



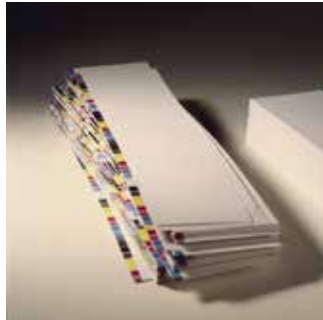
# Venturi Systems

**Efficient systems for conveying of  
light materials in the paper and  
plastic industries**

### **Kongskilde Inline Venturi System (KIV)**

The pneumatic transportation system is extremely suitable for conveying of various light materials in paper and plastic industries as well as in packaging plants. The system is easy for installation as the Venturi and blower can be installed virtually anywhere in the system. The system conveys the induced materials extremely gently with no harm or damage as the material has no contact with moving parts.

Efficiency of the system is exceptionally high with pipe diameters up to 400 mm and lengths of transportation as high as 100 m for system with a single Venturi tube. Several Venturi systems can be sequenced one after another that will allow the transportation distance to extend virtually unlimited.



### **Kongskilde ITF Venturi**

This simple transportation system is suitable to convey many types of waste products and edge trim in the paper and plastic industries.

The system is easy to install as both the Venturi and blower are minimal in size. It can be placed nearby the location where trim originates. The material is picked up and conveyed very gently as it comes into contact with no moving parts during transportation.

The application is operated in an open loop, i.e. without air feedback, so the inducing air is only slightly heated when as it passes through the blower.

The unit is highly efficient with pipe diameters up to 200 mm and transportation lengths up to 100 m.

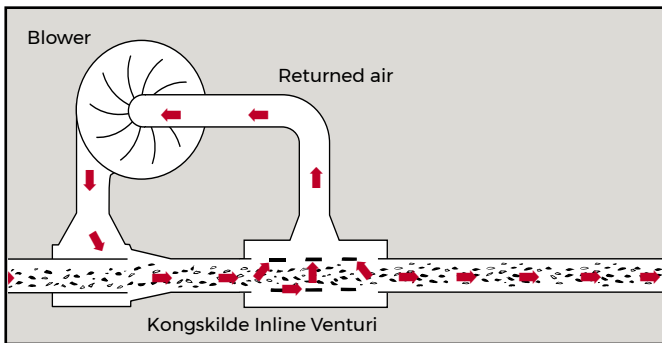
A typical diagram of the system can be found on the other side of this leaflet.



### Kongskilde Inline Venturi

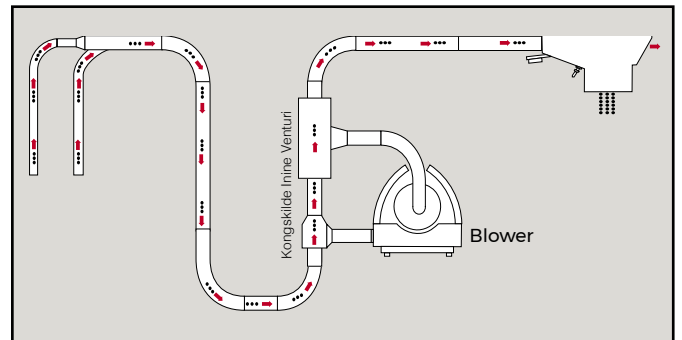
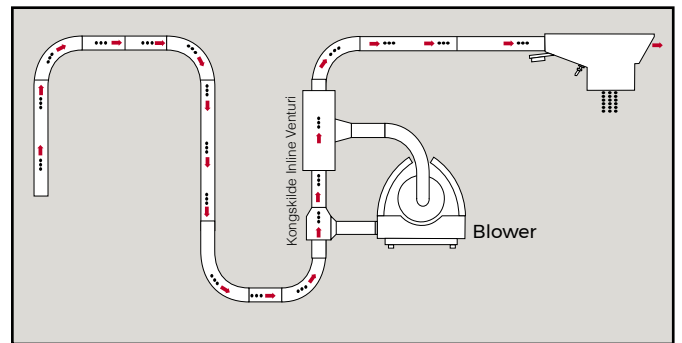
- Material has no contact with moving parts while being conveyed
- Unsurpassed flexibility as the system with Venturi tubes can be installed virtually everywhere
- The same pipe cross section both upstream and downstream the Venturi tube
- The pneumatic circuit with the Venturi tube is operated in a closed loop with full feedback of induction air to the blower. Thus, only a small amount of air is necessary to pick up the conveyed material and set it in motion. Air inlets and air filters with low diameters can be applied
- A number of circuits with Venturi tubes can be applied to increase the vacuum force and extend the transportation path to the required length
- Flow velocity of air can be altered by appropriate adjustments to the Venturi

