

# colorexpert

Product systems • Colours • Training • Marketing

**Formula One™:**  
Refinishing like  
world champions.



**Colour Trends:**  
Smart coatings.



**Management:**  
Estimating  
correctly.



2017

Spies Hecker – simply closer.



# A strong team.



**Joachim Hinz,**  
Spies Hecker Brand Manager EMEA.

## Dear readers,

Teamwork is an important aspect of all parts of life. This is particularly true for everyday work in the bodyshop.

Processes only have a chance to work like clockwork if the employees can count on each other. That concept applies to everything from substrate preparation to colour searches, as well as the refinishing process itself. And bodyshop equipment and products must also be perfectly matched in order to produce a brilliant result for the customer.

## Matching solutions for colour management.

This approach is what makes Spies Hecker a strong team partner for daily work, regardless of whether it is with new technologies, such as the Phoenix colour software, assistance with using spectrophotometers or further training with the help of our MyTraining E-learning programme.

## Effective product systems.

As a team player, Spies Hecker also offers products that will suit the processes in your shop precisely and will help you to set up your business to be even more efficient. We will be presenting the latest paint technology – such as the new

quick-drying Permasolid® HS Speed Filler 5500, the practical Priomat® 1K Spot Primer 4074 and the Raderal® Plastic Putty 2015 – in this issue.

## "Painting like champions".

This issue's feature article highlights an exceptional example of perfect teamwork. Under the motto "painting like champions", Spies Hecker is once again official supplier of the MERCEDES AMG PETRONAS Formula One™. This season, the reigning Drivers' and Constructors' World Champion is once more counting on our expertise and our products. Being part of this extremely successful team and being able to contribute to a successful season, makes us very proud. You can find more details on this exciting collaboration in this edition of Color Expert.

Happy reading!

Yours

Joachim Hinz  
Spies Hecker Brand Manager EMEA



# Five tips for optimal measuring results.

*ColorDialog spectrophotometers help bodyshops to retrieve colours quickly and reliably. But in order to obtain dependable results, it is important to follow these five tips.*

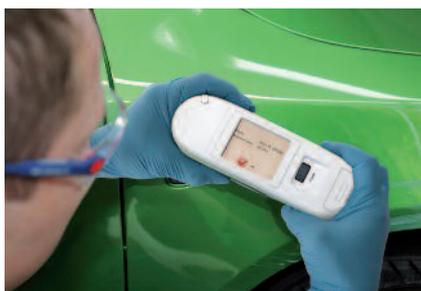


## 1. Smooth and clean surface.



Readings should be taken from an even and clean surface. Scratches and dirt noticeably reduce the accuracy of colour measurements. Refinishers should first clean the surface with a silicone remover and carefully polish the area that is to be measured.

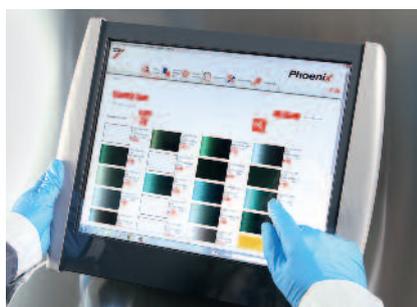
## 2. Colour measurement.



Every colour measurement requires three separate readings taken from around the damaged area. When taking

the readings, all contact points must sit evenly on the vehicle's surface so that the process can be carried out precisely. Please do not measure any surfaces that have been exposed to direct sunlight for prolonged periods of time. However, don't worry about the external light conditions when taking the readings, as the device is equipped with integrated LEDs.

## 3. Colour search.



When searching for a colour match, it is possible to narrow down the selection criteria by specifying manufacturer, colour code or paint quality.

## 4. Use a spray-out card for colour comparison.

Regardless of the colour formula shown, it is recommended always to create a spray-out card before carrying out the



repair in order to be able to compare it with the colour on the vehicle.

## 5. Calibration, protection and care of the device.

The spectrophotometer must be calibrated – when indicated – with the metallic blue and white tiles. It is vital to keep these tiles clean using warm water and a soft cloth. Calibration of the device should be carried out in the same environment, at the same temperature and in the same humidity conditions that exist during normal use. When the tool is not in use, the measurement optics should always be covered with the dust protection cap.

# MERCEDES AMG PETRONAS Formula One™ Team relies on Spies Hecker to “work to smooth”.

Formula One is the highest-echelon of single seat racing. Governed by the Fédération Internationale de L'Automobile (FIA), Formula One garners some of the largest global television audiences – the 2008 season saw an estimated 600 million people watch each race. The “formula” in the name comes from the strict and lengthy rules and regulations by which each team must abide.

The race cars are the fastest in the world – up to speeds of 220mph – thanks in large part to the huge amounts of down force the cars’ designs can generate. It’s a gruelling and sometimes dangerous sport that is driven by strategy and at the cutting-edge of technology. So it should come as no surprise that the reigning World Constructors’ Champions are so passionate about the 3,000 litres of paint used on their race cars each year.

## Specialist supplier.

Situated in Brackley, England, about 70 miles northwest of London, MERCEDES AMG PETRONAS occupies a 15-acre/ site with about 850 employees working five shifts, 24-hours a day, seven days a week. The team’s ultra-modern facilities include a wind tunnel, driver simulator and its own paint shop.

motorsports valley, which means we have many specialist suppliers within a 50-mile radius,” he says. And one of those suppliers is Spies Hecker.

## Weight, speed and reliability.



*Andrew Moody, Head of Paint and Graphics, MERCEDES AMG PETRONAS Formula One™ Team.*

“It’s important, of course, that the race cars look great on the track and that our sponsors’ logos are displayed clearly. But what is exceptionally critical for us are the weight of the paint, the speed of its application and the reliability of the entire system. And by that I mean, being used over and over again, all season, season after season, with the same great results. Spies Hecker delivers that for us,” says Moody.



available: three shades of green and five shades of the main colour, called Stirling Silver after Stirling Moss who drove for Mercedes in 1955.

## Thousands of hours and thousands of parts.

With such an intricate livery on the car, Moody and his team of 16 in Paint and Graphics face tough challenges during the season. “It takes about 150 hours to paint a race car, with the nose and rear wing each taking about 12 hours,” says Moody.



Over the course of this season, they will paint literally thousands of panels and components. “It’s almost impossible to calculate how many parts we paint in a season, but some weeks we can do as many as 150, so it really does start to add up. The speed of application and reliability is essential, we don’t have time to accept anything less than perfect,” he says.

