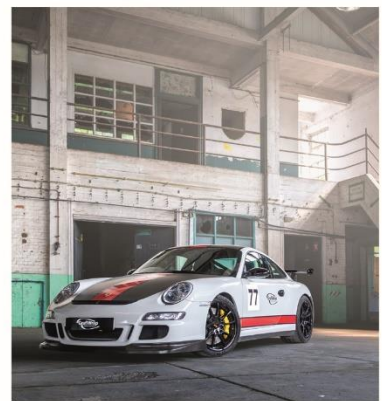
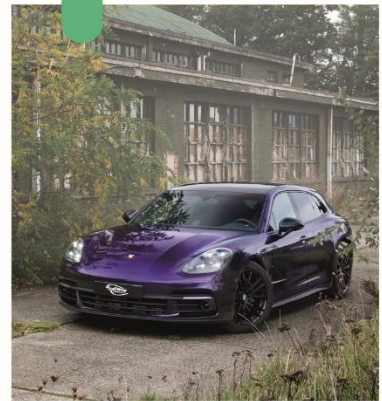


GRAFTYP

makes you stick



Manual

**Wrapping with GrafiWrap
Automotive & Deco Films**

grafityp.com

WHAT IS GRAFIWRAP ?

GrafiWrap is a trade name that was registered by Grafityp Selfadhesive Products, which refers to materials that are used for "wrapping" a complete vehicle or object.

Grafiwrap Automotive & Deco films are perfectly suited for "wrapping" a vehicle or object. A number of these films are available in the form of a smooth film, which can be compared with a standard cutting film (like e.g. the rather thick matt cast and glossy cast films, the cast colour wave films that change colour depending on the viewing angle, the cast metallic films, etc...).

Other films in this range (like e.g. the brushed aluminium films, the carbon films, the leather-look films and the special deco-effect films) come with a certain structure, and require some special attention when they are being applied, to avoid that the film will rip during the application process. With this brief manual we would like to give you some tips and tricks, which will help you to apply the structured Grafiwrap Automotive & Deco films successfully.



Front of a Jaguar XK. As you can see, the deepest indents are wrapped with a carbon film without any problem

On www.grafiwrap.com you will find a beautiful movie full with tips and tricks for applying these films.

WHY CHOOSE FOR GRAFIWRAP / GRAFICAST AUTOMOTIVE & DECO FILMS ?

In our current market, it is of utmost importance to catch the attention. This can be done on the one hand by advertising on a vehicle that will be spotted by other road users and pedestrians alike, or on any other object, or on the other hand by means of a rather subtle touch that makes your vehicle or object unique. This can be achieved with the GrafiWrap system, i.e. with an impressive design on your vehicle or object, or with the Graficast Automotive & Deco films, i.e. with a creative and personal design. Your product applied in full-colour on your company vehicles, a car mirror in carbon, a matt black boot lid, a leather or carbon-look interior, the complete car body in brushed aluminium, stripings that change colour depending on the viewing angle, a kitchen cabinet with a special decorative effect ... The sky is the limit ! With the GrafiWrap system and/or the Graficast Automotive & Deco films your car or object can become unique in no time at all.

Anyway, with the GrafiWrap system and/or the Graficast Automotive & Deco films your car or object will certainly be noticed. This way of advertising will cost a lot less than placing an advertisement, and at the same time you can promote your products to the large public day after day. The possibilities are really limitless.

A second important advantage : the GrafiWrap system and/or the Graficast Automotive & Deco films will protect your vehicle's paintwork against weather conditions, chemical products, salt for icy roads, brush washes, scratches, stone chips and the bleaching effect of the sun.

Another advantage is the flexibility to change advertising campaigns frequently without the need for an extremely expensive respray. A wrapping specialist can easily remove the "wrap" at the end of a campaign, so whether you just want to change its design or sell the vehicle or object on, you can return the vehicle or object to the state in which it was prior to the wrap, without leaving any glue residues behind, which will give it a much higher trade-in value if you want to sell it.

