

WE ARE INSPIRED BY NATURE

Our company has been offering services in the greenhouse climatization sector since 2006.

We have completed many successful projects since the establishment of GENFOG™.

We are proud of being the industry leader in air conditioning, humidification, and fogging fields, especially with our applications in High-Tech Greenhouses, Seed R&D Greenhouses, Textile Factories, Industrial Cold Storages, Industrial Livestock Facilities.





Jur company was founded in 2007 as GENFOG™ Air Conditioning Systems Ltd. and has been

GENFOG™ has been providing services for Modern Hydroponic Agricultural Greenhouse Projects. Our company, which has developed its branding process by serving in many countries of the world, continues its activities successfully. We extended our activity fields to producing turnkey modern greenhouse projects with high-quality standards in 2017 by establishing a new company called Greencon that produces greenhouse steel construction.

Currently, we are exporting to many countries of the world and providing products and services to domestic investors in our 30.000 m² production area in Antalya Organized Industrial Zone.

Our Sales & Marketing department is always in contact with our valuable customers and provides 24/7 service to finalize the processes in your requests and projects as soon as possible and transfer them to our Project Department.

Our Project Department is responsible for creating the most suitable project for our customers with minimum costs and as soon as possible and presenting them to your valuable opinions. This department, which reaches a final agreement with the customer, transfers your projects to production at the final point.

Your projects that come to the production stage are produced with the utmost care by our expert teams and transferred to the quality control department.

Our products, which are transferred to the application area, are assembled here in a short time by our competent teams and go to the test phase. Our supervisors comply with every point of the project at every stage of the assembly until the end. At the last point, the facility, whose tests are completed, is transferred to the customer in working condition.

VOLKAN GÖSTERİŞLİ

GENFOG AIR CONDITIONING SYSTEMS **Board Member**



GENFOG™ HIGH-PRESSURE FOGGING SYSTEM

Fogging is used to keep the greenhouse temperature at normal levels naturally without harming the plants, and to humidify when needed at certain times, and to lower the greenhouse temperature.

The High-Pressure Fogging System basically consists of six parts:

- 1. Booster Pump
- 2. Automatic Self-Cleaning Vertical Filters
- 3. High-Pressure Pumps
- 4. Disinfection Tank
- 5. Main Unit Control Board and Chassis
- 6. Stainless Steel Pipes, Pipe Fittings, and Nozzles



BOOSTER PUMP

The new and improved Lowara e-SH Series is a high-performance, stainless steel, single impeller centrifugal pump with a radial flanged suction port and a horizontal shaft.

The E-SH series is made entirely of AISI 316 stainless steel. It is the right choice for thousands of liquids by its high chemical resistance and mechanical insulation.



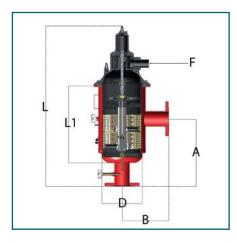
GENERAL FEATURES					
Flow Rate	240 m³/h				
Max Dynamic Head	110 m				
Electrical Supply	Tri-Phase and Mono-Phase				
Network Frequency	50Hz ~ 60Hz				
Power	0,25kW ~ 75 kW				
Temperature of Pumped Liquid	-10°C ~ +120°C				
Sealing	F				
Protection Class	IP 55				

Material Description	Model	Flow Rate (m³/h)	Pressure (Mss)	Engine Power (Kw)	Engine Speed (rpm)
HORIZONTAL MULTISTAGE CENTRIFUGAL PUMPS	LOWARA 15HM03S022T	15	33	2,2	2.900
316 HORIZONTAL SINGLESTAGE CENTRIFUGAL PUMP	LOWARA ESHE 32-200/40	17	40	4	2.900
316 HORIZONTAL SINGLESTAGE CENTRIFUGAL PUMP	LOWARA ESHE 40-200/55	40	32	5,5	2.900
316 HORIZONTAL SINGLESTAGE CENTRIFUGAL PUMP	LOWARA ESHE 40-200/75	40	42	7,5	2.900



AUTOMATIC SELF-CLEANING SCREEN FILTERS

Hydrofilt VDF/VHF filters are hydraulically controlled, fully automatic backflush filters. No additional energy is required for this automatic vertical filters process, only pumping the water is sufficient. The pressure created by the speed of the water from the pump ensures the cleaning of the filtering element with a fully automatic backflush, in other words, the filter cleans itself. While this backflush mechanism is operating, the filtration process continues. The dirty water formed in this process is automatically discharged during backflush.