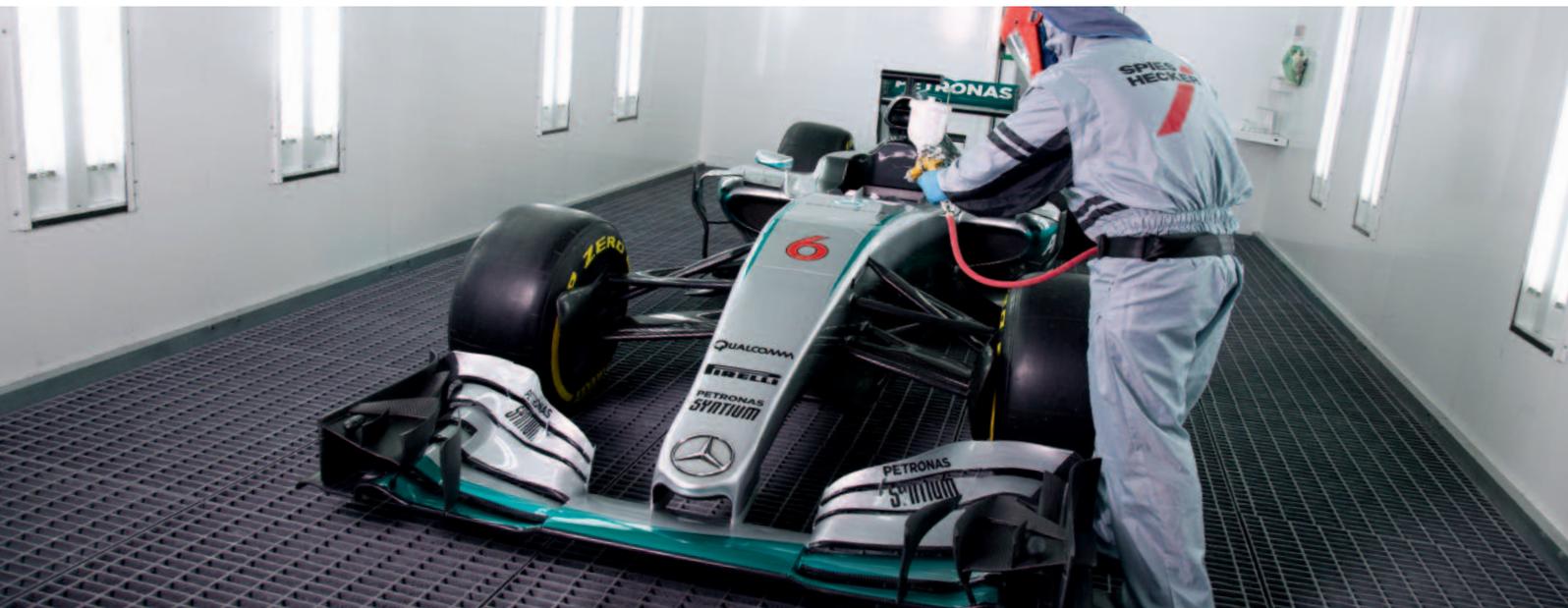
## Work to smooth.

When being painted, each part requires a huge amount of attention to detail,

Being less than 10 miles from the Silverstone race circuit might seem the key factor for the team’s location, but Andrew Moody, Head of Paint and Graphics, MERCEDES AMG PETRONAS, explains the site has other advantages. “We are in the centre of the so-called UK

This season – which sees 21 Grands Prix over eight months – the W07 car, in addition to new external body parts and wings, is sporting a new design in the instantly-recognisable colours from 2015. On the 2016 race car there are eight colours, none of which are commercially





particularly relating to its weight, and the aerodynamically-sensitive parts require even more detailed finishing. The substrates of the race car also vary depending on whether they are of a structural or of a cosmetic nature, and this impacts how the part is painted and its bake cycle. But regardless of the part or of the substrate, two things always hold true.

“For us everything is about weight and aerodynamics. Carbon fibre, for example, can be tricky, as it can be porous. So we

race cars, often starting with Priomat® Wash Primer 4075. Permasolid® HS Vario Primer Surfacer 5340, a high solids primer surfacer, and Permasolid® HS Performance Surfacer 5320, a fast drying 2K HS sanding surfacer, are the two key products they choose from to prepare the surfaces for the Permahyd® Hi-TEC Base Coat 480.

Moody says, “we finish the components off with one of two Spies Hecker clear coats. Permasolid® HS Optimum Plus Clear Coat 8650 is a hugely reliable clear coat

Once a part is painted, it’s weighed, it’s inspected, and if passed, it goes through on-going quality control with the Aerodynamics Department, and at the circuit, until it is used.

### Getting it just right.

The race car livery means that it is essential that every interchangeable component not only fits perfectly but also matches the colours and shading on the adjacent panels. Moody explains, “We work with specially built “jigs”, which are



have to get a lovely finish with the minimum weight of paint, and the acceptable tolerances are different from component to component. For an aerodynamic part, it might be 0.3mm, which would be miniscule for most refinishers, but for us, any more can cause real issues. That can be hard to determine visually in the spray booth, so we have a “work to smooth” rule,” explains Moody.

The team in Paint and Graphics use a variety of Spies Hecker products on the

and we use it on many parts. But for parts we need to get done and dried quickly, we trust Permasolid® HS Speed Clear Coat 8800. It’s a fantastic High Solids clear coat that’s very, very fast.”



essentially parts of a dummy chassis that allow us to reproduce each individual component accurately in terms of its size and shape, and most vitally, also the colours, shading and design. So where you have three panels coming together and the silver going from darker to lighter across the joins of the three panels, it is quite complicated and delicate to spray those three panels, and get it right. So the jigs are indispensable.”

## Smooth car concept.

To ensure the race cars remain as aerodynamically sound as possible, 80% of the sponsors' logos are airbrushed onto the paint rather than using decals. And that includes the iconic Mercedes-Benz star on the front of the nose.

"Airbrushing the star is a fantastically creative skill, but we needed repeatability, consistency and accuracy. So we took that wonderfully creative activity and built a clear process behind it, so any of our painters can airbrush it. The star takes nearly an hour to complete, and there are 30 different stages in the process, but only four colours: blue, brown, white and black."



*Some of the stages in the 30-step process required to airbrush the iconic Mercedes-Benz star.*

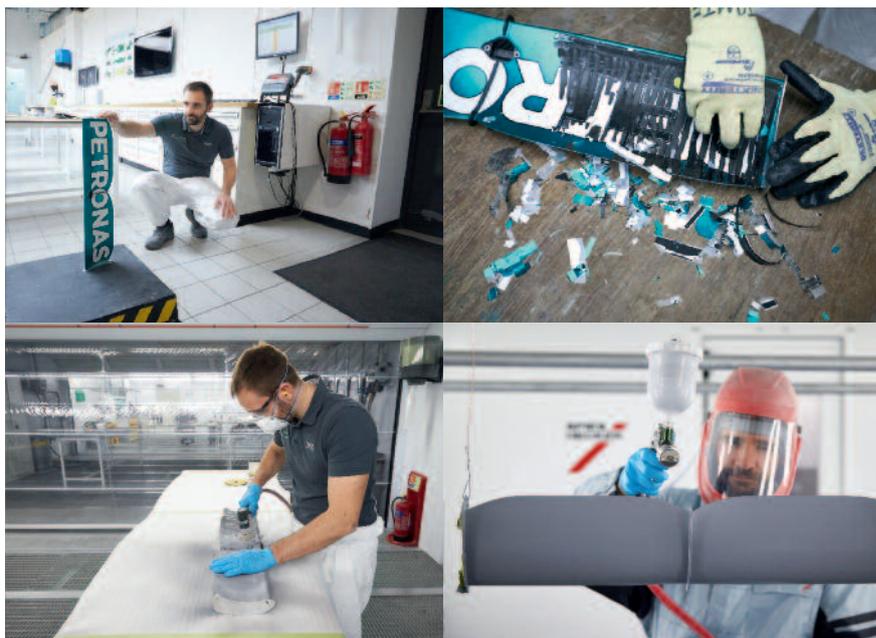
## Work doesn't stop after the race.

