

TEXTILE AIR ENGINEERING

EASY INSTALLATION HIGH PERFORMANCE ENERGY EFFICIENCY



AUTOMATIC ROTARY AIR FILTERS





Self-cleaned rotary air filter can be used in various applications. General area of use is textile plants for filtering the highly dusted and glass fibered air while other areas are glass manufacturing, tobacco and industrial plants. The biggest advantage of the system is the self cleaning/particle collecting technology which provides low cost maintenance and commissioning. Filters can be designed as sections which creates a wide range of volume flow ranges under 60 - 250 Pa resistance.

Automatic-running vacuum cleaner system collects the dust and unwanted particles from the inlet air with the aspirator integrated running vacuum collector from the surface of the rotary air filter . The separated particles are ejected into a dust collecting container.



MODEL	VOLUME FLOW RANGES					
MODEL	Min. Flow Rate [m³/h]	Max. Flow Rate [m ³ /h]				
SRF - 15	15.000	100.000				
SRF - 20	20.000	140.000				
SRF - 25	25.000	175.000				
SRF - 30	30.000	200.000				

**Volume flow rates given above are determined according to the type of raw material produced in the textile plant (cotton, silk, glass fiber etc). The length of the rotary air filter is designed between 1.200 mm - 6.000 mm regarding the dust concentration of the air





ROTARY PREFILTERS

Automatic - rotary prefilters with exterior cleaners are used to collect textile wastes from textile machines . Filter elements are mounted leak-proof onto vacuum inlet and positioned perpendicular to the airflow direction.



EVAPORATIVE HUMIDIFIER SYSTEMS









HIGH PRESSURED/FOG SYSTEM & STANDART NOZZLE TYPE HUMIDIFIERS

Inlet frame of this module, which holds on the nozzles, is made from stainless steel. Dimensions can vary upon desired design conditions. It is possible to go up to 8100 l/h by using several pumps and compressors. Solenoid valves areused to enable desired capacity. Although the general operation pressure is about 80 bar, nozzles are tested at a pressure of 150 bar.

Deflector and seperator units are made by polipropilen or aluminium material (optional), used at the inlet and outlet of the humidifyer section in order to maintain a linear flow and avoid water drops to escape humidifier duty area. Single step cantrifugal pumps are used to provide the water needed. Dimensions are meeting EN 779 standarts. Controlling of this module can be achieved with fixed or variable electronic card. It is also possible to control humidification process with a dry contact output.

CENTRIFUGAL HUMIDIFIER

The patented centrifugal humidifying technology is not being manufactured/used in most of the countries. This non-spread technology; provides less and easy maintenance with high humidifying efficiencies With 40 kW of evaporative cooling capacity maintained from 1,0 kW of electrical input, Centrifugal humidifier is being used in both direct & indirect evaporative cooling processes.

ADVANTAGES of CENTRIFUGAL HUMIDIFIER

- High efficiency Low cost (120 kg/h humidifying with 0,7 kW of power input)
- Long-life
- Low pump-energy consumption
- Hygienic
- No need for water conditioner
- Aerodynamically designed
- Short humidifying ranges
- High COP





AXIAL AND RADIAL VANTILATORS









AXIAL FANS

SAV S/D direct coupled or belt driven Axial Fans have a wide capacity range. Plastic blades are offered in 10 different models within the capacity range of 500 m³/h - 45.000 m³/h and fan diameter range of 310 mm - 900 mm. Adjustable aluminum blades for high capacity flow-pressure requirements are offered in 13 different models within the capacity range of 6.000 m³/h - 230.000 m³/h and fan diameter range of 400 mm and 2000 mm. Fan hub is made of round ABS materials injected on St. 37 bushes. Fans are equipped with guard wires on front and rear sides as standard. Optimum operating temperature range for fans are between -10°C and 70°C.

