

# JACOB TUBING SYSTEMS IN THE PACKAGING INDUSTRY



## ■ THE PROJECT

The Sealed Air Corporation – specializing in packaging systems and product protection – has all the latest machinery and equipment. Their quest for new production units for packaging films lead to producing a new generation of vacuum packaging films for food products. Machines for cutting, welding or coating with a special anti-stick powder are particularly prone to generating industrial dust, which is extracted from work processes through a system of tubing. The dust filtration specialists IMEX Filtertechnika Kft. based in Sopron, Hungary were tasked with engineering, delivering and installing the entire plant. The tubing system was delivered by Jacob.

## ■ EXECUTION

Jacob supported IMEX Filtertechnika beginning at the planning stage. CAD models of the components required for the tubing system were supplied for the design process in a 3D environment. The Jacob tubing system met the stringent quality standards expected when it comes to practical use: leak-tightness in particular is important in this environment. Since there was a risk of explosion through the industrial dust becoming statically charged and igniting due to sparks, the system had to be extremely safe and certified as explosion shock-resistant (to 3 bar). But it was also the fast installation and maintenance friendliness of the QUICK CONNECT principle that made their decision to opt for the Jacob tubing system.

## ■ THE UNIQUE ASPECT

The Jacob modular tubing system in diameters from DN 100 mm (4") to DN 400 mm (16") was used for the entire exhaust air line. In the event of becoming statically charged, JACOB's innovative earthing bridge was used to ensure that the discharging capacity of the tubing system was afforded as efficiently as possible. This patented and EXAM-certified safety element is simply installed onto the pull-ring connection. Even as a retrofit job, only a few easy steps are needed to ground the plant without the need for any welding or for interrupting plant operation. The dedusting plant is designed to have extra explosion relief between the filters and a non-return valve fitted in the tubing system. The tube elements were therefore designed in part with a loose flange connection. The components used in the modular tubing system in 1.5 mm (16 gauge) and 2 mm (14 gauge) wall thicknesses range from tubes and special fittings, such as bends, forks, segments and cone pieces, right up to manually operated throttle valves and shut-off valves in a powder-coated finish. These system components were assembled quickly and easily with pull-rings to give a sturdy construction.

**The modular principle combines custom design and easy assembly.**



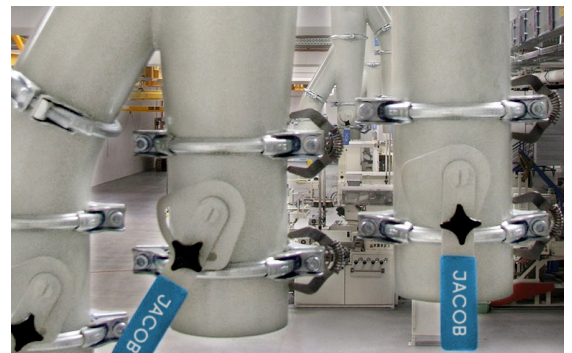
**The JACOB tubing system stands for reliability thanks to its leak-tightness and pressure surge resistance.**



## ■ THE CUSTOMER

The Sealed Air Corporation is a globally active manufacturer of packaging materials and systems for protecting and presenting products, and for packaging food products in industrial and consumer markets. Products manufactured at the Hungarian factory in Újhartyán include films for vacuum food packaging.

**Installation-friendly pull-ring connections make for easy maintenance and cleaning.**



**For the most exacting requirements:**

