



Protection upgraded



High Performance Surfaces for the Automotive Industry

SurTec Group



a brand of
 **FREUDENBERG**

Innovating Together at the Freudenberg Group

Internal combustion engines, hybrid technologies, fuel cells, pure electric vehicles and autonomous driving - getting from A to B by passenger car has never been so diverse. The Freudenberg Group, a global technology group with 50,000 innovators, has its finger on the pulse of change and continues to pioneer mobility concepts of tomorrow. These innovative solutions stretch beyond electric mobility.

As a part of the Freudenberg Group, SurTec contributes to progressive technologies by providing surface treatment chemical specialities tailor-made for the automotive industry. Together with customers, partners and sister companies we strive for the optimum solution.

From cleaning technologies throughout the manufacturing process, to high performance, light metal corrosion protection, and to state-of-the-art quality decorative chrome plating for interior and exterior design, SurTec is your global partner assuring the success of your project.



Sustainable Technologies

Since our company founding in 1993, we were already committed to the development of environmentally friendly processes, a philosophy unchanged to this day.

Furthermore - in all our decisions we pay special attention to sustainability, matching business activities to the smallest possible environmental impact.

Our strategic aim is to provide innovative solutions that enable our customers to achieve their goals with minimal impact on natural resources.



Custom-made Chemical Specialities for Surface Treatment

SurTec develops, manufactures and supplies solutions for Industrial Parts Cleaning, Metal Pre-treatment, Functional and Decorative Electroplating. Our products and process solutions meet complex specifications and the highest requirements of our global customers.

With our in house formulations we are an industry pioneer. Dedicated customer collaboration, high Research & Development intensity and decades of valued expertise within our global expert team keep us relevant and cutting edge.

About SurTec



22 locations
worldwide



9 certified
production sites



8 Tech Centres
in all regions



since 2017
chromium(VI)-free

Design Elements

Trivalent Chromium Processes with the broadest Range of Colours and Tones

SurTec is a leader in the development of chromium(VI) replacements. With 25 years of expertise, recognised as a leader in this field, our novel high-quality technologies continue to evolve with the market. SurTec 883 XT is the original proprietary formulation achieving identical colour values to standard chromium(VI) and hence perfectly suited for automotive applications, where exact colour matches are required.

In addition, the SurTec 88X-family covers a comprehensive palette of aesthetically appealing chrome colours ranging from blue bright to deep dark.

100%
Chromium(VI)
Replacement



Our Favourite Colour is Chrome!

SurTec 883 XT consistently achieves identical colour values as established chromium(VI) processes comparable to chromium(VI):

L = 83 to 85
a = -0.5 to -0.8
b = -0.5 to -1.5





From Firn to Ice

SurTec's advanced satin technology **SurTec 851** enables semi-gloss and non-reflecting nickel coatings with an extremely even and diverse set of finishes ranging from subtle satin to grunge matt. Its robust additive system prevents pores, black spots and rapid agglomerations.

SurTec 851 meets all colour requirements of OEMs:

- VW Group 3Q7
- Porsche Galvano Silver 09
- BMW Pearl Gloss
- PSA HDX-M018
- Daimler Silver Shadow
- and many more



Product Highlights

100% Chromium(VI) Replacement:
SurTec 883 XT

Exclusive Satin Nickel Finish:
SurTec 851

Dark 'blue' Chromium:
SurTec 886



Driving in the Dark

SurTec 886 provides a reproducible, even and consistent dark, blue colour. Due to its high deposition rate a minimal number of process cycles is required. In addition, the surface shows impressively high corrosion protection results meeting industry standards.

L = 60 to 64 | a = -0.2 to 0.2 | b = 1.0 to 1.5

E-Mobility

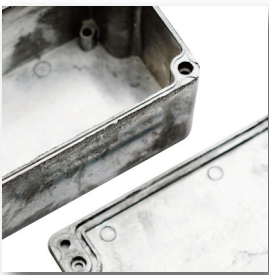
Key Corrosion Protection Technologies for Battery Systems

SurTec, preferred partner to the Automotive industry from design stage, prototype conception to final high-volume manufacture. Choosing the right surface treatment technology enables state-of-the-art light weight battery housings with reliable and durable lifespans.