MODEL	ØD ₀	ØD ₁	ØD ₂	ØD ₃	ØD	H ₁	H ₂	*All lengths are in mm values. Motor is not included
SAV - 31	318	356	376	393	430	105	283	in the weights of fans. Values may be changed without giving prior notice, please consult our
SAV - 35	358	393	412	436	470	105	283	office for detailed information. SAV models have
SAV - 40	403	436	455	483	515	105	308	Aluminium / Plastic blades. Units are manufactured
SAV - 45	453	483	503	535	566	105	308	according to 2006/42/AT regulation and suitible for EN 60204-1 standart. Optimum operating tempera-
SAV - 50	507	535	557	607	645	180	425	ture range for fans are between -10°C and 45°C for
SAV - 56	572	607	622	675	710	180	425	plastic series, -10°C and 70°C for aluminium series.
SAV - 63	642	675	696	750	780	180	425	
SAV - 71	721	750	771	831	860	240	559	
SAV - 80	806	831	872	936	945	240	602	
SAV - 90	906	936	976	1010	1045	240	642	
SAV - 100	1010	1055	1095	1340	-	700	-	
SAV - 140	1410	1455	1495	1740	-	700	-	
SAV - 160	1610	1655	1695	1940	-	700	-	MANA
SAV - 180	1785	1855	1925	2155	-	1280	870	
SAV - 200	2005	2075	2145	2455	-	1395	900	

RADIAL FANS

Radial fans are manufactured both in dual & single inlet high efficient backward curved aerodynamically formed types and statically balanced with CNC machines. Inlet cone is designed specially according to the rotor itself and the body is manufactured from carbon steel - shaft from St-50 in order to work under heavy duty conditions. Volume range between 1.000 m³/h - 220.000 m³/h and static pressure up to 6.300 Pa.





CONCRETE & PACKAGED PANEL TYPE AIR HANDLERS



Concrete or packaged panel types of textile air handlers are designed to maintain high volumetric flow capacities up to 300.000 m³/h. While the design providing easy allocation, with a mounting on site option makes every unit possible to fit every location. Mounting on site option starts with manufacturing the parts and sending them to site. Ready parts and equipments are mounted at site by our team. This option lets the customer put units in mechanical rooms which are enclosed and impossible to carry from within the openings/doors.

The main construction is made by aluminum profiles for its light weight, strength and extra corrosion resistance. Side panels are composed of film coated galvanized sheet metal exterior walls and galvanized (aluminum or stainless steel upon request) interior walls fully sealed in a closed structure. Polyurethane or rockwool (50-70-110 kg/m³) is used between the walls of the panel with different thicknesses to provide heat and sound insulation. The panels are mounted tightly on to the structure with neoprene gaskets on the inside and outside to assure a leak-proof construction. The connections are made either by bolts or by special fitted joints.

Compactor/Fiber Pre-Seperator: Cooperates with the panel rotary pre-filter collects and compacts the glass fibers and textile wastes from textile machinery.

Dampers: Counter/parallel working aerodynamically shaped low leakage dampers.

Can Klima offers a complete **HVAC** system solution package for projects. Other equipments of the system are air ducts, louvres, hermetically sealed door, service corridor for maintenance and other various system needs upon request.















INDIRECT EVAPORATIVE COOLING SYSTEM







Textile machines hold a significant role on a textile plants capital expenditure and use a substantial amount of energy. **Can Klima** engineers created indirect evaporative cooling system solution to provide a significantly cost efficient cooling for textile plants.



FC: FREE COOLING

Free Cooling mode works when the outdoor air temperature is lower than the indoor air temperature. The external air exchanges heat by heat recovery system, thus removing heat from the textile plant. This mode requires no additional process

IAC: INDIRECT EVAPORATIVE COOLING

Indirect Evaporative Cooling mode uses adiabatic humidifiers before heat recovery system to pre-cool the external air. Loading air with water and letting it evaporate increases the humidity of the air and lowers down the temperature which provides a higher heat recovery capacity and higher efficiency. Indirect evaporative cooling is basically an improved mode of free cooling which gives a high cooling capacity with very low energy consumption.

SMC: STANDART MECHANICAL COOLING

Standard Mechanical Cooling mode is used at conditions which SC or IAC remains insufficient. Refrigerant or chilled water systems can be used as optional.





Automated control solutions provide a wide range of advantages to the end user. The compact **MCC & DDC** panel packages are all-in-one plug and play solutions that provides easy installation, less space while providing high performance & high energy efficiency.

Automated HVAC System Advantages

Can Klima control equipments and automation softwares are integrated and used create efficient automation environment. The unit interprets the data transmitted from the sensors and adjust the conditions of the air until satisfying the necessary needs. Optional frequency control provides a wide operating range with high efficiency.

CAN KLİMA TEKNİK™ Controls

open, mobile, flexible, and scalable



Can Klima provides the correct scenario with textile plants while integrating highly energy efficient equipments to maintain the optimum performance considering the needs in the corresponding environment.

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