

The McLaren Group Magazine

083

RacingLine

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by McLaren 

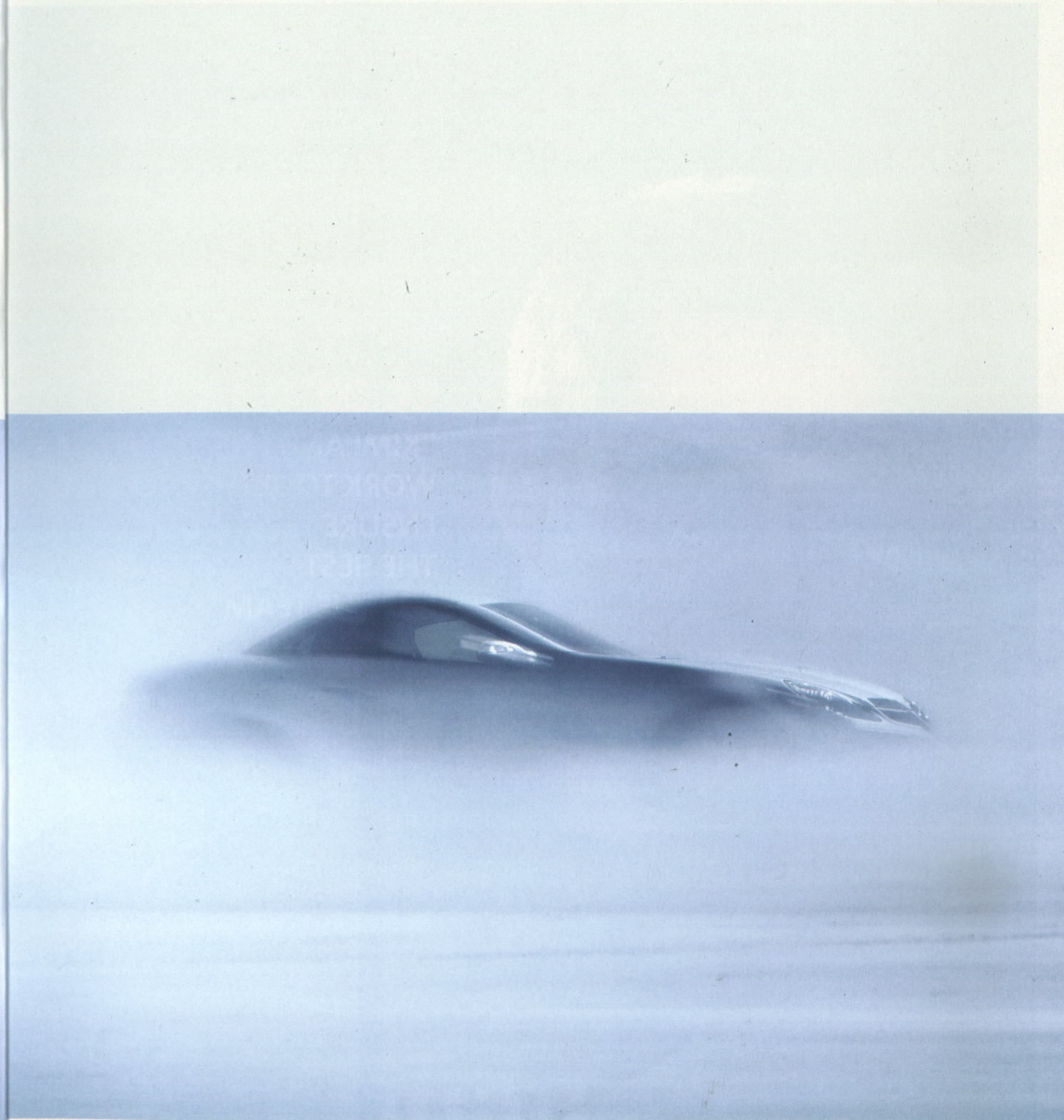
WORLD EXCLUSIVE!

**“I AM HERE TO
WIN”**

WE GO ONE-ON-ONE WITH TEAM
McLAREN MERCEDES' LATEST
STAR – JUAN PABLO MONTOYA

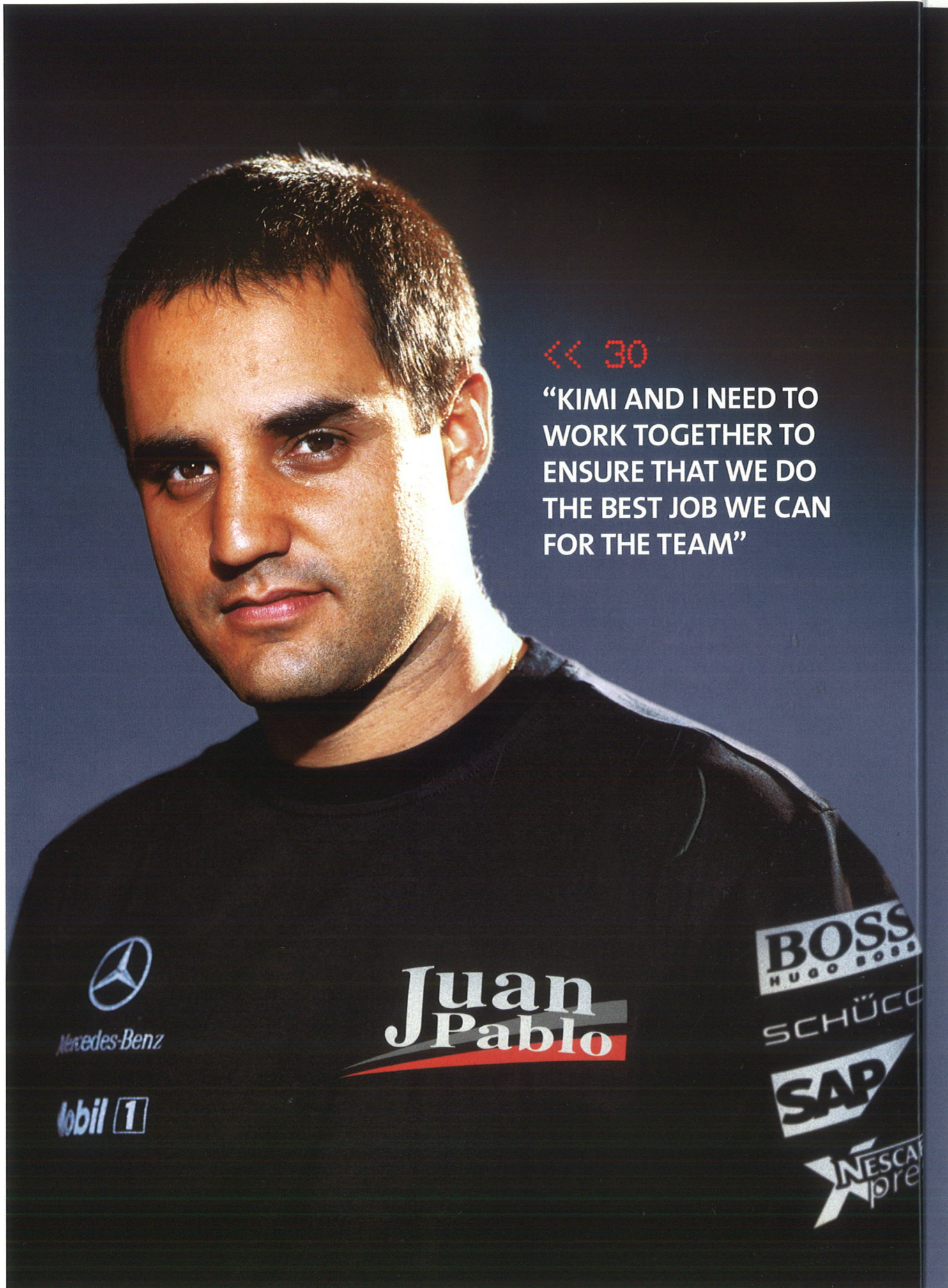
PLUS BEHIND THE SCENES AT A GRAND PRIX WEEKEND ■ THE CHANGING FACE OF THE FORMULA 1 PIT STOP

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<< 30

“KIMI AND I NEED TO WORK TOGETHER TO ENSURE THAT WE DO THE BEST JOB WE CAN FOR THE TEAM”



7 INSIDE LINE

McLaren Group Chairman and CEO Ron Dennis talks about the activities of the company

8 INSIDE TRACK

The latest news, events and promotions from the McLaren Group, its Partners and associates

12 PICTURE PERFECT

Evocative photographs of Team McLaren Mercedes in action over the 2004 season

20 STOP BACK IN TIME

Pit crew members from the 1970s, 1980s and the present day discuss the evolution of the pit stop

28 Q&A – JAY LENO

The American broadcaster talks about his love affair with the Mercedes-Benz SLR McLaren

30 FIRST TIME CALLER

In a world exclusive, we catch up with Juan Pablo Montoya at the McLaren Technology Centre

36 LUBRICATE TO ACCUMULATE

We join Technology Partner ExxonMobil as it celebrates 30 years of its Mobil 1 lubricant

42 BITS & PIECES – FLUID DELIVERY SYSTEM

The secrets of the system that keeps the drivers hydrated during the course of a grand prix

44 THE ULTIMATE TEAM GAME

How exactly does Team McLaren Mercedes operate over the course of a grand prix weekend? We find out

50 TASTING TIMES

Grana Padano, the Italian cheese maker, hosts an event to mark the start of its Partnership with the team

54 UNSUNG HEROES – MICK EAST

The McLaren Racing Pattern Facility Manager explains the intricacies of his day-to-day role