After every race, the Build Department strips the cars and then the individual parts are sent to Moody's team in the paint shop. The parts are checked carefully and then usually repainted.

It may seem rather excessive to refinish the entire car after every race, but as Moody explains, there are valid reasons for it. "Consider qualifying or racing somewhere like Abu Dhabi or Bahrain, where there is a lot of sand in the air. Given the speeds at which the cars go, the paint can almost look sandblasted after a while on track. Or, if another car goes into a gravel run-off area and comes back out. To get the gravel out, the driver will hit the brakes, and all the trapped gravel will end up on the track. If a piece of gravel hits our car, it can take a piece out of the body, or can cause craters and nicks in the paint, which certainly will interfere with our aerodynamics, especially if the damage is on the front wing. It goes back to how aerodynamically important it is to "work to smooth", and that means even after a race."

## Weight watchers.

A part that requires refinishing is first weighed, then stripped of its coatings, repainted, weighed again, inspected, and only then is it returned to the Build Department. The team keeps a detailed



record of each part's weight history until that part becomes unusable. This is to ensure a part doesn't "gain" weight over the course of its life. Some parts may be a tiny bit heavier after their first paint and will be slighter lighter after their second

and subsequent repaints. Most parts have a life span of four or five repaints, while some have shorter lifespans, often due to the substrate being very thin – perhaps only 1mm thick – or because the design might change.





**Not just race cars.**

Spies Hecker isn't reserved for the race cars though. There are eight team trucks that are painted with Spies Hecker about every two years. And Moody's team paints hundreds, if not thousands, of garage and hospitality boards, as well as everything from grid trollies and water bottles, to the engineer's station on the pit wall.

**True team sport.**



So next time MERCEDES AMG PETRONAS Formula One™ takes the chequered flag, remember all those refinishers who have spent hundreds of hours ensuring they "worked to smooth" – it might have made a difference!

# All expenses at a glance.

*What do paint products, lighting and filters have in common? They are all things bodyshops and paint shops can adjust in order to reduce energy costs.*

Energy expenditure is a large cost item for every bodyshop, which is why it's so important for bodyshop owners to keep an eye on it. Those who carefully vet bodyshop processes and take action to avoid high energy-consuming items are strategically smart. Just a few simple steps can easily contribute to reducing energy costs. One is the use of efficient products.

**Intelligent paints speed up processes.**

"One area where bodyshops can look to save money is drying," says Jörg Sandner, head of the Spies Hecker Training Centre in Cologne, Germany. Modern paint products, such as the Permasolid® HS Speed Clear Coat 8800, help. "This clear coat dries quickly and can be sanded and polished straight after drying." And it is also very energy efficient. The fast-drying Permasolid® HS Performance Filler 5320 and the new Permasolid® Speed Filler 5500 also contribute to lowering energy costs.

**Check the spray booth.**

Spray booth technology is another area with great potential for cutting energy costs. Modern systems are equipped with

heat recovery or insulated aggregates. Viktor Richtsfeld, member of the senior management team at WOLF Anlagen-Technik, says, "The Taifuno Vision spray booth can work in different operating modes, has a multi-air blower system and LED light technology." According to the manufacturer, the use of dimmable LED light controls alone makes it possible to cut energy costs by up to 70 per cent.

**Fresh air saves money.**



Jürgen Becker, Segment Manager Surface Treatment Freudenberg Filtration Technologies, explains that, "regular filter changes can significantly influence energy consumption." That is why filters that lose little of their initial performance even after lengthy idle times should be used. "With increased loss of pressure, in other words increasing contamination of the filter, energy costs and CO<sub>2</sub>

emissions will rise." His advice is, "to exchange the pre-filters and ceiling filters as soon as a pressure of 200 Pa is reached, or they have been in operation for a year."

If the floor filters become blocked, this leads to negative pressure in the spray booth. "Refinishers should regularly check pressure conditions using a Booth Clearance Time Test," Becker says and recommends "exchanging floor filters at set intervals."

**Ensure there is sufficient pressure.**

Michael Heinrich, manager of PL Energy, Resources & Management Systems, DEKRA Consulting GmbH, says that placing the compressor in a dust-free area and checking the air pressure system for leaks regularly also helps to reduce energy costs. He calculates that, if technical specifications are followed, they can save six per cent of compressed air if pressure is lowered by one bar. Nonetheless, the quality of the repair, and work safety, must remain the focus for every bodyshop.

# Design for Formula One™.

According to guidelines, Formula One™ helmets have to withstand high stresses and temperatures up to 900°C. But despite that, they also have to look good, which is where helmet designer Jens Munser comes in. With his spray gun, he produces veritable cult objects.



Jens Munser has been designing helmets for 27 years and today the 45 year old is preceded by his reputation: he and his team are among the top in their field, and that includes Formula One™, the pinnacle of motor racing. And that is how Jens Munser and his six painters and two graphic designers in Salzgitter, Germany, have come to create the Schubert helmets for Nico Rosberg of MERCEDES AMG PETRONAS, among others.

## How do the helmets reach you and which paints do you use?

*Jens Munser:* The unfinished helmets are delivered to us either primed white and fully assembled, or as a raw carbon fibre shell. Before they are painted, we apply a fire-proof primer and sand the surface. We use the Permahyd® Hi-TEC Base Coat 480 to paint the F1 helmets for Nico Rosberg and we apply the paint with a Minijet 4400 B by SATA.

## What challenges do you encounter when painting?

*Jens Munser:* The paint process is very different from that of cars, as we don't use the traditional paint system. Instead, we produce graphic elements on the computer and transfer these to templates. Multiple paint layers and clear coats are

used to create a unique design. We achieve special effects through gold leaf, glitter flakes or transfer printing, and we finish the helmet off with the fast Permasolid® Speed Clear Coat 8800 or the Permasolid® Clear Coat 8035.



The colour and the weight of the helmets play a decisive role in Formula One™, because every single gram of weight matters. When creating a helmet we have 50 grams to play with for our paint layers, so the design has to work within that weight tolerance.

## How long do you and your team take on a single helmet?

*Jens Munser:* From design to completion takes about three days. Pure paint time accounts for between eight and 20 hours, depending on the design the driver wants. For Nico, we manually create between 10 and 15 Schubert helmets every season.



The helmet of the 2016 FIA Formula One™ World Drivers' Champion, Nico Rosberg.

