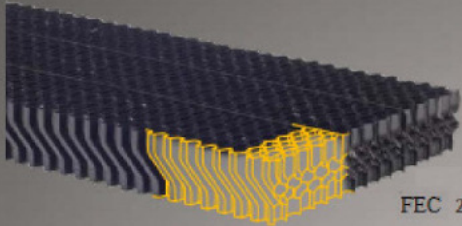
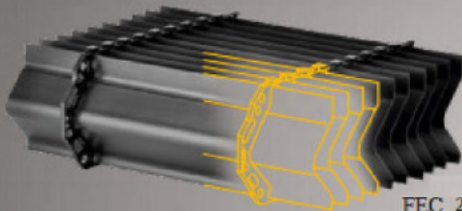




FEC 2H TEP 130

FEC 2H TEC 130

FEC 2H TAP 160

FEC 2H drift eliminators reduce water loss and emissions. The chemical and UV resistance of the PP and PVC material grants a long service life. FEC 2H drift eliminators types FEC 130 and FEC 160 are made of PP which remains stable and in shape even under high temperatures. The certification by EUROVENT, an independent inspection authority, proves the high efficiency of FEC 2H drift eliminators.

Types

Application	Type	Material	Drift loss* %	Max. face velocity m/s	Drag coefficient	Pitch mm	Max. distance between supports mm	Additional information
Small or medium sized cooling towers	 Module type FEC130	PP	≥ 0.0005 - 0.0007	4.5	2.2	18	1000	<i>Special Design</i> FEC130 with additional stiffeners
Small or medium sized cooling towers	 Module type FEC 130	PVC	≥ 0.0005 - 0.0007	4.5	2.2	18	1000	<i>Special Design</i> FEC 130 with additional stiffeners
Large site erected cooling towers	 Profile FEC 160 with Spacer FEC 033	PP	≥ 0.0006 - 0.0012	4.0	2.6	33 / 38	1200	<i>Thickness:</i> 2 mm (+/- 0.2 mm) <i>Spacer:</i> FEC1033 (with 33 mm / 10 profiles per spacer) FEC1738 (with 38 mm / 7 profiles per spacer)

*Based on the CTI ATC-140 test method (Isokinetic Drift Test Code) and EUROVENT standard OM-14-2009. These limits are guidelines only. The performance of the drift eliminator is indicated by the ratio drift loss/water flow rate (in % of the circulating water volume). The efficiency of droplet separation depends on constant air velocity and an absolutely tight assembly of drift eliminator elements to each other and to the housing wall. The face velocity must not be exceeded at any point of the drift eliminator.



CK 19 FILM FILL

for counter flow Cooling Tower



Rigid PVC/PP

Farabard

Engineering, Procurement, Installation

CK 19 FILM FILL

for Counterflow Cooling Towers



High temperature resistant
Minimum pressure drop
Environmental friendly
Longest service life
Superior heat exchange properties



Technical Data:

Standard dimensions L/W/H: 2.400 x 300 x 300 mm

Flute size: 19 mm

Material: Rigid PVC

Distance of supports: max. 1.000 mm

Width of supports: 50 mm

Dry weight: 27 kg/m³

Average foil thickness: 0,30 mm

Max. service temp.: 60 °C.(short)

Alternative:

PP fills can also be delivered for high temp. application, permanent exposure to 80 °C.

On request we also deliver special compounded PVC & PP fills meeting fire retardant grade B₂(DIN 4102) or UL 94 V₂.

CK 19 is also available in PP version with absolute identical heattransfer specification as showed above.

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Cooling Tower Spray Nozzle FSN35



Polypropylene

Farabard

Engineering, Procurement, Installation

Cooling Tower Spray Nozzle FSN35



Longest Service life
High temperature
Low clogging
No moving part
No metallic part
Material : p.p
Nozzle Dia : 3.5-4 cm
Max flow/nozzle : 99.5ton/h



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FAN STACK DW TYPE

for Cooling Towers / Air Coolers



Standard Cylindrical - FRP Structured

Farabard

Engineering, Procurement, Installation

FAN STACK DW TYPE

for Cooling Towers / Air Coolers



High temperature resistant
Minimum pressure drop
Environmental friendly
Longest service life

Industrial fan casings consist of inlet fan ring which accelerates flowing air steam and the cylindrical portion - the impeller work area. Fan housing duty is to shape up the medium stream in order to achieve the best fan unit flow parameters. Fan unit housing is made of FRP. Specially elaborated fan ring or fan stack structure provide required stiffness of the units.

