



**bomaksan**<sup>®</sup>  
INDUSTRIAL AIR FILTRATION SYSTEMS



**ECO SERIES**  
**JET-PULSE COMPACT**  
**CARTRIDGE DUST COLLECTOR**

# GENERAL FEATURES



## COMPACT

Bomaksan branded ECO Series Jet-Pulse Dust Collector takes up less place thanks to its' compact design. It is a plug&play device that contains all accessories on its own.



## ECONOMICAL

Bomaksan branded ECO Series Jet-Pulse Dust Collector decreases your installation expenses thanks to its easy setup and your air duct expenses due to its special design suitable to work indoors.



## DURABLE & LEAK-PROOF

Side and upper doors of cabin, makeup profile, chassis and carrying legs are produced with sufficient plate thickness and leak-proof is ensured by press inflection unifying with a nut.



## SILENT

Bomaksan branded ECO Seris Jet-Pulse Dust Collector enhances the air quality of your factory without reasoning noise pollution thanks to its specially designed deadening ventilator and its cabin.



## AUTO CLEANING

Thanks to its' high yielded automatic cleaning system designed by Bomaksan engineers as part of an R&D project of TUBITAK, while the consumption of compressed air is decreasing, the life and performance of filter increase.



## EASY MAINTENANCE

Bomaksan branded ECO Series Jet-Pulse Dust Collector decreases your time and labor expenses minimum due to its custom-engineered cartridge filter and dust bin.