PREPARATION

Before you start applying Graficast Automotive & Deco films, you have to make sure that

- a. the vehicle or object is suited for a "wrap",
- b. the environment is suited for the execution of the job
- c. all tools required for the wrap are available.

It is extremely important that the vehicle is properly cleaned and/or degreased. Also check whether it has any surfaces (e.g. deep indents) that require a special treatment with a primer to improve the adhesive strength of the vinyl.

The vehicle or object

First of all take care to ensure the paintwork of a vehicle or object is sufficiently cured. This should not be a problem with new vehicles.

Attention ! A waiting period of at least six weeks is required for newly painted vehicles. Paintwork that is not sufficiently cured may result in it peeling off at the removal stage of the film (during the application as well as afterwards).



The ideal environment for wrapping is a well illuminated, dust free area with a constant temperature between 17°C and 24°C. The vinyl to be used also needs to be sufficiently acclimatized. The preparation of the vehicle includes the removal of unnecessary car parts, such as number plates, window rubbers, mirrors, the antenna, etc..., just to make the application of the vinyl a lot easier.

Requirements

- a squeegee with a felt strip at one side (SPAVELC), or a hard squeegee with a separate felt squeegee (SPATEL & VILT08),
- a very sharp scalpel (cutter),
- a heat gun with regulatory air pressure and temperature,
- soft, clean, fluff-free gloves (GLOVE1),
- a good, non-aggressive degreasing agent and/or silicone remover, isopropanol, ethanol or "Rapid Prep",
- a primer,
- cleaning cloths (of which the cleaning agent is not solvent based).

The vehicle or object should be cleaned a day in advance of wrapping (by hand or in the car wash, but without using wax). Why a day in advance ? So that you can be completely sure that everything is completely dry, and that no water will run out from the rubber trims or indents.

We use isopropanol, ethanol or "Rapid Prep" for degreasing the vehicle properly. Pay special attention to deep recesses. A tissue wiped over a small area and discarded after short use will prevent silicones being moved around. Also pay special attention to "hidden" areas and areas that are hard to reach, such as the backside of the wheel housing



A good wrap starts with a perfectly clean surface

Tip: For degreasing areas that are hard to reach, please use a bit of isopropanol, ethanol or "Rapid Prep" on a cotton bud. For cleaning the area between two car parts, you can wrap a cleaning cloth around a squeegee.



The space between various car parts also requires special attention

PS: When using a cleaning agent, please always follow the safety instructions, e.g. wearing a mask, gloves, etc...

APPLYING THE STRUCTURED GRAFICAST AUTOMOTIVE & DECO FILMS



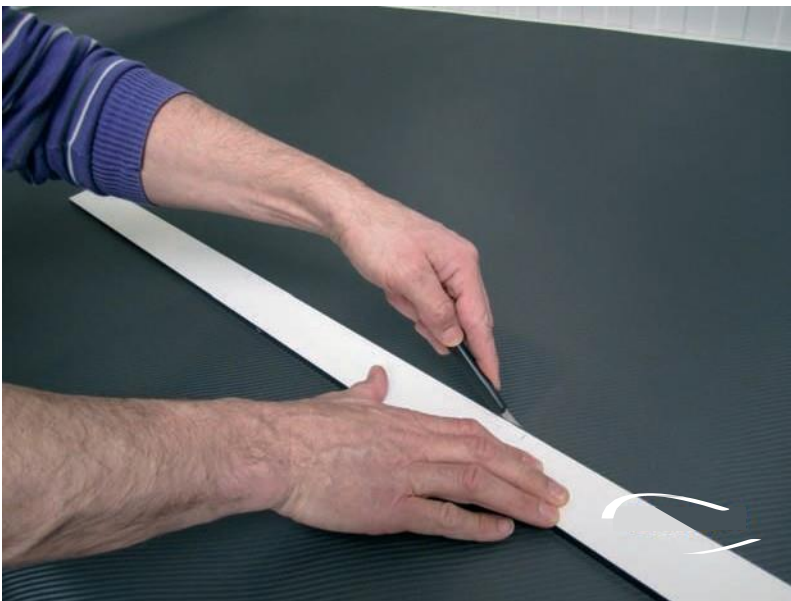
Jaguar XK with extremely deep indentations

In this example we are showing you how a structured Graficast carbon film is applied on the front bumper of a Jaguar XK. As you can see, this bumper is characterized by a very extreme curve and some very deep indentations.

