



## *I Made The Cars Float*

In *Desire*, Bikini Films' latest spot for Ford, a host of superfluous old cars are lifted heavenward by bunches of colourful balloons. SFX supervisor Mark Mason of Asylum describes his role on the commercial

**CR:** Cars. Floating. How?

**MM:** Our very first meeting with the ad's director Philippe Andre, production designer Jan Houllévigie and producer Dominic Wilcox was to discuss precisely this issue: how we would create the effect of the cars floating. The most obvious way to achieve this would be to lift the cars on cranes and remove the cables in post. We quickly decided that although this method would work for some shots, it would not always give the real effect of the car being lifted on balloons. So what we suggested was to remake some of the cars in carbon fibre – which is a very light material. This would allow us to get the desired finish, ie realistic-looking

bodywork that would stand close-up shots, while at the same time keeping the models extremely light weight to allow us to actually make them float using helium balloons.

**CR:** Tell us about the design of the cars in the ad as you weren't able to simply recreate existing car types...

**MM:** The design of each car was a close collaboration with Jan (production designer), who spent a lot of time with us at Asylum working out each design alongside our pre-visualisation artist Conor Breen. Pre-visualisation is a 3D render that can be viewed from any angle before the model is made. Jan also had a pre-vis team working in Paris to assist with this design stage of the process.

**CR:** And how were the cars actually built, did they really float?

**MM:** Some of them did, yes. We built three different types of car. Firstly we made three "crane" cars – a small two-door, a saloon car, and a 4X4. These were made by first buying a "donor car" for each model which was then cut up and its bodywork changed to match the designs by welding panels back on and using loads of body filler to get back to an ultra smooth surface. The cars would then be primed and painted in the finished colour and baked on in our huge oven as per a real car finish.

Our model makers then made new lights, body trim, mirrors, wipers, bumpers and badges to Jan's designs. Halfway through the shoot, on two down days (when we weren't on the shoot), each car was repainted in a different colour so they could be

In *Desire*, the new Ford Mondeo spot shot by **Bikini Films'** Philippe Andre for Ogilvy, outmoded cars float off to heaven in deference to our sensibly-priced family saloon hero (2). Except that they are not really cars at all: most are either giant balloons or carbon fibre

models, painstakingly crafted by SFX supervisor Mark Mason (1) and his team at **Asylum**.  
**3.** Testing the lifting power of the specially-made helium balloons.  
**4.** Balloons, trees – well it had to happen.  
**5.** One of the “crane cars”

is cunningly disguised at the **Asylum** workshop.  
**6.** The lightest SUV on the road, or off it

used in other shots later in the week.

We also made three carbon fibre cars – a small two-door, a saloon, and an estate car. Again, three donor cars were required and we modified these to the designs we had and as before got the cars to a high gloss finish.

Once this had been achieved they were moulded in fibre glass – a process that was, in itself, a very large undertaking and a lot of time was spent making sure that the moulds would come off the cars leaving a good surface finish as at this stage, the better the mould, the better the finished car would be. Once the moulds had cured, they were removed from the car and the pre-impregnated carbon fibre was laid into the moulds. In certain areas a structural foam was added to give them more strength. The whole thing was then put in a large vacuum bag (to get the carbon flat in the mould) and is then put into an auto-clave (large oven) to set the carbon fibre.

After a day in the oven the mould can be removed, leaving the black carbon fibre body shell duplicate of the original car. We then had to trim off any excess, cut out all the windows and smooth off any flaws. The whole shell was then rubbed down and then the same paint process as above was used.

We needed to have windows in the car but adding any kind of Perspex or plastics would have added too much weight to the car so we used a fabric gauze which gave the appearance of a tinted window but without adding much weight. What it would not give us is any reflections, so it was discussed with post production and

they decided the reflections could be added later. All the fitting like lights, mirrors, wipers etc had to be made extremely lightweight as our target weight for each car was quite low: carbon estate car target was 40kg and the small carbon car's weight target was 25kg.

As the carbon cars were being built we were calculating the size and volume of the balloons that would be needed to lift each one. The final decision was to have the balloons made to hold 11 cubic metres of helium: this in theory would lift 11 kilos but we then had to deduct the weight of the balloon itself and all the guide ropes and clips that would also be attached. A balloon expert was contacted to advise us on what type of balloon and rope would be best: we had them made in the US out of polyurethane no thicker than 0.2mm. The rope we chose was the lightest to strength we could find, as the effects of sudden gusts of wind had to be calculated also.

And finally, we created a helium-filled car that could float on its own. This was made by vac-forming Styrofoam over tools that had been machined by CNC (Computer Numeric Control, basically an automated milling machine that can work on five axes) to designs that were drawn up in Cinema4D. The car body parts were then glued together and a foil bag to hold the helium was fitted inside the “car” which was then painted in a water-based paint. This car was the lightest of all our cars at only 4.5kg.

which included four days over two weekends due to locations all over London. Actually, we had to contact the CAA (Civil Aviation Authority) to make sure that we would not break any rules as we could come under their jurisdiction. After reading through all their regulations, we had safety valves fitted to all of the lifting balloons that would deflate them if they reached a certain height. And a rip line was used in case the balloon got free from its safety lines.

**CR:** In the making-of film you mention that *Asylum* put around 14,000 man hours into this project – how long did you have to research and make all the material you created for this? How many *Asylum* guys worked on this project in total?

**MM:** We had about seven weeks before the shoot and even during the shoot we were still working on the cars at the workshop. The cars that were required on set at 8am on the first day were actually finished about four hours earlier at 4am the same morning! In total we had around 30 people working on the cars and around ten others just doing the carbon fibre.

**CR:** What happens to the models when a job like this is done?

**MM:** The real cars that are left at the end of the shoot will be recycled for materials. The others will be stored at our workshop. You never know... **CR**

**CR:** How long was the shoot?

**MM:** The shoot was over ten days



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#### Desire Facts

**Advertising agency:** Ogilvy  
**Executive creative director/creative:** Greg Burke  
**Agency producer:** James Brook-Partridge  
**Director:** Philippe Andre  
**Production company:** Bikini Films  
**Producer:** Dominic Wilcox  
**Production designer:** Jan Houllévigie  
**SFX supervisor:** Mark Mason, Asylum  
**Post-production:** BUF Compagnie