## For whom have you and your team designed helmets?

*Jens Munser:* The first Formula One™ helmet, commissioned by Toranosuke Takagi who drove for Tyrrell, was meant to have a special chrome design. After that things happened very quickly and we created helmets for Michael Schumacher, Mark Webber, Rubens Barrichello, Ralf Schumacher, Giancarlo Fisichella, Nick Heidfeld, Nico Rosberg, Felipe Massa, Fernando Alonso and Sebastian Vettel. Today, our team of eleven includes six painters, two graphic designers as well as a helmet assembly and dismantling specialist and an administrative specialist.

# The helmet manufacturers for Formula One™.

*He is at home on the elite class race circuits and prepares the helmets of the Formula One™ stars. Sven Krieter ensures that the Schubert helmet is ready for Nico Rosberg of MERCEDES AMG PETRONAS Formula One™ as soon as he starts.*

Formula One™ is team work of the highest level. Fans can appreciate that when they see four tyres changed in less than two seconds during a pit stop. And even behind the scenes there is a spirit of team work. So, there are experts on hand who make sure, for example, that the drivers' helmets are perfect. At speeds of more than 300 km/h, a helmet is a potential lifesaver. For helmet manufacturer Schubert, this task falls to Sven Krieter. The 41-year-old service technician prepares the helmets of Nico Rosberg and other Formula One™ drivers for each test run, each qualifying session and each race.

## What exactly do you do?

*Sven Krieter:* We get the painted shell from Jens Munser, the helmet designer who, together with Nico Rosberg, has previously discussed and created the individual design. My task is to assemble the helmet. This involves much more than simply attaching the visor and chin strap, because the Schubert helmets used by Formula One™ drivers are equipped with, among other things, air

conditioning systems, communications technology and particulate filters for engine oil and brake dust. Then there is the weather: in rain, we have to swap the mirrored visor for a clear one.

## Does Nico Rosberg wear a special helmet?

*Sven Krieter:* The helmet is tailored to Munser's design. It is handmade and unique. But irrespective of this customisation, the specifications of the FIA (Fédération Internationale de l'Automobile) must be met: the regulations about the shape of the helmet shell, the number of vent holes and the visor-locking system. Like the racing cars, which drivers develop further after each drive, the helmets are also fine-tuned. Nico Rosberg has been wearing a Schubert since 2005, so he has been heavily involved in its ventilation and comfort optimisation.

## What do you look for in the development of a Formula One™ helmet?

*Sven Krieter:* For a helmet to be approved for use in elite class races, it has to



complete a whole series of tests, including an impact and penetration test for both the helmet shell and visor. Because at about 300 km/h, each stone chip is destructive. We also test the resilience of the chin-strap and the fire resistance of the helmet.

## Which other drivers, besides Nico Rosberg, also wear Schubert?

*Sven Krieter:* In Formula One™, Nico Hulkenberg, Felipe Massa and Sergio Perez wear Schubert helmets. And drivers in the Deutsche Tourenwagen Masters, NASCAR, FIA World Endurance Championship, Formula 3 and Formula 4 also wear them.

## New UV Primer speeds up small damage repair.

*With a drying time of only three to six minutes, new Permasolid® 1K UV Primer 9002 is an efficient solution to Speed Repair.*

Permasolid® 1K UV Primer 9002 is ready to use and can be applied directly to cleaned and sanded substrates, including steel, galvanised steel or factory primed substrates. Even application on plastic parts is straightforward after pre-treatment with an adhesion promoter. "For Speed Repair, swift processes are critical. That's why we've introduced Permasolid® 1K UV Primer Surfacer 9002," says Evgeny Khmelev, Spies Hecker International Training Manager.

## Simple application, short drying time.

The transparent grey primer surfacer is applied in two light spray passes without flash-off times. With the help of a 400 watt UV-A lamp, it dries within just three to six minutes. It is also suitable for use with more powerful, commercial UV-A lamps. The primer can be dry- and wet-sanded and overcoated with all Spies Hecker basecoats and topcoats.



*Permasolid® 1K UV Primer 9002 is an efficient solution for small damage repairs.*

Permasolid® 1K UV Primer Surfacer 9002 is supplied in ready-to-use one-litre tins and a handy spray can version.



## ColorSpot: for precise colour assessment.

*The new daylight lamp with LED technology helps refinishers to identify colours more accurately.*

From damage assessment and colour comparison with colour swatches and sample panels, to checking freshly painted surfaces, "the new daylight lamp, ColorSpot, provides refinishers with a tool that will reveal even the slightest metamerism and effect differences easily," says Dietmar Wegener, Spies Hecker Colour Management Specialist for Germany, Austria and Switzerland.

### **Three levels of light intensity.**

The intensity of the energy-saving LEDs can be set to three different levels. Light level 1 makes it possible to compare light solid and effect colours more accurately. Light level 2 is suitable for mid-toned effect colours. And light level 3 is recommended for darker colours, as it highlights the nuances of effect paints and so helps to

achieve an optimal colour and effect match. In addition to bright daylight, the lamp can be set to a warmer, but still white, evening light. Equipped with this tool, refinishers will be able to identify potential colour differences, quickly and reliably.



### **Wireless, with a powerful battery.**

A powerful battery ensures the cordless lamp can be used for long periods. The battery can be charged on its base station. "Due to the low energy consumption of

the LEDs, the battery can handle a long day's work. Thanks to its minimal weight and ergonomic shape, ColorSpot is comfortable to handle and helps to make refinishers' work easier," Wegener adds.



*The new ColorSpot daylight lamp with LED technology.*

## New European Technology Center opens.

*On 8 June 2016 the expanded European Technology Center (ETC) in Wuppertal, Germany, was officially opened. The centre is home to the Axalta's liquid coating research facilities for the Europe, Middle East and Africa (EMEA) region.*



*Opening Axalta's expanded European Technology Centre in Wuppertal, Germany are (from left to right) Robert K. Roop, Axalta Vice President of Refinish Technology, and Head of Technology Europe, Middle East and Africa; Barry Snyder, Axalta Senior Vice President and Chief Technology Officer; Charles Shaver, Axalta Chairman and CEO; and Matthias Schönberg, Axalta Vice President, and President Europe, Middle East and Africa.*

The 15,000m<sup>2</sup> ETC campus encompasses the latest coating research equipment including laboratories, formulation and application capabilities, a weathering and corrosion service, pilot-scale and full scale-up facilities, customer demonstration centre, as well as offices.

Matthias Schönberg, Vice President of Axalta and President of EMEA, says, "The origins of our company can be traced back to the Wuppertal site, where paint production first began 150 years ago. Today, over 300 technical professionals work on creating and developing next generation paints and services to address our region's market needs and to meet our customers' specific requirements."



## Colour Quality Coordinator: The expert in colour differences.

*Does the refinish formula match the original car manufacturer's colour? This question is of vital importance when it comes to colour accuracy. In order to avoid differences between OEM colours and the corresponding refinish paint formulas, Spies Hecker capitalises on the experience of its colour quality coordinator.*

Once a year Horst Neumann, Axalta Colour Quality Coordinator for Europe, the Middle East and Africa (EMEA), visits all German car manufacturers and their associated brands, and compares colours on site with the refinish formulas from the Axalta colour lab. "I measure the colours of each model currently being produced directly at the vehicle manufacturer," he says when describing his job.

