



PRODUCTS

An eye for process engineering: Peter Färber makes sure all the machinery runs smoothly.

Forward roll

Helge Warta and his team set the idea behind paint films into motion. Many individuals have contributed to its success – we asked seven of them to step in front of the camera.

By Thorsten Schönfeld Photos by Joel Micah Miller

Sometimes, apparently simple things turn out to be brilliant. The idea of "sticking instead of spraying", for example, has become a model of success over the past eleven years. "The technology is booming," says department head Helge Warta (50) in summarizing the situation with a certain amount of pride. After all, he and his team launched these films and their very special features.

The approach: revolutionary. The technology: 100 percent Wörwag. Paint on rolls.

A process that saves resources and energy. Plastic parts with an even surface can now be made laminated in a single step. A separate painting process is no longer needed. The advantages over liquid application processes include no overspray and minimal drying times. Moreover, the films are weather and scratch-resistant. These properties are important to the automotive industry and window makers. Decorative paint films that disguise plastic window frames, for example, are made of a polypropylene substrate film, a base coat whose color can

be freely chosen, and a protective clear coat. The UV clear coat cures instantly, is highly elastic, and can be embossed to show texture. In the automotive industry, paint films consist of a colored, thermo-active adhesive layer and a UV clear coat, and are used on roof trim and water deflectors.

The initial idea for paint on rolls came from Helge's wife Terry (39). In 2001 she wrote her undergraduate thesis on thermoformable clear coats for films. She and colleagues like Sibylle Holzmann, who is still



**In his element:
responsibility rests
on Helge Warta's
shoulders.**

**Decisive role: Petra
Gerull handles the
cutting process in
Münchingen.**



on the team today, brought the clear coats to series production in the plastics lab.

The process described in Warta's thesis triggered interest at the company. A five-member team studied the matter and began to build pilot facilities. The first films for coating car roof modules were produced in 2005 by pioneers including Manuel Wittke and Peter Färber. A plastics engineer, Wittke contributed thermoforming expertise and directed the coating facility on the factory grounds of the Decoma company. A

chemical engineer, Färber took on the job of developing the complete array of Daimler paints. Today he directs not only base coat development but also process technology and is responsible for building and starting up all plant facilities.

"That was an exciting time," says Helge Warta. "We went at it in full start-up mode, and were positively euphoric." He and his colleagues played a special pioneering role not only in the new technology, but also in a number of other areas.

Wörwag gave the film fans all the freedom they needed. And the specialists put it to good work. In 2007 they founded the film engineering department with the aim of making new products on their own facilities in Zuffenhausen. They planned and built these facilities themselves, and introduced a four-shift system – which was also a first at Wörwag. Their team spirit played a very important role throughout. "The only way you can accomplish something like that is for everyone to pull together," says Warta. As head of the department, he believes ►

Leader in production:
Manuel Wittke has a
friendly ear for his
colleagues not only
when planning shifts.



In good hands: Stefan
Bänsch watches
over the products in
Zuffenhausen.



that people should feel at home on the job. "We were one of the first departments to have our own fully automatic coffee machine," he says with a smile.

Warta puts everything he has into his job. This chemical engineer more or less grew up at Wörwag. His father headed a lab that developed façade paints – a unit that was discontinued some time ago. Warta Senior regularly took his son to the company. At the age of four, Warta Junior was given a miniature paint lab as a gift. "The die was

essentially cast from that point on," he says today. While still in school he did some part-time work for Wörwag, completed an apprenticeship as a coatings technician, and decided to study chemistry. After working at other companies, he returned "home" in 2001. By the way, he was hired at the same time as his future wife – their personnel numbers differ by one digit.

Like all new technologies, paint films experienced growing pains. And the odd skeptic needed to be convinced. But that

just brought the team closer together. New employees came on board and were welcomed with open arms. "Working on paint films is incredibly interesting," says base coat developer Heiko Veth, and he is hardly alone in this view. He was selected to represent the department at the photo-shooting session for this article, as was product manager Stefan Bänsch and machine operator Petra Gerull. They and the "old hands" are the seven individuals chosen to represent the breakthrough of an innovative technology.



Aiming high:
Head of Development Terry Warta
sends products
off to successful
careers.



Color touch:
Heiko Veth
brings base
coats for paint
films to fruition.

“Now we’re ready for the next step.”

Helge Warta

The department now has 27 employees. They produce films under very clean conditions on a three-shift timetable. Storage and cutting facilities are located about five kilometers (3 miles) away in Kornthal-Münchingen. The annual product volume would easily cover 100 soccer fields. And the environmentally friendly star product keeps winning awards. In 2016 Wörwag was one of the “100 Companies for Resource Efficiency”, a project sponsored by the Environment Ministry of the State of Baden-Württemberg. That same year Wörwag’s

presentation of paint films at the “Woche der Umwelt” environment trade fair in Berlin impressed many people, including then German Federal President Joachim Gauck.

“Now we’re ready for the next step,” says Warta. The team is preparing to market its current major products worldwide. It is also developing new applications like a new transfer base coat and highly conductive and self-adhesive films, to name just a few. Where all this leads will certainly be interesting. ■