WE MAKE THE WORLD CLEANER

Application not only for the foundry, metallurgical, foodstuffs, chemical, woodprocessing industries.

Industrial filtration, capturing and separation of solid particles, droplets and aerosols, and gas impurities.

### **DUST FILTERSJET / JETT**

TYPE JET – FLAT FILTRATION ELEMENTS

TYPE JETT – CIRCULAR FILTRATION ELEMENTS









WE MAKE THE WORLD CLEANER

Application not only for the foundry, metallurgical, foodstuffs, chemical, woodprocessing industries.

Industrial filtration, capturing and separation of solid particles, droplets and aerosols, and gas impurities.

### JET - DESCRIPTION

This is a filtration device with horizontally positioned, flat filter elements, with pulse regeneration by pressured air. The extracted, polluted air mass first enters the pre-separation chamber of the casing of the filter. Here, the larger and heavier particles are separated, where they fall into collection cones-bins. All of the separated dust is taken away from the cones-bins by devices like rotational feeders, pneumatic and gravitational drops, screw conveyors, etc. The separated dust is then left to settle in ASP containers, big-bags,

high-volume containers or the smaller quantities in small collection

containers.

In the case of JET, there is access to the filtration medium from the front side of the equipment, through the service door. Replacement of the is possible either from the service platform of the filter or from a separate mobile platform, or from a ladder or scaffolding.





PRO – FILTR Brno, s.r.o. V pískách 400/20, 620 00 Brno, CZ tel..: + 420 606 437 179 profiltr@profiltr.cz, www.profiltr.cz



WE MAKE THE WORLD CLEANER

Application not only for the foundry, metallurgical, foodstuffs, chemical, woodprocessing industries.

Industrial filtration, capturing and separation of solid particles, droplets and aerosols, and gas impurities.

#### **JETT - DESCRIPTION**

This is a filtration device with **vertically** positioned filtration tubes, with pulse regeneration by pressured air. The extracted, polluted air mass first enters the filter up through the bottom directly into the collection cone-bin, which, simultaneously,

acts as a gravity chamber. Once the air mass enters the cone-bin, the air-flow slows down, therefore separating the larger and heavier particles. The air mass continues to flow upward through the filtration tube, where the primary separation of the polluting substances takes place. The separated dust, in the case of JETT, is taken away mostly

by a screw conveyor, directly to the ASP container or big-bag.

The access to the filtration tubes is carried out directly from the roof, and, therefore, no service platform or scaffolding is necessary. Just like in the case of JET, the JETT is suitable for indoor as well as outdoor workplaces.





PRO – FILTR Brno, s.r.o. V pískách 400/20, 620 00 Brno, CZ tel..: + 420 606 437 179 profiltr@profiltr.cz, www.profiltr.cz

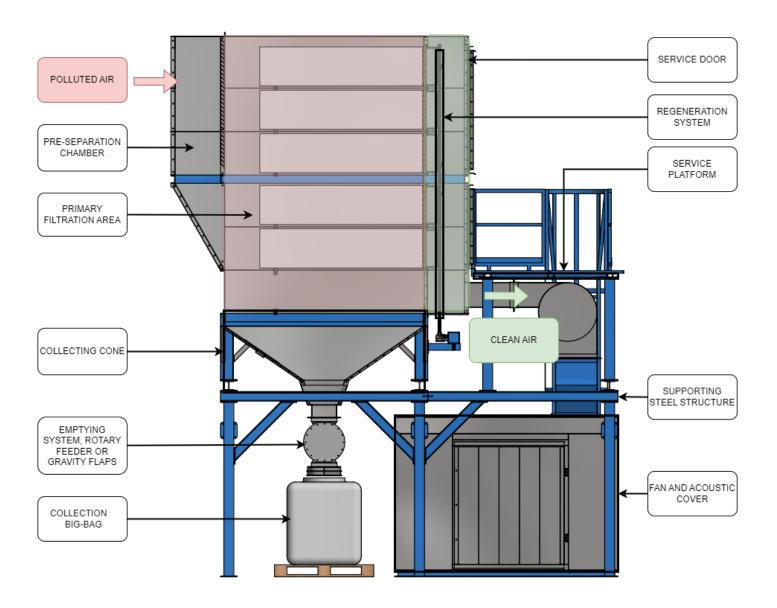




Application not only for the foundry, metallurgical, foodstuffs, chemical, woodprocessing industries.

Industrial filtration, capturing and separation of solid particles, droplets and aerosols, and gas impurities.