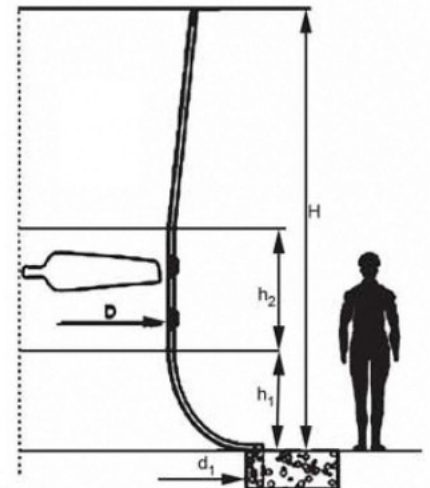
Despite of low weight fan ring and fan stack features high stiffness, provided by specially engineered stiffening ribs system based on sandwich structure.

Thanks to the latter both internal and external fan stack and fan ring surfaces are smooth and shiny thus improving air flow parameters and help to keep the unit clean over the time of operation. Well elaborated down to the every detail, lightweight sandwich structure of the fan stack or fan ring segment effectively lowers manufacture cost, facilitates handling and assembly in order to reduce work time of Contractor team on site. High manufacture precision of every single fan housing segment provides perfect roundness of impeller work area and optimized fan blade tip clearance. Fan housing is furnished with special ribs additionally compensating aerodynamic force resulted in impeller rotation.

All connection accessories of vertical segment flanges are made of PN OH18N9 (DIN 1.4301) stainless steel.

Fan housings are suited for work temperatures ranging from - 25 up to do + 65 °C.

Fan housings can be made in any of RAL color palette. Our RAL standard product color is pale grey (RAL 7035)



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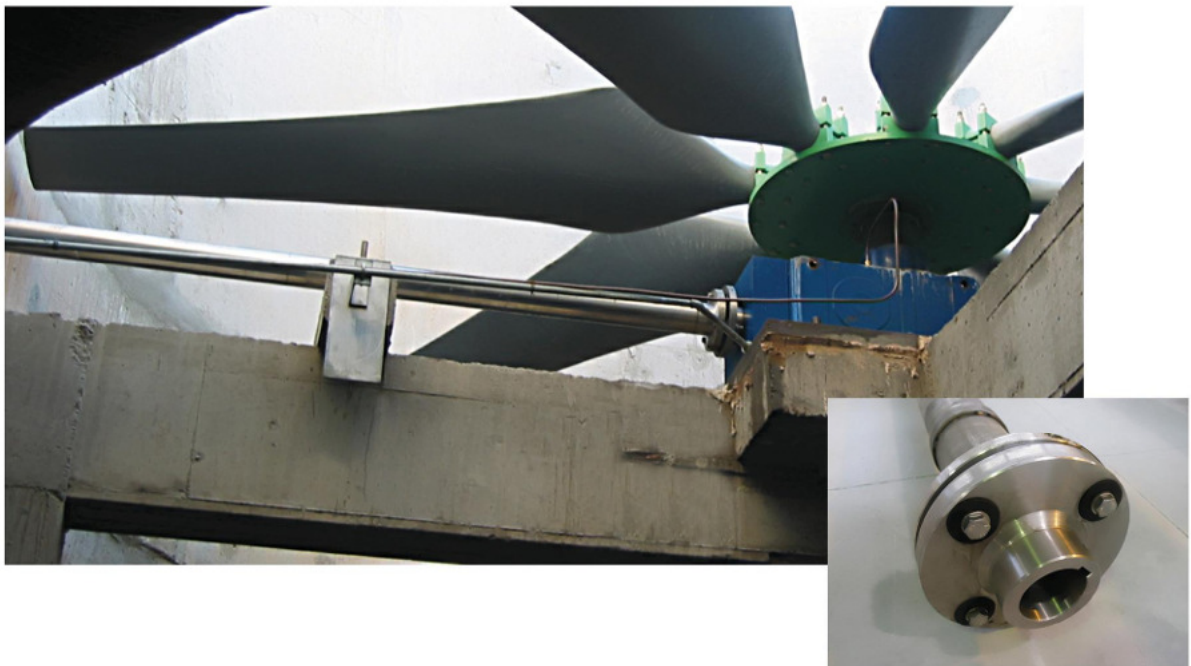
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METALLIC FLEXIBLE DRIVE SHAFT

for Cooling Towers / Air Coolers



Carbon Steel / Stainless Steel Structured

Farabard

Engineering, Procurement, Installation

CFP FLEXIBLE DRIVE SHAFT

for Cooling Towers / Air Coolers



Low weight

Corrosion resistance

Best Alignment

Longest service life

Technical Data :

Application:	Cooling towers, Air coolers
Maximum length:	5500 mm
Minimum length:	500 mm
Maximum rated power:	315 kW @ 1500 rpm
Maximum torque:	2300 Nm
Material:	Carbon Fiber Composite Laminated
Metal Part.:	Stainless Steel



Specification:

The shaft features significantly low weight that represent as much as only 10% weight of standard steel made shaft. This great advantage made possible to skip a number of support bearings along the shaft. Engagement of composite shaft in drive system due to lack of bearings made the system actually maintenance free. Low shaft weight certainly facilitates the fan unit assembly.