## APPLICATIONS



Metal Working



Sand Blasting



Food



Plasma Laser Cutting

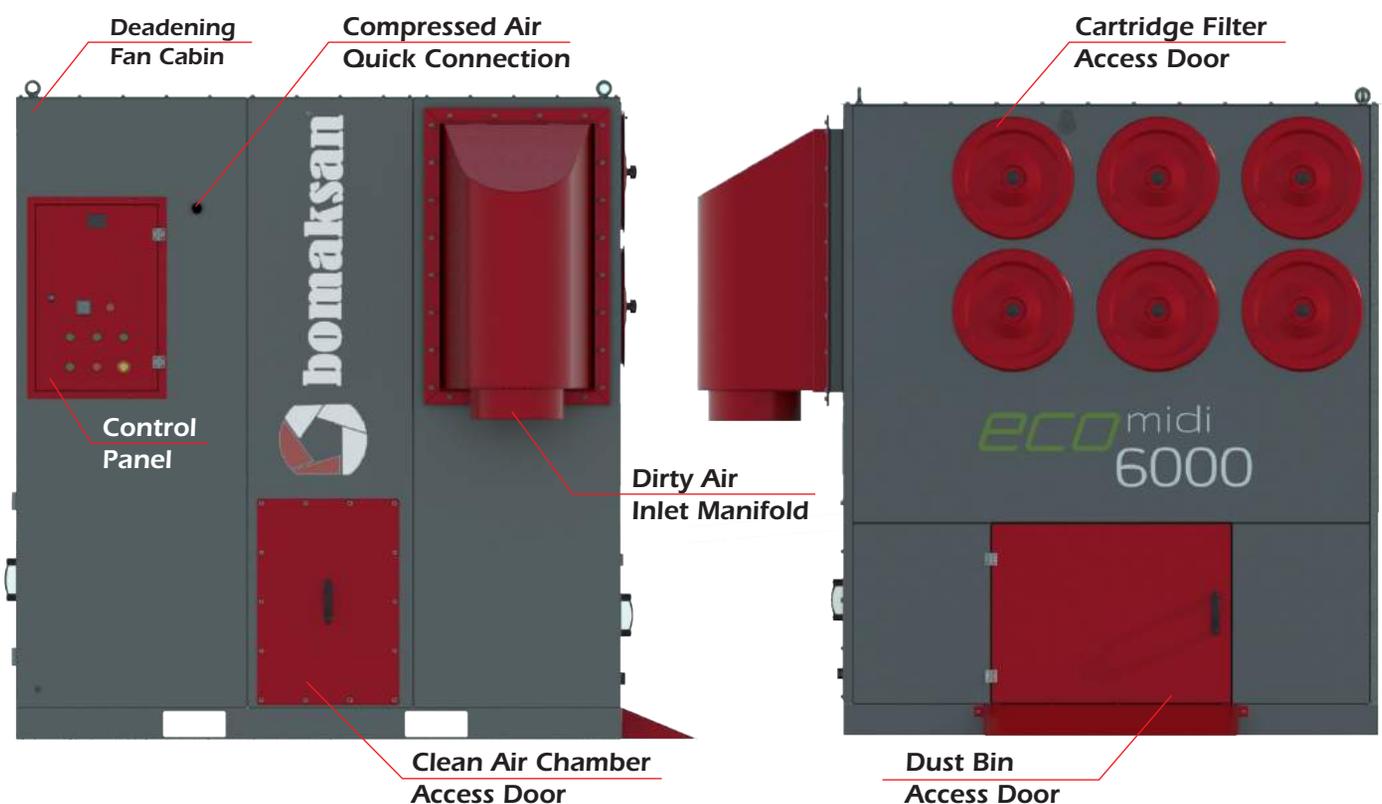


Powder Coating



Pharmaceutical

## GENERAL OVERVIEW

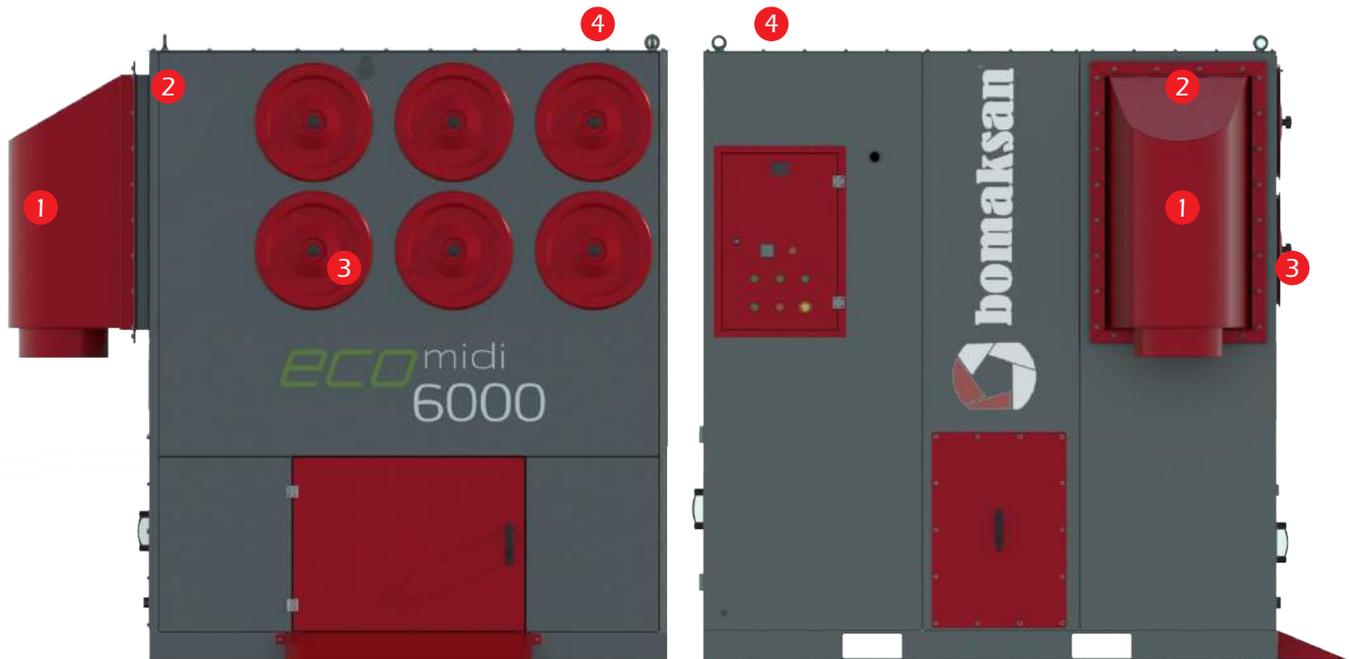


# HOW IT WORKS?



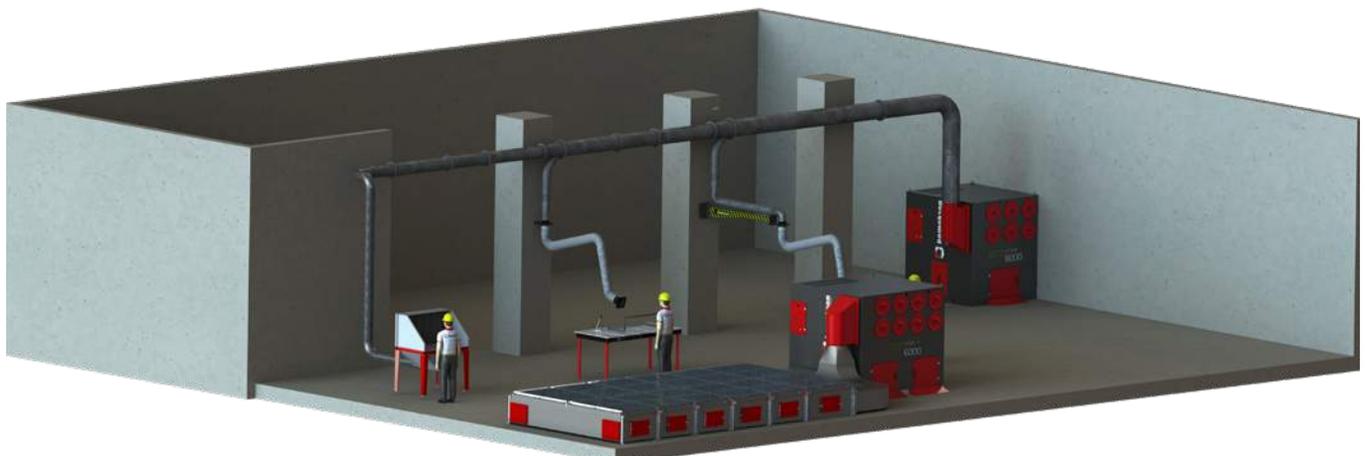
## PLUG&PLAY DEVICE

Bomaksan branded ECO series Jet-Pulse Cartridge Filter Units are able to be shipped as pre-installed due to its special designed dimensions. This design advancement allows us to pre-set each start-up settings and all you need to plug all air connections, electrical connections and start running your device.



- 1 Dirty air comes into inlet manifold with proper sized duct.
- 2 Integrated spark arrestor protect cartridge filters and filter unit from abbrasive particle and reduces fire risk by capturing sparks.
- 3 Dirty air is filtering by high efficienct cartridge filters.
- 4 Clean air released to the ambient via super silent fan

## SYSTEM INSTALLATION

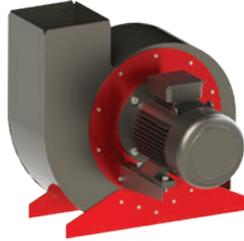


# ACCESSORIES

## STANDARD ACCESSORIES

### ● FAN

Targeted to satisfy requested flow and pressure, centrifuge type, conforming the standards and with its' direct drive motor its' produced to work quite and vibration free. Fan motor are made by steel as standard and balanced dynamically and statically on specialized plants.



### ● PULSE-VALVE AND AIR TANK

Pulse Valves are made by aluminum cast block and 1" sized. They perform with 24V DC standard voltage as standard. Air tank is produced conforming to compressed container technique and adequate to store the air between two valves.