#### JET DIAGRAM





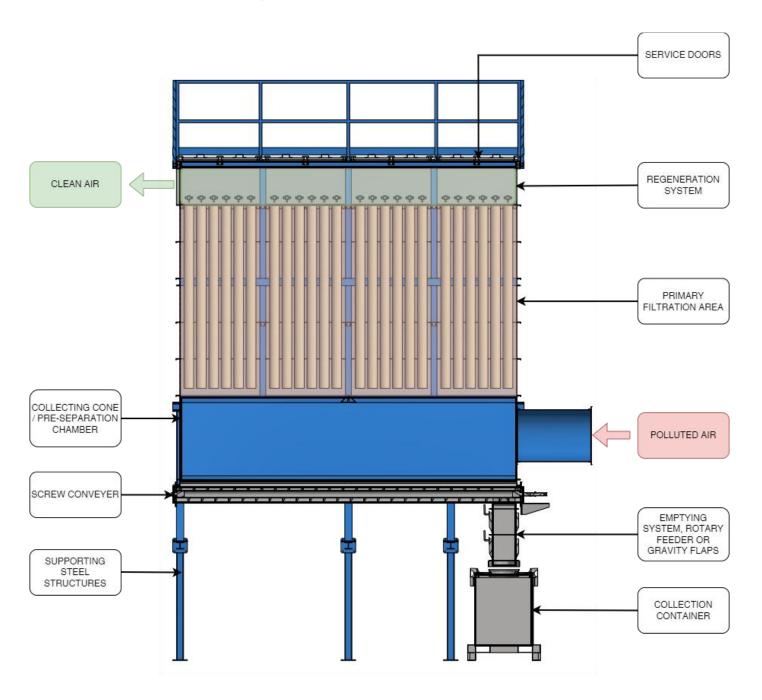




Application not only for the foundry, metallurgical, foodstuffs, chemical, woodprocessing industries.

Industrial filtration, capturing and separation of solid particles, droplets and aerosols, and gas impurities.

#### **JETT DIAGRAM**









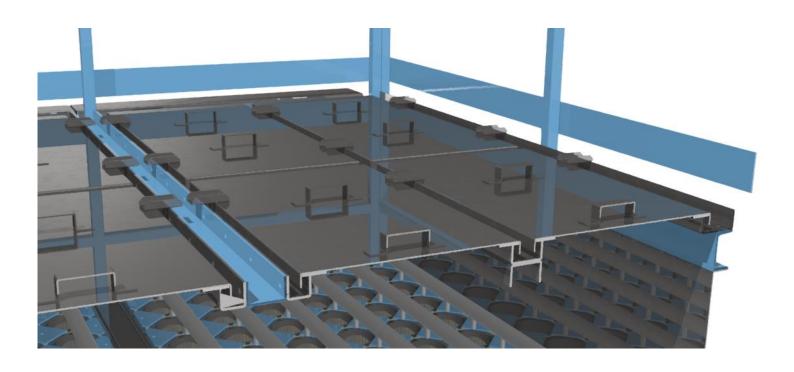
Application not only for the foundry, metallurgical, foodstuffs, chemical, woodprocessing industries.

Industrial filtration, capturing and separation of solid particles, droplets and aerosols, and gas impurities.

#### SERVICE DOOR DIAGRAM

Entry into the filter for cases, such as filter replacement of the filtration medium is possible through the service door. As is mentioned above, the JETT service door is positioned directly on the roof of the filter, whereas the JET has a standard wing door at the front. In both cases, the door is pushed into the frame through the sealing with the aid of pressure plates or screws directly into the frame.

The JETT service entrance has a raised edge to prevent water from entering. Furthermore, the roof on the edges is flat, so any water can flow away freely.







WE MAKE THE WORLD CLEANER

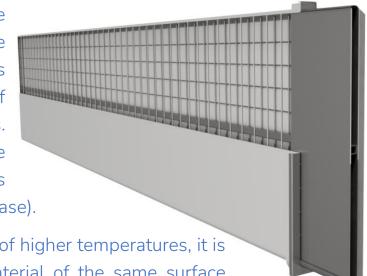
Application not only for the foundry, metallurgical, foodstuffs, chemical, woodprocessing industries.

Industrial filtration, capturing and separation of solid particles, droplets and aerosols, and gas impurities.

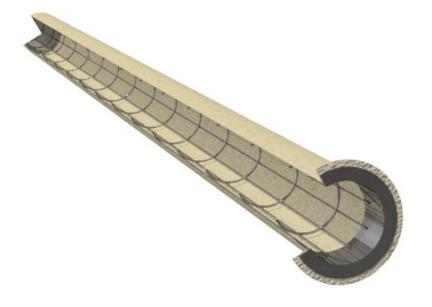
#### FILTER ELEMENT DIAGRAM

The filter element, be it flat tiles in the case of JET or the JETT filtration hose, is always composed of two parts - a supporting wire construction (basket) and the actual filtration medium (i.e. tile or hose).

polyester filtration material, with a surface density of 550 g/m². This medium is suitable for the extraction and filtration of all of the above-mentioned industries. Anti-static filters can also be used. The maximum operating temperature of this medium is 130°C (150°C in the extreme case).



