



**BLUMENBECKER**

WE DELIVER SOLUTIONS

**AUTOMATION TECHNOLOGY** ENGINEERING INDUSTRIAL TRADE INDUSTRIAL SERVICE TECHNICS

REFERENCE

## Switchgear construction | Chemical industry

Engineering, switchgear production and electrical fittings for ventilation and extraction systems



### CLIENT



Axalta Coating Systems  
Germany GmbH  
Christbusch 25  
42285 Wuppertal

### PROJECT COMPLETED BY

Blumenbecker  
Automatisierungstechnik GmbH  
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### COMMISSION

Planning and production of switchgear for ventilation and extraction systems, including turnkey electrical installations for a new production facility in Wuppertal.

Project execution: 2014 / 2015

# ENGINEERING, SWITCHGEAR PRODUCTION AND INSTALLATION

From consulting and project planning to design and software development and all the way to switchgear production, electrical installation and commissioning, Blumenbecker is your one-stop shop for all automation services. Switchgear units are manufactured at our state-of-the-art production plant in Beckum using the engineering design tool EPLAN. We operate an independent testing facility where our highly qualified staff can conduct tests in line with all relevant standards and regulations, including explosion-risk categories.

## AXALTA COATING SYSTEMS GERMANY GMBH

Axalta is a leading global coatings company dedicated solely to the development, manufacture and sale of liquid and powder coatings. The firm does business in 130 countries, has more than 12,800 employees and serves an international customer base of more than 100,000. In 2015 the company generated a turnover of around 4.1 bn US dollars.

The company can trace its origins back to the Herberts lacquer boiling shop that was established in Wuppertal in 1866. And lacquers are still being developed and produced in Wuppertal to this day.

## THE COMMISSION

In 2014, the groundwork was laid for a new facility that would expand production of water-based coatings at the Wuppertal-Wichlinghausen plant. The production line went into operation soon after in 2015. Blumenbecker Automatisierungstechnik was contracted under a very tight timeframe to complete the engineering and construction of the switchgear equipment required for the ventilation and heating systems and for part of the production line in the manufacturing shop.

» *The schedule was very tight, but Blumenbecker did an outstanding job.* «

Bernd Kaeseler, TGA/ EMSR Projektleiter, Axalta Coating Systems Germany GmbH

## PROJECT SCOPE

Occupational safety regulations for the chemical manufacturing industry stipulate that all ventilation and extraction systems must operate smoothly and efficiently, especially in potentially explosive environments where gases and vapours are likely to be present. While the traditional solution here usually involved fitting individual ventilators into the factory roofs, the preference now is to install central ventilation equipment. These energy-efficient, integrated ventilation and extraction systems are designed in full compliance with ATEX regulations. The control technology that these units require has also become fairly complicated, with connections linking the sprinklers, the fire alarm circuit, the smoke extraction system and so on.

As is normal at chemical processing plants, the company's production shop is designated as an explosion-hazardous environment. This means that all the system technology installed in the production plant has to be certified as EX-proof.

Blumenbecker developed various types of switchgear for the automation of the production line and ventilation systems, this including distribution cabinets, control panels, a server rack and a PLC cabinet. Everything was planned out in EPLAN P8 and under tight time constraints, as commissioning and production start-up all depended on the completed switchgear being delivered on schedule.

Thanks in no small measure to the close teamwork between the engineering and the production departments, every single switchgear unit was completed on time. The programming work was carried out by Axalta personnel.



## IN DETAIL

- | Engineering and switchgear production
- | ATEX zone 1/ATEX zone 2
- | 19 control cabinets
- | EX-i verification
- | Special signature regulations for chemical and pharmaceutical audits

WE LOOK FORWARD  
TO **HEARING FROM YOU.**