### ● CONTROL PANEL & dP SEQUENCER

The panel containing thermal switch controlling ventilator engine, contactor, engine protection relay, working/warning lights, emergency stop button and fan start/stop button. dP controlled sequencer is integrated to the control panel



### ● DEADENING FAN CABINET

Specially designed fan cabinet reduces noise of ECO series dust collector and make them run super silent.

### ● CARTRIDGE FILTER

In ECO series dust collectors; Nanofiber coated, flame retardant, 80/20 blend cartridge filters are standart. In ECO+ series dust collectors, high efficient ePTFE membrane, 100% synthetic cartridge filter are standart. (See pg.4 for more details)



### ● COMPRESSED AIR REGULATOR

It regulates the pressure of the compressed air coming from compressor and ensures it has been forwarded to air tank as dry, thus the filter cleaning pressure is kept under control and safety of filters is guaranteed.



### ● DUST BIN

Dust bin accumulate the dust filtered by cartridge filters. Bomaksan branded dust bins are easy to plug and remove thanks to their brand new fitting equipment. Also ECO series dust collectors contains dust bin ramp as standard to remove the dust bin more easily.



### ● INTEGRATED SPARK ARRESTOR

Integrated spark arrestors are designed to capture risky sparks and reduce fire risk of dust collector.

## OPTIONAL ACCESSORIES

### ● INLET MANIFOLD

Special designed input manifolds keep duct and entrance velocity as it's best and your filtration unit works the most efficient way. Symmetric design lets you install your manifold either upward or downward.



### ● AUTO START SWITCH

ECO series dust collectors are able to synchronised with your plasma/laser cutting machinery. If you want to start your

### ● SMOKE DETECTOR & FIRE ALARM

ECO series dust collectors can be equipped with smoke detector and fire alarm.

## EX-PROOF ACCESSORIES

### ● EXPLOSION VENT

ATEX certificated, stainless steel explosion vents are selected with required calculations



### ● PILOT BOX and EX-PROOF COILS

Remote box keep electrical equipments of pulse valves out from explosive and dangerous areas. It also prevents electronic equipments from harsh environment.



### ● EX-PROOF FAN & MOTOR

ATEX certificated ex-proof motor and fan are used, which are suitable for different capacity requirements



# CARTRIDGE FILTER



According to DIN EN 60335-2-69 standards, in 0,4 – 2  $\mu$  sized M-Class particles it has a filter efficiency up to 99,9%.



It provides fast and easy replacement; no additional tool is needed.

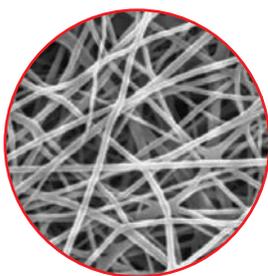


It provides extended use without losing filtration efficiency.

In Bomaksan branded ECO series jet-pulse dust collector, highly efficient nanofiber coated, flame retardant, 80/20 cellulose/synthetic, F9 filter media is used as standard. In ECO+ series dust collectors, ePTFE membrane, 100% synthetic, H13 filter media is used as standard. With its' superior pleating technique it's guaranteed the pleating sizes have been equal and better filter cleaning is ensured. Due to its' plate design, it can be assembled and disassembled easily.

