处理，透湿、透气性能高，保证了较高的交换效率
- ◆ 具有抗菌、防霉、耐腐蚀等特点，使用寿命长
- ◆ 加工工艺精湛，气密性良好
- ◆ 尺寸灵活，多种规格选择



材质

膜材：高效率全热纸
外框：镀锌钢板

显热交换芯

Plastic 四边形显热交换芯

Heat Recovery Ventilator Core



特点

- ◆ 作为铝箔交换芯的替代，降低成本，提高市场竞争力
- ◆ 结构优良，耐化学性，抗腐蚀，耐湿，适用于多纬度地区
- ◆ 易于维护，使用寿命长，热交换效率优秀



材质

膜材：PET塑料
外框：镀锌钢板

TAESUNG
All materials are qualified with

RoHS	有害物质（重金属）
UL94	防火性

KS F2819	耐燃性
ASTM G-21	抗菌防霉

全热交换芯

Polymer 全热交换芯

Energy Recovery Ventilator Core



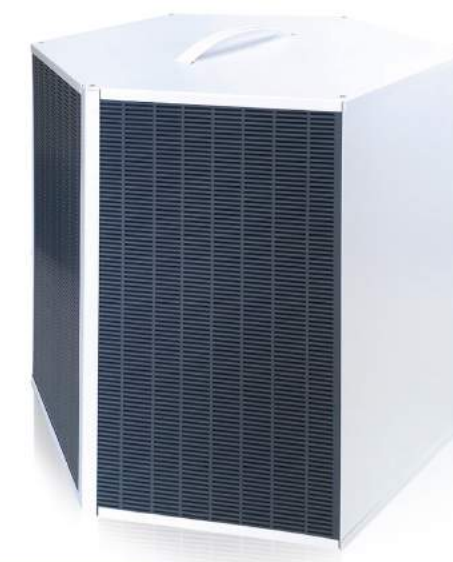
特点

- ◆ 采用特殊膜材，交换效率高
- ◆ 因膜材结构的特殊性，可以有效阻隔有害物质透过膜材，提高换气质量
- ◆ 作为可水洗的全热交换芯，改善了显热芯体无法进行湿度交换的问题，
- ◆ 气候适应能力强，有效防止结冰结露



材质

膜材：Polymer 全热膜
外框：镀锌钢板



Typical applications

- Energy recovery for ventilation
- Circuit air cooling.



A single pass exchanger can provide an efficiency

Certificate



耐久性



亲环境



SVHC



防霉

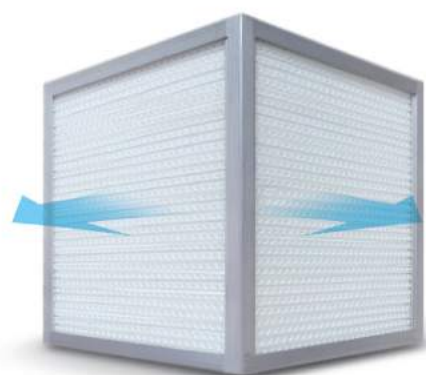


抗菌

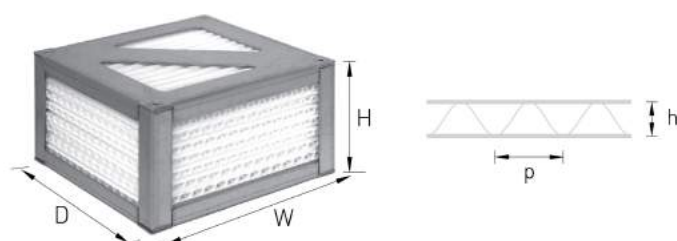
正方形交换芯

Fine-X-Vent

Square Type



- Best solution to TOP-MOUNT ERV.
- Optimum performance with low price.



Typical applications

- Energy recovery for ventilation
- Circuit air cooling.

Typical features

- World best performance ERV core
- Raw materials developed in Korea
- Precise performance expectation and design proposal
- Certification (Hazardous, Flammability, Ignitability)
- Flexible in size



A single pass exchanger can provide an efficiency of 65 - 85%.