The structured Grafiwrap Automotive & Deco films are ALWAYS applied dry.

In a first stage you need to check how big the piece of vinyl should be, so it will cover the complete bumper. Always make sure the piece of vinyl is about 10 cm larger – this will make the application a lot easier.

Cut the required piece of vinyl on a worktable. The structured films always need to be cut in a STRAIGHT line by means of a measuring rod or ruler. Never cut the structured films without a measuring rod or ruler, as you would unintentionally follow the structure of the material in this way, as a result of which the film would tear more easily during the application process.



Check once again whether the piece of vinyl is big enough for the car part to be wrapped. Then remove the backing paper and position the vinyl loosely on the car. The vinyl can easily be removed again as long as you haven't pressed it down tightl

Then start fixating the vinyl. Start at the middle of the bumper, and apply the vinyl towards one side (in this example we start working from the middle towards the right side, and afterwards from the middle to the left side). Fixate the vinyl approximately in the middle of the bumper at its highest point, and then rub it downward. Once the film is firmly fixated, and you still wish to take it off again, we advise you to heat it before pulling it loose.



Pull the vinyl off the car again at one side of the fixated part, and heat the vinyl by means of a heat gun. For large surfaces, we recommend that you set the temperature of the heat gun to 600°C. Heat the vinyl slowly, making circular movements, to make it smooth and to avoid any tension in the vinyl. Always heat a larger part than the one you are about to apply – also the part that you are holding in your hand, to avoid that the vinyl will tear. Then stretch a piece of vinyl over the bumper surface and rub it lightly.



Pull the vinyl off carefully and heat the complete piece of vinyl

It is extremely important that you always heat the piece of vinyl before you stretch it over the surface to be wrapped. This also goes for the pieces of vinyl that are pulled off the vehicle again in order to reposition them again.

In this way, stretch the vinyl round the complete right side of the bumper, without taking into account any indentations and/or adjoining car parts.



Stretch the vinyl around the bumper and then rub it lightly

Repeat the application of the vinyl from the middle of the bumper towards the other side of the bumper.



Also complete the upper- and bottom part of the bumper

Once the vinyl is stretched around the complete bumpoer, you can start rubbing it firmly. If you start by rubbing the vinyl firmly from the beginning, you will run the risk of creating shiny strips where the vinyl is pulled off again for repositioning.

Now you can start with the finishing touches, i.e. working the vinyl into the various indentations and finishing the edges. In this example we start with the finishing touch around the car lights. In order to avoid too much tension building up in the vinyl, just make an incision in the vinyl over the middle of the car lights. Make sure you don't make a straight incision, but cut the vinyl in a round line. In this way you will avoid that the vinyl will tear at the end of the cutting line as soon as you start manoeuvring the vinyl. Start at the inner side of the car light, and end at the outer side.





