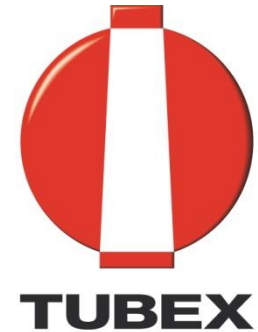


# Application Success Stories

## TUBEX Aluminum aerosol cans



Reproducibility

Usability

Efficiency

# Application Success Stories

## Technical Data

### Parts:

Internal coating of aluminum aerosol cans

### Part Dimension:

Ø 45 mm

### Principle of conveying:

Continuous conveying / appr. 180 pcs / min

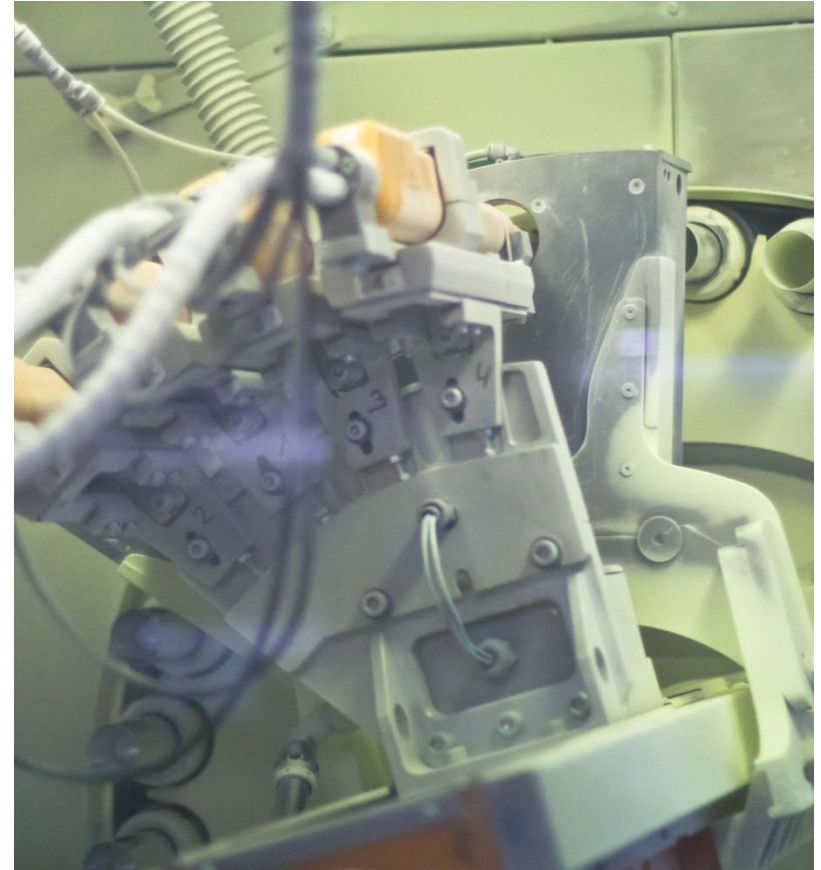
### Scope of Delivery:

4 x OptiGun GA02 automatic powder gun  
including extension nozzles

1 x OptiCenter incl. fresh powder supply

1 x Powder recovery system

1 x Rotation sieve machine with continuous  
debris removal



# Application Success Stories



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Based in the German town of Rangendingen, the packaging specialist TUBEX is a leading manufacturer of aluminum aerosol cans, which it coats on the inside to protect the contents. If solvent-based paints are used, the exhaust air needs to undergo thermal cleaning. But given the high investment costs, rising energy prices, and the maintenance costs involved, this is not really a cost-effective option. Also, a post-combustion system starts to approach the limits of its capacity within just a few years as sales figures increase. In powder coating TUBEX discovered an alternative which does not require thermal

cleaning and takes up very little space. TUBEX's initial trials with powder coating date back to 2003, with the focus on machine technology. Various system manufacturers made their products available during the development phase. Initial trials failed due to the complex configuration involved, the problems integrating the technology into existing production systems, but mainly the need for long-term stability as regards the production process. The major challenge was the extremely short trigger frequency required for the guns in order to ensure the permanent activation and deactivation of the powder flow remained reliable during the coating process. Ultimately, it was Gema who offered the best

solution. The first test was immediately successful, and the system proved relatively easy to use. Shortly after the trials, TUBEX started production with a small Gema system and processed a number of customer orders for bag-in-can containers. A thin-coating application was subsequently developed, and the first powder-coated cans produced on an industrial scale were delivered in 2009. OptiStar controls and the proven GA02 powder guns with extensions are at the heart of every system. Based on continuous operation, they are able to achieve coating thicknesses of around 25  $\mu\text{m}$  at high speeds.