

# CROSS FLOW FILM FILL



*SPH series*



**NEWIN**  
All About Cooling Tower



Newin SPH Film Fill is a hanging film type cooling tower fill which incorporates highly efficient cellular drift eliminator and molded with the air inlet louver, spreads the water through the thin film, flowing over large vertical surfaces, promoting maximum exposure to air flow to get higher cooling efficiency. This type of fill provides much more water surface exposure per cubic foot than splash type fill.

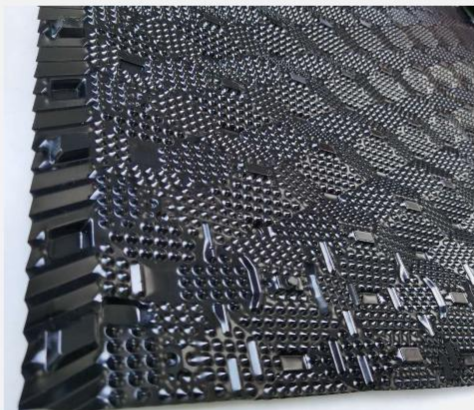
Applicable for replacing cross flow cooling tower series of KG/ KX Field Erected, with SGS test in ASTM Standards to keep high quality infill to get the high efficiency of the cooling tower. Hanging or glue assembly methods are available. Thermoformed from PVC with a flame spread rating and considered self extinguishing.

### Shenzhen Newin Machinery Co., Ltd.

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### Pictures in Details

Newin supplies customized service for different request on film fill length, width, material or thickness. Standard flat material thickness in 0.3mm thickness and Newin developed a new technology solution for high inlet water temperature condition.



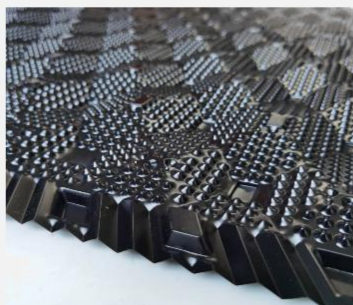
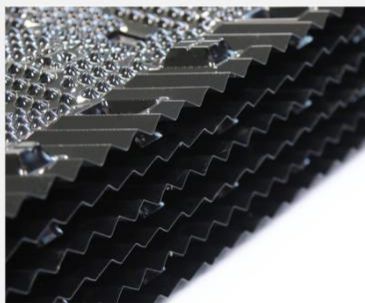
Using modified PVC sheet, unique modified formula makes the infill strong resistance and high durability.

Good heat dissipation, large flux, low resistance, uniform distribution, good water distribution, no clogging, no agglomeration, large specific surface area, improve oxygen transfer rate and utilization rate.

Fully solve gas-liquid exchange, reasonable design, not easy to hide dirt, easy to install.

Vac form special processing, the inner side (fan side) edge with integrated liquid baffle plate, and controls the drift loss of water in minimum value. and maximize the heat exchange performance of the water and air.

Standard heat temperature of 50 ° C, heatproof specification (optional) can use up to 80 ° C



The surface is smooth and bright, pressure strength is strong, it will not break when touched, non-toxic and non-irritating, more safer.

Complete specifications, according to customer requirements, specifications and sizes to meet the needs of different fields.

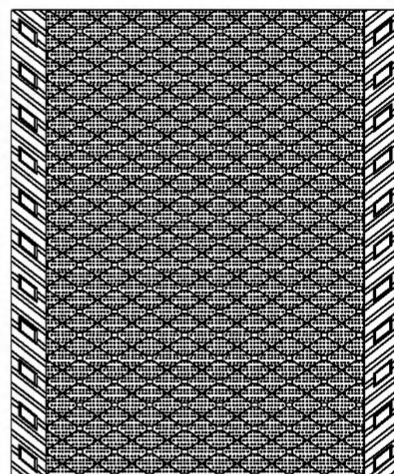
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## Properties

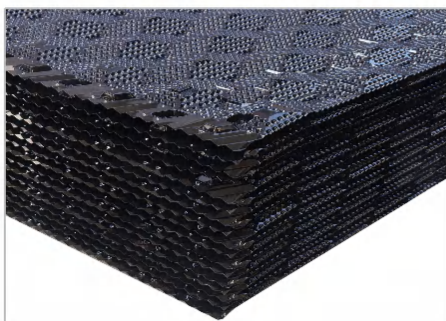
With different request in MAH film fill, like length and width, materials or thickness, etc, please inform us your detailed request to get correct solution and offer. Newin could cover all customer requirements. Fill media in flame retardant or anti-bacterial execution are also available on request.

Module Length (Max)	mm	1000
Module Width	mm	850/ 1000
Module Depth	mm	—
Flute Height	mm	16
Flute Corrugation Angle	degrees	-
Surface Area	m <sup>2</sup> /m <sup>3</sup>	150
Sheet Thickness — Before Forming	mm	0.3
Sheet Thickness — After Forming	mm	0.28
Max. application temp. (short time) — PVC	° C	60
Max. operating temp. (short time) — PP	° C	95
<i>Customized thickness available for special request. Contact Newin for details!</i>		



## Applicable Commercial Standards

Sheets material is strictly followed below SGS test with ASTM standards. Each property or all properties as below tested by your products are also available on request.