The power brand 'SurTec 650' is the chromium(III) benchmark pre-treatment technology at leading OEMs and Tiers. Available from qualified applicators in all relevant markets.

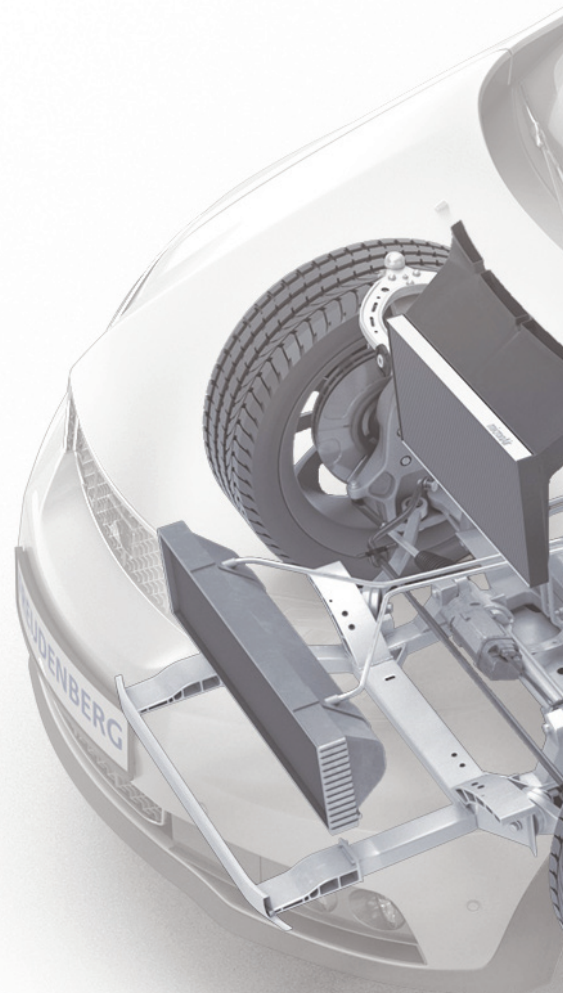
Are You Qualified Yet?

Together with leading OEMs from the Automotive as well as Electronics and Aerospace industries, SurTec has developed a process that allows applicators of SurTec 650 to qualify for a specific requirement. The resulting qualification gives the end customer or OEM an indication of the process suitability of a SurTec 650 coater for a defined requirement. A list of Qualified Applicators can be found on the SurTec website.



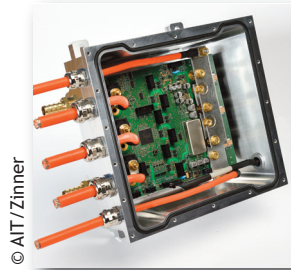
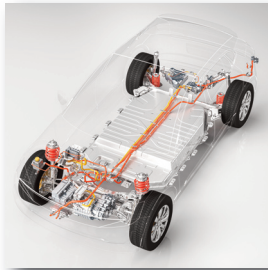
Let's Stick Together!

SurTec 650 treatment also includes a high-performance cleaning and a desmutting step which ensures an homogeneous surface, ready for subsequent joining processes including adhesive bonding and welding. Due to this surface conditioning, it is possible to process aluminium parts also long after they have been treated with SurTec 650. This gives customers greater flexibility in their production processes and in the procurement of parts as well as independence from locations, storage and transport times.