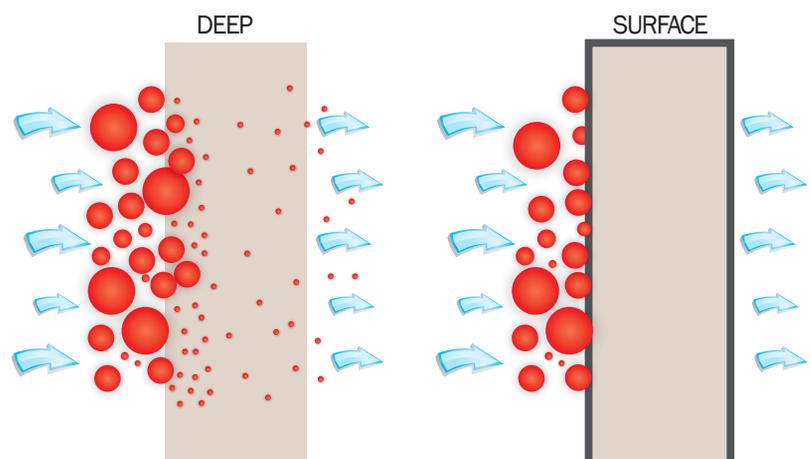
Bomaksan engineers offer the most suitable filter material for all applications and dust types. Some filter materials considering factors such as density of dust, humidity proportion, if the dust has a potential to be loaded statically and so on are as follows;

- PolyMight - 100% non-woven polyester
- PolyMight HO - 100% non-woven polyester + OLEO/HYDROPHOBIC
- PolyMight ALU - 100% non-woven aluminized polyester + ANTISTATIC
- PolyMight 255 PTFE - 100% non-woven polyester + ePTFE Membrane
- PolyMight 265 PTFE - 100% non-woven polyester + ePTFE Membrane
- PolyMight ALU PTFE - 100% non-woven aluminized polyester + ePTFE
- NanoBlend FR - 80% Cellulose 20% Polyester + Nanofiber coated



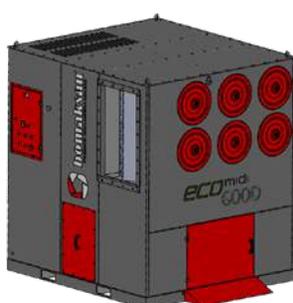
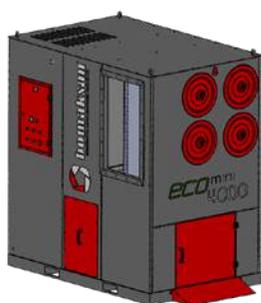
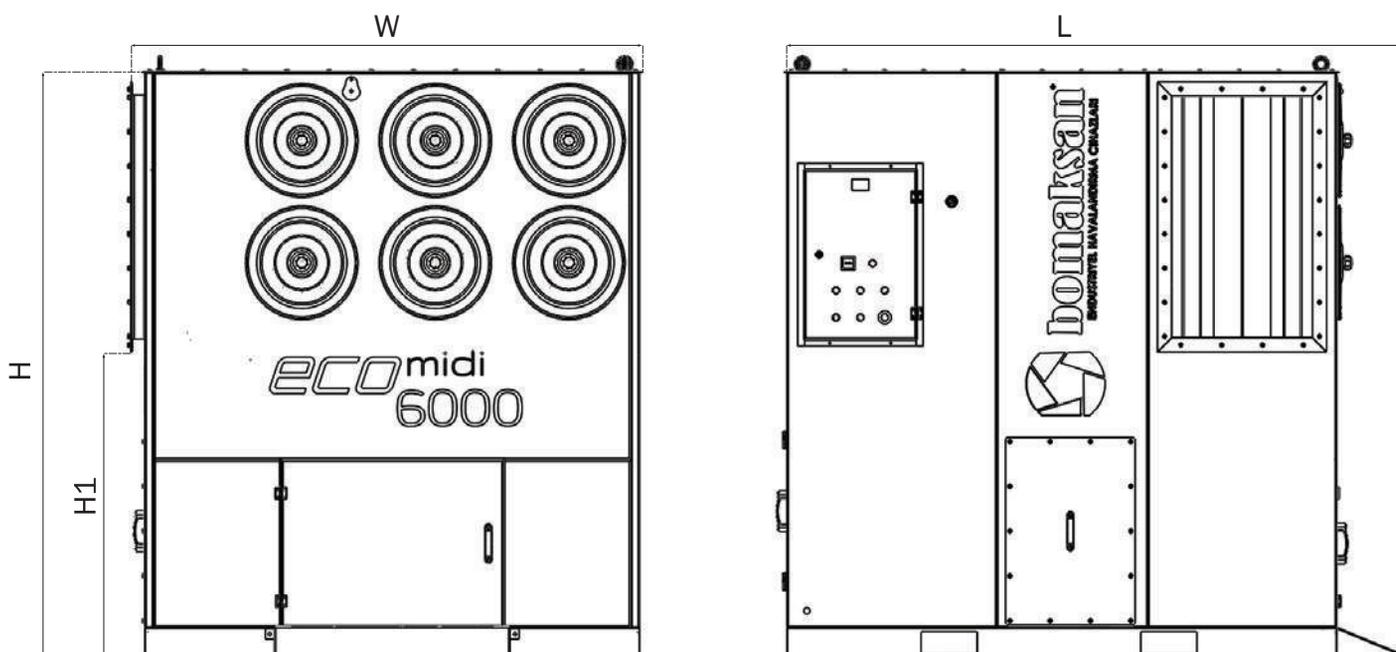
## SURFACE FILTRATION