56 TEAM McLAREN

All the latest information from the Team McLaren Mercedes enthusiasts' club

58 POSTCARDS FROM ... STARS AND CARS

An exclusive peek at the annual Mercedes-Benz event held in Stuttgart, Germany



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McLaren's Roll of Honour

Eight Constructors' Championships

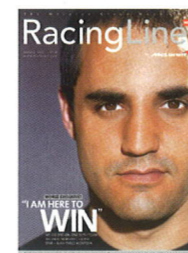
1974 – M23-Ford, 73 points
1984 – MP4/2-TAG Porsche, 143.5 points
1985 – MP4/2B-TAG Porsche, 90 points
1988 – MP4/4-Honda, 199 points
1989 – MP4/5-Honda, 141 points
1990 – MP4/5B-Honda, 121 points
1991 – MP4/6-Honda, 139 points
1998 – MP4-13-Mercedes, 156 points

Eleven Drivers' Championships

1974 – Emerson Fittipaldi – M23-Ford, 55 points
1976 – James Hunt – M23-Ford, 69 points
1984 – Niki Lauda – MP4/2-TAG Porsche, 72 points
1985 – Alain Prost – MP4/2B-TAG Porsche, 73 points
1986 – Alain Prost – MP4/2C-TAG Porsche, 72 points
1988 – Ayrton Senna – MP4/4-Honda, 90 points
1989 – Alain Prost – MP4/5-Honda, 76 points
1990 – Ayrton Senna – MP4/5B-Honda, 78 points
1991 – Ayrton Senna – MP4/6-Honda, 96 points
1998 – Mika Häkkinen – MP4-13-Mercedes, 100 points
1999 – Mika Häkkinen – MP4-14-Mercedes, 76 points

2004 GP Results

Australian GP: David Coulthard 8th; Kimi Räikkönen DNF
Malaysian GP: David Coulthard 6th; Kimi Räikkönen DNF
Bahrain GP: David Coulthard DNF; Kimi Räikkönen DNF
San Marino GP: David Coulthard 12th; Kimi Räikkönen 8th
Spanish GP: David Coulthard 10th; Kimi Räikkönen 11th
Monaco GP: David Coulthard DNF; Kimi Räikkönen DNF
European GP: David Coulthard DNF; Kimi Räikkönen DNF
Canadian GP: David Coulthard 6th; Kimi Räikkönen 5th
United States GP: David Coulthard 7th; Kimi Räikkönen 6th
French GP: David Coulthard 6th; Kimi Räikkönen 5th
British GP: David Coulthard 7th; Kimi Räikkönen 2nd
German GP: David Coulthard 4th; Kimi Räikkönen DNF
Hungarian GP: David Coulthard 9th; Kimi Räikkönen DNF
Belgian GP: David Coulthard 7th; Kimi Räikkönen 1st
Italian GP: David Coulthard 6th; Kimi Räikkönen DNF
Chinese GP: David Coulthard 9th; Kimi Räikkönen 3rd
Japanese GP: David Coulthard DNF; Kimi Räikkönen 6th
Brazilian GP: David Coulthard 11th; Kimi Räikkönen 2nd



Editor: Luke Hayter

Deputy Editor: Gemma Briggs

Art editor: Sarah Mountford

Production managers: Stuart White/Ben Payne

Group editor: Andrew Golby

McLaren editors: Rachel Rumsey/Ellen Kolby

Publisher: Robin Shute

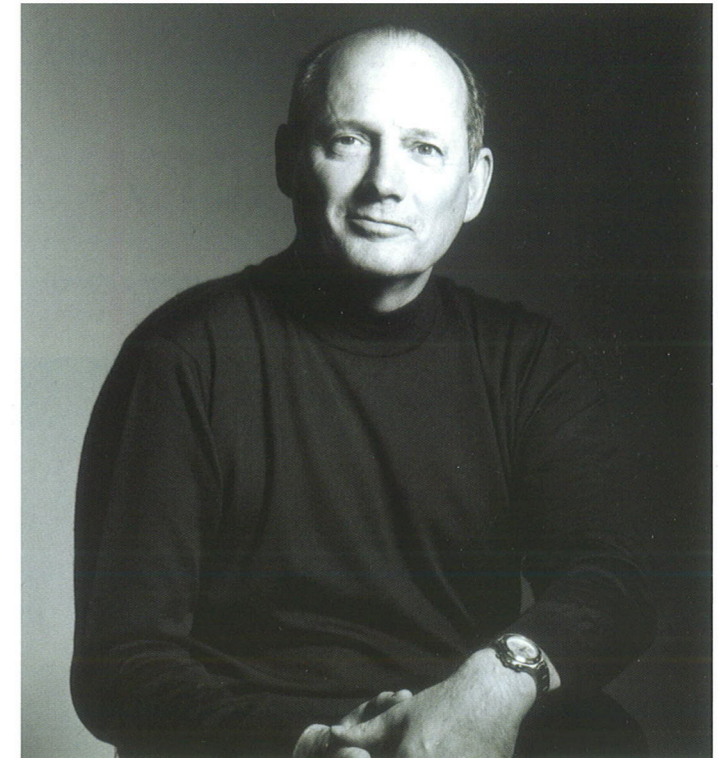
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Portrait by Hugo Burnand



InsideLine

For any company involved in the Formula 1 business the notion of an 'off-season' as such is a somewhat theoretical concept. One world championship campaign moves seamlessly into the next and, as I write this introduction, everybody at Team McLaren Mercedes has their heads down working hard to ensure that the MP4-20 Formula 1 challengers are completed by their scheduled deadlines. Although the cyclical nature of the season amplifies the occurrence of the different stages of the Formula 1 programme, the start of a new year also marks an exciting period for all the companies within the McLaren Group. There are a number of interesting ventures that will be executed during the course of 2005, and you will be able to read all about them in the pages of *Racing Line* over the coming year.

We are obviously looking forward to the coming Formula 1 season with a sense of enthusiastic expectancy with the firm intention of building on the steadily improving performance we achieved in the second half of last season. Since the final race at Interlagos, we have completed a significant amount of testing kilometres and will be ramping up the intensity of our programme in January during the build-up to the 2005 Australian Grand Prix. Every member of the team is fully prepared for the challenge ahead and as focused and determined as ever to give their best.

Juan Pablo Montoya joins Kimi Räikkönen in our driver line-up and he has already completed his first tests for us at Barcelona and Jerez in Spain. He has quickly integrated into his new environment and has gone about the task of immersing himself in the McLaren ethos with the commitment and single-mindedness one would expect from a seasoned and experienced Formula 1 competitor.

As I have often stated, I firmly believe Kimi and Juan Pablo will be a formidable pairing and they will work well together to achieve the best results for the team. This is another factor that makes me think 2005 will be an exciting year, both for us and the sport in general, and we look forward to enjoying it with all the Formula 1 supporters across the world.

I would also like to take this opportunity to wish all the *Racing Line* readers a Happy New Year.

Ron Dennis CBE
McLaren Group Chairman and CEO

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Testing begins at Barcelona and Jerez, Kimi tries Mercedes-Benz DTM car

TEAM RUNS JUAN PABLO IN SPAIN



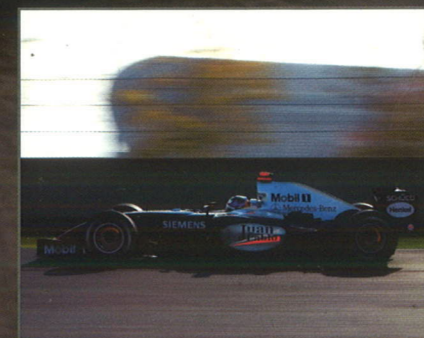
Team McLaren Mercedes has been busy testing at Jerez and Barcelona in preparation for the 2005 Formula 1 season. These sessions marked the debut of new signing Juan Pablo Montoya.

"The first time I went out of the garage in a Team McLaren Mercedes Formula 1 car was special," said Juan Pablo. "I know a lot of the guys in the team already and am really looking forward to working with everybody."

"The main aim of Juan Pablo's first test in MP4-19B was for him to familiarise himself with how the test team operates," explained Test Team Manager Indy Lall.

"He seems to have settled in well and is getting to know everyone in the test team." Juan Pablo was joined at the tests by Pedro de la Rosa and Third Driver Alex Wurz.

"I'm very pleased that Juan Pablo seems to be fitting in well with the team and we are all looking forward to working with him," said Team Principal Ron Dennis. "Reports from Spain suggested everything went according to plan and that the team and Juan Pablo were working well together. There is a lot of work ahead of us to ensure that we are in the best possible shape to challenge for the 2005 Formula 1 World Championship."



Juan Pablo enjoyed a successful first test with the team

PICTURE CREDITS
LAT/ MERCEDES-BENZ

KIMI ENJOYS DTM RIDE

Kimi Räikkönen swapped the driving seat of a Formula 1 machine for that of a German touring car when he took part in a fun test with the works Mercedes-Benz DTM team in late November. The event took place at Hockenheim prior to the Mercedes-Benz Stars and Cars day. Kimi, who has always been interested in DTM, was given the opportunity to drive an AMG-Mercedes C-Class and came close to achieving the top lap times set in the last DTM race held at the circuit.



Kimi proved his is as quick in a touring car as he is in a Formula 1 car when he tested an AMG-Mercedes C-Class

TEAM DRIVERS APPEAR AT STARS AND CARS

Members of Team McLaren Mercedes recently attended the annual Mercedes-Benz Stars and Cars event, held at the Daimler-Chrysler plant at Stuttgart-Untertürkheim. Thousands of company personnel and motor racing fans enjoyed the traditional end-of-season event, which featured appearances from Kimi Räikkönen, Pedro de la Rosa and Alex Wurz. All the drivers were interviewed on stage and signed autographs for the crowds, while Kimi also took part in a race simulator competition.

Highlights included a the chance for guests to sit in a Formula 1 car, a drivers' parade and a pit stop challenge between the Formula 1 team and the Mercedes-Benz DTM German touring car outfit. There was also a demonstration of Mercedes-Benz cars past and present and acceleration contests between race and production cars.

McLaren Group chairman and CEO Ron Dennis and Vice President of Mercedes-Benz Motorsport, Norbert Haug also made appearances at the event. [To see a selection of photographs from the day, turn to page 58.]