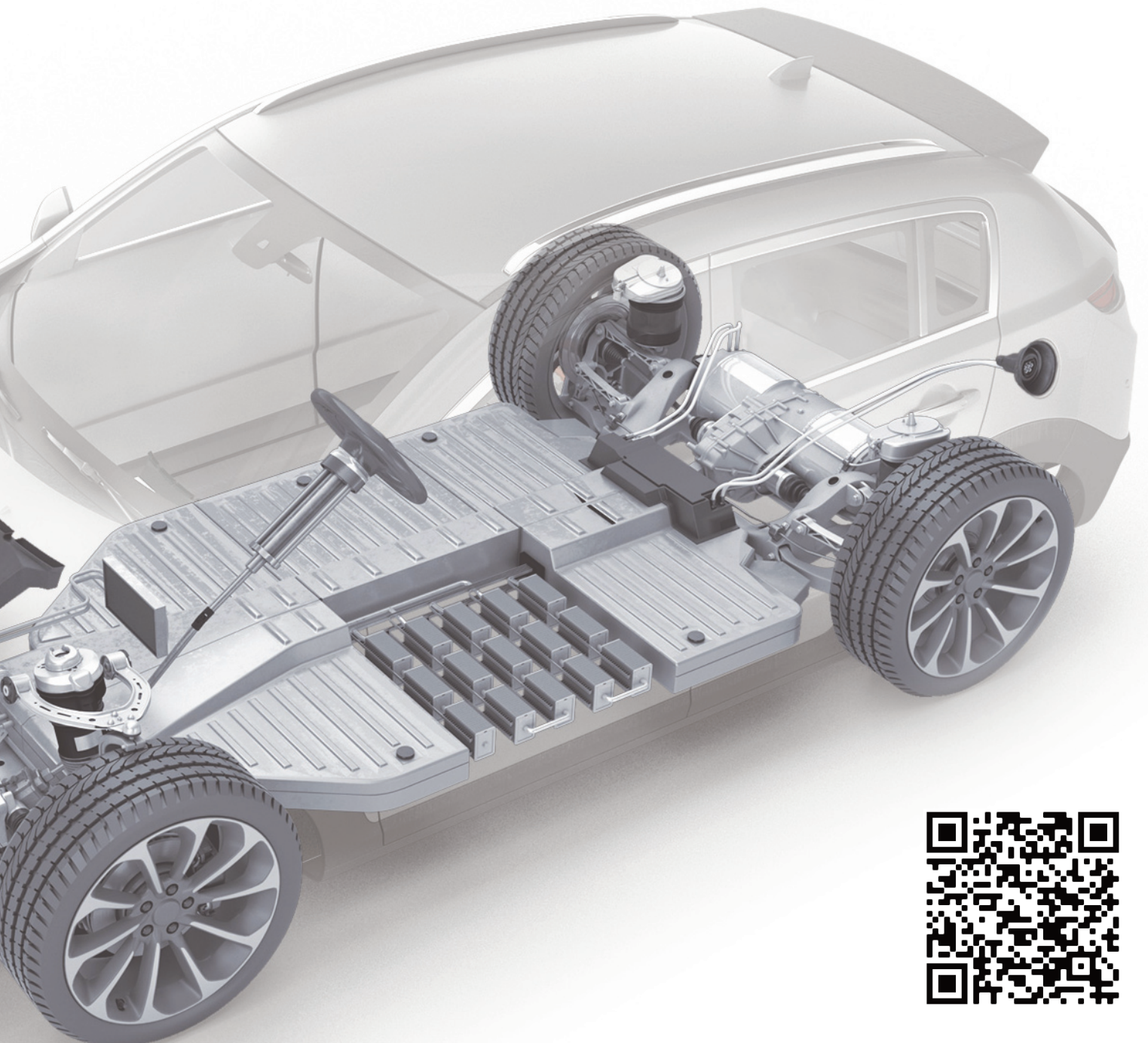


Corrosion Protection for Electrical Powertrains

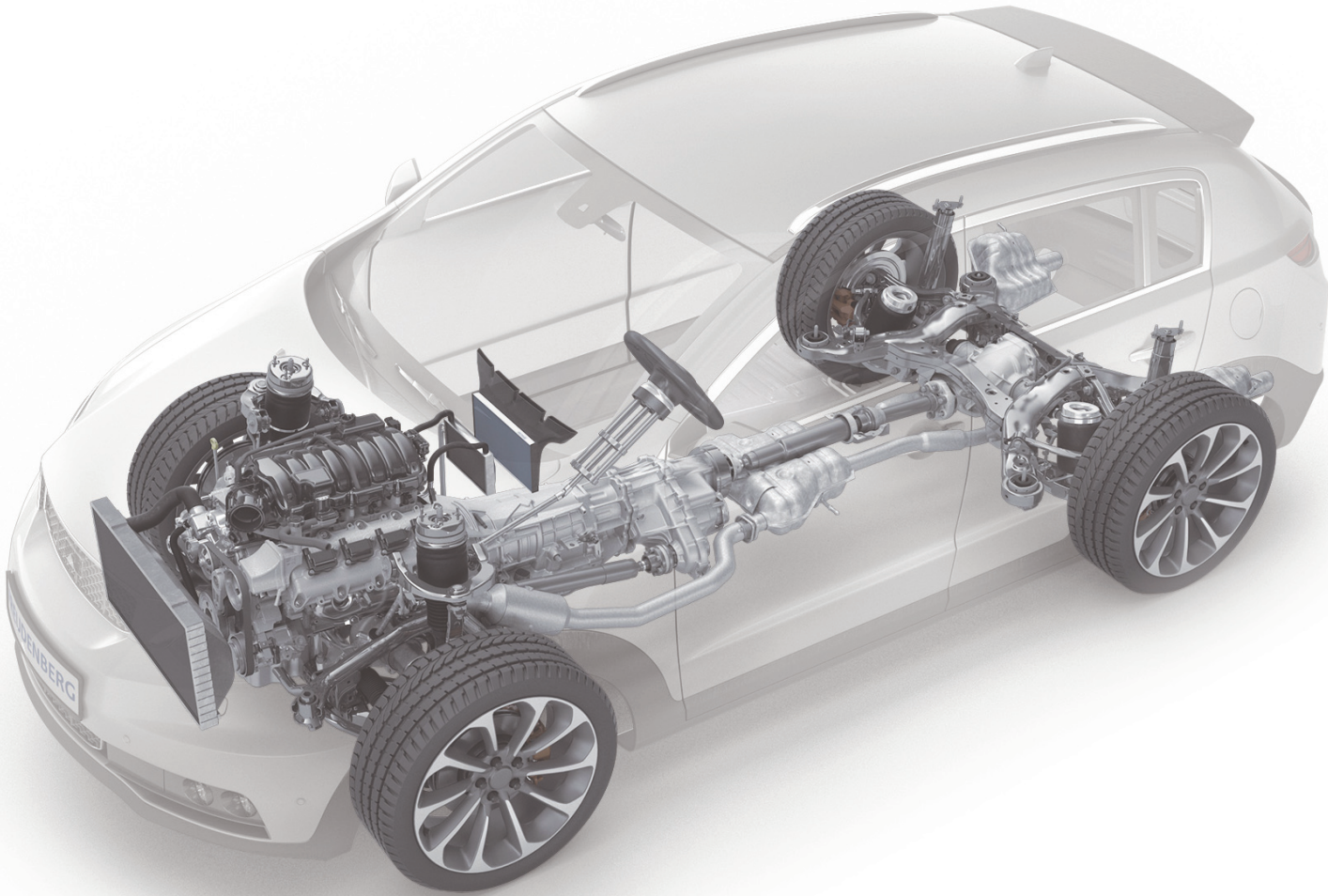
SurTec 650 in combination with a gasket optimally prevents corrosive seal creepage of moisture into a battery compartment and ensures low electrical contact resistance. The technology also provides electromagnetic compatibility (EMC) and is hence the perfect solution for surface treatment of e.g. battery pack housings and Electronic Control Unit (ECU) housings. Due to its best-in-class bare metal corrosion protection, additional e-coating applications of the battery housing could be considered redundant.



© AIT/Zimmer



Components Solutions



Product Highlights

Alkaline Zinc/Nickel Process:
SurTec 717

Alkaline Zinc/Iron Process
(High Iron Content):
SurTec 781 Ferronium

Bright Acid Zinc Process:
SurTec 758 BC

Low-Temperature Chromiting:
SurTec 688

Enabling Reliable Drive Technologies

Battery, hydrogen cell or something new? No matter what the future of vehicle drive systems, SurTec is ready to support in the successful implementation of future-oriented projects.

