



USA – Lafayette

PRIMER

The Secret of R1218

Letter code
for automotive
paint systems

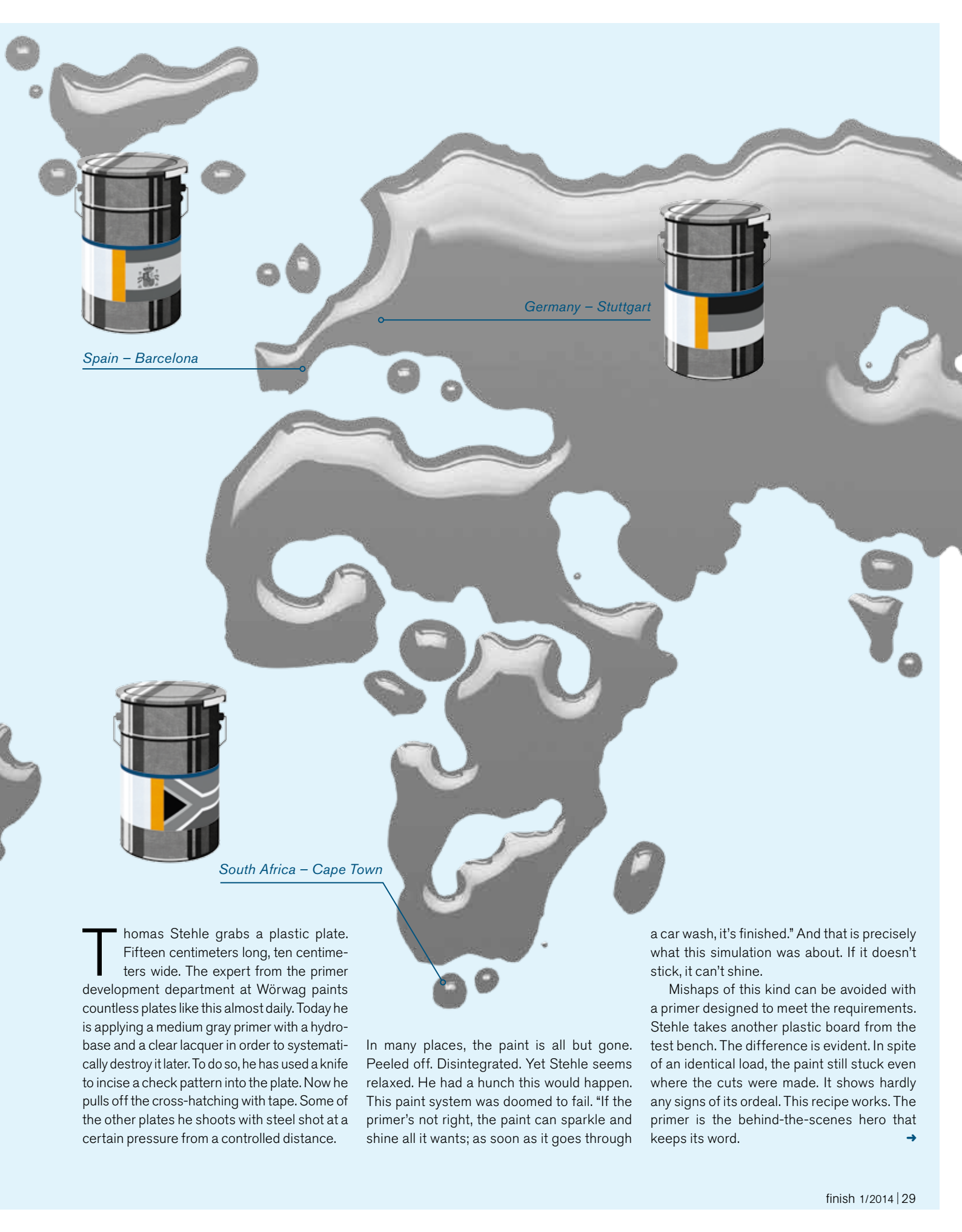
Code for the
type of paint:
1 stands
for primer

Code for the paint
technology: 2 stands
for two-component
composition with
solvent

Sequential
numbering of
binding agent
combinations

It all depends on what's underneath.
**Wörlag's primer has been demonstrating its versatility for
some 15 years. No one sees the primer, but everyone needs it.**
Prime stuff—a look at the recipe for success.

By Michael Thiem



Spain – Barcelona



Germany – Stuttgart



South Africa – Cape Town

Thomas Stehle grabs a plastic plate. Fifteen centimeters long, ten centimeters wide. The expert from the primer development department at Wörwag paints countless plates like this almost daily. Today he is applying a medium gray primer with a hydro-base and a clear lacquer in order to systematically destroy it later. To do so, he has used a knife to incise a check pattern into the plate. Now he pulls off the cross-hatching with tape. Some of the other plates he shoots with steel shot at a certain pressure from a controlled distance.