Young drivers get first taste of Formula 1 power; Grana Padano holds launch event

GRANA PADANO HOLDS LAUNCH EVENT TO CELEBRATE START OF PARTNERSHIP

An exclusive launch event was recently held at the McLaren Technology Centre to celebrate its Partnership with Consorzio Tutela Formaggio Grana Padano. Food journalists, trade buyers from multinational supermarkets and members of the Italian Trade Commission were among the guests who visited the facility to celebrate the commencement of the Partnership. During the evening they were given tours of the impressive kitchens, as well as the race

bays. They also sampled canapés made using the cheese, which were produced by Absolute Taste – the McLaren Group’s catering arm – and Michelin-starred chef Giorgio Locatelli. Guests were addressed by McLaren Group Chairman and CEO Ron Dennis and Grana Padano President Nicola Baldighi, who explained the synergies between their two companies. For full details of the evening, turn to the *Tasting Times* feature which starts on page 50.



HÄKKINEN TO RACE DTM WITH MERCEDES-BENZ

Former Team McLaren Mercedes driver Mika Häkkinen is making a comeback to racing, competing for Mercedes-Benz Motorsport in DTM, the German touring car championship. The Finn, who retired from Formula 1 at the end of 2001, will contest the series in an AMG-Mercedes-Benz C-Class, which he has already tested at Germany’s Lausitzring circuit. “After leaving Formula 1, I realised that I’m not

ready to retire for good. It was just the right moment that Mercedes-Benz offered me a test in a DTM car,” explained Häkkinen. “The AMG-Mercedes-Benz C-Class is a great car and I want to be consistently competitive soon. It should be an interesting season with exciting battles – against former Formula 1 colleagues as well as against the young drivers – and to see my fans again. I’m especially happy about returning to the Mercedes-Benz family.” “We are very happy about Mika’s decision to compete in the DTM series with us,” added Norbert Haug, Vice President of Mercedes-Benz Motorsport. “The Championship will gain a lot from his commitment.”

TASTE OF F1 FOR YOUNG DRIVERS



CLOCKWISE FROM TOP Alex Lloyd prepares for his run in the MP4-19; Jamie Green behind the wheel

Winners of the McLaren AUTOSPORT BRDC Young Driver of the Year Award recently claimed part of their prize by testing a Team McLaren Mercedes MP4-19 at the Silverstone circuit in the UK. The 2003 award winner Alex Lloyd was joined by 2002 winner Jamie Green. Both drivers completed 21 laps of the national circuit, in what was for each their first chance behind the wheel of a Formula 1 car. “Driving a Team McLaren Mercedes Formula 1 car is a big milestone in my life,”

said Green. “When I won the award, my first thought was ‘wow, I am going to get to drive a Formula 1 car.’ This has been a day I will always remember.” “As I came out of the pitlane there were no words to describe the feeling,” said Lloyd. “I had not driven a car with carbon brakes before so that took some getting used to, however for the last few laps I was getting on really well.” See the February issue of *Racing Line* for a full report from the day.



PICTURE CREDITS>
LAT/ MERCEDES-BENZ

Information

- Team McLaren Mercedes’ Test Driver Pedro de la Rosa recently became a father for the second time when his wife, Maria, gave birth to their second daughter, Olivia. “In Formula 1, timing is everything and I definitely got the timing just right, having the baby during the Formula 1 break!” said Pedro.
- Two engineers from McLaren Cars, Jim Dowle and Chris Gardner, were set to take part in a unique race from Plymouth to Dakar as *Racing Line* went to press. The event involved driving over 3,000 miles in a car costing less than £100, with the pair raising money for charity along the way.

RON DENNIS ACCEPTS CHEQUE FOR TOMMY’S

As Co-Chairman of the Board of Trustees of Tommy’s, the baby charity, McLaren Group Chairman and CEO Ron Dennis was presented with a cheque by SELOC, the Lotus Enthusiasts Group, in November. It raised £20,000 through an event held at Bruntingthorpe Proving Ground in Leicester, which featured over 500 Lotus cars. Members of the club also held events including an online auction to contribute to the donation. “Tommy’s relies almost entirely on voluntary support from people like the members of SELOC to fund its ground breaking research into miscarriage, stillbirth and premature birth and we are extremely grateful to SELOC members for supporting us in this way,” said Ron Dennis.



WIN SIGNED TEAM CAP

To mark the start of Juan Pablo Montoya’s career with Team McLaren Mercedes, we have an exclusive signed team cap to give away. To be in with a chance of winning, simply email racingline@mclaren.com with ‘Juan Pablo Competition’ in the subject bar and tell us at which circuit he completed his first test with the team. Don’t forget to include your name and address. Good luck!

PICTURE PERFECT

Hundreds of great images of Team McLaren Mercedes were taken during 2004 and once again, *Racing Line* has selected the best. See February's issue for the final choice and details on how to vote for your favourite and win a signed print

#1

Photographer:
Rainer W. Schlegelmilch
Belgian Grand Prix,
Podium

Kimi had to wait for his second grand prix win, but when it came, it could hardly have been better



**PICTURE
PERFECT**



#2

Photographer:
Darren Heath
US Grand Prix, Pit Lane

A rare moment of stillness
in the vast Indianapolis
pitlane: enjoy it while you
can; it will not last long

PICTURE PERFECT



#3

Photographer: Mark Sutton/Sutton images
Belgian Grand Prix,
La Source hairpin

There is no greater test
of a driver than the Spa-
Francorchamps circuit,
here's Kimi taming it

PICTURE
PERFECT



#4
Photographer:
Jurgen Tapp/Hoch Zwei
British Grand Prix,
Pit Lane
Kimi has just put his car into
pole position – the team's
first of 2004. The smile
tell you what it means...



STOP BACK IN TIME

Life in the pitlane has come a long way in the past three decades. *Racing Line* assembled six of McLaren's pit crew past and present to discuss how it has changed

WORDS BRUCE JONES PHOTOGRAPHY MIKE WESTON, HOCH ZWEI, LAT

Watch a pitstop and it's a blur of choreographed activity carried out by 30 overall-clad and helmeted figures. Wind the clock back to the 1970s, though, and it was different. Pitstops weren't a regular part of the show plus, when they did happen, the tools were rudimentary and the crew dressed in short-sleeved shirts.

To expand on the differences, we assembled six masters of the pitstop. Ron Pellatt [RP] and Paul Simpson [PS] remember back to the 1970s, Rick Goodhand [RG] and Gary Wheeler [GW] to the 1980s, with Brian Hardy [BH] and Warwick Pugh [WP] relating how it is now.

RP: "We had pitstops only if there was a problem with the car or a puncture. As we didn't have radios, we had to spot which way the car was leaning as it came in to detect which tyre was flat."

PS: During the 1970s, we used a pad jack at each corner. From the 1980s onwards we started to use a single jack under the nose of the car. There were times when the cars rode so low it could be hard to get anything underneath. This was especially true after the start of the race, as we would top the cars up with fuel on the grid, so they would have 180 litres on board. We also tried a hydraulic lift, but that was very heavy. Today the quick-release jack is used."

Imagine too, that there were no air



guns used in the pitlane until 1974.

RP: "We'd use a T-key and hit it with a copper hammer. One of the worst things was that you had to grab the hot wheel nut and we didn't wear gloves. Putting the wheel pin back in was also tricky as you needed the driver to keep his foot on the brake to help get the alignment correct. This didn't always happen and I remember another team's driver trying to leave the pitlane at an Austrian Grand Prix when a rear wheel was still being fitted and some of the pit crew were knocked over."

PS: "Another aspect that made changes tricky was that the wheels were large and heavy."

GW: "The front tyres were about the width of today's rears..."

The size of the crew was another difference, being much smaller in the 1970s than in the present day.

PS: "There were six – one per wheel plus a front and rear jack man. There wasn't even a lollipop man. As we practiced, we developed techniques



LEFT In 1986, the team went to work on Alain Prost's car wearing swirling red coats and no helmets or gloves. Safety, and technological advances, have rendered scenes like this obsolete

such as keeping a spare nut on a tie-wrap with one end attached to your shirt and the other in your mouth."

GW: "Then you'd drop that as well, it would roll away and you'd wonder why you hadn't put the spare on the ground to start with..."

PS: "Also, the nuts weren't tuned to the axles so there was no lead-in which meant that cross-threading [where the threads are not correctly aligned] sometimes occurred. If you didn't locate the wheel onto the drive pegs and were, at the same time, able to engage the wheelnut on to the axle thread, you would have 'pegged' the wheel and only realise that you'd done so when you couldn't get the pin in."

RG: "This soon changed so that if you

pegged the wheel, there was no way that you could start threading the nut."

PS: "Originally, the drive pegs were flat-ended which could make them difficult to locate. Now they are bullet-shaped which makes it much easier to locate the wheel during a pit stop."

One feature that has been developed to prevent fumbling is the wheel pin, which was introduced after Michele Alboreto's Minardi shed a wheel in the

pitlane after a stop at Imola in the 1994 San Marino Grand Prix.

RG: "The wheel pin was there to stop the nut falling off if it became loose. Nowadays, a wheel retention device (inset, left) is fitted to the end of the axle and performs the same job."

With so much hanging on pitstops, practice is essential and every advantage that can be gained has to be examined.

BH: "We rehearse a lot today, even for the 'double-shuffle', which is the, >>

"SENNA WAS ALWAYS SPOT-ON WHEN PLACING HIS CAR; BUT GERHARD BERGER MADE YOU NERVOUS!"
PAUL SIMPSON, PIT CREW MEMBER, McLAREN



Both Rick Goodhand (left) and Gary Wheeler were pit stop crew in the 1980s



fairly unusual, scenario of both cars pitting at the same time.”

PS: “Since the FIA [Formula 1’s governing body] fitted transmitting devices in the pitlane, our pitstop area is defined but it used to be wherever we wanted it. This meant we could put our pitstop area right next to the neighbouring team’s garage area to make the entry to their stops tight or we could push it the other way so our drivers had an easier exit.”

