

The collage features several images related to bag filter manufacturing. One image shows a large cylindrical bag with 'ISO 9001-2015' printed on it. Another shows a circular array of many small filter bags. A third shows a close-up of a filter bag being processed in machinery. A fourth shows a large industrial building with multiple levels and walkways.

# BAG FILTER FACTORY LTD

## ABOUT US

Bag Filter Factory Ltd. was founded in 1997. Today Bag Filter Factory Ltd. is one of the leading companies in the manufacture of removable filter elements.

Our company is certificated in the quality system ISO 9001. In many countries certificate of quality management system according to ISO 9001 is an indicator of competitive ability of the company not only at national but also at international level. This is another sign of the quality of our products, an additional guarantee of reliability



## WHAT

- ◆ Baghouses
- ◆ Filter bags
- ◆ Metal filter cages
- ◆ Pocket filters
- ◆ Filter elements for liquid filtration
- ◆ Sectors for vacuum filters
- ◆ Press filter cloth
- ◆ Flexible expansion joints

## FOR WHOM

- ◆ Flour-grinding, grains and feed milling industries
- ◆ Ore-dressing and processing industry
- ◆ Cement and ferroalloy industries
- ◆ Woodworking industry
- ◆ Glass and porcelain and faience industries
- ◆ Metallurgical industry
- ◆ Food industry
- ◆ Chemical and petrochemical industries
- ◆ Production of carbon black
- ◆ Pharmaceutical industry
- ◆ Tobacco plants
- ◆ Electric power station
- ◆ Waste recycling plants
- ◆ Asphalt concrete production