An international team of Colour Quality coordinators focuses on matching colours for vehicles that are produced in Belgium, France and the Netherlands – also directly at the manufacturers. For the Asian car marques, the colour comparison is carried out in the European ports through which the vehicles enter the markets.

### Precise recommendations for refinishers.



The aim is to provide Spies Hecker customers with advice on which refinish formula or variant best matches the original car colour that has to be repaired. The formulas selected by the colour quality coordinator are made available to bodyshops with the help of the Phoenix software.



## Smart coatings can do it.

*The time when all paint did was look good are long gone. In just a few years from now, vehicle paint could be used to generate electricity or to absorb heat.*

Professional bodyshops are familiar with handling textured, matt or effect coatings, and the application of classic colours is, nowadays, everyday work. And this is unlikely to change any time soon. But the near future could bring an increasing number of paints with special functions. Heat-absorbing or self-cleaning exterior paints have been available for architectural applications for a long time.

### The car as a power bank.

The automotive industry is also experiencing changes, although self-cleaning paints are among the lesser challenges that technicians will have to face. It will be far more complex to develop a functional coating that produces energy. This technology is of particular importance as more vehicles are becoming powered by electricity. Just like a photovoltaic system on the roof of a building, the entire car exterior, coated with functional paint, will be used to produce electricity from sunlight.

"A lot of work is being carried out on functional coatings, but we haven't yet got a solution that is ready for large series production," says VW Chief Designer Oona Scheepers, Color & Trim for Volkswagen. Nevertheless, she is sure that paints with special properties are on the horizon.

### Self-healing and texture.

Today there are already coatings that repair themselves and others that provide texture. The Permasolid® HS Diamond Clear Coat 8450 provides high mechanical resistance and offers "self-healing" properties - thanks to the reflow effect.





Sparkle Effect is supplied ex-factory with glass flake pigments that are coated with silver metal. Elke Dirks, Axalta Coating Systems Colour Designer for EMEA, explains, "They reflect the incoming light and create a sparkling effect."



In other words, small micro scratches can vanish under the influence of heat or intense sunlight. Superficial damage in the clear coat is covered by the clear coat flowing over it, eliminating the small scratches caused by car washes, which in turn increases the gloss.

(EMEA) says, "The noticeably coarse paint shows a different effect depending on the light and viewing angle. It is critical not only to choose the textural effect, but also to adjust the gloss level of the clear coat."

Effect also plays a special role at Volkswagen. Scheepers says, "To achieve a glitter effect in the early days, we used to wash off the material that creates the silver effect on fish scales and then mixed it into the paint. Today, this has been replaced by variations of industrially-produced crystal pigments that achieve the same effect."



Other challenges include matt-textured surfaces, such as those Peugeot uses. With Ice Silver and Ice Grey, Spies Hecker offers matt finish paints that faithfully replicate the textured effect of Peugeot OEM colours. Evgeny Khmelev, Spies Hecker International Training Manager for Europe, Middle East and Africa

**Sparkling effects with glass and fish scales.**

Special brilliance and glitter effects are achieved when the paint contains glass particles or crystal pigments. The transparent Permahyd WT 304 Magic



**Today's colour trends.**

While functional high-tech paint is still in its infancy, designers are setting very real colour trends. Petrol colours are set to become more important on small and compact car models in the B- and C-segments, while white, black and silver continue to be extremely popular.

## Small tips, big impact.



*Trust, quality and service are what build customer loyalty. That's the theory. But, in daily operations, it often happens that the service element falls a little short. Service means far more than just the pickup and delivery service, or the coffee machine in the reception area of the bodyshop; it includes active discussions with customers.*

The effect of these customer conversations is often underestimated as a marketing tool.

"Bodyshops can win points right at the end of a repair. This is precisely when the bodyshop has the opportunity to work on maintaining customer loyalty," says Joachim Hinz, Spies Hecker Brand Manager for Europe, Middle East and Africa (EMEA). And it's easy to achieve by simply offering tips and recommendations for proper paint care.

### Communicate paint protection.

Bodyshops can provide their customers with valuable tips on handling and taking care of a freshly painted vehicle. Evgeny Khmelev, Spies Hecker International Training Manager for EMEA, explains that, "bodyshops should point out that owners should avoid car washes with wax ingredients and that pressure washers should be used at a minimum distance of 30cm to 40cm."



Advice on how to care for paint, for example by giving tips on how to deal with bird droppings or insects on the freshly painted cars, also demonstrates the bodyshop's expertise to the customer. Hinz says, "the substance is extremely aggressive and can damage the paint. The customer should on no account wait until the next wash." Customers generally regard bird droppings as fouling.

An appropriate personal and practical gift for customers is the Spies Hecker Stick'n'Go paint plaster. The special film



can easily be painted when the car is in the spray booth. The film is then placed into a rear view mirror hanger. There is a space on the reverse of the hanger for the bodyshop's name or logo. This paint plaster can be presented to customers while advising them it can be used to temporarily cover small scratches. The professional repair of the damage can then be carried out at a later date in the bodyshop.

### Use care tips strategically for marketing.

Care tips are a particularly effective marketing tool. Bodyshops can share them through their websites, through flyers or in conversations with customers. The tips will help to raise the quality of service and to enhance customer loyalty.

### Where to use paint tips most effectively.

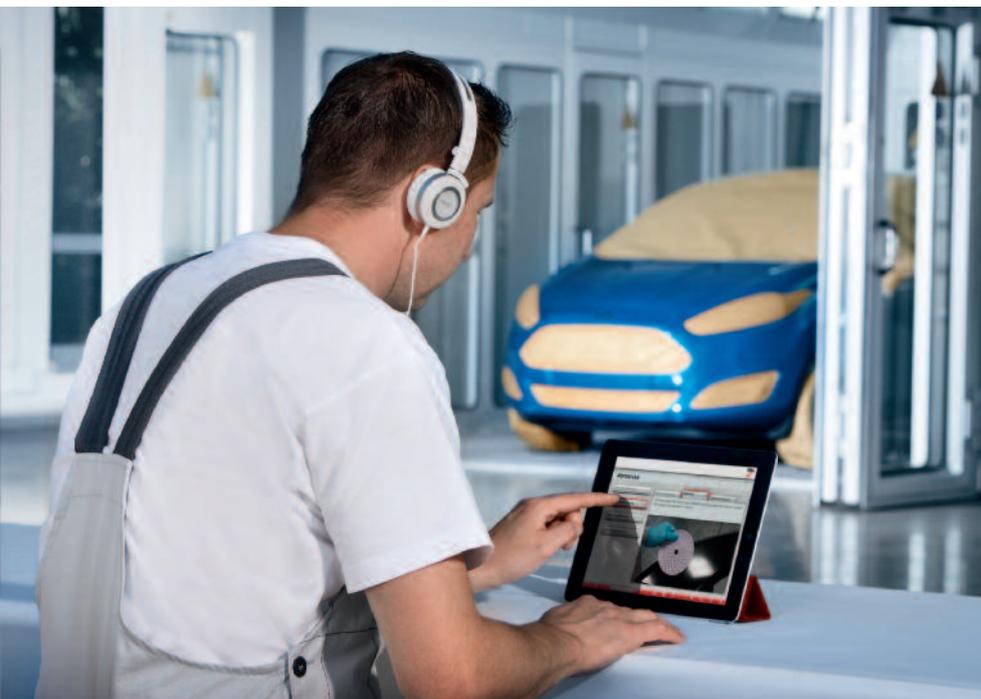
– **Website:** Use your website and offer your customers professional tips for paint care. Once set up, the tips will require little effort apart from occasional updates.