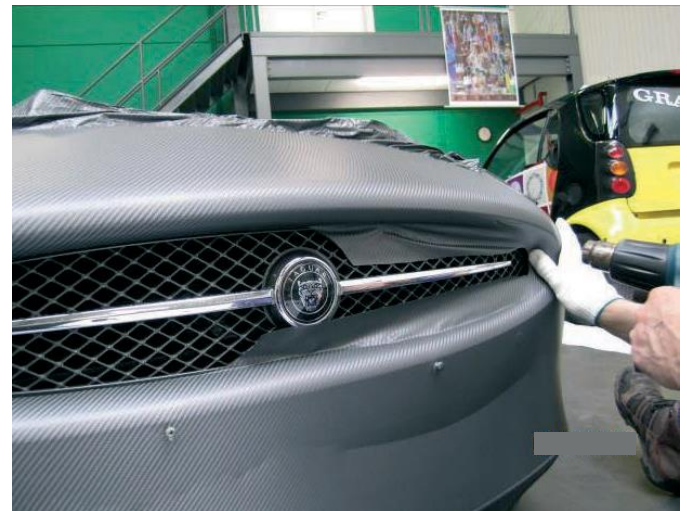
Pull the vinyl gently off the car. Reheat the vinyl, so it shrinks to its original shape again. Allow the vinyl to cool down for a while (until it feels "lukewarm"), and then rub it firmly. Afterwards cut off the unnecessary vinyl and fixate the vinyl at the edges by means of a squeegee.

A similar work method needs to be followed for the indentations. In this example we start with the front indentation. Start by making a "rounded" incision in the vinyl, and heat the piece of vinyl in front of the indentation (except for the area where you are going to rub the vinyl – see picture 20). Never heat the vinyl (temperature heat gun 250°C) at the side where you are going to rub it into the indentation. In this way you will avoid a reduced amount of adhesive in the areas where the highest adhesive strength is required, and the tension in the vinyl will be considerably lower.



Once again make a "rounded" incision and keep the vinyl warm

Heat the vinyl over the front indentation (always at the opposite side where you are going to apply the vinyl), and press the vinyl part by part.



Finish the complete indentation carefully, and press the edges by means of a squeegee.



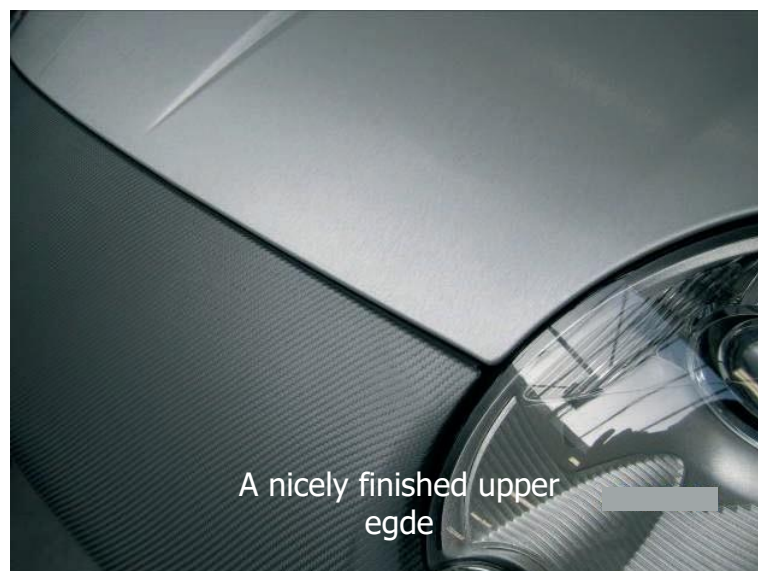
Then we finish the edges at the upper part of the bumper.



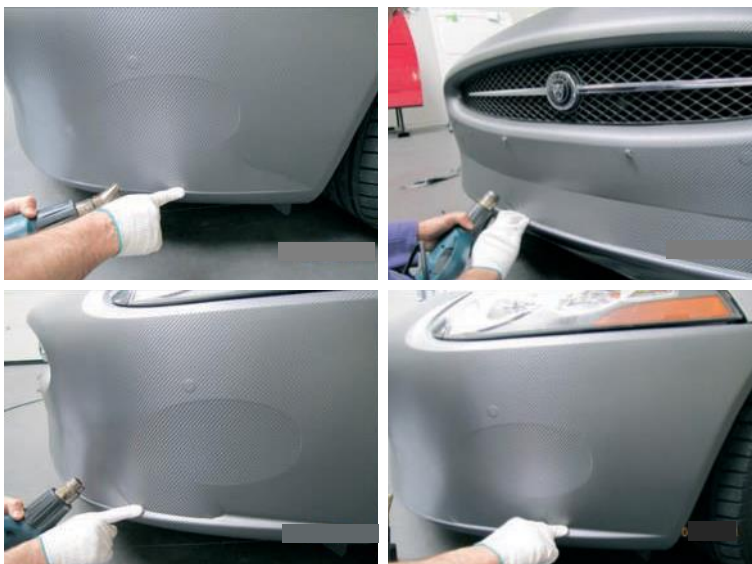
Pull the vinyl off at the edges, where it has been stretched. Then heat the vinyl (heat gun at 250°C), so the vinyl can shrink to its original size again