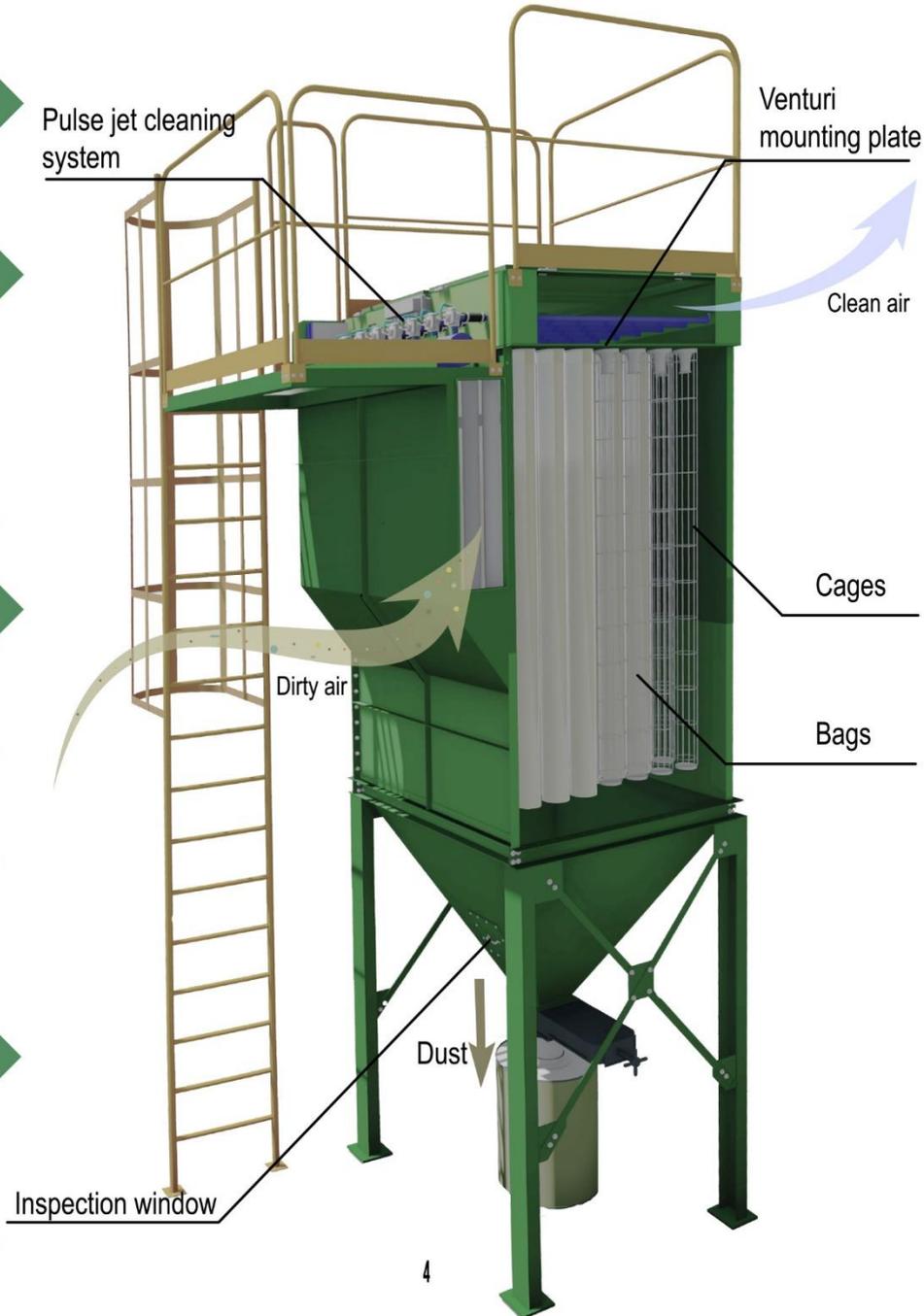




## WHY

- ◆ Modern equipment guarantees quality, reliability and flexibility of supply
- ◆ High quality, reliable, accurate production of the cages provides respect to the filter bags during installation, filtration and regeneration, which ultimately increase the life of the filter bags
- ◆ Big stock of filter cloth and accessories
- ◆ The constant development of new designs and components to improve the quality characteristics of the product
- ◆ The quality management system of our company is certified for compliance with international standart ISO9001:2015
- ◆ Technical supervision (warranty and post warranty maintenance of equipment)
- ◆ Own design bureau and high qualited technical personnel
- ◆ Fast execution of orders
- ◆ Geographic location

# PRODUCTION: BFF BAGHOUSE



# PRODUCTION: BAGHOUSE DUST COLLECTORS

## BFF BAGHOUSE

Bag Filter Factory LLC - is producer and developer of high-efficiency gas-cleaning equipment intended for technological and sanitary air purification in industry and agriculture from broad list of toxic impurities, present as gases, vapors, and aerosols.

### Capabilities:

Inlet dust concentration, g/m	up to 10
Outlet dust concentration, mg/m	up to 5
Air blowing pressure, MPa	0,4-0,6
Off-gas temperature, C	up to 260



## BFF BAGHOUSES ARE USED

- cement and ferroalloy industries
- metallurgical industry
- chemical and petrochemical industries
- ore-dressing and processing industry
- woodworking industry
- tobacco plants
- flour-grinding, grains and feed milling industries
- pharmaceutical industry

## IF YOU PLAN TO USE BAGHOUSE DUST COLLECTORS

- 3D planning of dust collectors with integration into layout and surroundings
- design
- supervision installation
- verifying the utilization conditions under which the filtration is being done
- commissioning

## IF YOU ALREADY USE BAGHOUSE DUST COLLECTORS

- inspecting all system elements conditions of the existing filter baghouses
- replacing worn-out filter bags, cages and accessories
- specialists' on-site visiting
- evaluating of engineering process
- reengineering of outmoded and subject to overhaul filter baghouses

## KEY FEATURES & ADVANTAGES OF THE BFF BAGHOUSE

- precise gas flow distribution
- minimum compressed air flow efficient regeneration system
- increasing of air flow volume at by Venturi
- bespoke automation solutions
- simple operation and accessible maintenance
- increasing of life-cycle by using components of leading producers



## PRODUCTION: BAGS

Filter bag is an element of bag filter, which is worn down the most and requires periodical replacement. The material for the filter bag is selected depending on the operating conditions of the Bag filter.

Safe operation of bag filters essentially depends on the quality of bag production because during operation they are exposed to multiple regeneration cycles, i.e. effects of different rapping mechanisms, impact actions and impulses of the compressed air or reverse purge. Therefore the reliability can be provided both with high-quality specification of the used filter materials and related equipment for their production.

The filter bag consists of top and bottom parts, the top side is open and often includes various additional fixing parts. They may include spring or metal rings, other sealing elements. The bottom side can be both open and closed (with a sewed bottom or jotted).

### PULSE JET

- use wire cages, which are mounted inside of filter bag;
- the diameter of filter bag (standard: 100-160mm);
- filter bag length is up to 9 meters;
- cleaning of the filter bags with a stream of compressed air, which is supplied to the inside of filter bag;
- the filter materials:
  - a. fiberglass with area weight 540-850 g/m<sup>2</sup>;
  - b. the non-woven felt with area weight 400-800 g/m<sup>2</sup>:
    - polyphenylsulfide (PPS),
    - polypropylene (PP),
    - polyester (PE),
    - polyamide (PA),
    - polyimide (PI),
    - PTFE,
    - meta-aramid (NX).