If the technique was different, so were the clothes, with shirts and shorts when the race was held in a hot climate.

RP: “I have tried today’s kit but the helmet made me feel remote from what I was doing as the visor steamed up. The benefit to the guys in safety terms is obvious, though.”

PS: “There was a big change when we moved to refuelling as we had to allocate time before the race to change into fireproof overalls whereas we used to be working on the cars right until they went to the grid.”

The refueller’s helmet was the self-contained type used by the fire service, and was twice the weight of a regular helmet. Nowadays, the team uses a smaller and lighter helmet which gives better protection with improved vertical and lateral vision.

PS: “When we first used helmets, we



“THE WHEELS WERE LARGE AND HEAVY: THIS MADE CHANGING THEM DIFFICULT”

PAUL SIMPSON, 1970s PIT CREW MEMBER, McLAREN

checked how much air would be needed in the back bottle, but we had not taken into account the fact that the wearer would be sucking air in more quickly because of his exertion during the actual pitstop process. This meant the refueller started running out of air halfway through the second stop, so we promptly increased the levels.”

WP: “When I tried the helmet initially I found it quite stressful, but I quickly got used to it. It had a restricted field of vision which did make it difficult

when you had to come out for a stop and step over hoses.”

Another piece of equipment that has made life easier for the pit crew has been the introduction of the radio headset.

PS: “We didn’t have them until the late 1980s, though there was a plug-in facility for the engineers. When we first got radios it was confusing, as you’d often not hear which driver was coming in, which made grabbing the right tyres a little tricky.”

The element that made the greatest



BELOW Back in 1987, refuelling was a somewhat more low tech affair
BELOW LEFT In the modern era, however, safety has become the dominant factor



change to the pitstop was in 1982 when refuelling, which had been commonplace in the 1950s before races were shortened and fuel consumption improved, was reintroduced to the process.

GW: “I was at another team back then. Just as the cars were less safe than they are today, the refuelling equipment was no different.”

RP: “You also had those steaming hot turbos. It was a recipe for an inferno.”
Static was another risk and metal strips were introduced in the 1990s to drain static from the car as it stops. They are fixed to the pitlane where the cars pull up, with the free end springing up to touch the car’s underside.

WP: “There were no speed limits in the pitlane back then either.”

RP: “The cars would come in flat-out and occasionally equipment would be knocked over.”

PS: “Ayrton Senna was always spot-on when placing his car, but Gerhard Berger made you a bit more nervous! When Michael Andretti came from IndyCars [in 1993], we thought he’d be excellent, but he couldn’t handle the crowded pitlane and we had to give him a marker.”

Considering the hazards involved, there were surprisingly few pitlane fires.

PS: “I remember one that Keke Rosberg had with his Williams at Rio in Brazil in 1983. The crew



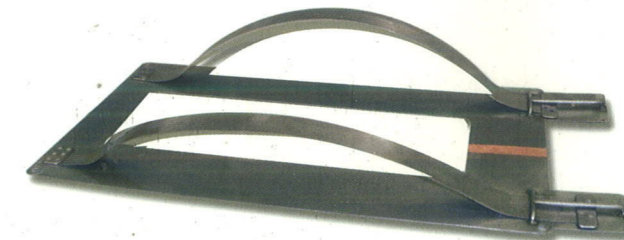
extinguished it and he was told to get back in and rejoin the race...”

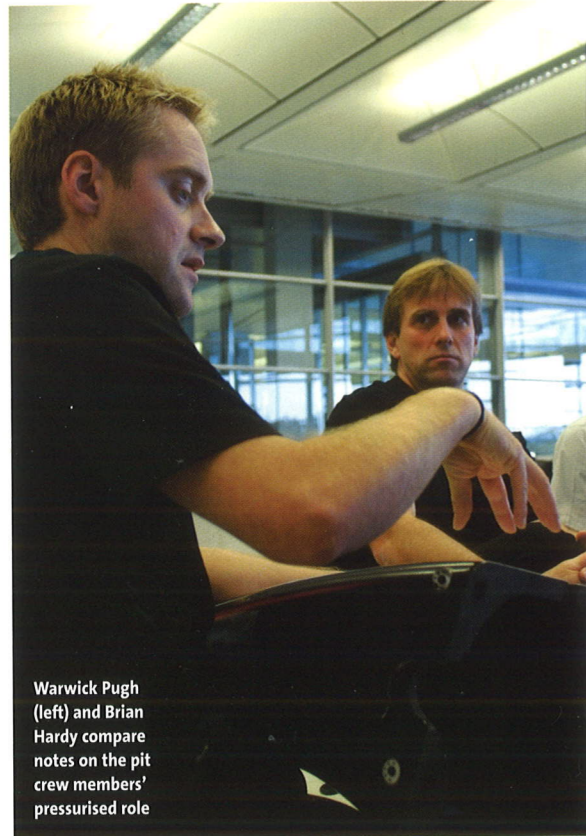
Much as the physically larger mechanics would get to change the rear wheels or operate the rear jack, those chosen to handle the refuelling nozzle and hose are also selected for their muscular strength.

PS: “You also tended to put the number one mechanics on the guns and the chief mechanic on the lollipop at the front of the car.”

Another function of the pitstop has been to allow minor crash damage to be repaired, an area which has >>

CLOCKWISE FROM TOP Air guns are a relatively recent pitlane phenomenon (they were introduced in 1974); a pit stop picture promotes discussion between two of our mechanics, Paul Simpson and Warwick Pugh; Paul explains his point while Brian Hardy and 1970s veteran Ron Pellatt look on; the stainless steel ‘springs’ that earth the car when it enters its box





Warwick Pugh (left) and Brian Hardy compare notes on the pit crew members' pressurised role

"OUR RECORD FOR A PIT STOP IS JUST 3.8 SECONDS AT THE MONACO GRAND PRIX IN 1993"

GARY WHEELER, 1980s PIT CREW MEMBER, McLAREN

certainly moved on.

RG: "To change the nosecone in the 1980s you needed long extension sockets that you inserted into the nosebox. Luckily, we soon changed to the current cam-and-pull system for a quick release mechanism."

PS: "We used to have cordless drills to release the bolts. So we have gone from hidden bolts to external bolts, to cam-and-pull. A nose change should only take 10 seconds now."

WP: "As some people will be making their way back from the grid, we also take the precaution of having a back-up crew in place to deal with any first lap incidents that may occur."

Measured and choreographed as

pitstops should be today, fast is best.

GW: "I think that the best time to be in the pit stop crew was in the 1980s as the crew made the most difference then. Now, in my opinion, it's more a matter of strategy."

RG: "If your rival was coming in, your driver would come in too."

PS: "If it was under six seconds we thought it was a good stop."

GW: "Our record for a pit stop was 3.8 seconds for Michael Andretti at the Monaco Grand Prix in 1993. Of course, there was no refuelling then."

Looking at the passion that our conversation engenders, one can see the pride that this pitlane sextet derive from a job well done. ■



In 21st century-Formula 1, the emphasis is firmly on strategy, meaning that the work of the pit crew is more vital than ever

TAG Heuer
WHAT ARE YOU MADE OF ?

Computer Associates
Kimi
TAG Heuer
SIEMENS
Mobil 1

KIMI RAIKKONEN AND HIS KIRIUM FORMULA ONE

SWISS AVANT-GARDE SINCE 1860

American broadcaster **Jay Leno** is host of *The Tonight Show* and one of the world's foremost collectors of classic and performance cars. He talks to *Racing Line* about becoming the first American owner of the Mercedes-Benz SLR McLaren

PHOTOGRAPH BILL NATION

How did you come to take delivery of the first Mercedes-Benz SLR McLaren in America?

I've always had close ties with the company. I used to work for Mercedes-Benz as a kid... I was a [car] lot boy. I knew that washing cars for a living I'd never be able to afford one. When they introduced the SLR at the LA Auto Show, I went down. I was talking to some Mercedes-Benz people and they were impressed with my knowledge of the marque so they asked me to say something to the crowd. I answered some questions and that made the front page of the *LA Times* and *Fortune* magazine. They then asked me to introduce the Maybach. I did and I then made a deal to get the very first SLR in America.

It is not just Mercedes-Benz, I have always been a fan of McLaren, I've got a McLaren F1 roadcar. The minute I heard about the SLR I wanted one.

When the car arrived, was the reality as good as the dream?

Absolutely, although I would say that 95% of the people who say that could in no way reach the car's capability. For instance, I went into a corner and as I got halfway through, there was a bit of sand and I felt myself start to slide. It was like a religious experience: the hand of God actually came down, straightened the car out, smacked me in the face, and sent me on my way. It was pretty amazing.

I've driven both with the traction control off and on, and I don't believe the traction control is completely off. The few times I've managed to take the car to my own limit – maybe a bit over – it's always responded really well.

Apart from the sheer speed and handling what else do you like about the Mercedes-Benz SLR McLaren?

This sounds odd, but the SLR is one of the few cars I can drive on roads I have not been on before. For instance, the Porsche Carrera GT is a wonderful car but it's so incredibly low. There's nothing more embarrassing than being in a half a million dollar car and pulling into a car park that has more than an eighth inch rise to it people are going BEEP BEEP! Whereas with the SLR you can do what you would in a normal car, but quicker. It's got a proper boot and you can parallel park it looking over your shoulder.

Design-wise, I like way that the car has been thought out, for example, the exhaust on the side. They put it there because the early car had it and then they worked on the solution of how they could get it to work properly. I like the start-up procedure... I just like all the pomp and circumstance that goes with it.

On the road, one minute you can be tearing through the hills – you know, hooligan stuff. But the nice thing is, the next minute you can take the wife in it, you can park it. I think the Mercedes-Benz SLR McLaren is the perfect compromise of road and sports car.

Those three letters 'SLR' have quite a heritage. Is that something you are aware of?

The name has a great heritage, doesn't it? I can still picture Stirling Moss in the original SLR. There's no real mechanical connection between the two cars, but there's a spiritual link. It's through osmosis, or whatever you want to call it, the connection.