Allow the vinyl to cool down a bit, until it feels "lukewarm", and then press it with a squeegee. Make sure the vinyl is nicely pressed down in between the edges, so you get a perfect cutting line, and then cut the vinyl against the adjoining car part, so you still have sufficient vinyl left to apply it "around" the edge.

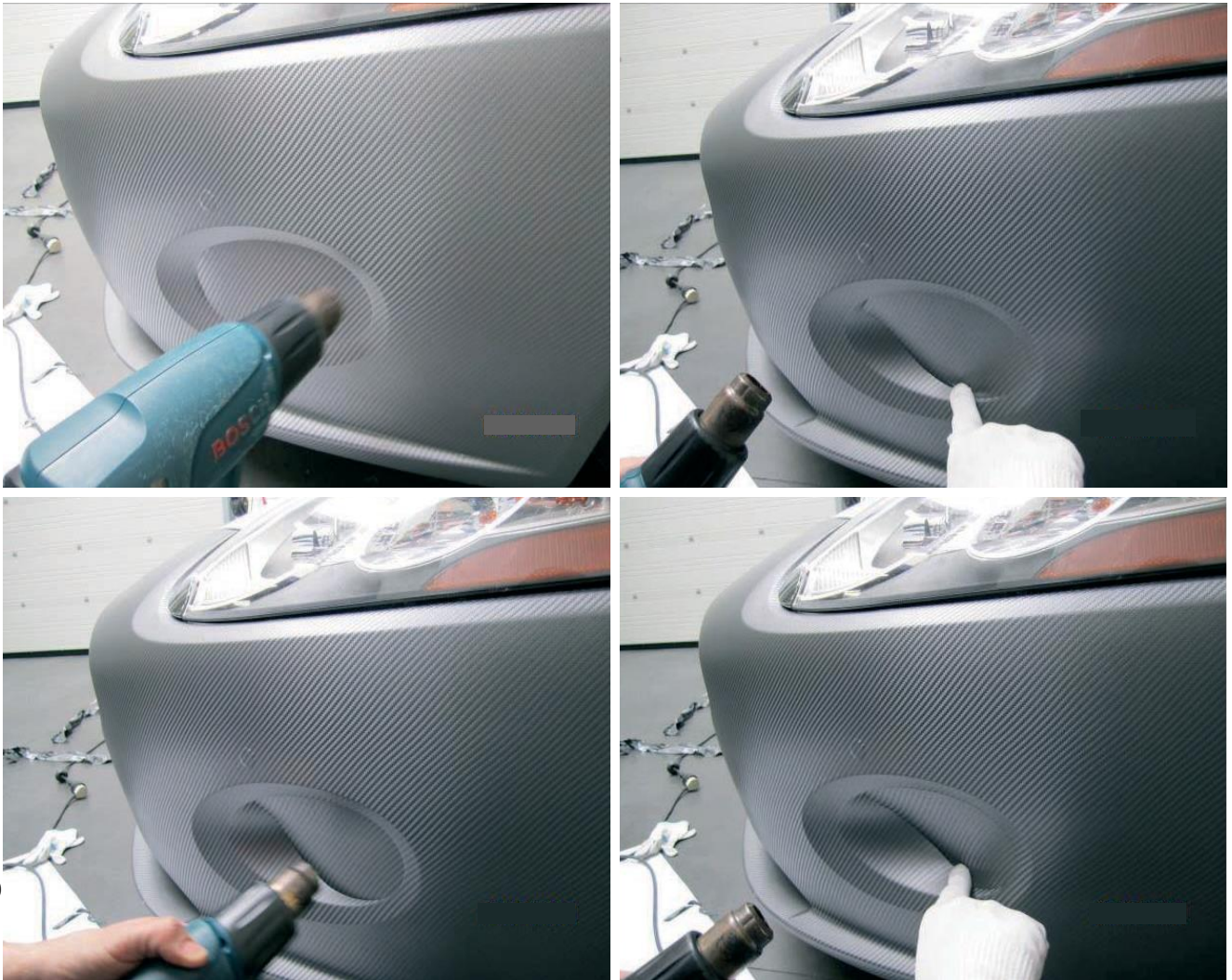


Then we finish the indentations at the bottom side of the bumper. Once again we work in a similar way.

