

# JACOB TUBING SYSTEMS FOR SÜDZUCKER



## ■ THE PROJECT

For Südzucker, JACOB has worked in collaboration with its distributor, mill and silo construction specialist Kastenmüller, to develop a custom permanent distribution system. The task: Distributing granulated sugar that is moved through a screw conveyor evenly across the twelve outlets on a sifting machine. Every conveying line must offer the option to be switched off separately and the system interior must be approved for ATEX zone 20. All components have to meet FDA food standards and the European specifications of EC 1935/2004 regulations. Gaskets must be detectable by metal detectors to ensure absolute product purity.

## ■ EXECUTION

A screw conveyor transports granulated sugar to a JACOB metering distributor that dispenses the sugar evenly across twelve outlets with a diameter of 300 mm leading to a sifting machine. At each outlet, JACOB design engineers installed a pneumatic regulator gate, which can be used to cut off the sugar flow. The order comprised a total of two metering distributors with regulator gates and a tubing system. All components (metering distributors, regulator gates, segments and gaskets) come from the JACOB FOOD GRADE range and DETECTABLE DESIGN line.

## ■ THE UNIQUE ASPECT

Due to use in the food sector, only products from the FOOD GRADE line, which includes the DETECTABLE DESIGN line, were used. In this market segment, it is the first product family to comply with both the American FDA food standards and the strict European Regulation EC 1935/2004. As a modular tubing system, the JACOB FOOD GRADE line features over 3,000 products. The tubing is made of high-quality 304 stainless steel, while the sealing materials consist of silicone that can be detected by metal detectors. Each individual product component – from the steel, to the adhesive through to the sealing materials and screws – was inspected right down to the last detail. The blue U-shaped gasket which was used between the tubing components in this product does not belong to the FOOD GRADE line, but to our new DETECTABLE DESIGN line. It consists of silicone, which we have fused with miniscule metallic particles, rendering it detectable by metal detectors. Should a ring or just parts of one find their way into production, these foreign bodies can be eliminated reliably.

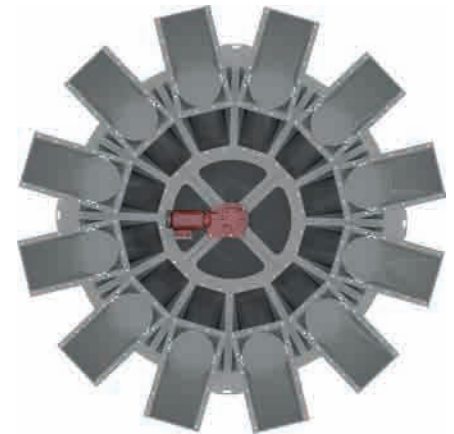
## ■ THE CUSTOMER

The company Südzucker operates with multiple locations in Germany. The Plattling factory, commissioned in 1961, is one of the largest sugar factories within the country. Within a season, the 180 to 200 employees at the Plattling location process around 16,000 tons of beets per day. Südzucker has always been a pioneer in state-of-the-art technologies, so it's hardly surprising that Südzucker relies on JACOB FOOD GRADE and JACOB DETECTABLE DESIGN to ensure maximum product purity and quality for its customers.

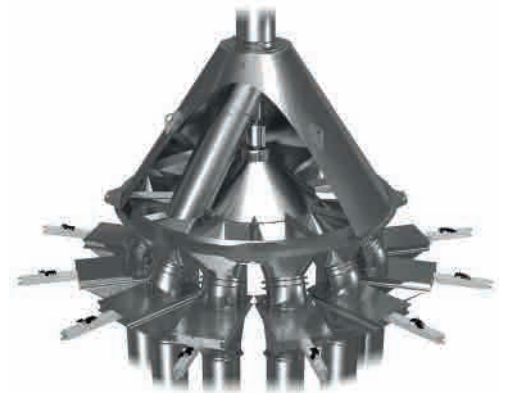
**Gaskets detectable by metal detectors ensure maximum product purity.**



**Homogeneous, uniform product distribution across all 12 outlets.**



**Complete flexibility for connections and cut-off thanks to our modular system.**



**For the highest standards:  
JACOB FOOD GRADE and  
JACOB DETECTABLE DESIGN**



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