

The logo for WAGNER, featuring a stylized black triangle above the word "WAGNER" in bold, black, uppercase letters.

## Greater efficiency and unsurpassed quality

Support of one of the largest contract coating companies in Austria

December 2015

**MKW, one of the largest contract coating companies in Austria, commissioned a second vertical powder coating system in 2015. The aim was to increase productivity and to continue supplying products of unsurpassed quality. One factor to success: The equipment from WAGNER.**

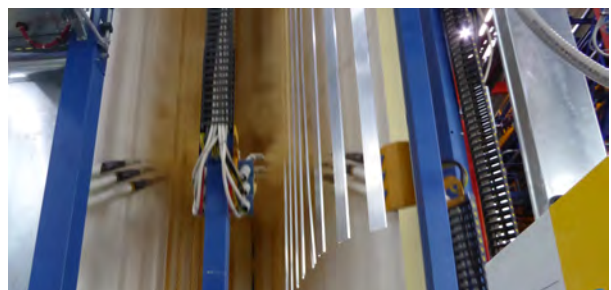
MKW Oberflächen + Draht GmbH is part of MKW Holding and is one of the largest contract coating companies in Austria. 450 tons of powder are applied there every year over an area of approximately three million square meters – the figure is still rising. What is crucial for MKW is supplying the best possible quality. "At MKW, we focus on quantity and quality. Despite the large volumes, the results have to be perfect. Only in this way can we assert ourselves economically with manufacturing in Central Europe," explains Christian Weinzierl, General Manager at MKW.

### System for vertical powder coating extended

Especially for aluminum profiles measuring 7 to 7.5 meters in length, MKW invested in a vertical coating system for two coating booths back in 2011 at the plant in Haag am Hausruck. The vertical design of such a system has the advantage that pre-treatment is possible using the more efficient flushing procedure. Compared to the spraying procedure, here the pre-treatment medium can flow over the workpiece from top to bottom. In addition, no material stress is generated: While the profiles bend when suspended horizontally and may be deformed in the industrial oven, being suspended vertically ensures a higher degree of accuracy during final assembly (see "Vertical system vs. horizontal system" table).

### Increase in productivity by over 15 percent

Initially, MKW installed just one of the two booths and equipped this with 20 WAGNER powder guns. But over the years, the batch sizes tended to become smaller and the delivery times shorter. "We wanted to become more efficient and flexible in our production planning. That's why in 2014 we decided to invest in an up-to-date powder coating system for the second booth," reports Christian Weinzierl. Today, MKW operates the two booths on a rotating basis to bridge the color change times. Christian Weinzierl does the math: "We could travel a conveying distance of 720 meters per 8-hour shift. At the present time, this is interrupted by ten color changes that each last seven minutes. That's equivalent to a gap of 105 meters. When we operate the second system alternately, we can reduce this gap to approximately 10 meters. This increases productivity by over 15 percent."





### **Coating efficiency per gun 40 percent higher**

For equipping the second booth, the Italian system manufacturer SAT-Trevisan planned a new type of booth housing in a triangular form with the redirection unit at the corner point. The special gun arrangement in conjunction with angled nozzles, the chain run within the booth, and the layout of the extraction system bring the powder cloud into line with the motion of the conveyor, resulting in a longer dwell time for the profiles in the powder cloud. In light of this, the number of guns could be reduced to twelve, whereby the coating efficiency of the new system is 40 percent higher per gun than in the existing system. The wear costs are also lower.

### **PXM powder center guarantees high quality**

Aside from the **twelve WAGNER PEA XL C4 automatic guns**, the new **PXM powder center** from WAGNER is also a guarantee for a high coating quality. "We use the PXM powder center here because it meets all the requirements of MKW. It conveys the powder both from original containers and fluid tanks, and prepares it perfectly. The continuous fresh powder supply as well as the use of an ultrasonic sieve guarantee unsurpassed coating quality and uniform surface finishes, particularly for metallic powders," explains Michael Topp, Senior Product Manager at WAGNER. For simple and fast operation, WAGNER equipped the powder center with a user interface that was newly developed recently. This enables the most important parameter, the powder quantity, to be adjusted in groups without additionally switching menus. "The system has been designed for quality and efficiency in every detail," says Christian Weinzierl, clearly satisfied. "We have thus created the perfect conditions for the further success of MKW."