You also own a McLaren F1. How do the two cars compare?

Obviously they both have incredible performance. They're both over 600bhp and then there's the handling. The F1 is the greatest car of the 20th century. It sounds odd to say that but of all the cars from the year 1900 to the year 2000, the greatest of them all is the F1. There's a great deal of satisfaction in that when you drive it, you know this is the best, the fastest production car in the world. McLaren just got it right from the start.

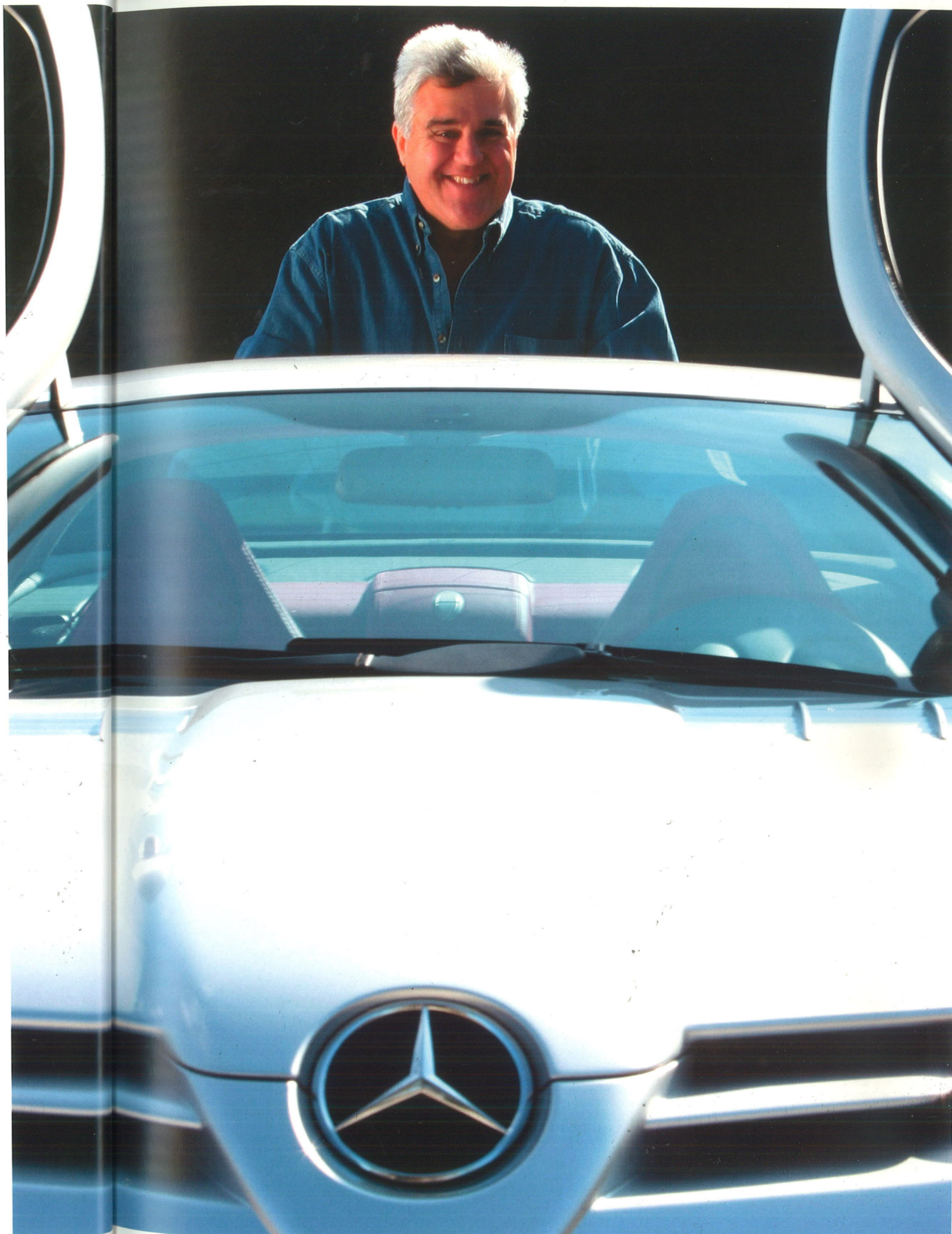
To me, the SLR seems, perhaps, a more mature version of the F1 roadcar. The fact that it has a CD player, for example. However, I have yet to play a CD in it. I find it entertaining enough to drive on its own.

You have done 1000 miles on your SLR. Where have you taken it?

That's the great thing about Los Angeles, there are some of the best driving roads I've ever found in America. Places like Angeles Crest and Mulholland Drive.

Is there a 'Great Drive' you'd like to take it on?

I'm not one of those people who'd take it on a long drive because as I am sleeping I am thinking: 'Somebody's touching my car'. Unless I am driving from one secure location to another I wouldn't feel comfortable about using a car like the SLR. To most people where they are going is more important than the journey. To me the journey is the whole thing... the driving, really using the vehicle. I have to say, driving is a serious business in this car. ■



FIRST TIME CALLER

Juan Pablo Montoya is the latest addition to the Team McLaren Mercedes squad for 2005. *Racing Line* caught up with him as he visited the team for his inaugural seat fitting

WORDS TONY DODGINS PHOTOGRAPHY GRAHAM KUHN



It is a bright, crisp morning at the McLaren Technology Centre. Just another normal day? Not quite. Juan Pablo Montoya, one half of the team's race driver line-up for 2005, is visiting the new team nerve-centre.

The purpose of this visit is to undertake a seat fitting, but if there is any nervousness at entering a new working environment and beginning fresh relationships with key people, it doesn't show. Respectful introductions everywhere are followed by good-natured banter and the occasional jocular gesture as Juan Pablo recognises familiar faces; a gearbox technician from F3000 here, an F3 mechanic there.

Everywhere he goes, Juan Pablo flicks glances at his surroundings, clearly in awe. "This is a great place," he says. "Anyone who comes here can't fail to be impressed with the way that all the details have been thought-out." Then he catches sight of the numerous Formula 1 machines that line the boulevard. "Seeing all these cars here together is pretty amazing," he exclaims, before going on to list in great detail the races and championships that each car captured. It's obvious that he is a bona fide racing aficionado.

As Juan Pablo entered his teens, his hero was Ayrton Senna, who had just joined McLaren as the team began one of its most prolific and successful periods (incidentally, Juan Pablo is the first South American to drive for the team since the great Brazilian). Obviously, he says, a driver is aware of a team's pedigree and it's important, but career choices are not emotionally driven.

"THE OPPORTUNITY TO JOIN THE TEAM CAME ALONG AND I THOUGHT IT WOULD BE GREAT FOR MY CAREER"

"When the opportunity to join the team came along and I started talking to them, I thought it would be a great thing for my career. It was a fantastic opportunity."

From the very start of their dialogue, the team told Juan Pablo that they could develop his career still further. "I really think that will happen," he continues. "That's one of the main reasons I came here. The team's management >>



TOP TO BOTTOM: Juan Pablo checks out the team's numerous trophies, no doubt hoping that he can add to the collection; getting settled in the car for the first time; sharing a point with Phil Prew, who will be Juan Pablo's race engineer in 2005



JUAN PABLO JOINS THE TEAM



TOP TO BOTTOM
The intricacies of the steering wheel are explained; Juan Pablo shows his sense of humour; inspecting some Team McLaren Mercedes world title winners from the recent past



"I GET ON WITH KIMI REALLY WELL. HE'S DONE A FANTASTIC JOB AND I HAVE A LOT OF RESPECT FOR HIM"

told me that I have a lot of talent and that they think they can get a lot more out of me."

Like what, specifically? "Everything from fitness levels, through driving levels to commitment," Juan Pablo responds immediately. "I believe I can become a much better person and a significantly better driver."

Seat fitting done, Juan Pablo climbs out of the cockpit and strips down to his waist before pulling on some team clothing for the first time. It is a sight that shocks the eyes, at first, but the black, elegant team kit does sit well on the Colombian's broad shoulders. The team want to shoot a few poses of him wearing team clothing for *Racing Line*, and, as the results on these pages prove, he's only too happy to oblige.

He's also happy to discuss any aspect of his decision to join Team McLaren Mercedes. Some think that heading for a team in which a driver as talented as Kimi Räikkönen already has his feet under the table could be a mistake. Juan Pablo disagrees. "I get on with Kimi really well. He's done a fantastic job and I have a lot of respect for him. He's one of the guys who races cleanly and I've never had any problems with him on track. The reason I came here, though, is because I believe I can win. Kimi and I need to work together and do the best job we possibly can."

Indeed, a tantalising glimpse of what the future may hold unfolded at the 2004 Brazilian Grand Prix, where Juan Pablo finished the season on the top step of the podium after winning a race-long tussle with his new team mate. He enjoyed a good celebration, he admits. "In a fast-food restaurant on the way to the airport..." You laugh. "I'm serious!" he insists. And now you're not sure. "When I crossed the line at Interlagos I thought: Frank [Williams] is going to be happy but Ron will be even happier!"

Juan Pablo is mindful that it takes time to establish >>



CLOCKWISE FROM TOP LEFT Montoya (wearing an interim black race suit) goes through the seat fitting process, and sees his name on a Team McLaren Mercedes car for the first time



"I'M LOOKING FORWARD TO DRIVING THE 2005 CAR BUT IT'S DIFFICULT TO KNOW WHAT TO EXPECT"

working relationships in any new environment but doesn't see that as a barrier to success in 2005. "Hopefully we'll have that all sorted by Melbourne," he says. "I think the relationship is always going to get better. You get to know people better, start working more closely together, create friendships. I'm sure the guys responsible for my car will work hard because we've got the same goal – to win."