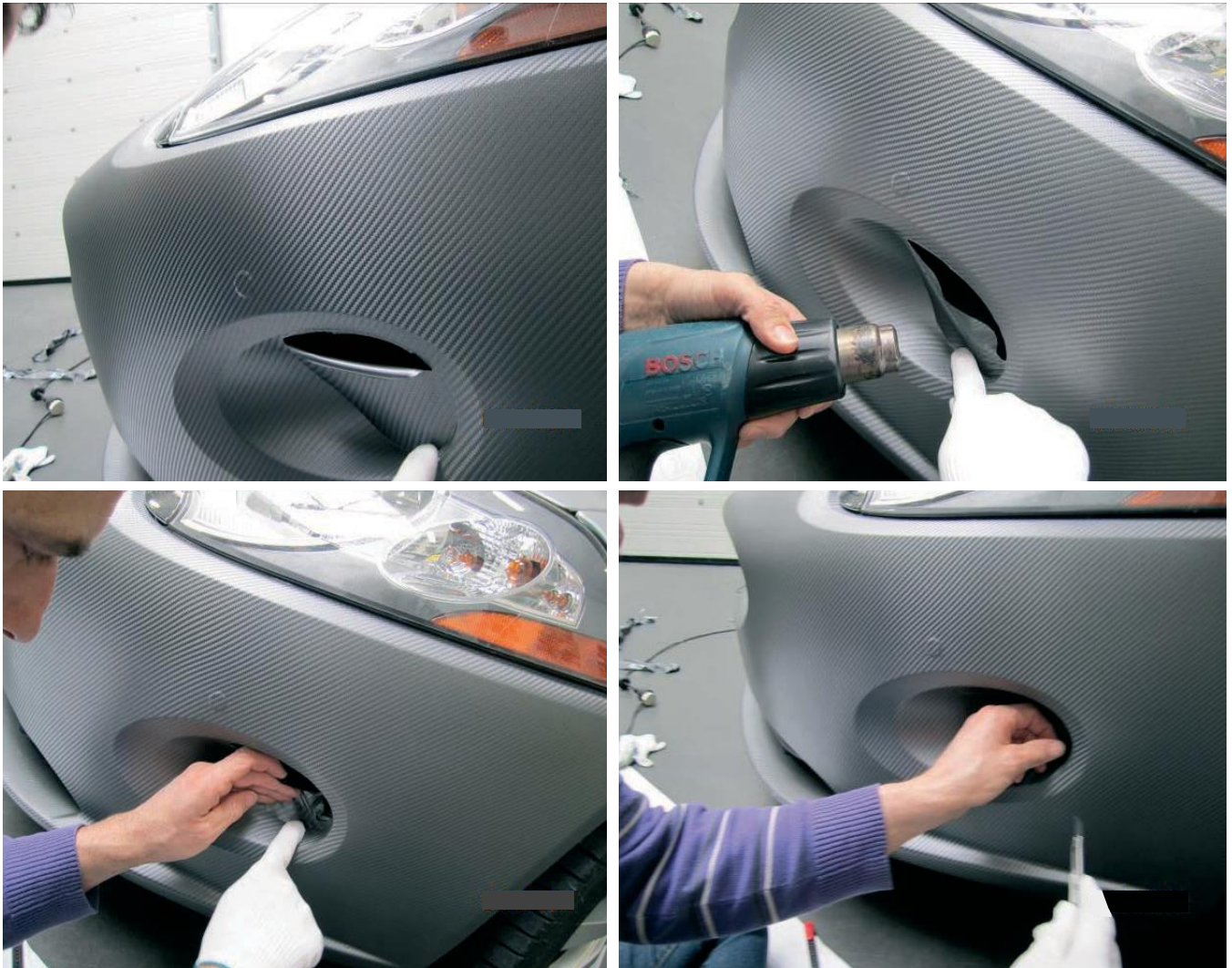


Heat the vinyl slightly at the edges and apply it a couple of millimetres around the edge (to "break" the edge). Then heat the vinyl at the "opposite" side and press it little by little into the indentation.

Finally we start with the deepest indentations.



Make sure the vinyl is always kept warm at the “opposite” side. Always keep moving the heat gun, so you don’t burn the vinyl ! Work the vinyl into the indentation slowly.



Make an incision in the vinyl (at the upper side) as soon as tension starts to build up. As soon as the vinyl has been worked into the indentation completely, we recommend that you heat it slightly again, to wait for a moment, and then rub it firmly again before you cut off the unnecessary vinyl



In order to obtain a good adhesion, we recommend that you always reheat the vinyl after it has been applied (temperature heat gun 350°C – this corresponds with about 90°C on the vinyl) and afterwards, when the vinyl has cooled down again, press the vinyl firmly once again (especially in the indentations). Please make sure that the vinyl has been applied well EVERYWHERE before you start reheating it, otherwise the vinyl may burst open at those places where it hadn't been pressed firmly (see pict. 51) !

Also make sure that you don't create any "rubbing stripes" on the vinyl when rubbing it firmly. Especially carbon films and matt films require a bit more attention to avoid "rubbing stripes". We also recommend that you don't rub the vinyl with a plastic squeegee. You'd better rub the vinyl firmly with a felt squeegee or with a glove.