PRODUCT GENERAL FEATURES					
Body Material	S195T / SS 316L / SS 304 L				
Screen Material	SS 304L, PA6GFR30				
Maximum Working Pressure	10 Bar (145 PSI)				
Minimum Output Pressure	1 Bar (15 PSI)				
Maximum Working Temperature	60 °C (140 °F)				
Back Flushing Type	Time and / or Pressure Differential				
Back Flush Control System	Electronic (AC) Control				
Filtration Degree	20-2000 micron (μ)				

PRODUCT CODE	INLET OUTLET inch	INLET OUTLET mm	A mm	B mm	L1 mm	L mm	D inch	FLOW m³/h	FILTER SURFACE AREA cm²	WEIGHT kg
VDF-102	2"	50	375	267	440	875	10"	40	1317	27
VDF-1025	2 1/2"	65	375	267	440	875	10"	50	1317	28
VDF-103	3"	80	375	267	440	875	10"	55	1317	30
VDF-103S	3"	80	425	267	540	975	10"	70	1975	33
VDF-104	4"	100	425	267	540	975	10"	100	1975	35





HIGH-PRESSURE PUMPS

Annovi Reverberi Pumps, also called AR Pumps, are created and imported from Italy. It is the most preferred pump brand in Turkey due to its quality, useful structure, and a wide network of spare parts.

It is a product that provides effective solutions with different flow rates and pressure possibilities in high-pressure car washing machines, textile steam boilers, concrete mold opening machines, mixer cleaning devices, highpressure water jets, in all areas where high pressure and pressurized water is needed.









PUMP TYPE	MAX. PUMI	P FLOW RATE	WORKING	PRESSURES	EN	NERGY CONSU	MPTION	WEIGHT
XWL 42.15 N	42 l/min	11,09 gpm	150 bar	2200 psi	16 hp	11,8 kW	1450 N°giri/1'	16 kg
XWL 50.15 N	50 l/min	13,20 gpm	150 bar	2200 psi	20 hp	15 kW	1450 N°giri/1'	16 kg
XWP 70.15N	70 l/min	18,5 gpm	150 bar	2200 psi	27 hp	20 kW	1450 N°giri/1'	17,6 kg
RTX 100.120N	100 l/min	26,4 gpm	120 bar	1740 psi	30 hp	22 kW	1450 N°giri/1'	32,5 kg





DISINFECTION TANK

The disinfection tank which has a water capacity of 1 ton, was designed by GENFOG™ R&D teams and applied in many greenhouses.

The tank located behind the main chassis of the system is activated by bypassing the main network.

Disinfectants or necessary drugs added in the tank are sent into the whole greenhouse with the help of the highpressure system.

The disinfection tank is only available in the GENFOG™ High-Pressure System among similar fogging units. It allows you to do the disinfecting job that takes hours in minutes.



	GENERAL FEATURES
Body Material	Electrostatic Paint
Tank Capacity	1.000 lt
Expandable Tank Capacity	Yes
Operation Method	Mains By-Pass
Width	2000mm
Length	1600mm





MAIN CONTROLLER AND CHASSIS

The Main Control Unit has been developed by GENFOG™ engineers and it manages the High-Pressure Fogging System. It keeps the possible pressure deviations caused by the network under control. It ensures that all components of the High-Pressure Fogging System operate in optimal condition.

It also allows you to plan sterilization, spraying, or fertilization processes.

All components of the High Pressure Fogging Unit are mounted on a platform made of stainless steel.

Connection parts and valve groups are manufactured from the products of the leading brands in the sector.

The high-pressure fogging unit provides maximum performance by the software developed by GENFOG™.

GENGOG™ Fogging Unit Software can be easily optimized for greenhouse characteristics and your greenhouse operations.

7" PLC Digital Control Unit



MAIN UNIT CONTROL PANEL AND CHASSIS GENERAL FEATURES						
Panel Body Material	Electrostatic Paint					
Chassis Material	Stainless Steel Profile					
Panel Interior Equipment	Schneider AG					
Maximum Operating Temperatur	60 °C (140 °F)					
Operating Voltage	220 V AC					
Operating Frequency	50Hz					
Control Unit (PLC)	WEINTEK 7" TFT Color Display					
Control Unit (PLC)	WEINTEK 7" TFT Color Display					



GENFOG™ STAINLESS STEEL PIPES, PIPE FITTINGS AND NOZZLES

All materials that we use in the fogging line and that have liquid contact are made of corrosion-resistant stainless steel produced with first-class workmanship.

