

INSIGHT: HELMET DESIGN

The fastest painter

How crash helmet artist Jason Fowler helps Lewis Hamilton

Fowler poses with a range of helmets he's painted



What do you get if you mix Ray Harroun, a ticket stub and a trophy? A truly mad helmet

One of Jason Fowler's most satisfying jobs is working with IndyCar star Dan Wheldon, who gives the artist creative carte blanche to design helmets. Fowler works in special features and themes for each helmet that he creates for Wheldon.

"Dan likes to have a different helmet for every race," says Fowler. "He's great to work for and really likes to go mad on some of his helmets."

"In America they tend to pick up sponsors on a race-to-race basis, so it changes quite often. I have pretty much a free reign. Dan's helmets have to have the sponsors' logos in the right position, but there aren't as many as for F1 drivers.

"He has a knight on horseback on the back of the helmet and a Union Jack, and as long as it has those on there somewhere, the sky's the limit.

"For the Indy 500 we do a special helmet every year. For the Indy 500 helmet, I normally start three months before the race. It's just a case of spending a few hours on the Internet, researching and printing out pages of images. Then you pick out bits you like and start piecing the images together.

"For the 2006 Indy, we did a whole helmet that was chrome. We did one half like

the Borg-Warner Trophy, with all the faces of the Indy winners on the side. The other side had a airbrushed image of Ray Harroun, the guy who won the first Indianapolis 500, and other images from Indy history, such as a ticket stub from the 1950 race. I had quite a lot of time to do that one and I did go a bit mad. It was a one-off – I wouldn't even try to do it again. It was probably the most complicated one I've done."



Wheldon has different helmet colours for every IndyCar race



Photos: Griffiths/LAT

in the world

stand out from the Formula One crowd

by Matt Burt
editor



Most motorsport fans pride themselves on being able to identify a racing driver from his crash helmet design alone. If you've spent the past season trying to distinguish your Lewis Hamiltons from your Heikki Kovalainens as soon as the television camera focuses on them, chances are your job has been a whole lot easier thanks to the Briton's trademark yellow lid.

And for that, you have to thank an airbrush artist in Suffolk. Jason Fowler is the man who produces Hamilton's distinctive crash helmet livery. Through his Bury St Edmunds-based company, JLF Designs, he has made an art form – not to mention a successful career – out of designing lids for top drivers.

Fowler, who has competed in karting and motocross, first got interested in crash helmet design back in the 1980s.

"I traced motocross from about 11 years old and even back then I used to get American motocross magazines and get all the pictures of the helmets and paint schemes," he says. "Then when I left school I started work as a graphic designer and bought an airbrush and taught myself how to do it. Over the years I started doing helmet designs for friends, but then the company I worked for went out of business. I had quite a few helmets on the go and I thought I'd go full-time and see how long it would last."

That was in 1993, and his business quickly expanded after he took his wares to a trade show in Bristol and came away with enough orders to keep him busy for three months.

"It was pretty much all bike helmets until about 1995, when I did a helmet for Robbie Kerr, who was karting at the time. Robbie had a friend who competed in motocross who had shown him a magazine with my advert in. Robbie was happy with his helmet and told us we should go down to Kimbolton, because there was a meeting on that weekend.

"We walked around the pits with a couple of helmets and gave out some flyers and got loads of orders. At the time the bike market was starting to die off because a lot of the helmets were coming in from China with the graphics and stickers already applied, so people didn't want to pay to have them painted. It was really good timing – we went to



Hamilton has worn Fowler's lids since his karting days

a kart meeting and suddenly realised there was a big need for it and went from there. That's how we got started in four-wheeled motorsport."

Fowler wasn't the only artist doing helmet designs, but he did bring something new to the table: "There were a few people doing it, but the designs were quite simple and quite reserved. I was coming from a bike background where really elaborate designs, special effects and airbrushed murals were expected. We were quite different to what all the other painters were doing at the time."

It wasn't long before Fowler's increasing presence in the kart paddock brought him into contact with a promising father-and-son combo named Anthony and Lewis Hamilton.

"We started doing a lot of the kart racers and, as they moved into car racing, we started to get more work from there as well," he says. "It was about that time – about 1999 or 2000 – when we started doing Lewis's helmet, when he was still in karting.

"He approached us and said he was getting his helmets painted somewhere else, but he'd seen ours around and said he quite liked them. When he first came to us he had a design that was based on his father's designs. There wasn't any 3D work – it was just quite simple bands. He said to us: 'That's my basic design, can you do something to jazz it up and make it look a bit more up to date?' We didn't do too much to it because I didn't want to go too far from what he originally had."



The devil is in the details...

The helmet design evolved subtly as Hamilton progressed through the ranks, but his step up to Formula One in 2007 necessitated some more significant changes.

"It had to change quite a bit when he went to F1," explains Fowler. "The sponsors' logos have to be in a certain position, so the helmet design has to incorporate the logos without overpowering them. The sponsors have to be happy that the logos aren't being swamped by an over-fussy design. Because Lewis has quite a simple design it is quite difficult to change. With a really complex design you can move bits around and you can't really tell, but when it's a couple of simple bands, when they get moved you can see it is a different design.