– **Flyers:** Display flyers that discuss the most important tips in the reception area for customers to take away with them.

– **Conversations with customers:** Every conversation should include paint tips. Always refer customers to flyers or to the paint plaster, which the customer will find in their car.

# Flexible learning at the click of a mouse.

*With MyTraining, the Spies Hecker e-learning programme, bodyshops have the ability to train their employees any time, any place.*



Frank Barduna, Spies Hecker Training Manager for Germany, explains how useful MyTraining is for bodyshops. "Online learning minimises traditional travel costs and downtime because employees can work through the training modules when they have time and when their workload allows," he says. The one-off license fee for a training package covers up to ten employees per bodyshop.

## Learn at your own pace.



MyTraining also offers refinishers a sensible add-on to practical training.

The learning programme is already being used successfully in numerous pilot bodyshops.

Johannes Joseph Falkenstein, managing director of a bodyshop in Lippstadt, Germany, also worked his way through MyTraining. "With MyTraining I was able to review, refresh and

supplement things I learnt a while ago, at my own pace, and without any time pressure," he says.

## Practical knowledge vividly explained.

MyTraining offers eight different training modules, each of which take 60 minutes to complete. Refinishers can, for instance, build on their knowledge of plastic part repairs, step by step, or find out more about new colour management technologies. Information is illustrated with the help of photos, videos and animations. "The questions are easy to understand and working your way through the programme is self-explanatory," is how Falkenstein describes his experience of MyTraining.

## Eight MyTraining training modules at a glance:

- Surface pre-treatment
- Colours and colour management
- Preparing and refinishing plastic parts
- Refinish processes
- Functional materials
- Avoiding application errors
- Products and technologies
- Workplace safety

## Mobile learning, reduce travel costs.

Depending on the workload, users can stop the programme in the middle of a module, and then continue at a later date. The online training can be used on a computer in the bodyshop and on mobile devices such as tablets or smartphones. Falkenstein also values the flexibility the programme offers. "MyTraining is ideal for educating yourself when the bodyshop is not very busy or in the evening at home," he says.

## Step by step certification.



At the end of each MyTraining module, there is a test. Upon successful completion of all modules, students receive a personal certificate, which identifies them as a Spies Hecker E-certified Painter.

Refinishers who wish to use the MyTraining e-learning programme, can register on the Spies Hecker website under the Training & Knowledge menu.

# Estimate accurately.



*If you know your hourly rate, you will know if your bodyshop is working cost-effectively. But how is it calculated? And which factors impact it?*

"In order to be able to assess the market position of their bodyshop objectively, owners have to know their hourly rates," says Herbert Prigge from management consultancy bpr Mittelstandsberatung GmbH, based in Dortmund, Germany.

## Determine your own hourly rate.

The more data available to calculate the hourly rate, the more accurate the result. "An important factor is capturing productive work time. If this is not done separately, a calculation is only possible using flat rates," explains Prigge.

To calculate the hourly rate, the total costs and target profit are added together. Material costs are not included in the hourly rate calculation as they are passed on to the customer and are not part of the hourly rate price structure. The sum of the total cost and target profit is then divided by the total of the number of productive employees times the number of working days, working hours and the workload capacity of staff.

**This results in the following formula:**



**Total costs**  
**+ Target profit**  
**Employees**  
**x Working days**  
**x Working hours**  
**x Workload capacity of staff**

The result shows the hourly rate at which a bodyshop can work costs-effectively.

## Example calculation and obtaining the required data.

<b>Total costs: (without materials)</b>	<b>€500,000</b>
<b>Target profit:</b>	<b>€100,000</b>
<b>Productive employees:</b>	<b>7</b>
<b>Working days:</b>	<b>222</b>
<b>Working hours:</b>	<b>8</b>
<b>Workload capacity of staff:</b>	<b>0.9</b>

The workload capacity is the ratio of sold hours and the hours that the productive employees are present at work. In this example, it means that 90% of working hours could be billed. This value does not match the industry average, which is about 70%.

The data for productive employees, working days and working hours in this example correspond to the productive opening hours. If there is a centralised time keeping system, this information can easily be retrieved. The hours sold



Herbert Prigge  
bpr Mittelstandsberatung GmbH

should also be taken from the time keeping system to determine the workload. With these assumed values, this bodyshop works economically at an hourly rate of **€53,62**.

$$\begin{aligned} & \mathbf{€500,000 + €100,000} \\ & \mathbf{7 \times 222 \times 8 \times 0.9} \\ & \mathbf{= 53.62 \text{ Euro}} \end{aligned}$$

## Formula applicable to many countries.

The general formula for calculating the hourly rate is valid in Germany, Austria and Switzerland. However, deviations arise particularly in English-speaking countries where productive employees are often recorded as variable costs. Business owners should therefore contact a management consultant in their country if they have questions concerning the calculation of hourly rates.

# Worthwhile work?

*Maintaining the economic health of a business is one thing, positioning it to operate strategically is quite another.*



Damage negotiation and price fixing are on the increase even in the international refinish industry. That means the economic viability of bodyshops is dependent on getting hourly rates right. In order to position a bodyshop strategically on the refinish market it is also vital to know the customer base that is the source of the business' income.



"That does not mean that bodyshops only turn a profit if they have a high



volume of work from a major customer," says Herbert Prigge, from management consultancy bpr Mittelstandsberatung GmbH in Dortmund, Germany. He explains that, "even with full order books, bodyshops can be threatened by losses. One reason for this could be that they have miscalculated individual jobs."

It is conceivable that the hourly rate for a large volume customer might be lower than for another, but that additional services such as a hire car are billable by the bodyshop. "For this reason, such customers may be more profitable, despite the low hourly rate, than others whose hourly rate is higher, but who do not pay for all the extras," he says.

## Customer analysis provides clarity.

When calculating the profit margin, the same rule applies to both large volume and private customers: for each individual job, all expenditure must be deducted from turnover. This includes the cost of spare parts as well as time spent on the repair. "In order to analyse the different areas correctly, bodyshops have to record each job accurately in their system. Only precise figures make it possible to determine whether the bodyshop is working cost-efficiently," says Prigge.

In the end, analysis will show if bodyshop owners should adjust the hourly rate for a customer and whether they might even have to renegotiate it for large volume customers.



## Checking calculations after the work is done makes the business stronger.

"Bodyshops should carry out a calculation after the job is done at least once," Prigge recommends. "It provides certainty when it comes to knowing whether the agreed hourly rate is profitable or whether it is likely to lead to losses in the longer term."