Materials used for shaft manufacture makes the product resistant to aging. (no rubber components very often found in standard shaft) Application of coupling made of stainless flexible pack of metal plates compensates for certain misalignment of drive system components.

Drive shaft metal components are made of stainless steel as standard.

The shaft length are adjusted to project requirement adequately.



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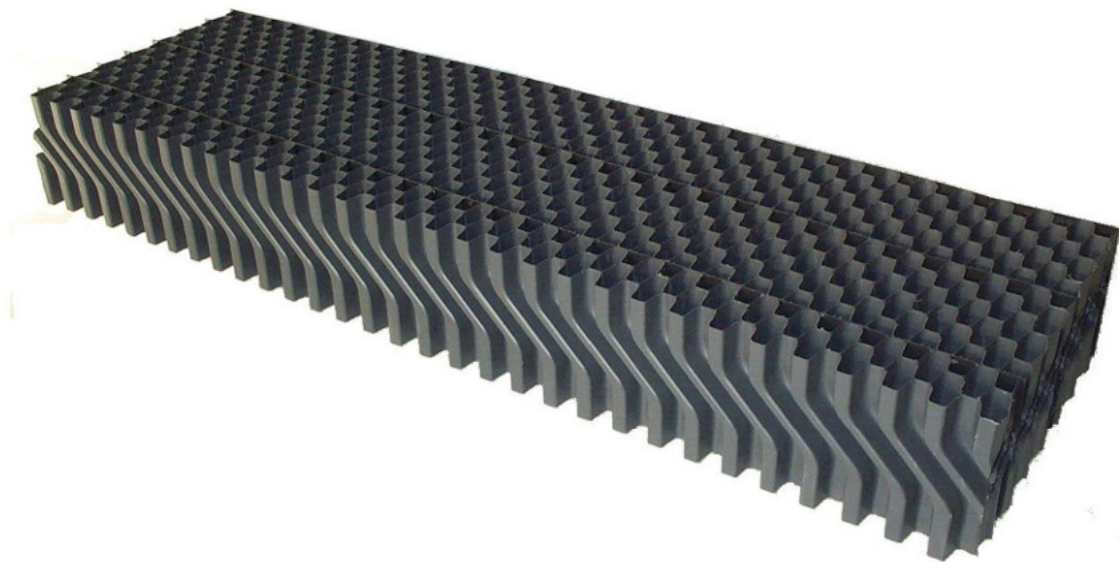
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TE 130 Drift Eliminator

for Counter/Crossflow Cooling Towers



**Welded Polypropylene Structure
with Honeycomb Flute**

Farabard

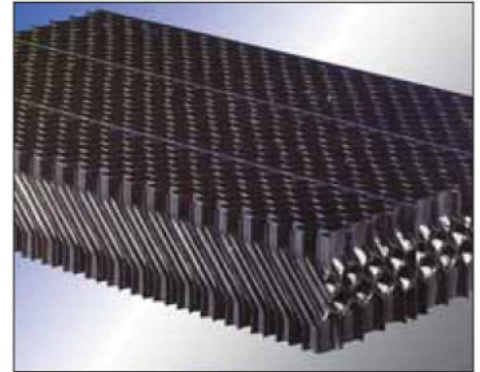
Engineering, Procurement, Installation

TE 130 Drift Eliminator

for Counter/Crossflow Cooling Towers



High temperature and UV-resistant
No deformation under direct sunlight
Environmental friendly
Longest service life
Minimal pressure drop
Optimal droplet capture



Technical Data:

Standard dimensions L/W/H:	2.400 x 600 x 125 (or 250) mm
Material:	Polypropylene UV resistant
Distance of supports:	max. 1.200 mm
Width of supports:	50 mm
Weight:	approx. 4 kg/m ²
Drift loss:	0,002 %
Max. air velocity:	approx. 4,5 m/sec.
Max. service temp.:	80 °C.(short)

Alternative:

PP fills can also be delivered for high temp. application, permanent exposure to 100 °C.