Rub the vinyl firmly before reheating it. Use a squeegee in the corners. If the vinyl has not been rubbed well, it may burst open during the reheating process

THE END RESULT



We advise you not to expose the vehicle to cold outdoor temperatures (below 15°C) immediately after a "wrap". Keep the vehicle in an acclimatized room for some time (at least one night) to allow the adhesive to build up its final adhesive strength.



REMOVAL

Graficast Automotive & Deco films can be removed just as easily as they were applied. In order to re-activate the adhesive, you just have to heat the vinyl again by means of a heat gun ($\pm 350^{\circ}\text{C}$ on the display). The heated vinyl will become smooth again, and you will be able to remove it in no time, without leaving behind any adhesive residue. After doing so, the vehicle will be back to its original state, as it was before the wrap.



OUR COMPLETE RANGE OF SOLUTIONS

Signmaking vinyls		Wrapping films	
Monomeric	Cast	Standard	
Promo-series	Graficast series	Glossy Polymeric Wrap	
100-series	Non-PVC	Matt Polymeric Wrap	
Polymeric	GEF series	Matt Super Cast	
200/300 series	Translucent	Gloss Super Cast	
	TL series	Protective	
	Etched glass films	Paint protection film	
Print media		Decorative	
Monomeric	Special formula	Leather	
Polymeric	Non-PVC	Pearl	
Cast	Wall deco	Colour wave	
		Metallic	
		Matt	
		Satin	
		Brushed	
		Carbon	
		Stardust	
		Flock	
Laminates			
Monomeric	Special formula		
Polymeric	Non-PVC		
Cast			

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