### Kongskilde Inline Venturi System



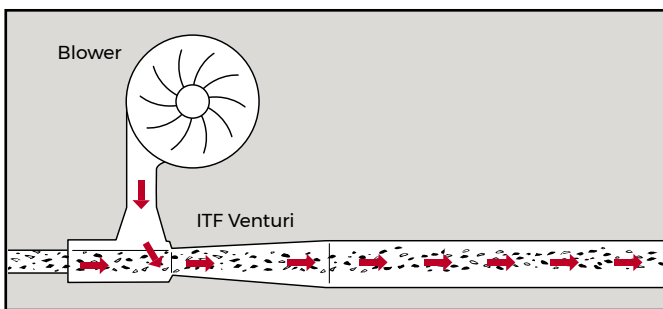
The system is designed to convey materials via a continuous arrangement of pipes from the suction point to the outlet. Pipe diameters are the same along the entire transportation path.

However, the cross-section of branch pipes is reduced if the system is designed with several pick-up points. The induced air is delivered by a blower and then flows through the Venturi. The overall volume of air in the pipeline is reduced as the air is recirculated back to the blower via the Air Return. Because of the low volume of conveying air, smaller diameter pipes and smaller air filters can be utilized.





### Kongskilde ITF Venturi

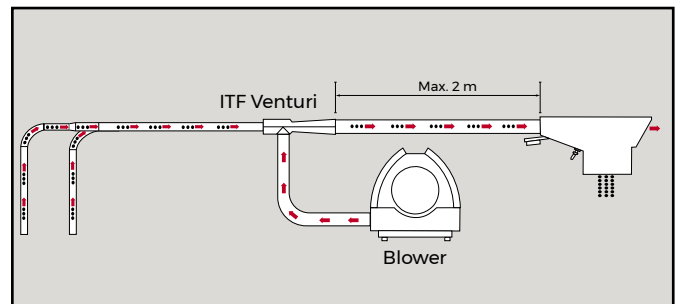
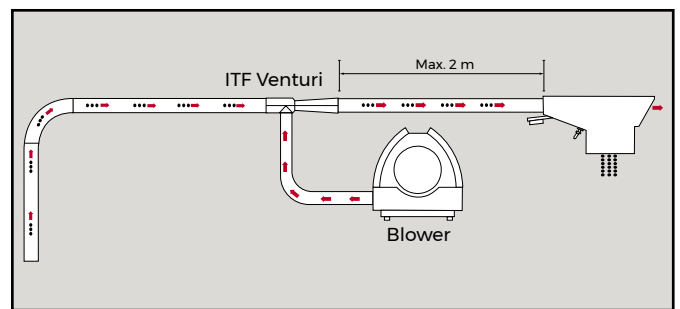


With this system the Venturi is installed as close as possible to the discharge point for the waste material. Therefore the ITF system requires minimal floor space in the production, where the material is picked up into the ITF system. The diameter of the pipes used for the system ranges from 80mm to 200mm before the Venturi. After the Venturi the pipe length must be max. 2 m, and with a larger pipe diameter than the pipe before the Venturi. The system can be designed with several pick-up points. The conveying air is supplied by a blower through the Venturi system ensuring a high conveying speed through the entire system. Due to the high air speed, systems for separation of the conveying air must be established at the discharge point.

**Kongskilde offers custom designed pneumatic transportation systems to efficiently meet customers needs. Please contact us to learn more about our solutions.**

### Kongskilde ITF Venturi

- Material has no contact with moving parts while being conveyed
- Easy and simple assembly and operation
- Diameter of the conveying pipe is expanded downstream from the Venturi tube
- The system takes up minimal floor space
- Perfect for conveying of thin films
- Air in the conveying pipe is only slightly heated as it passes the blower only once and then is released with no feedback to the blower
- Recommended for conveying of dust-free materials



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