Meanwhile, we ensure that every single screw and fastener reliably does what it's supposed to do: holding the vehicle together. Sounds simple but resisting high temperatures and other environmental impacts requires robust surface finishing. Every component - whether small or large - has to be protected against corrosion to guarantee passenger safety and long vehicle life.



Pushing Sustainability

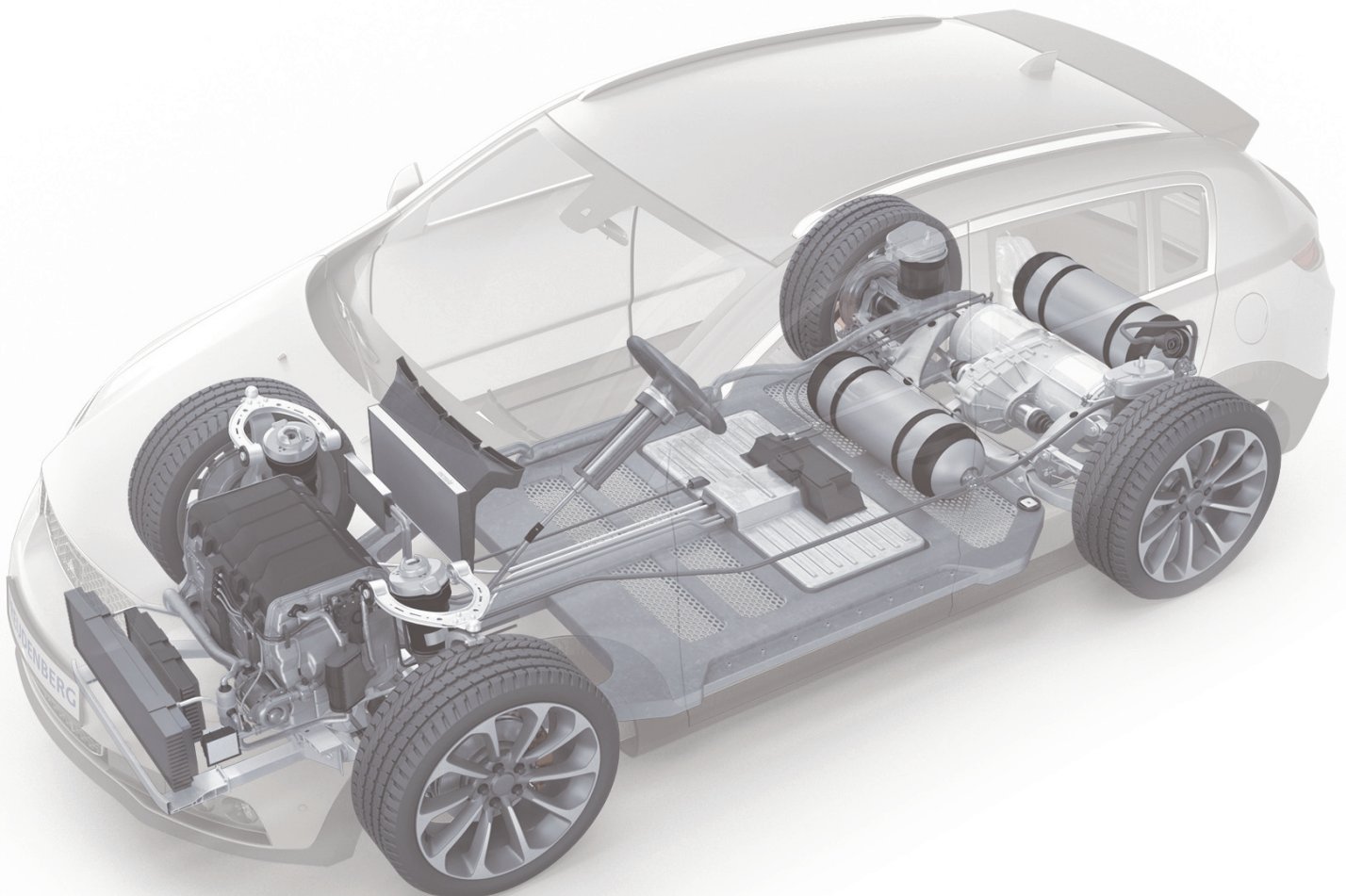
SurTec's Low-Temperature Chromiting process SurTec 688 supports the applicator in reducing his environmental footprint and increases productivity.