Specification

h (mm)	p (mm)	Paper	Polymer	PP
1.8	4.8	O	-	-
2.0	4.8	O	-	-
2.0	4.8	O	O	O
2.6	5.6	O	-	-
3.0	7.0	O	O	O
4.0	9.6	O	O	O
6.0	13.5	O	O	O

Dimension(mm)	Paper	Polymer	PP
W	1,000	900	900
D	1,000	900	900
H	1,500	1,500	1,500

菱形交换芯

Diamond Type

特点

- 壁挂式新风机的最佳选择
- 相比四边形交换芯，换热面积增加，将交换效率最大化
- 多种材质选择，尺寸灵活
- 可作为六边形交换芯的替代品，降低成本



材质

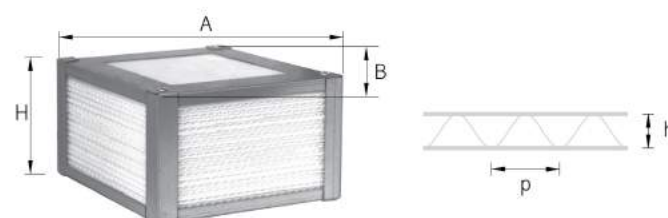
膜材：高效率膜材
外框：镀锌钢板

Specification

h (mm)	p (mm)	Paper	Polymer	PP
1.8	4.8	O	-	-
2.0	4.8	O	-	-
2.0	4.8	O	O	O
2.6	5.6	O	-	-
3.0	7.0	O	O	O
4.0	9.6	O	O	O
6.0	13.5	O	O	O

Dimension(mm)	Paper	Polymer	PP
A	1,300	900	900
B	750	520	520
H	1,500	1,500	1,500

- Best solution to TOP-MOUNT ERV.
- Maximum performance with reasonable price.



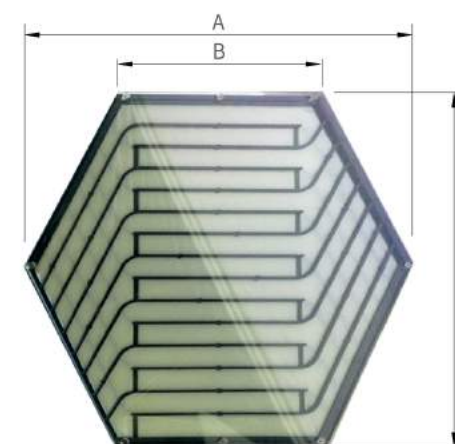
六边形全热交换芯

Hexagon Type

Energy Recovery Ventilator Core



- Best solution to TOP-MOUNT ERV.
- Maximum performance with reasonable price.



特点

- 六边形交换芯，换热面积是普通四边形交换芯的两倍，换热效率显著，是壁挂式新风机的最佳选择
- 加工技术精湛，外观精致，压阻小，减少噪音污染
- 气密性好，保证了有效的换热效率，降低能耗



A single pass exchanger can provide an efficiency of 65 - 85%.

Model Range

Model	Measure (mm)			Plate distance (mm)
	A	B	c	
TSC 400	400	200	200	2.5
TSC 440	440	200	200	2.5
TSC 458	458	160	260	2.5

Model Range

Model	Measure (mm)			Plate distance (mm)
	A	B	c	
TSC 366	366	196	366	2.5

Material

Plate : Inorganic polymer
Spacer : Plastic

Frame material

Corner profiles in aluzinc and end-plates in aluzinc.

Sealings

Siliconfree (-50°C ~ 90°C)



六边形显热交换芯

Cell Type

Fine-X-Vent

Air to Air Total Heat Exchanger



Sensible heat exchangers have air flow channels formed with injection molding which enable two gases to flow in the opposite direction with each other while transferring heat.

Typical features

- **Excellent sensible heat exchange efficiency**
High efficient sensible heat exchange occurs because it has three times bigger heat transfer area than existing exchangers by using cellular method. Also, the thickness in counter flow region is lower than 100μm.
- **Excellent sensible heat exchange efficiency when used for the residential air to air heat exchangers**
High sensible heat exchange efficiency in the environment of -20°C~50°C
- **Possible design with various flow rate and various target efficiencies**
possible design for various flow rates from 50CMH to 500CMH and heat exchange efficiency over 95%
- **Easy Maintenance**
Wash with water when it is contaminated
- **Flexibility in size**
The stacking height can be requested by customers in accordance with their needs

活性炭四边彤全热交换芯

活性炭 四边彤全热交换芯

Energy Recovery Ventilator Core

特点

- ◆ 全热膜材经过特殊处理，添加了活性炭成分，起到吸附粉尘，去除异味的作用
- ◆ 有效吸附有害气体的效率可达到99%
- ◆ 保持着全热交换芯的功能，同时可以起到空气净化器的作用
- ◆ 升级版全热交换芯，实现产品差异化，提高市场竞争力