12mm / 22mm Stainless Steel Tube

12mm / 22mm SS Press Coupling

22-12mm Press "T" Reduction

12mm / 22mm SS Press "T"

12mm Valve 3/8" +Reduction

12mm / 22mm Heavy Series Pipe Clamp

12mm / 22mm SS Press Elbow

12mm / 22mm ¾ Press Coupling With Union

12mm / 22mm Press Adapter

Flange

Manometer

NOZZLE GENERAL FEATURES

Body Screwed to Pipe

SS Nozzle Tip No:0,3 Gib

Valve Spring



12mm / 22mm Stainless Steel Pipe



12mm / 22mm SS Press Coupling



22mm / 12mm SS Press Adapter "T"



22mm SS Press "T"



12mm / 22mm 34 Press Coupling



12mm / 22mm Press "T" Reduction



12mm / 22mm S Press Elbow



12mm / 22mm Heavy Series Pipe Clamp



Flange



Ball Valve

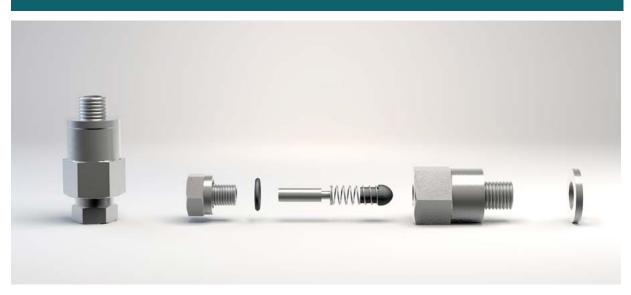


Manometer



Nozzle Mounted Stainless Steel Pipe

SS316 NO:3 PIN NOZZLE





GENFAN™ CIRCULATION FANS

Our company has become the strongest brand in the greenhouse air conditioning systems sector by producing more than 150,000 fans since 2006. Our fans, who are still actively working in the field, are the favorites of investors.

Our GENFAN™ circulation fans, produced in our factories in Antalya Organized Industrial Zone, have succeeded in becoming a brand that is preferred by not only domestic investors but also foreign investors.





MORE THAN 150,000 ACTIVE FANS ON THE FIELD

One of the most important issues while providing the necessary air conditioning in greenhouses is the circulation of the air inside. With the fans installed in the greenhouses, the air required for the plant is distributed more homogeneously.

GENFAN™ circulation fans create the necessary climatic conditions for greenhouses with 5.500m³/hr, 7.500m³/hr, 9.500m³/hr, and 11.000m³/hr options. 0.37 and 0.55 kW electric motors are used in our circulation fans.

The highest efficiency is achieved with low energy usage and silent operation.

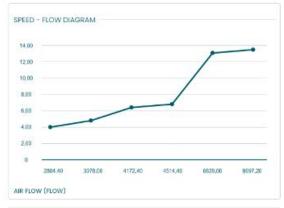
According to the desired humidity values, the humidity of the air can be increased up to 95% or the air can be cooled by expelling the humid air.

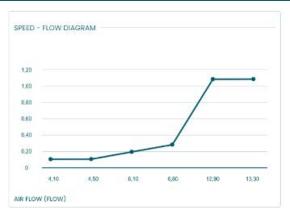
With the decreasing temperature, more suitable conditions are created for the working environment and the growth of the plant, thus reducing the waste rate and increasing productivity.

GENFAN™ FAN MODELS

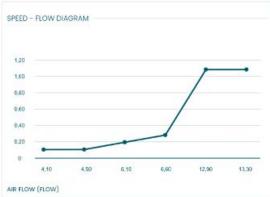
CODE	VOLTAGE	POWER	CURRENT	ROTATION	FLOW
FG 55	400 V	0,37 kW	0,60	1380 rpm	5.500 m³/hr
FG 75	400 V	0,37 kW	0,80	1380 rpm	7.500 m³/hr
FG 95	400 V	0,37 kW	1,10	1380 rpm	9.500m³/hr
FG 110	400 V	0,55 kW	1,25	1380 rpm	11.000 m³/hr