SurTec 688 leads to a significant reduction in energy consumption, reduces necessary exhaust capacities and increases output and capacity by a long bath life. It produces a clear and only slightly iridescent passivation layer with a good corrosion protection and attractive appearance even without sealing.



Don't Stress

Cathodic corrosion protection with zinc/nickel is the method of choice when it comes to corrosion protection for heavily stressed vehicle parts. The modular system SurTec 717 has a proven track record exceeding 10 years in the surface treatment industry. The process is characterised by an outstanding metal distribution and a permanently high current efficient operation. Due to the extraordinarily stable electrolyte, extremely long service life is achieved.



Components Solutions

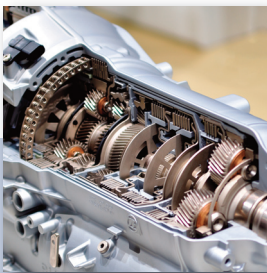
Imperceptible yet Essential

It takes more than 10,000 parts to build a modern car. From the smallest and invisible screws to the more obvious, large body panels. Every single component plays its part in the big picture - the final, smoothly functioning and safe car.

It is indispensable to make sure even the smallest parts are high-quality and fulfil the highest demands. With Industrial Parts Cleaning and Metal Pre-treatment technologies by SurTec the focus is set on preparing car components for their important future tasks.

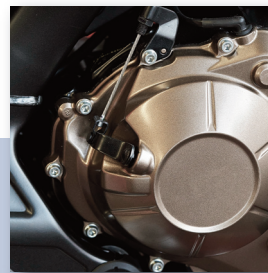
It's Getting Hot In Here!

Whether it is cleaning prior to or after heat treatment or prior to welding steps - SurTec 042 is an easy to handle, yet powerful cleaner for steel and its alloys.



Keeping Everything Under Control

When it comes to cleaning of Aluminium, e.g. cooling plates for thermal control of car batteries, SurTec 102 FL delivers strong performance with close-to-zero cleaner residues after rinsing.



Anything But Average

Cold formed parts are needed for all types of power supply. SurTec 199 P is the solution for reliable dephosphating processes. Due to the absence of hard complexing agents it simplifies waste water treatment and significantly increases bath life time compared to standard caustic dephosphating.



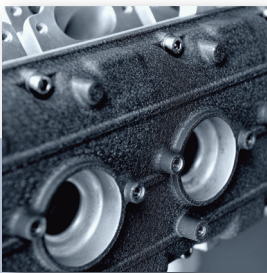
The Perfect Match

Increase the efficiency of your phosphating process with tailor-made solutions from SurTec: **SurTec 617 F** is the perfect choice when it comes to the preparation of your car components prior to e-coat. It's the industry standard for tri-cationic zinc phosphating.



Setting the Course

Car components need optimal pre-treatment for subsequent sealing, bonding and painting processes. The etch passivation for Aluminium, **SurTec 642**, convinces with optimal Zr-optics without stains or marks and easy bath maintenance.



More Versatile Than Ever Before

SurTec 168 LT is an alkaline builder cleaner for multi-metal applications with the option for low temperature operation. It can be applied at temperatures of 60°C, but also at low temperatures down to 30°C. It can have a demulsifying or emulsifying effect and makes spray applications possible depending on the accompanying surfactant blend.



They See Me Rollin

Aluminium wheels have to meet the highest demands of car manufacturers in terms of corrosion and weather resistance. SurTec has developed the innovative technology **SurTec 644**, a process which not only fulfils all quality requirements - even for machine faced wheels - but also offers the wheel manufacturer the possibility to realise significant cost advantages by reduced energy in the cleaning stage and reducing maintenance efforts in all process steps.

Your Reliable Partner for Global Megatrends

With its globally active team of specialists, SurTec develops highly innovative technologies for surface treatment specifically tailored to the needs and requirements of the Automotive industry. As a design partner, we are at your side from project conception to successful realisation of local and global projects.



Get in contact with us!

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For more products and information,
see www.SurTec.com

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