## PRODUCTION: BAGS

Materials which are used to produce bag filters ensure:

- ◆ purification efficiency up to 99,99%
- ◆ ability to catch fine-dispersed dust with the size from 0,3 micrometer
- ◆ high wear resistance and resistance to aggressive environments due to special impregnations, filter cages, etc.
- ◆ use at temperature up to 270 C

### REVERSE AIR

- the manufacturing of various configurations of filter bags according to the drawings or filled in the questionnaires of the Customer;
- anticollapse rings are sewed along the length of filter bag;
- the cleaning of filter bags by reverse flow of air from outside of filter bag;
- the filter materials: fiberglass, polyester fabric area with weight 300-500 g/m<sup>2</sup>.



When manufacturing the special attention is paid to the connecting element – a filter bag longitudinal seam which is done by a triple lock-type stitch that provides 100 % reliability since such a seam can bear greater loads than the filtering fabric itself.

## PRODUCTION: CAGES

Its separate elements for bag filters of standard construction, as well as based on the individual customer's drafts.

Metal frames (supporting elements) are designed to give and hold the optimum shape of filter bags during filtration and regeneration, which is necessary to ensure stable workflow. Filter cage is a welded structure made of metal wire with additional elements:

- the top ring (flange)
- a bottom
- the Venturi tube (the ejecting nozzle)
- lock.



## CAGES: MATERIALS & TREATMENTS

- |                    |               |
|--------------------|---------------|
| ◆ steel 3          | ◆ galvanizing |
| ◆ low-alloy steels | ◆ painting    |
| ◆ stainless steel  | ◆ coppering   |

## VENTURI TUBE

By agreement with the customer filter cage can be equipped with a nozzle (Venturi tube). Nozzle advantages:

- it directs compressed air impulse along the axis of the bag which prevents mechanical damage of the filter fabric;
- nozzle design (due to the differential diameter) increases the speed of the compressed air impulse.

The above advantages provide the improved regeneration of filter bags and prolong their service life.



## FILTER POCKET

Filter pockets are used for capturing of dust, cement, gypsum, flour and all other industrial suspensions, treating of process gases and process air. Filter pockets are characterized by a long service life, provide the best filtration results at low pressure loss, have very good regeneration characteristics.



## FILTER SECTORS

Are used for liquid filtration on the complexes of the mining industry; ore-dressing and processing industry; glass and porcelain and faience industries.



## PRESS FILTER CLOTH

Are used in the processes of filtration of liquid heterogeneous systems (suspensions, slime, pulps) at the enterprises of chemical, mining, metallurgical, pharmaceutical, food industries, while purification of sewage and other communal services' branches.



## FLEXIBLE EXPANSION JOINTS

Are vital components in most industrial plants. They are installed as flexible connections in duct and piping systems to take up or compensate for thermal expansion, vibration and/or misalignment. Fabric expansion joints are commonly used in power plants, FGD, cement, incineration, pulp & paper, petrochemical, metal fabrication, etc.

Dimensions: according to customer specifications  
Temperature range: up to 600 °C  
Pressure range: up to 0,1 bar



# FABRIC EXPANSION JOINTS

SELECTION OF THE RIGHT FABRIC EXPANSION JOINT DEPENDS ON A VARIETY OF FACTORS WHICH VARY FROM APPLICATION TO APPLICATION.

BY COMBINING DIFFERENT MATERIALS AND TAKING:

- THERMAL,
- CHEMICAL,
- MECHANICAL

RESISTANCE INTO CONSIDERATION, AS WELL AS THE FATIGUE PROPERTIES OF THE MATERIALS, OUR ENGINEERS DEVELOP OPTIMAL SOLUTIONS THAT PROVIDE LONG-TERM RELIABILITY TO CUSTOMERS IN VARIOUS INDUSTRIES.

FABRIC EXPANSION JOINTS ARE ABLE TO COMPENSATE FOR MOVEMENTS IN SEVERAL DIRECTIONS SIMULTANEOUSLY AND HAVE ALMOST NO REACTIVE FORCE. THEY REQUIRE LITTLE SPACE FOR INSTALLATION AND ARE EASY TO ADAPT TO PHYSICAL CONDITIONS.



FABRIC EXPANSION JOINTS ARE VITAL COMPONENTS IN MOST INDUSTRIAL PLANTS. THEY ARE INSTALLED AS FLEXIBLE CONNECTIONS IN DUCT AND PIPING SYSTEMS TO TAKE UP OR COMPENSATE FOR THERMAL EXPANSION, VIBRATION AND/OR MISALIGNMENT.