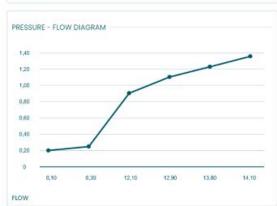
GENFAN™ FG 75 MODEL FAN FLOW DIAGRAMS

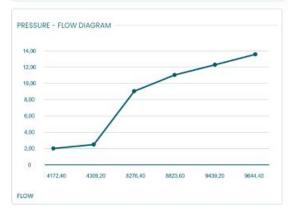








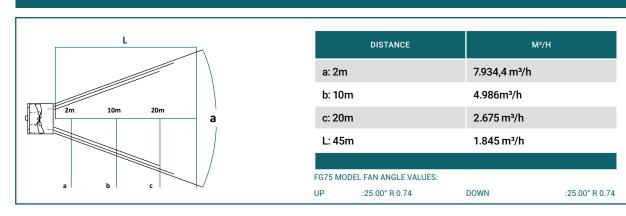




OUR YEARS OF PRACTICAL EXPERIENCE AND OUR FOGGING TESTS HAVE SHOWN THAT FANS ARE AN EFFECTIVE TOOL TO ACHIEVE SEVERAL IMPORTANT BENEFITS IN THE GREENHOUSE.

FOR EXAMPLE,

REDUCING MOISTURE-RELATED PLANT DISEASES AND PESTS, MORE UNIFORM PLANT GROWTH, AND INCREASING YOUR ENERGY SAVINGS.





WHY ARE CIRCULATION FANS IMPORTANT?

The amount of air plants getting is as important as the circulation of the air in the greenhouses.

The correct air circulation and speed may also differ according to the crop grown. Another important point is the correct placement of the circulation fans.

Our engineers will make the best positioning calculations for you according to the climatic conditions and land layout where your greenhouse is located.

The heated air inside your greenhouses due to the heating system, sun rays, or lighting generally accumulates in the upper parts. Taking advantage of this accumulated hot air, mixing dry air with moist air will significantly affect both your heating costs and your humidification costs.

As a result, the fan values used, the number of fans, placement points, and mounting details are factors that directly affect your crop. You can get support from our website or from our experts.

GENFAN™ FG 75 Flow Measurement Values (from 2 meters distance)

Diameter (m)	Cross Section (m²) Measured Velocity (m/s)		Flow Rate (m³/h)
0,49	0,19	11,6	7.934,4

FAN DIMENSIONS

PACKING DIMENSIONS

Diameter	Length	Weight	Width	Length	Height
46.5 cm	49 cm	19 kg	50cm	51 cm	50 cm



GENTECH™ GUTTER SYSTEMS

We have been producing and installing plant-growing tables for more than 2500 projects worldwide since the beginning of the 2000s when we first entered the industry under the GENFOG^{\dagger} brand as GENTECH^{\dagger}.

In close contact with growers and suppliers, we are constantly developing new solutions to respond to changing needs. We offer solutions to provide the most suitable environment for your plants in your greenhouses.

GENERAL FEATURES OF GENTECH™GUTTER SYSTEMS

GENTECH™ Gutter systems have a full range of products.

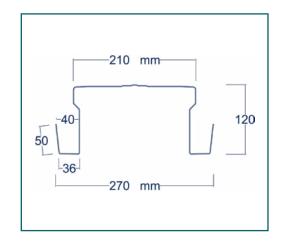
Gutter models, hanger and support products, plant support, and water diverting materials. The result: a professional plant growing system uniquely prepared for your greenhouse, your plants, and your employees.

Some of the advantages that gutter grow tables will give you

- Water and fertilizers filtered from the growing tables can be collected through drainage channels and reused.
- Provides equal water and fertilizer distribution for each plant.
- Provides optimum air circulation around the leaves and stem.
- Growth control of your growing plants becomes easier
- · Facilitates the prevention and control of plant diseases
- Provides more comfortable working conditions for your employee thanks to its adjustable working height.
- · Maximizes workforce productivity



GENTECH™ GUTTER GENERAL FEATURES					
Gutter Material	Steel S28GD				
Gutter Sheet Thickness	0,6 mm				
Color and Finish	White RAL9002 BGS				
Maximum Payload	22 kg/m				
Carrier Width	210 mm				
Height	120 mm				
Drainage Channel Width	36 mm				
Drainage Channel Depth	50 mm				





CONNECTION PARTS GENERAL FEATURES				
Hanger Clamp	ST 37 - 5 mm 58gr			
Hanger Wire	ST 37 - 5 mm 460gr			
Plant Heating Hook	ST 37 - 8 mm 129gr			
Stretcher	Steel Casting - M8 mm 300gr			
Adjustable Stretcher	DX51D + Z - 5 mm 222gr			
"A" Hanger Hook	ST 37 - 8 mm 528gr			
Plant Tilting Wire	ST 37 - 5 mm 225gr			
Gutter Circlip Wire	ST 37 - 4 mm 36gr			
Plant Rotation Wire	ST 37 - 8 mm 600gr			
Drainage Cover	Polyurethane - 8 mm 190gr			
Gutter Cover	Polyurethane - 0,6 mm 131gr			
Gutter Head Sheet Set Perforated	DX51D + Z - 2 mm			
Gutter Head Sheet Set Straight	DX51D + Z - 2 mm			
Gutter End Fixing System Kit	DX51D + Z			
Spiral Drainage Hose and Clamps	Transparent PVC - DIN1623 P2 Rolled Steel			