# Passion & Hobby.

The 2017 Spies Hecker calendar will have the theme *Passion & Hobby*. The calendar presents automotive masterpieces created by Spies Hecker customers in eight European countries.



"The images for each month of the year were chosen from more than 100 submissions from all over Europe – all lovingly restored classic cars, painted with the highest level of craftsmanship," says Peter Wingen, Spies Hecker International Marketing Communications.

What made the project particularly interesting was translating the calendar theme – *Passion & Hobby* – into visuals. "In addition to the vehicles and bodyshop employees, we placed small accessories into the pictures that each hint at a particular hobby of one of the staff."

The arrangement shown for the Kessler bodyshop in Breiback, Germany, is classic and special: "The junior manager is a big motorsports fan. The image for this bodyshop is a Facel Vega II from 1962, a luxury GT sports car, which was described by the international trade press at the time as the most beautiful post-war car from France. At 245km/h, it was also the fastest four-seat coupé in the world," Wingen explains.

## A rare Porsche and a tractor.

The 2017 calendar once more shows plenty of gleaming chrome, highly-polished rims and glossy paint: from the current Constructors' World Champions MERCEDES AMG PETRONAS Formula One™ race car and a very rare Porsche 718 RSK from 1957 that is now in Portugal, to an Opel Kapitän PL 2600 in Denmark. The most unusual photo opportunity came from an Austrian bodyshop: a bright red tractor type Steyr Model 280A, built in 1971.



With other images from the Czech Republic, Italy and Switzerland – *Passion & Hobby* brings together refinishers from across Europe.

## Corrosion protection for small sand-through areas.

New, fast drying 1K Spot Primer 4074 in a spray can.



Even at a low film thickness, Priomat® 1K Spot Primer 4074 provides good corrosion protection.

The Priomat® 1K Spot Primer 4074 is suitable for priming small areas that have been sanded through right to bare metal, for instance at edges and on corners. It can be used just before the basecoat is applied. This 1K primer can also be overcoated quickly and offers a good topcoat holdout appearance.

## Recoatable after 10 to 15 minutes.

"After just 1.5 spray passes, a thin coat of the Priomat® 1K Spot Primer 4074 provides good corrosion protection. It can be overcoated with Spies Hecker Permahyd® Hi-TEC Basecoat 480 and Permahyd® Basecoat 280/285 waterborne systems after 10 to 15 minutes' drying at ambient temperature," says Evgeny Khmelev, Spies Hecker International Training Manager for Europe, the Middle East and Africa.

## Ready for use, time-saving application.

The handy spray can makes application and handling of the Priomat® 1K Spot Primer 4074 easier for routine work, as the 1K product comes ready to use and has a long pot-life. In addition, it helps to cut repair process times as it does away with time spent cleaning the spray gun.

## New plastic putty.

*Reliable build-up, strong adhesion, high elasticity: the new Raderal® Plastic Putty 2015 Black provides an efficient way to repair surface damage of plastic parts without the use of an additional primer.*



Raderal® Plastic Putty 2015 Black is particularly well suited to fill and to smooth imperfections on plastic parts and to prepare the surface for subsequent painting. "Due to the high elasticity of the two-component product, the putty is flexible and can adjust to the movements of the plastic parts," says Evgeny Khmelev, Spies Hecker International Training Manager EMEA.

Another advantage is that Raderal® Plastic Putty 2015 Black can be used directly on the plastic part that needs repair without additional adhesion promoters. And the low-pore putty is also easy to sand. When applying the plastic putty, Khmelev explains, "The already strong adhesion of the putty can be further increased by using an additional primer, such as the Priomat® Elastic Primer 3304 Transparent, when preparing the substrate."

### Reliable drying.

At ambient temperature, the putty dries in about 30 minutes. Forced drying cuts the drying time to 15 minutes.

The Raderal Plastic Putty 2015 Black is supplied as a set in a 1.4kg tin, which includes the relevant hardener in a tube fitted into the lid.

## An ambulance shines again.

*The team from the SAS Steigra bodywork and paintshop in Saxony-Anhalt, Germany, has restored an IFA F8 ambulance, built in 1953. After 30 years in a barn, the vehicle was discovered and has just undergone an extensive renovation.*



There were 25,000 of these vehicles built in Eastern Germany, formerly the GDR. "This ambulance is the only of its type that has been restored to its original state, so it was really an unusual project for us. We had to reconstruct many small details from photos and old records," says bodyshop owner Stefan Hodel.

The bodyshop used Spies Hecker materials for the restoration. But before the ambulance could be coated with a special white colour, Hodel and his team first had to remove four layers of old paint from the wooden parts of the chassis.

### Presentation at international automotive exhibition.

It was a special moment when the restored engine block was put back into the vehicle. Overall, the restoration work on the IFA F8 took more than six months. After its restoration, the ambulance was handed over in a ceremony to the historic association of the German Red Cross. Looking fabulous again, the vintage ambulance also attracted many admiring glances at the IAA International Motor Show IAA in Frankfurt, Germany, 17 - 27 September 2015.

# Highly connected.

*Phoenix brings the Internet into the mixing room, making it possible to network multiple bodyshop locations and to store custom colour mixing formulas securely. But how do refinishers in the bodyshop work with the colour software?*

"We are in the midst of transition from CRplus to Phoenix," explains Ralf Szczepaniak from a car paint shop in Wittichenau, Germany. "Five refinishers in our body and paint shop are currently working with Phoenix. They quickly learned to make effective use of this programme in their daily work."

## Current colour formulas available any time.

The specialist bodyshop has been using Phoenix since early 2016. The greatest benefit for his team, according to Szczepaniak, is that, "all the updates are installed automatically. In addition, the formula selection is excellent, because the current colour mixing formulas of car manufacturers are always available in the Phoenix Color Cloud. Our refinishers then only have to download and to mix them."



## Data backup in the Phoenix Color Cloud.

As well as the colour search function, Phoenix allows bodyshops to store and to archive their own data in the Color Cloud. "One reason why our bodyshop decided to use Phoenix was that the customers' own data is secure and will not be disclosed to third parties," says Szczepaniak.

## Easing refinishers' workload.

"The digital mixing room in combination with the Phoenix software help to ease

refinishers' workload, from colour search to mixing and stock control. In addition, the repair processes become more efficient. Colour formulas can be accessed by smart phone or tablet as soon as refinishers receive a vehicle for repair and subsequently mixed in the mixing room," says Dietmar Wegener, Spies Hecker Colour Management Specialist for Germany, Austria and Switzerland.

## "A step into the future".

Szczepaniak is certain, "Phoenix takes bodyshops one step closer to the future."