材质

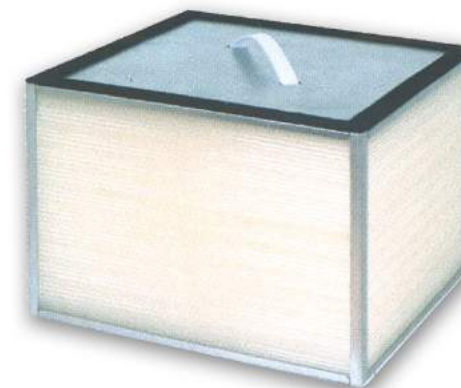
膜材：活性炭膜材
外框：镀锌钢板



空调用显热交换芯

HRV CORE

Energy Recovery Ventilator Core



Fixible in size

- Not like conventional HRV cores, our Type-HP could meet your request in millimeter range

Competitiveness of price

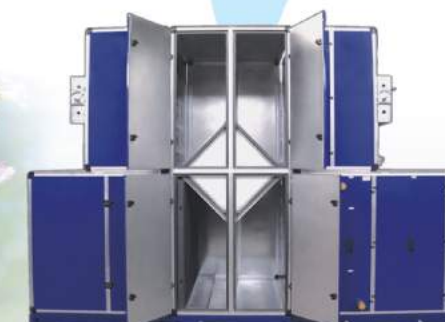
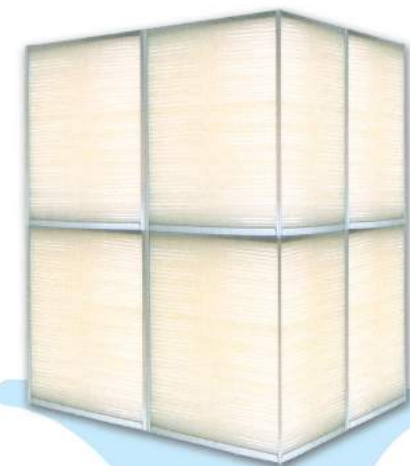
- Compare to metallic HRV cores, Type_HP is economical

Great durability

- Type-HP is durable not only for their structures but also for their resistances to water condensate, corrosion, salt and chemicals

Make your system more special

- Our Type-HP provide premium characteristics to your system more special with plastic core



Corrosion Resistance Table

Substance	Plastic	Aluminium
Acetone	No	Yes
Acetic acid (초산)	Yes	No
Alcohol	Yes	Yes
Ammonia liquid	Yes	Poss
Cooking oil	Yes	Yes
Detergent	Yes	Poss
Fruit juice	Yes	Poss
Heating Oil	Yes	Yes
Hydrochloric acid (염산)	Yes	No
Methanol	Yes	Poss
Milk	Yes	Yes
Mineral oil	Poss	Yes
Ozone	Yes	Poss
Petrol	Poss	Yes
Sulphuric acid (황산)	Yes	No
Soap solution liquid	Yes	Yes
Toluene	No	Yes
Washing solution	Yes	Poss
Water	Yes	Yes