On request we also deliver special compounded PP meeting fire retardant grade B₂(DIN 4102) or UL 94 V₂.

TE 130 is also available in rigid PVC version with absolute identical specification as showed above.

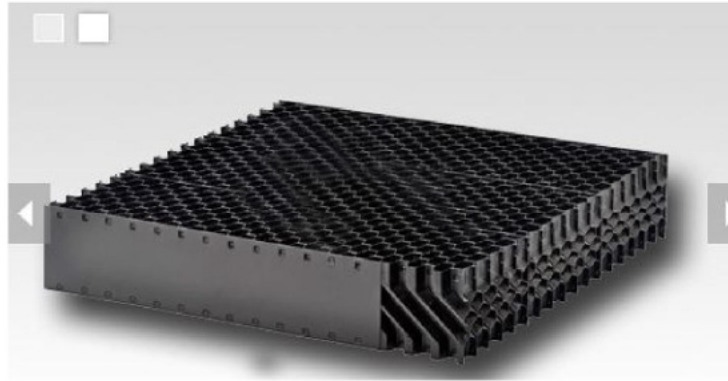
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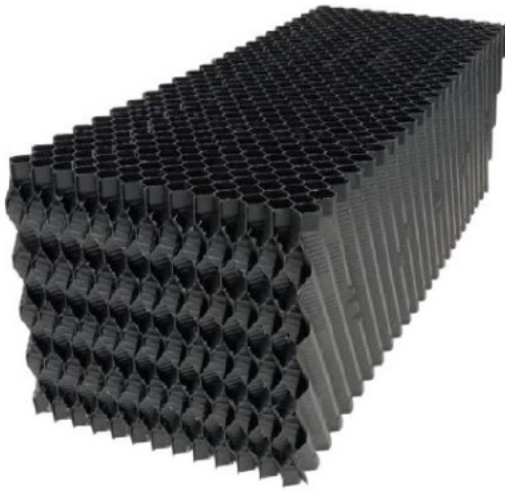


2H Drift Eliminators are available in two different types. The profile (TAP 160) is mostly used in bigger, the chamber types (TEP 130 and TEC 130) in smaller cooling towers.

Technical Data

	FEC 130
Material	PVC
Max. length / width (mm)	2400 / 800
Height (mm)	125 / 250
Drift loss* (%)	≥ 0.0007 - 0.0005
Contin. operation temp. / Max. operation temp. (C°)	55 / 60 (short time)
Max. face velocity (m/s)	4.5
Drag coefficient	2.2
Pitch (mm)	18
Max. distance between supports (mm)	1000

* Based on the CTI ATC-140 test method (Drift Test Code) and EUROVENT standard OM-14-2009. These limits are guidelines only. The performance of the drift eliminators is indicated by the ratio drift loss/water flow rate. The efficiency of droplet separation depends on constant air velocity and an absolutely tight assembly of drift eliminator elements.



Our Cross-Fluted Fills Factors

- High resistance to erosion provided by patented foil thickness distribution and reinforced edges
- Self-supporting structure – High bearing capacity achieved by large number of connecting points and variable sheet thickness
- Flexibility in material and dimensions makes adaptation to plant requirements easy
- Long service life due to chemical, bacterial and UV resistance of PP and PVC
- Easy and economical installation

Technical Data

	PP	PVC
Maximum length	2400 mm	
Maximum width	600 mm	
Maximum Height	300 or 600 mm	
Continuous operating temperature*	80 °C	55 °C
Max. operating temp. (short time)*	90 °C	60 °C

*Depending on recipe/additives higher temperatures can be reached by HT-additives.

Maximum tolerances: On all dimensions +/- 20 mm or 2 % whichever is the greater. Tighter tolerances by prior agreement.

Maximum application temperature: The operational temperature should be measured at the inlet pipe of the system and should not exceed the maximum temperature stated in this document.

High temperature applications: Fill media in high-temperature version in PVC (up to 75 °C) and PP (up to 100 °C) available on request.

Typen

Application	Type	Material	Specific surface area m ² /m ²	Corrugation height mm
Counter-flow cooling towers	FPP 319/619	PP	150	19
	FPC 319/619	PVC	150	19
Slightly polluted water				

PVC-material: Unplasticized (uPVC)

PP-material: Impact-resistant, environmentally friendly

PVC and PP material: Resistant to rot, fungi and most dissolved chemicals, UV-stabilized

Flammability: Products in flame retardant version according to American and European standards available on request. National regulations on fire protection should be taken into consideration before choosing a product.



Staggered edge