## Benefits of Phoenix in the bodyshop.

- **Connectivity in the mixing room (ColorDialog terminals, scales, Daisy Wheel dosing system)**
- **Networking of smartphone, tablet and barcode-reader for colour formula retrieval, mixing and ordering**
- **Up-to-date colour mixing formulas for many car manufacturers in the Phoenix Color Cloud available at any time**
- **Networking of different operational sites**
- **Data backup**
- **Creation of individual colour mixing formula databases in the Phoenix Color Cloud with access from any company location**

# Close partnership for over 40 years.



*Carrozzeria Palma in Borgosatollo, Brescia, Italy, became the very first Spies Hecker bodyshop in the country in the mid-1970s. The company, founded in 1974, has been working in close partnership with the Cologne refinish brand ever since, and with good reason.*

"In fact, we were already a Spies Hecker customer, when the importer Ingres Color began selling Spies Hecker products," says founder Renzo Voltolini. "We are very happy with the product and system quality and with the support from Spies Hecker. There has never been a reason to change anything," he says. "And when we moved into our current, ultramodern site in early 2015, Spies Hecker and Ingres Color helped to give our bodyshop a completely new image."



## Two sons on board.

Voltolini still runs the family business today, but now in collaboration with his two sons. They have divided up responsibilities in the business: Nicola is in charge of the painting area, while Mario

is responsible for the office and other tasks. Two other employees complete the team. The technical equipment in the painting area comprises two preparation areas and a Metron spray booth. In addition, the bodyshop also manages and carries out its own auto glass service.

## Proud of private customers percentage.

The team is very proud that 80 percent of its customers are private clients. "We are well known in the region and are considered to be a point of reference by our customers. That is why we have really not noticed the general slowdown in the automotive repair market," says Voltolini.

## Sophisticated systems for excellent efficiency.

Carrozzeria Palma also works with a Mazda and a Hyundai dealer and is increasingly entrusted with the repair of luxury vehicles.

"The complete reorganisation in 2015 with the help of our paint partner, including a modernised appearance, has undoubtedly been crucial to our success," says Voltolini. "Even if we don't have the largest bodyshop, we are very efficient thanks to the efficient Spies Hecker paint systems which allow us to complete 12 to 13 cars per week."



## Speed Repair

# Speed Repair, yes! But how?

*Scratches, dents, damage to plastic components: A lucrative additional income stream, small damage repair increases customer loyalty and attracts new customers to the bodyshop.*

Bodyshops can rely on a steady income stream from small damage repairs, which include spot paint repairs, panel beating and auto glass repair and interiors. According to a study by the German technical testing organisation TÜV Nord, customers prefer independent bodyshops for the repair of minor paint damage, as well as damage to wheel rims, plastic parts or for dent and hail damage repair. This area also has great potential for fleet owners and car dealers who also frequently award repair work for minor damages to independent bodyshops.



### Benefits for the bodyshop.

Besides increasing the number of jobs, the minor damage repair business offers bodyshops much more. It strengthens customer loyalty and is also an effective tool for attracting new customers. Bodyshops should still always point out the benefits to customers, such as the low repair costs, and the fact that the repair of

minor damage contributes significantly to maintaining the value of the vehicle. For leased vehicles, the repair can lead to lower costs when the vehicle is returned. And the short time it takes to carry out the small area repairs is also worth mentioning in the sales conversation.

### System solutions and workshop equipment.

The investment costs for bodyshops starting out in small damage repairs are low and bodyshops can get support from workshop equipment and paint suppliers with the help of coordinated small damage repair solutions. Spies Hecker offers its specific products for this process under the name Speed Repair System. These include Priomat® Wash Primer 4085, HS Performance Fillers 5320 and Permasolid® HS Vario Primer 5340. Evgeny Khmelev, Spies Hecker International Training Manager, also recommends Permahyd® Hi-TEC Basecoat 480, Permasolid® HS Speed Clear Coat 8800 and Permacron® Speed Blender 1036.

### Even faster with Speed Repair.

For ultrafast small damage repair, Spies Hecker now has the new Permasolid® 1K UV Primer 9002. Supplied ready to use, it can be applied on cleaned and sanded surfaces such as steel, galvanised steel or factory primed substrates. It can even be

used on plastic parts after application of an adhesion promoter.

"To make their small damage repair work efficient, refinishers should have the following workshop equipment: Infrared dryers, small orbital sanders, Minijet spray guns and small polishing discs," says Khmelev. This type of paint repair is particularly suitable for bumpers, wheel arches and decorative trim. Another advantage of small damage repair is that a single multifunctional work station is all that is needed, leaving the spray booth free for larger operations.



### Success through active marketing.

But to have a successful smart repair business requires targeted marketing, which includes regular advertisements in the local press, mailings to existing customers and maintaining an active dialogue with customers. Daniel Schröder, managing director of IDENTICA Schröder GmbH in Telgte, Germany, says "Our smart repair business is successful because we conduct active marketing. Especially in the retail business, personal customer contact is crucial."

# The new Speed Surfacer with ground-breaking technology.

*The new Permasolid® HS Speed Surfacer 5500 surpasses all drying records for surfacers.*



"The wipes create a specific barrier, whose corrosion resistance is comparable to acid primers," says Khmelev, describing the process.

## Together a winning system.

Permasolid HS Speed Surfacer 5500 is particularly interesting for bodyshops who want to make their processes more efficient and who want to increase their throughput. That means the use of Permasolid HS Speed Surfacer 5500 can eliminate the need for IR drying, helping to reduce energy costs. And it stops the time-consuming moving

back and forth of the IR dryer, which can improve workflow.

The new surfacer is formulated for use with Permahyd® Hi-TEC Basecoat 480 and the particularly fast Permasolid® HS Speed Clear Coat 8800. The clear coat can also be air dried or dried at low spray booth temperatures of only 40°C – together they make a winning combination.

"The first bodyshops are already successfully trialling Permasolid HS Speed Surfacer 5500 and are thrilled with the incredible time savings," says Karsten Jürs, Spies Hecker International Marketing Communications.

"It can be sanded as early as 20 minutes after air-drying, depending on local climate conditions. Flash off until flat after the first coat, no flash-off required after next coats," said Evgeny Khmelev, Spies Hecker International Training Manager EMEA. This new surfacer goes beyond all the drying times that were previously regarded as standard, ushering in a new age of refinishing processes.

After mixing the new Permasolid® HS Speed Surfacer 5500 with Permasolid® Speed Surfacer Hardener 3550 in a simple 1:1 ratio, the mixture can easily be applied in two to four coats. The new technology delivers a very smooth surface finish.

## Perfectly matched.

Permasolid HS Speed Surfacer 5500 has a wide range of applications and can be used on all common substrates. When processing directly on metal, the area to be repaired must be prepared with the new Primat Reactive Pretreatment Wipes 4000. These innovative pretreatment wipes provide the necessary corrosion protection before the filler is applied.



**Hi-TEC  
Performance**

# Our teams finish first

– with the new, ultrafast HS Speed Surfacer 5500.



With the new Permasolid® HS Speed Surfacer 5500 and Primat® Reactive Pretreatment Wipes 4000 on your team, you won't just finish first: with a non-stop application without intermediate flash-off times and an impressive air-drying performance. We are talking 'Formula 1' speed with sanding after only 20-40 min. That winning feeling also comes with the smooth surface that guarantees excellent gloss hold-out after top coating.



Spies Hecker – simply closer.



Hi-TEC  
Performance

An Axalta Coating Systems Brand