FABRIC EXPANSION JOINTS ARE DESIGNED TO RELIEVE STRESS ON PIPING SYSTEMS AND DUCTS, TO ABSORB AXIAL, TRANSVERSE AND TORSIONAL MOVEMENTS.



## FABRIC EXPANSION JOINTS ARE COMMONLY USED IN

POWER PLANTS

FGD

CEMENT

INCINERATION

PULP & PAPER

PETROCHEMICAL

METAL FABRICATION

THEY ARE EASILY REPAIRABLE AND INSTALLABLE, VIBRATION DAMPENING AND SOUND ATTENUATION. THEY POSSESS EXCELLENT CORROSION AND CHEMICAL RESISTANCE. BFF'S FABRIC EXPANSION JOINTS HAVE A HIGH CYCLE LIFE.

## FABRIC EXPANSION JOINT OPERATING LIMITS

DIMENSIONS

ACCORDING TO CUSTOMER SPECIFICATIONS

TEMPERATURE RANGE

UP TO 600 °C

PRESSURE RANGE

UP TO 0,1 BAR



# PRODUCTION: DISCHARGE CONE

## DISCHARGE CONE BFF-1

The main difference between the BFF-1 dust suppression system is that it is passive, that means that it does not require any electrical or pneumatic rotating mechanisms. At the same time its efficiency is much higher than the active dust suppression systems existing on the market.

The design of the cone is built in such a way that during unloading the bulk material is pressed against the walls of the cone, and the dust continues to fall along with the material, but inside the flow. Thus, dust does not separate from the material and does not pollute the atmosphere.

The system ensures the cleanliness of the enterprise.



Video of cone operation on a real object

## DISCHARGE CONE BFF-1 ARE USED

- cement industries
- metallurgical industry
- chemical industries
- flour-grinding, grains and feed milling industries

## ADDITIONAL INFORMATION

Power  
Does not require power supply and special service personnel

Accommodation  
It is usually placed directly above the place of loading of bulk materials (for example, for loading ships, road or railway transport)

## DESCRIPTION

Unloading cone BFF-1 (with dust suppression) solves the problem of excessive dust formation during transfer / loading of dry bulk materials.

Scope of application: enterprises of the mining, cement, construction industries; elevators, grain dryers, feed mills, etc.



## MATERIALS

- ◆ Polyester (PE)
- ◆ Polyacrylonitrile – homopolymer (AC)
- ◆ Polypropylene (PP)
- ◆ Polyimide (PI)
- ◆ Polyamide (PA)
- ◆ m-aramid (NX, NO)
- ◆ Polyphenylenesulfide (PPS)
- ◆ Polytetrafluoroethylene (PTFE)
- ◆ Fiberglass fabric
- ◆ Polyacrylonitrile–homopolymer+poly-  
ester (AC+PE)



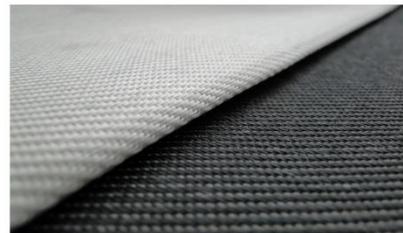
## TREATMENTS

- ◆ Water- and oil-repellent
- ◆ Wear resistant
- ◆ Anti-abrasive
- ◆ Acid proof
- ◆ Alkali-resistant
- ◆ PTFE – chemical resistant



## FINISHING

- ◆ Glazing (for the filtration of fine, abrasive dust)
- ◆ Antistatic (stainless steel fiber or carbon fiber are used), preventing the adhesion of dust
- ◆ Microporous surface coating (decrease of dust adherence and improvement of filtration efficiency up to 99.99%)
- ◆ Spark-quenching
- ◆ PTFE membrane (filtration of fine-dispersed dust, it has plain water-repellent and chemical-resistant surface)



# REFERENCES



Araratcement, Armenia



Zaporozhye Titanium&Magnesium Combine



Pobuzhsky ferronickel integrated works Ltd



JSC Moldova Steel Works



ЗАПОРОЖСТАЛЬ





**BAG FILTER FACTORY LLC**  
39630 UKRAINE, POLTAVA REG.,  
KREMENCHUK, YARMARKOVA 5D,  
[WWW.BFF.COM.UA](http://WWW.BFF.COM.UA)  
+38 (067) 530-42-85  
+38 (093) 374-54-53  
[FRF@FRF.COM.UA](mailto:FRF@FRF.COM.UA)