加湿器

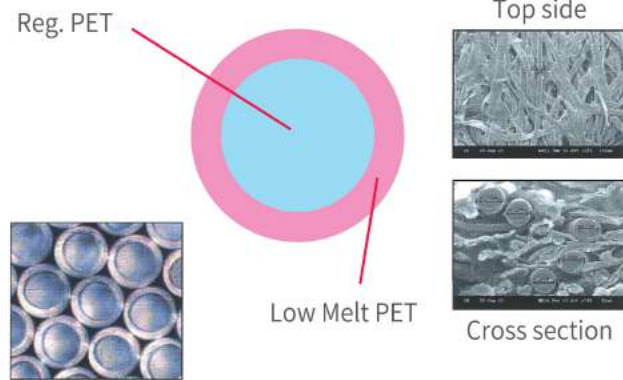
Fine-X-Vent



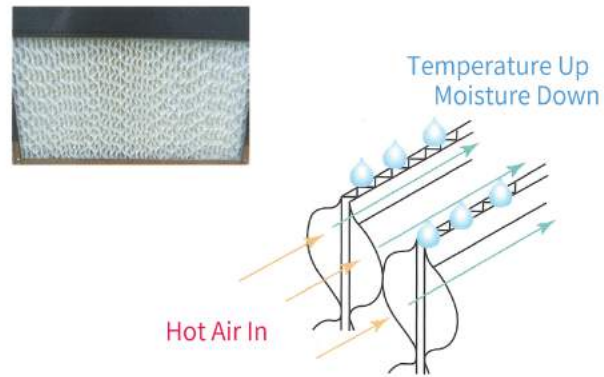
Features & Benefits

- Media : Cellulose + PET , developed by Clean Air NT
- Outstanding absorption ability by cellulose
- Strong durability made by PET on media and water pole structure
- Alternative with glass fiber media , Solution of scattering problem
- Anti-bacteria media
- Low pressure drop