GUTTER HANGER SYSTEM CONNECTION PARTS



Hanger Clamp



Hanger Wire



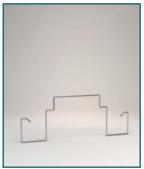
Adjustable Stretcher



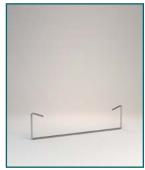
Plant Heating Hook



"A" Hanger Hook



Plant Laying Wire



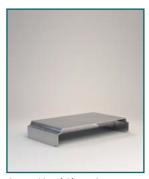
Gutter Circlip Wire



Plant Tilting Wire



Gutter Head Sheet Set Perforated



Gutter Head Sheet Set Straight



Drainage Cover



Gutter Cover



Stretcher



Gutter End Heating Pipe Carrier



Heating Pipe Stand



Gutter End Fixing System Kit



PRIDE™ IRRIGATION SYSTEMS

Irrigation is of great importance for efficient and sustainable production in greenhouse cultivation. It is necessary to use the right irrigation system and reliable automation for guidance. Most of the time, the water and fertilizer needs of the plants change depending on the climatic factors both during the growth stage and at other stages.

The PRIDE Irrigation Unit is designed to be compatible with different automation systems and it adjusts the water and fertilizer mixture balance in the fastest and most precise way with its unique fertilization method, while minimizing the reaction time. As a result, it sends the amount of water and fertilizer demanded by the grower to the plants in the most efficient and stable manner in the irrigation and fertilization process. One of the problems generally experienced in irrigation systems in the market is that water and fertilizer cannot be sent to the root zone of the plant at the desired values and an unbalanced fertilizer distribution is experienced between irrigation periods. This means both costs for the grower and a waste of resources.

PRIDE Irrigation Solutions offers solutions tailored to the grower's needs and ensures you get the most out of every drop of water.





WHAT IS THE DIFFERENCE OF PRIDE IRRIGATION SOLUTIONS?

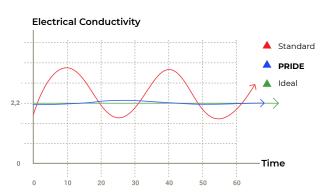
The amount of water sent to the drips is under your control while the water and fertilizer mixture sent to the greenhouse is stabilized at a stable pressure and feeding valve groups of different sizes in the PRIDE Irrigation Unit. The fertilizer is provided exactly to the desired point in the desired amounts and it is ensured that each plant is watered equally at the same time. The amount of water transmitted from the drips is not affected by the changes that may occur in the water pressure. In this way, plants are not exposed to water stress.





After the water and fertilizer solution drained from the plants are collected in the drainage pits, they are passed through the UV unit and disinfection is ensured by cleaning all existing pathogens such as fungi, bacteria and viruses. PRIDE Irrigation Unit reads the water salinity before entering the machine and uses the desired EC amount mixed from reverse osmosis and clean drainage. In this way, significant amounts of fertilizer are saved and the water can be used many times, collected, disinfected and added to the circulation again. Our automation-operated UV systems are equipped with the highest security measures and have been developed to operate in the most sensitive way for many years with the right maintenance.

The water purified by reverse osmosis provides an environment where you can provide the fertilizer needed for the growth of plants with water in a controlled manner. Unlike standard irrigation systems, the solutions coming from the tanks in the PRIDE Irrigation Unit are mixed in the mixing tank at the exact ratios with fine optimizations and the best results are always achieved. You can track the amount of fertilizer used from the fertilizer tanks with flow meters, which are not available in many irrigation systems, and you can even manually regulate the dosage flow. In this way, you will get the most accurate fertilizer mixture by resetting the difference between the tanks.



In addition, thanks to the fertilizer dosing line placed on the filling pumps, your fertilizer mixture is prepared faster and mixed much better. However, the fluctuation in nutrient concentration in feedings made with irrigation is minimized and the efficiency of fertilizer use increases.



Automotion System Partners





Solution Partners

































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