The feasibility of winning races and challenging for the championship in 2005 will not be known until the cars run to the new Formula 1 regulations. "I'm looking forward to driving the new car but it's hard to know what to expect," Juan Pablo admits. "We know for sure that we will be losing quite a bit of downforce and that alone will make things more difficult. Also, with the rules regarding tyre use changing [one set of tyres must complete both qualifying and the race in 2005] we will have to look after the tyres much more and this will be a challenge not only for the drivers but the teams as well. It's our job as drivers to cope with these changes, though, and if the equipment is quick enough to win, then we can win, no doubt." Confidence with Juan Pablo is never in short supply. He can't wait to get down to business.

"He's got the most smouldering stare!" says one of the McLaren girls who meets him for the first time. "It can go right through you if you're not used to it..." Upstairs, management will no doubt be hoping it will be reserved for his rivals. Smouldering Latino and the Ice Man. Stand back. It makes for an explosive cocktail. And quite a team! ■

JUAN PABLO – THE STORY SO FAR

Juan Pablo Montoya was born in Bogota, Colombia on 20th September 1975 and was introduced to karting at the age of five by his uncle Diego. Loyal father Pablo has also supported his son's racing ambitions since day one.

Juan Pablo won a number of karting titles and took part in both open-wheeled and saloon car races in South America before making the move to Europe in 1995, when he finished third in the British Formula Vauxhall Championship. From there it was up to F3, where he won a brace of races in his debut season and made the move straight into F3000. He finished runner-up in the championship in 1997 with the RSM Marko team, winning three races and demonstrating the aggression and natural racing ability that has since become a trademark.

Juan Pablo joined another team for 1998 and won four races en route to a record one-season F3000 points tally (65). His 1997 showings had been noticed by Williams Formula 1 team boss, Frank Williams, who tested Juan Pablo and signed him to a contract before he moved to Chip Ganassi's team in the USA. Juan Pablo was the most impressive rookie the CART championship had ever seen, equalling Nigel Mansell's record seven

pole positions and scoring seven wins to secure the championship in 1999.

The following season, Juan Pablo also won the Indy 500 on his first visit to the famous Brickyard, the first time a rookie had won the event since Graham Hill in 1966. It was now that Williams brought him back to Europe to race in Formula 1.

In just his third race, Juan Pablo muscled his way past Michael Schumacher and led for 36 laps before being taken off by a back marker. He also took three pole positions and his maiden grand prix victory at Monza in Italy.

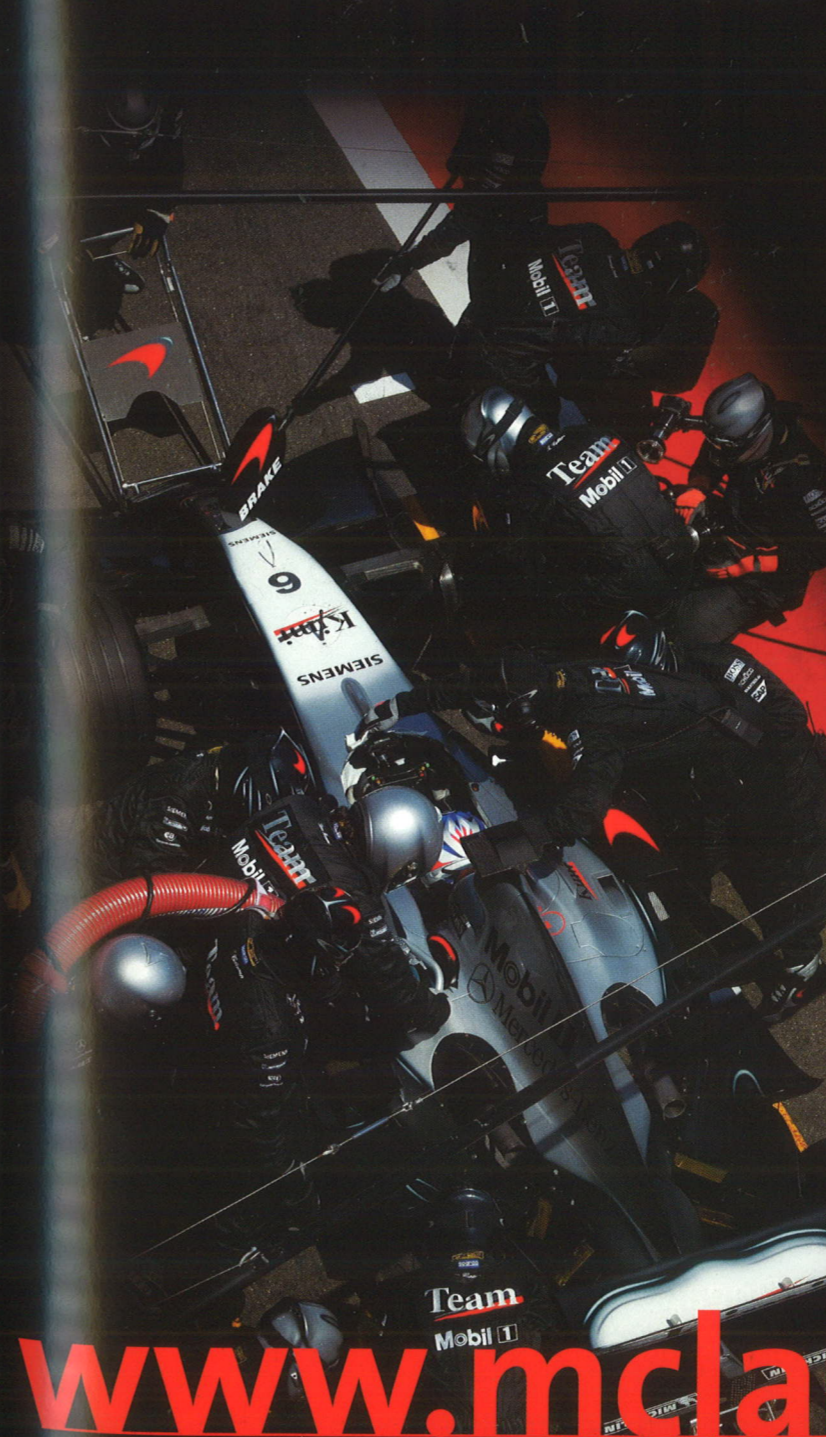
In 2002, Juan Pablo took seven pole positions and finished third in the Drivers' World Championship. He was stronger still in 2003, winning at Monte Carlo and figuring in the championship battle right up until the penultimate round at Indianapolis when he was penalised for a move on Rubens Barrichello.

Juan Pablo hoped that 2004 could be 'the year,' but it was not to be. He did manage victory in his final race for Williams at the Brazilian Grand Prix, however, winning an absorbing battle with his new Team McLaren Mercedes team mate Kimi Räikkönen.

His success in Europe and in the USA has turned him into an international star. He has become a regular on the David Letterman show on New York's Broadway and has been described as Colombia's favourite export after coffee!

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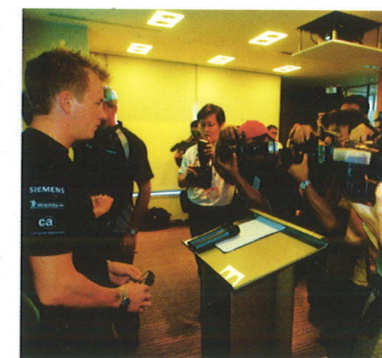
LUBRICATE TO ACCUMULATE

Team McLaren Mercedes Technology Partner ExxonMobil is celebrating 30 years of its market-leading Mobil 1 synthetic lubricant. *Racing Line* joined the company in Singapore as it marked the special occasion... with a little help from Kimi Räikkönen

WORDS LUKE HAYTER PHOTOGRAPHY ANTHONY CULLEN



CLOCKWISE FROM TOP Kimi addresses the crowd before beginning media interviews; everyone wants a photo of the star; a busy day of appearances for Kimi



There's a cable car that slides from mainland Singapore across the harbour to the sleepily named Sentosa Island some 1.5 kilometres away. These compact and colourful cabins bob up and down in the air above us, brightening the skies of Singapore and drawing peoples' eyes upwards. Until, that is, a black Mercedes-Benz S-Class appears along the arrow-straight road upon which we are standing.

Racing Line has come to Singapore to help celebrate a birthday, but there are no candles or cake, and not a party hat to be seen. Instead, we have guest of honour Kimi Räikkönen, dressed all in black with dark glasses, emerging from the S-Class into the daylight.

ExxonMobil is celebrating 30 years of its Mobil 1 synthetic lubricant, and this day in Singapore is one of three such events planned to take place around the world to help celebrate the milestone.

The ExxonMobil HQ for the Asia Pacific region stretches imposingly into the clear sky above. Brushed aluminium jostles with blue mirrored

glass for your attention as your eyes take in its scale. It is a sultry September morning, and the thin, stretched-out clouds above look set to precipitate sometime soon. The humidity is so high, in fact, that glass surfaces cannot help but develop a thin film of moisture.