"We've done the odd change to his helmet, like for Monaco we did a little cartoon for the back. This year's he's run a little cartoon on the back too – you don't really notice, but the overall footprint of the design has to stay the same.

"With Lewis it is really nice to be a small part of it," adds Fowler. "I remember when he got the F1 drive and it was all in the news, it was a nice feeling to have been there since the beginning. When Lewis first went to F1 and the design got changed, I got a really nice email from Anthony about the helmets we'd done. F1 is a cut-throat world with not a lot of room for sentiment but he's been really good to us over the years. It's quite nice to get a challenge and go away and work it out and then go back and give the design to a customer and they are happy with it."

Fowler produced a special design to give to Hamilton as a gift when the McLaren ace won the driver's title in 2008. It featured Hamilton's contemporary design on one side, and the simpler livery he used at the start of his karting career on the other.

Hamilton gets through an average of two helmets for every three F1 race weekends, so Fowler always has a couple of new lids on the go. He also does replica Hamilton helmets: "We get through a lot of yellow paint".

Although Fowler gave up kart racing a couple of years ago to fully focus on his work (he paints around 450 helmets each year) he gets to meet plenty of racing drivers. The lobby of his company premises is filled with motorsport memorabilia.

Although most of the finished helmets are couriered to their destination, his Suffolk location means that some drivers pop in to collect them in person if they happen to be heading east to go testing at Snetterton. He gets to meet with a range of competitors from aspiring young stars, established names and seasoned amateur enthusiasts who want to look the part.

"We've done a lot of wacky ideas," he says. "We did one where the whole helmet was painted as a pumpkin and another that was painted up to look like a bowl of fruit."

Fowler is passionate about his work, and shudders to think how much time he spends with airbrush in hand: "I've never timed it with a stopwatch and wouldn't want to, because I'll probably find I'm working for less than the minimum wage! [IndyCar star] Dan Wheldon's helmet took about 80-100 hours [see sidebar], but the average time for a race design is about 15-20 hours."

His five-strong team – which includes himself and his wife Shirley, who looks after the website (jlfdesigns.com) and organisation, has been busier than ever during the past year and the order book is already starting to fill up for next season. A new-for-2010 Snell safety standard will prompt many competitors to buy new helmets, and there is a new kart helmet for under-15s that will be introduced in Europe. Fowler is getting lots of enquiries about that, just as he did a couple of years ago when the sport's rule makers changed the regulations concerning the positioning of the clips for head and neck safety (HANS) devices.

Fowler has been recently commissioned to paint Andy Green's helmet for the Bloodhound SSC assault on the Land Speed Record, where a speed of 1000mph is being targeted. As well as working with world champions and Indy 500 winners, Fowler could soon become the designer of the fastest helmet in the world. ■



You can see Lewis's helmets, but what's with the pumpkin?

CREATING A HELMET DESIGN

1 GRAND DESIGNS

Competitors usually have a vague idea for their helmet design when they contact Fowler, but he often has to work hard to turn it into reality: "They can see in their head what they want but they can't translate it into words. We encourage people to find images they like the look of. We can look at that and see what direction their style goes in. For example, a lot of young karters go for a similar



design featuring a dayglo colour so their parents can spot it easily." From there Fowler and his team create a simulation of how it will look.

2 START STRIPPING

"When the helmets come in we strip them down as far as we're allowed to," says Fowler. "We prep the surfaces and put a primer on so that the paint adheres to the shell. Then we spray the helmets white. The prep work itself can take a couple of hours. The problem is not getting paint inside the liner: it's a polystyrene liner and if the paint gets in there it can eat away at the polystyrene and



cause damage. We have to make sure the helmet is sealed. You see stickers on helmets saying 'don't paint it'. They're put there more for the liner than the shell. It's to stop people painting it themselves and getting paint inside the helmet."

3 RACING LINES

Fowler: "Once the helmet is all white, the design gets laid up either with fine-line tape or, if it's a complex design, we have to draw it on by hand. You mask up each area of the helmet. Laying the design out can take a long time, but once the lines are down, the colours go on quite



quickly. Sometimes you get complex things that take a couple of hours to draw up, another hour or two to cut it all out by hand and then after 30 seconds of spraying you're peeling it all off again. There is an awful lot of masking up and preparation work involved. In a helmet, 90 per cent of the time we spend on it is getting it ready to paint."

4 WATCHING PAINT DRY

"The paints we use are custom paints from America that are designed for the job," says Fowler. "They give the best colours, they're light-fast and they go on well in very thin coats without adding too much weight to the helmet. Different colours need a different amount of coats on to get the same coverage. For example, the yellow that we use for Lewis

goes on really well in a small amount of coats, but some other colours you need to put a lot on to get the coverage. We use one manufacturer for a lot of our paint, because it is made for the job and is very reliable, but sometimes we shop around to find the best colours for a job."