In many places, the paint is all but gone. Peeled off. Disintegrated. Yet Stehle seems relaxed. He had a hunch this would happen. This paint system was doomed to fail. "If the primer's not right, the paint can sparkle and shine all it wants; as soon as it goes through

a car wash, it's finished." And that is precisely what this simulation was about. If it doesn't stick, it can't shine.

Mishaps of this kind can be avoided with a primer designed to meet the requirements. Stehle takes another plastic board from the test bench. The difference is evident. In spite of an identical load, the paint still stuck even where the cuts were made. It shows hardly any signs of its ordeal. This recipe works. The primer is the behind-the-scenes hero that keeps its word. →



China – Langfang



“Our primer is an outstanding product. With these characteristics, right now there’s nobody who does it like us.”

Georg Bussmann

→ The driving force behind the development of the primer 15 years ago was Ramona Baumgärtel, today the head of the technology development department for pastes and top coats. Together with Georg Bussmann, who is now responsible for international technology and know-how transfer, she got the successful Wörwag product off the ground. The primer is used on components such as plastic bumpers and mirror shells on cars. “At present, with this composition and with these characteristics, there’s no one else who does it this way,” says Bussmann.

One for all

Allow me to introduce R1218. This is no code for some android from the future, but the indispensable Wörwag product of today. An evergreen that’s been impressing customers since its launch in 1999. Two thousand metric tons of it leave the plants in Zuffenhausen (Germany), Langfang (China), Lafayette (USA), Barcelona (Spain) and Cape Town (South Africa) every year—from five-kilo cans to containers weighing tons.

R1218 stands for the highest quality worldwide. The primer’s advantages are legion: it can be used on almost any system, adheres to most materials, and fulfills the specifications of the carmakers. It can be delivered in countless colors and settings. With this single primer, the user covers all coating processes, whether dry, wet-in-wet or electrostatic.

R1218 also has another ace up its sleeve. It is permitted in the spare parts service of every carmaker. Parts are put into storage

The source:
Primer production
at Wörwag in USA.



Photos: iStock, Laurent Burst, Boris Schmalenberger

primed and can be reliably finished even after lengthy periods. "Many people don't think of primers as sexy products because they don't shine," says Bussmann. "You don't even see them. For a reliable coating system, however, the primer is absolutely indispensable."

Bussmann still clearly recalls the beginnings of the innovative primer system in the late '90s. It took about three years to reach the launch phase. During the process, the developers had to learn to dispense with the old standards. If you want to make a single product out of six or seven primer variants with different characteristics and applications, you have to find new ways of thinking. You have to be bold, try things out—and keep learning from experience.

The persistence paid off. The result was a primer unlike any that came before. R1218 is especially unique in the combination of binding agents. But ingredients alone do not make a good primer. "The trick is in the production process," confides Bussmann.

From transparent to glossy

Today R1218 is available in 130 recipes and color variants, from transparent to shiny, black to slate gray. Red, white, green, and beige are possible as well. For John Deere's tractors, a very special green primer was developed. Another company wanted a glossy primer to make it easier to identify impurities during inspections. For vehicle door handles, Wörwag has a transparent variant that makes scratches less apparent.

Beyond its vast spectrum of uses, the primer also demonstrates the highest reli-

ability. Bussmann: "Many customers demand a system that can be implemented with less technologically advanced procedures. And whatever they do with our primer, it works." Particularly in markets like Brazil, Mexico, and China. In those countries, few factories are capable of combining the work steps in a coating system. That's one reason why R1218 is the top-selling product group in China.

Wörwag offers custom solutions. That's what Stehle's coating tests are about as well. If the primer has to meet special requirements, the customer consultants are the first responders. They have the basic composition of R1218 and a modular system at their disposal. This allows them to change parameters such as the viscosity of the application type. If the requirements are more complex, Stehle joins the fray. Reasons for altering the recipe might include substitution of raw materials to meet new environmental regulations or to avoid supply bottlenecks. And of course, that requires the entire testing program for the respective specification.

New color tones and changes to the composition of the solvents require equally extensive testing. Depending on the intensity and complexity of the task, it can take up to six months for the modified primer to be ready. "Paint lives, and sometimes it behaves rather oddly," chuckles Stehle. Some things are a lot different in the chemistry books. But if you think your way into things, you always get to the bottom of it." That's why it doesn't bother him in his development lab when the paint goes missing from the test boards. Once in a blue moon. ■



THOMAS STEHLE AND GEORG BUSSMANN (RIGHT) are two of Wörwag's primer experts. Bussmann, today the head of International Technology Management (ITM), was involved in developing the primer 15 years ago. His motto: "Primers can be sexy too." Stehle has worked for Wörwag since 1991. The trained commercial vehicle painter and paint and plastics technician is responsible for continuous primer development. His motto: "You can't re-invent the wheel every day, but you have to keep it rolling."



Many production locations, one recipe for success: R1218 is made to the same quality standards worldwide.