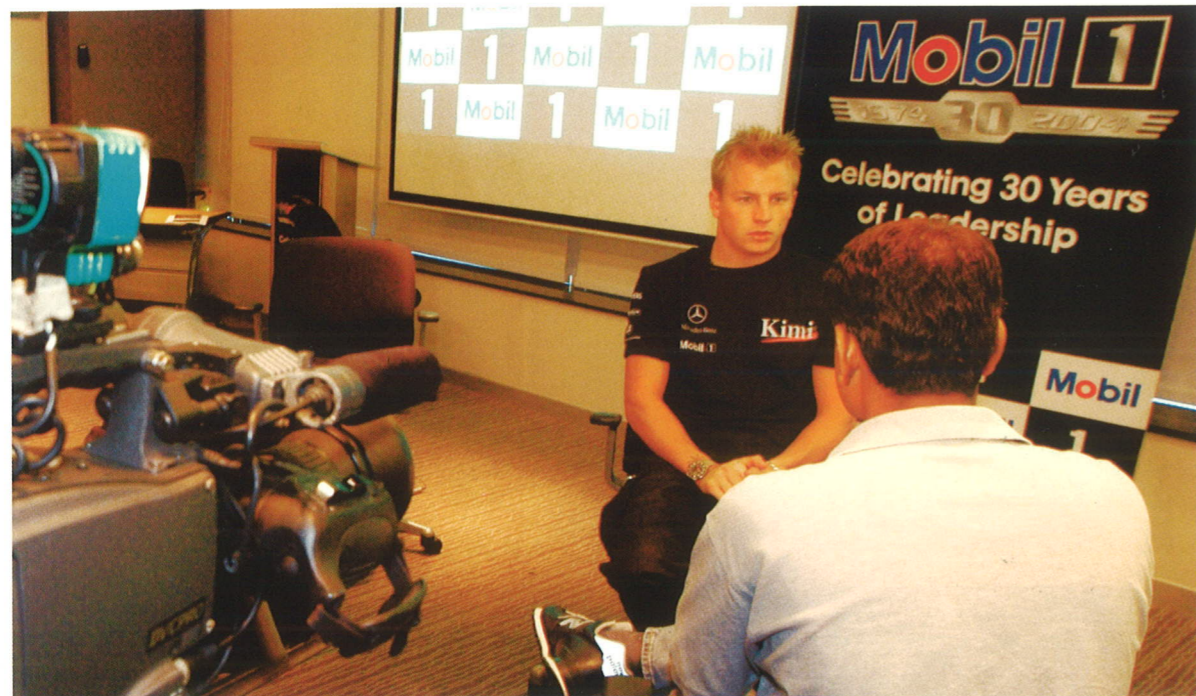
Kimi's small party makes its way into the foyer of the building, a gaggle of journalists and photographers in tow. It's quite a squeeze to get all these people into the lift in one go, but somehow it happens and we make our way up to the floor that has been prepared especially for Kimi's arrival. Anticipation of the forthcoming Chinese Grand Prix hangs in the air, and the local journalists are keen to maximise their access to Kimi to learn

more about the intricacies of grand prix racing. Thus the Finn is called forward to take his place at the rostrum where he faces first applause and then a barrage of questions.

"Today is not only to celebrate Mobil 1's 30th anniversary," explains Koh Tze San, Communications Manager at ExxonMobil Asia Pacific. "It is also to showcase to our consumers the association we have with motorsport in general and Team McLaren Mercedes in particular. Formula 1 is a very demanding sport and being a Technology Partner to such a prestigious team allows us to test our products under the most demanding conditions imaginable. If the lubricant performs well in a grand prix environment there's no >>

"KIMI'S PRESENCE TODAY TO HELP US CELEBRATE IS VERY IMPORTANT, BOTH TO US AND TO THE REGION"

KOH TZE SAN, COMMUNICATIONS MANAGER, EXXONMOBIL ASIA PACIFIC



CLOCKWISE FROM TOP
Kimi faces the television cameras before making his way through the dining room; the Finn is all smiles as he prepares to eat



ABOVE The Mobil 1 logo appears on the side of the Team McLaren Mercedes cars. The Partnership allows ExxonMobil to fully test and develop its range of products

reason why it cannot offer similar benefits to the everyday motorist.”

As Kimi continues to answer questions, cameras click and whirr, flash lights intermittently bathing the room in whiteness. Kimi is optimistic and upbeat about his chances for the forthcoming race, as well as excited about getting to grips with a new circuit for the second time this season. The questions he faces are intelligent and the audience clearly well-informed. When the question-and-answer session is finished, Kimi moves from the auditorium to participate in a series of one-on-one interviews for radio, television and press.

He is also asked to strike some interesting poses for the various lensmen present, and takes this all in his stride as if it were just another Formula 1 corner to be negotiated. Unseen, the first location has now been adapted into a temporary television studio, and Kimi strides in to face the last interview of the day.

“Having a well-known Formula 1 driver like Kimi here signifies our relationship with Formula 1 and our association with Team McLaren Mercedes,” continues Koh Tze San. “Kimi’s presence today to help us celebrate is very important to us and to the region.”

Kimi himself realises the significance. “Mobil 1 is a vital part of the Team McLaren Mercedes Formula 1 car,” he



admits. “If the engineers from ExxonMobil can develop a lubricant which helps the engine run cooler, or a fuel which gives us better efficiency, for example, we can then find more time on the racetrack: it could be the difference between winning and coming second.”

As part of the celebrations, a promotion involving listeners of a local radio station offered a prize of a meeting and photo opportunity with Kimi in person. So over-subscribed was the promotion, in fact, that the radio station – along with ExxonMobil – took hundreds of calls from those who were not lucky

“IN A SPONTANEOUS DISPLAY ALL THE DINERS RISE TO APPLAUD KIMI AS HE WALKS TO THE FRONT OF THE STAGE AND SAYS A FEW WORDS”

enough to win, demanding to know where Kimi would be and when! This is typical of the excitement the two-time grand prix winner’s presence has generated.

The next scheduled event is a special birthday lunch for the ExxonMobil employees. Held in a sumptuous restaurant, which sits almost adjacent to the ExxonMobil building, there are tables aplenty – each well presented with silver cutlery and immaculate, white tableware.

The place is awash with chatter, but this is soon hushed as an ExxonMobil representative steps up to address the throng. All are thanked for their attendance before Kimi is introduced. In a spontaneous display all the diners rise to applaud Kimi as he walks to the front of the stage. When the applause and the audience has settled down, Kimi says a few words about today’s celebration – reiterating the importance of Mobil 1 to the Team McLaren Mercedes effort – before lunch is served and it’s time to tuck in. Kimi chooses the healthy option: a bowl of rice, some vegetables and >>

LUBRICATION INNOVATION

For the past 30 years, Mobil 1 has been a world-leading synthetic engine oil. Originally developed for jet aircraft engines, it was the world's first fully synthetic automotive engine oil and is now widely used across all spheres of motoring, from Formula 1 across the complete spectrum of cars.

Launched to the public in 1974, today it sets the standard in advanced lubrication technology. As one of the team's Technology Partners, ExxonMobil supplies Team McLaren Mercedes with unleaded race fuel and Mobil 1 lubricants capable of operating in the toughest conditions. Furthermore, information gleaned from the involvement of Mobil 1 in Formula 1

filters down to road car use, which is why Mobil 1 products are the world's leading synthetic engine oils.

Mobil 1 synthetic oils are renowned for their ability to dramatically reduce friction and have a wide operating range of -30 degrees C to +180, delivering faster lubrication at start-up in low temperatures and superior protection at high temperatures. They offer huge advantages over conventional oils, such as providing optimum engine efficiency with greater resistance to oil oxidation and lower oil consumption under high-speed conditions.

The most recent automotive product, Mobil 1 with SuperSyn, is testament to ExxonMobil's ongoing quest to push the performance envelope. Launched

in 2002, this motor oil features an effective anti-wear system, which not only helps to protect and prolong the life of the engine, but leads to cleaner running with improved fuel economy.



Having spoken to the lucky group of competition winners and posed for photographs, Kimi signs autographs for the eager fans

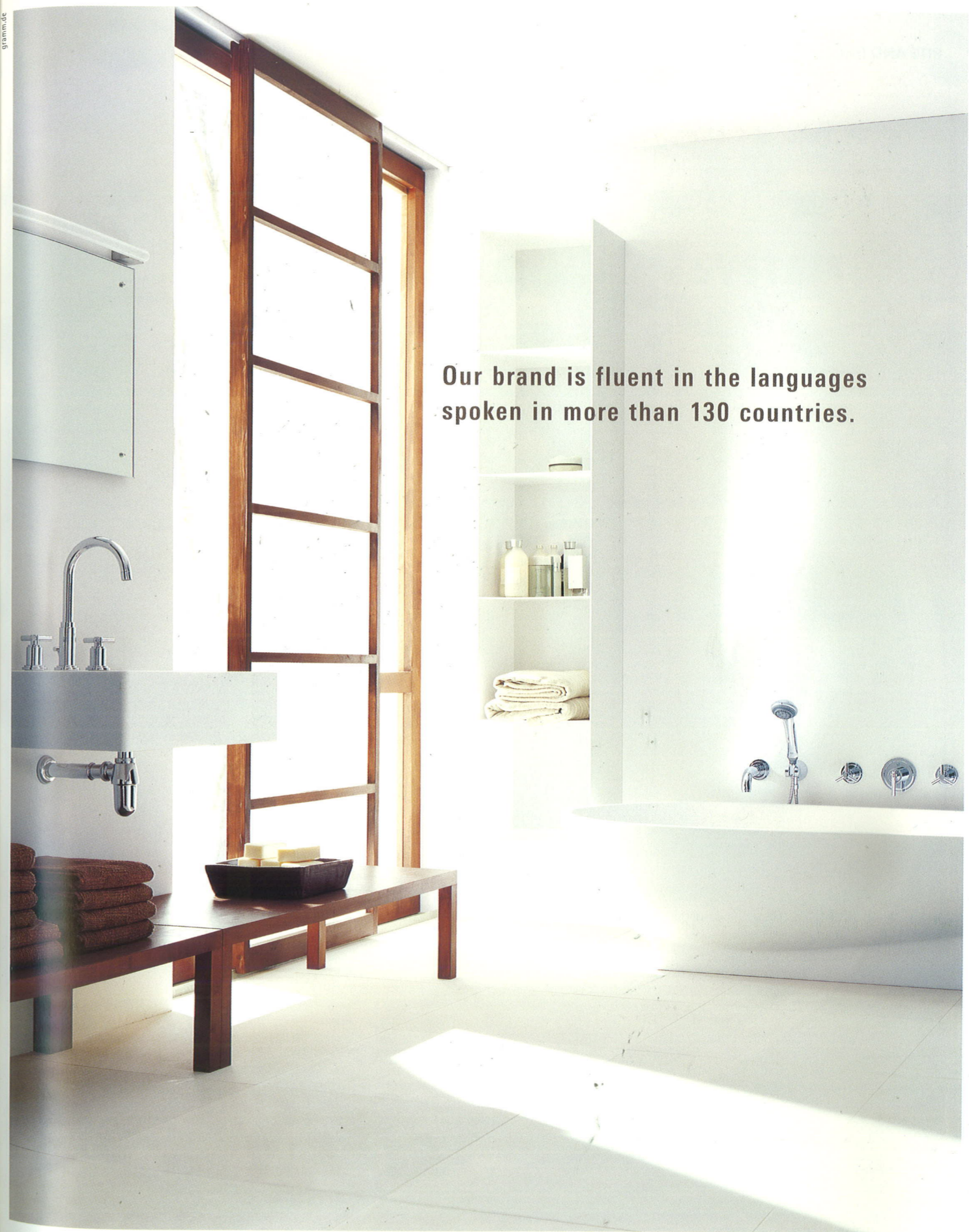
a glass of mineral water, while the guests and employees – including *Racing Line* – tuck in to rather more sumptuous and calorifically laden fare!