If it is necessary to extract air mass of higher temperatures, it is possible to use the resistant **aramid** material of the same surface density. The maximum operating temperature of this medium is 200 °C (230 °C in the extreme case).









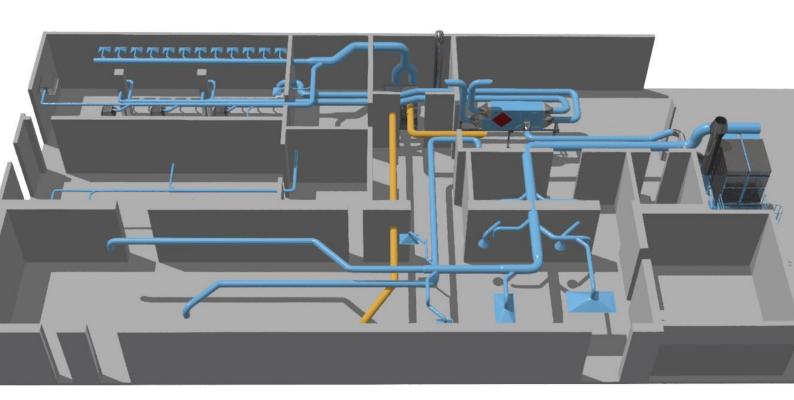
Application not only for the foundry, metallurgical, foodstuffs, chemical, woodprocessing industries.

Industrial filtration, capturing and separation of solid particles, droplets and aerosols, and gas impurities.

#### THE FOUNDRY INDUSTRY

The working environment in the foundry industry is often highly polluted - mainly with smoke and dust, as a result of the melting of metal/steel, its casting into moulds and the successive flaming, extraction from the moulds, surface improvement, and the regeneration of the sand..

The system for central extraction using the JET or JETT system is suitable for all these processes, where on such system can clean various kinds of processes simultaneously, thereby ensuring a clean working environment in the entire plant.







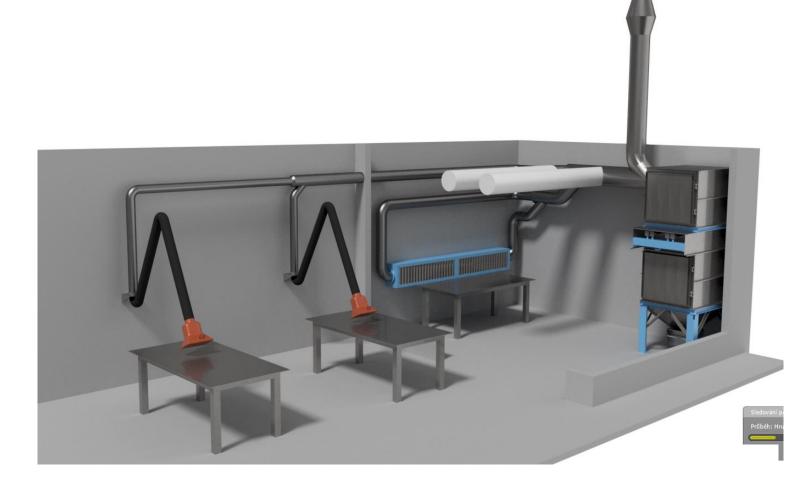
WE MAKE THE WORLD CLEANER

Application not only for the foundry, metallurgical, foodstuffs, chemical, woodprocessing industries.
Industrial filtration, capturing and separation of solid particles, droplets and aerosols, and gas impurities.

#### WELDING

JET and JETT are suitable also for use in welding shops. This process does not create dust but there is smoke with some greasy content that is dangerous if inhaled.

The welding shop can be exhausted in several ways, depending on the need of the customer. In an ordinary welding shop, the smoke can be extracted with the aid of arms that can be positioned by the operator. In the case of larger welding shops or automated welding lines, it is more convenient to use the PUSH-PULL vacuum system, where the working area is enclosed between two parallel ducts, where one extracts the polluted air and the other returns the filtered air mass back into the workshop, opposite the suction duct, thus creating a flow that captures the welding smoke.









Application not only for the foundry, metallurgical, foodstuffs, chemical, woodprocessing industries. Industrial filtration, capturing and separation of solid particles, droplets and aerosols, and gas impurities.

### **SURFACE IMPROVEMENT**

The surface of components and products can be improved using various methods. Whether it is sand blasting, grinding, shot blasting or polishing, these processes always create various amounts of dust particles of different sizes, that pollute the air in the working environment. In such cases, it is therefore advisable for operators to use protective or respirator. The dust, however, still remains in the workplace.

That is why these particles should be extracted upon their removal from the casting or component being processed via a suction tube directly in the workplace. This ensures a safe working environment for the operator and, at the same time, a clean workshop.