On the contrary to traditional filters, filters made by non-woven polyester performs the filtration not in the filter but on the surface. Therefore;



- The penetration of dust inside the filter is prevented and filter life is extended
- Less differential pressure is produced and required compressed air consumption for cleaning process is decreased
- Higher filtration efficiency is provided

# TECHNICAL DETAILS



## TECHNICAL SPECIFICATIONS

MODEL	ECOmini 4000	ECOmidi 6000	ECOmaxi 8000	ECOmini 4000+	ECOmidi 6000+	ECOmaxi 8000+
Cartridge Filter (pcs)	4	6	8	4	6	8
Total Filtration Area (m <sup>2</sup> )	80	120	160	40	60	80
Filter Material	NanoBlend FR	NanoBlend FR	NanoBlend FR	ePTFE Membrane	ePTFE Membrane	ePTFE Membrane
Fan Capacity (m <sup>3</sup> /h)	2.000 - 5.000	3.000 - 7.500	4.000 - 10.000	2.000 - 4.300	3.000 - 6.500	4.000 - 8.500
Filtration Velocity (m <sup>3</sup> /m <sup>2</sup> /min)	0,42 - 1,05	0,42 - 1,05	0,42 - 1,05	0,83 - 1,8	0,83 - 1,8	0,83 - 1,8
Fan Pressure (Pa)	3.000	3.000	3.000	3.000	3.000	3.000
Fan Motor Power (kW)	5,5	7,5	11	5,5	7,5	11
Pulse Valve (type - pcs)	1' - 4	1' - 6	1' - 8	1' - 4	1' - 6	1' - 8
Req. Comp. Air (bar)	4-6	4-6	4-6	4-6	4-6	4-6
Power Supply (V ve Hz)	350V 50Hz	350V 50Hz	350V 50Hz	350V 50Hz	350V 50Hz	350V 50Hz
Operating Temperature (°C)	0/80 Dry Air	0/80 Dry Air	0/80 Dry Air	0/80 Dry Air	0/80 Dry Air	0/80 Dry Air
Cabinet Burst Strength (Pa)	Max. 5000	Max. 5000	Max. 5000	Max. 5000	Max. 5000	Max. 5000
DIMENSIONS	ECOmini 4000	ECOmini 6000	ECOmini 8000	ECOmini 4000+	ECOmini 6000+	ECOmini 8000+
Weight (kg)	~925	~1.200	~1.450	~925	~1.200	~1.450
Width (W) (mm)	1.350	1.820	2.295	1.350	1.820	2.295
Length (L) (mm)	1.970	1.970	2.120	1.970	1.970	2.120
Height (H) (mm)	2.100	2.100	2.100	2.100	2.100	2.100
Inlet Height (H1) (mm)	1.150	1.150	1.150	1.150	1.150	1.150

\*Bomaksan reserves the right to change or modify the details in the list at any time.



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Authorized Reseller



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