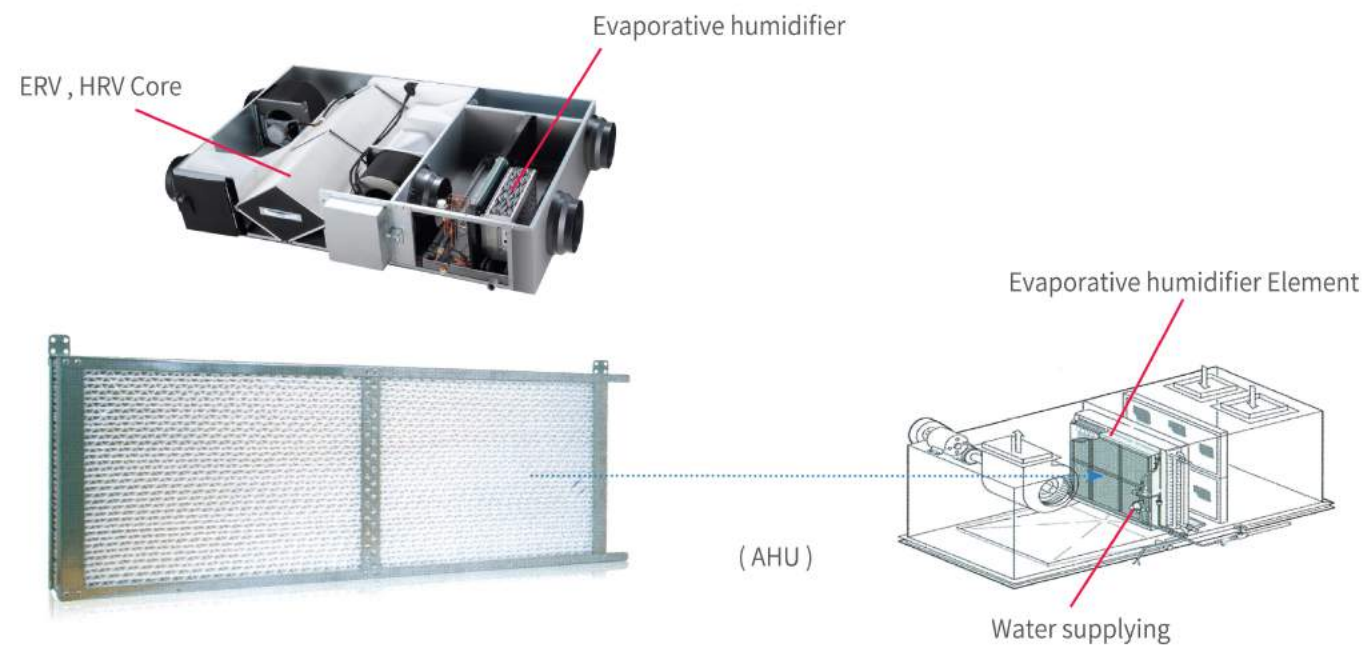
Merterial technology



Product structure



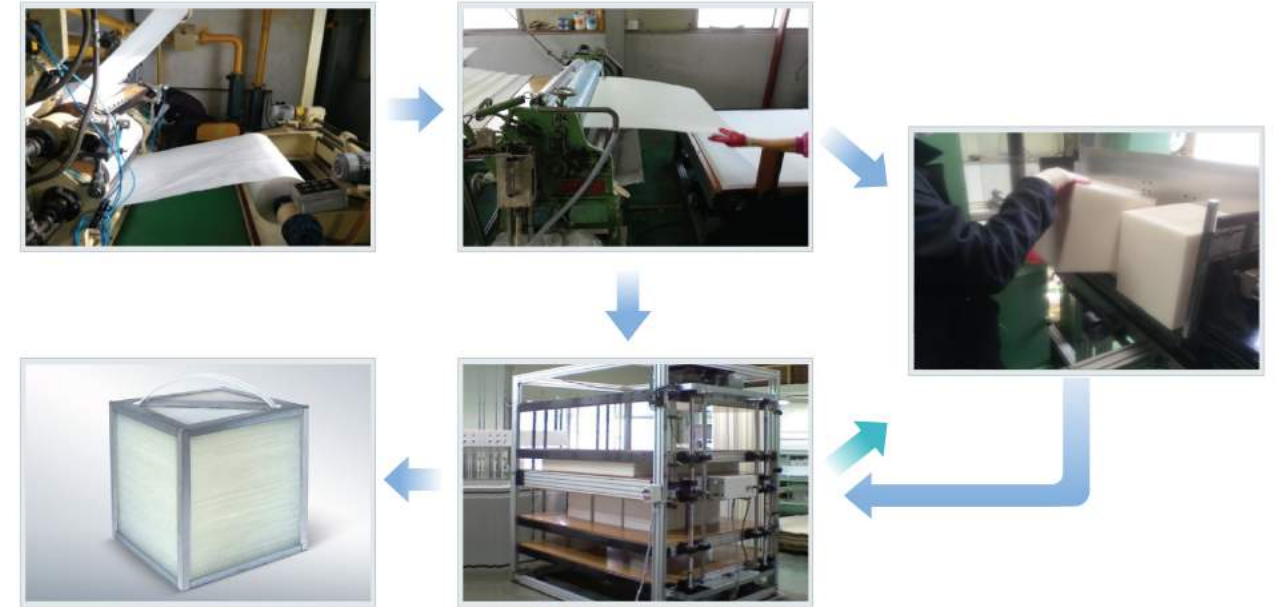
Applications



生产工艺

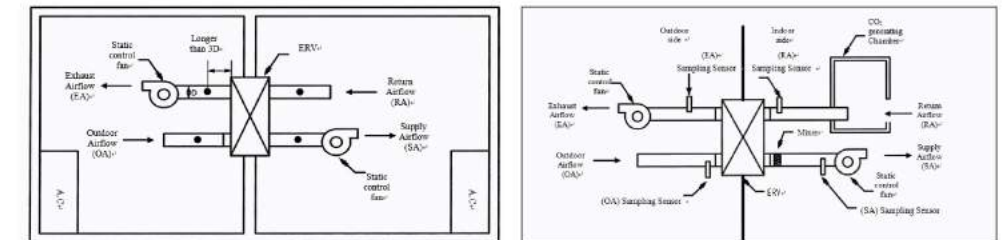
原材料处理及生产流程

🌐 技术工艺 (涉及隐私, 仅展示部分步骤)

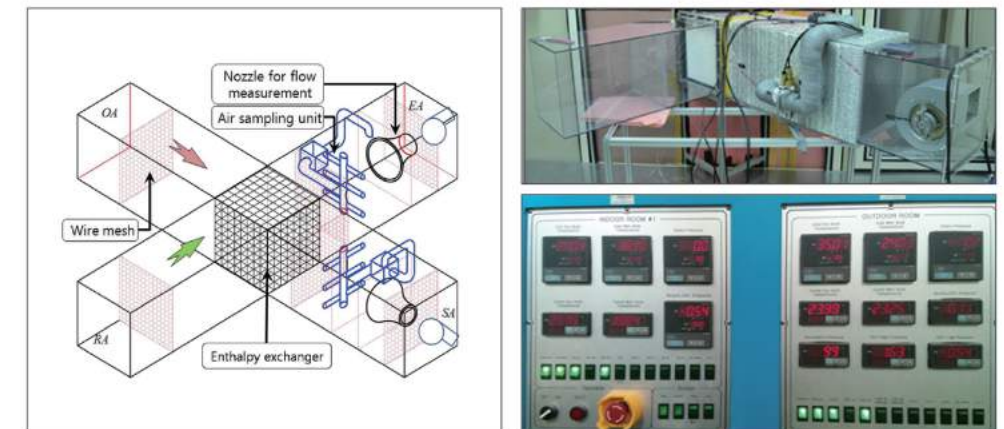


效率检测

- 检测标准
 - ◆ Korea, JIS (包括风扇发热温度)
 - ◆ AHRI (交换芯效率)



检测方式



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