Property	Test Method	Values		
Specific Gravity	ASTM D792-13 Method B	1.426g/cm <sup>3</sup>		
Oxygen Index	ASTM D2863-13	34.50%		
Tear Strength	ASTM D1004-13	X direction	111N	
		Y direction	121N	
Tensile Test	ASTM D 882-12	Tensile Strength	X direction	51.1MPa
			Y direction	45.3MPa
		Elongation at Break	X direction	87%
			Y direction	56%

*Values shown above based on SGS Test No.: GZIN1708039662PS by Newin*

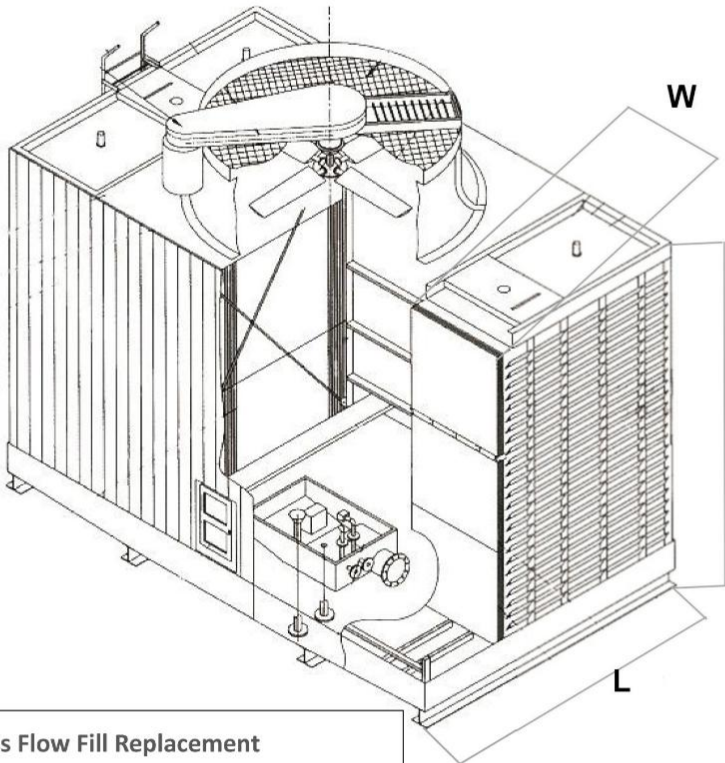
*Statements and methods presented are based upon the best available information and practices known to Newin. Conditions of use may vary and are beyond control, the user should undertake sufficient tests to determine the suitability for any intended use of the material.*

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### Field Data for Cross Flow Film Fill Replacement

Fill in below measurements data for your maintenance cooling tower or repairing projects demand quality and reliability, count on Newin, site visit or maintenance service, engineered to fit the cooling tower fills or components.



Field Data for Cross Flow Fill Replacement		
Dimension	Description	Field Measurement
L	Inside casing length	
W	Inside distribution basin width	
H	Inside casing height (exclusive distribution basin height)	
Nos of Cells		

Shenzhen Newin Machinery Co., Ltd.	
Drawing No.	NW-2005020-Fill

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## Reference List

Newin supplies production and replacement service worldwide to satisfy different customers' request. One - stop supply for all cooling tower with parts and service.



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## Jobsite Storage Procedures for PVC Film Fills

### 1. Guidelines for the Storage of Nested Sheets

a. Fill sheets cannot be exposed to direct sunlight for any length of time when client received. The solid block of plastic created by the nested sheets will absorb heat rapidly and distort the exposed edges. **Inside ventilated environment storage is strongly recommended.**

b. If inside ventilation not possible then use of heavy duty tarps or waterproof boardas to cover. **Clear or black covers must not be used, and covers must not be wrapped tightly around the nested sheets.**

c. Do not stack more than five feet(1.5m) high, supported on flat level ground is required. All fill sheets must remain clean and dry prior to assembly.

※ Newin shipped PVC film fills use pallet with sun protection films or wood box to avoid the fills exposed to sunlight directly.



### 2. Guidelines for the Storage of Assembled Product

a. Modules must not be stored in any environment where the air temperature exceeds 49°C (120°F). When considering outside storage, the skin temperature of modules must not be allowed to reach more than 60°C (140 °F). Due to solar heat gain, the dark PVC material rapidly absorbs the sun's energy, the surface temperature is higher than ambient.

b. Modules must be stacked such that the plane of the sheets are in the vertical position , similar to the manner of their position in cooling tower.

c. Modules requiring storage outside must be covered .  
·Clear or black covers must not be used.  
·Covers must not be wrapped tightly around the media.

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