The winners from the radio competition are here with a table all to themselves. They are conspicuous, in the main, for the team-branded clothing that they wear and their eager, beaming faces, as well as the myriad digital cameras they hold poised and at the ready. Kimi walks over to meet them, shaking hands and posing alongside each person for pictures. The smiles are as wide as they can be, and Kimi seems to be infected by their warmth, enjoying the experience seemingly as much as the winners themselves. This scene typifies the day.

By now the rain that has threatened to arrive is tapping on the windows with some insistence. Kimi and his entourage have to leave to prepare for the flight to Shanghai, that is, to yet more new pastures. They leave to genuine and loud applause.

The cable cars above continue to hold their elevated trajectory, their colours all the more bright against the now-grey and brooding sky. There may have been no party hats, but there was a party atmosphere – and that is something that simply cannot be bought. ■

Our brand is fluent in the languages spoken in more than 130 countries.



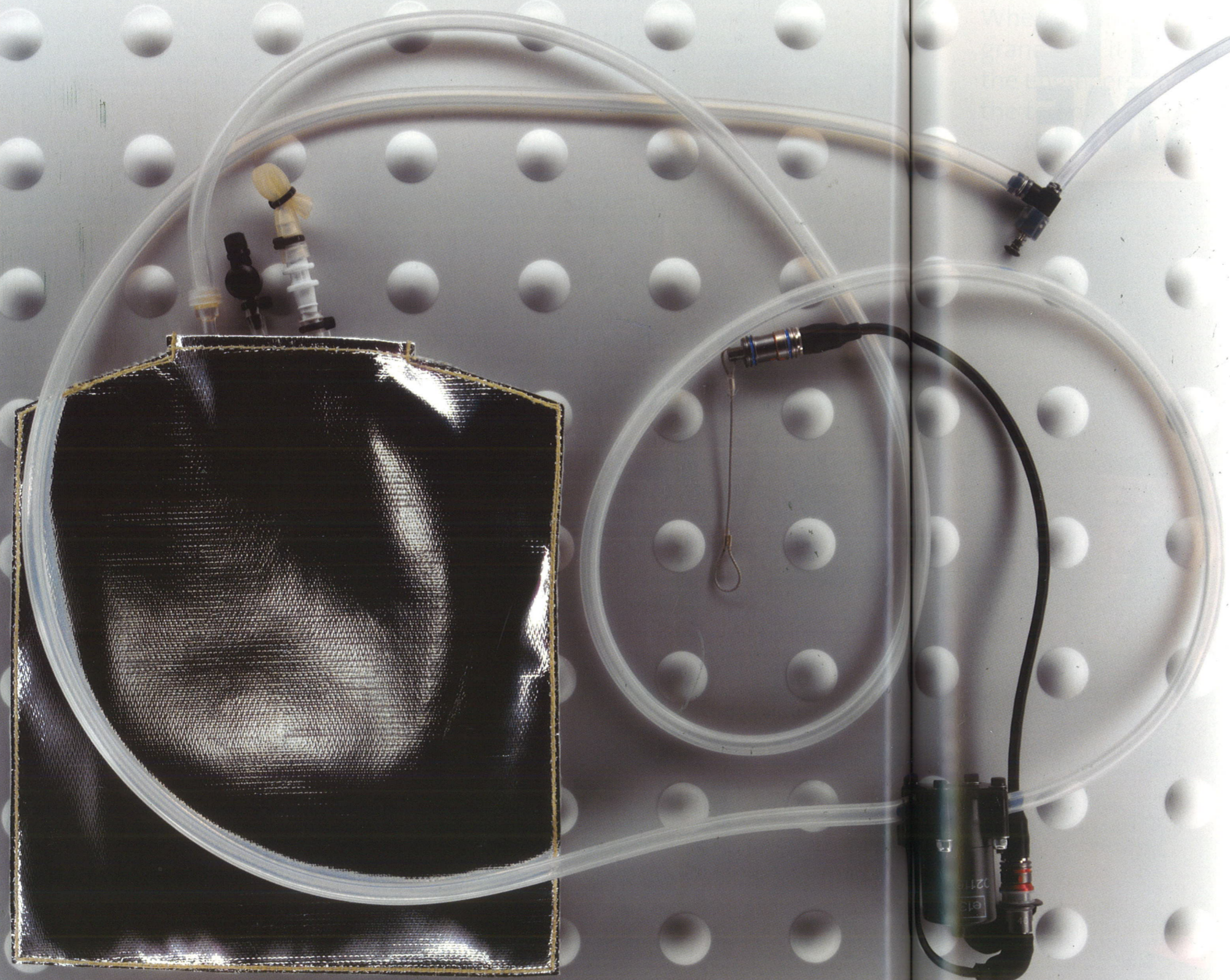
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GROHE
WATER TECHNOLOGY

TEAM McLAREN MERCEDES FORMULA 1

FLUID DELIVERY SYSTEM

WORDS GEMMA BRIGGS PHOTOGRAPHY TED HUMBLE-SMITH, LAT, HOCH ZWEI



It comes as no surprise that the physical effort of racing a Formula 1 car almost non-stop for over an hour is literally draining. Drivers can lose up to four litres of fluid from their bodies during a grand prix, so the need to keep hydrated is paramount. Thankfully for Kimi and Juan Pablo, Team McLaren Mercedes has a tried and tested method that ensures they are drinking enough both before and during a race.

Sucking liquid from a hand-held drinks bottle is part of the driver's pre-race preparation, often witnessed on the grid or in the garage. "We try and get as much fluid as possible into the driver leading up to the race to make sure they are well hydrated," says Mark Arnall, Kimi's personal trainer and therapist. "During the race, the cockpit gets very hot so there will be dehydration, which can effect the driver's performance. Our task is to make sure that dehydration is prevented."

During the race, a slightly more complex system comes into place, with a medical IV drip bag acting as the drinks bottle, situated in the cockpit to the left hand side of the driver. A system of plastic piping and an electric pump transfer the liquid around the inside of the helmet into the driver's mouth. When he wants a drink he pushes a

button on the steering wheel to activate the system and inject the fluid, which is a simple solution – water!

Due to the forces acting on the car as it works its way around the circuit, it is conceivable that the drinks system could be activated and then fail to turn off. As sports drinks contain substances such as carbohydrates and can be sticky, it would be uncomfortable for them to be squirted onto the driver's face and cloud the visor, so water is a more practical liquid to use.

There are some important external factors which will influence how much liquid a driver needs to consume during a race and therefore how much the fluid delivery system is used, such as humidity and temperature. "A driver always has to be 100% hydrated, but the conditions at each circuit can come into play," explains Arnall. "In Malaysia, for example, it is very hot and humid and therefore important to consume the drink, because the driver will lose a lot more fluid. In cooler conditions, such as we generally find in European grands prix, that need isn't as great."

Furthermore, the fitness level of the driver and the handling of the car can influence the amount of effort he must put into driving, and thus the amount of fluid he will use. Unlike other components on a Formula 1 car, the method is unlikely to alter. "We've been using this system for a while," says Arnall. "So long as it's doing the job there's no reason to change."



TECHNICAL SPEC

HAND-HELD BOTTLE CAPACITY	1 litre
IN-CAR DRINKS BAG CAPACITY	1 litre



Drivers drink before and during a race to keep hydrated. The in-car system (above right) operates at the push of a button

THE ULTIMATE TEAM GAME

When a Team McLaren Mercedes driver crosses the line to finish a grand prix, it is the result of many hours of hard work, not least by the engineers and mechanics at the circuit. *Racing Line* shadowed the team over a race weekend to see what went on

WORDS MARK SKEWIS PHOTOGRAPHY HOCH ZWEI



Many hands make light work: the Team McLaren Mercedes crew at the circuit are always trying to find ways to improve the car's performance

“WE ARE ENGAGED IN A RACE AGAINST TIME FROM THE MOMENT WE ARRIVE AT THE CIRCUIT”

PAT FRY, CHIEF ENGINEER, RACE DEVELOPMENT



It's Friday evening. The sun has departed. So have the spectators. Under the bright lights that burn through the twilight, the Team McLaren Mercedes mechanics toil away in the pit garage.

The scene is a million miles removed from the image usually portrayed of the fastest and most glamorous sport on the planet. The reality, though, is that glamour doesn't win grands prix. Hard work does. Great organisation and attention to detail are everything.

Watch from the grandstands and you wonder what all the fuss is about. After all, the teams are at the racetrack for fully two and a half days before the cars line up on the grid to start the race. Stand at the back of the pit garage, though, and a strikingly different picture emerges.

“The cars do so little running at the track these days that you are engaged in a race against time from the moment you arrive at the circuit,” explains Pat Fry, Chief Engineer, Race Development, Team McLaren Mercedes. “Track time is so precious that if you go in the wrong direction it can be very difficult to claw back that lost time.”

Under 2004 rules, cars were on-track for a combined total of only three and a half hours before the start of official qualifying. During that period, a host of decisions need to be made. The key to getting them right lies in a structured

framework of meetings, the timing of which defines the team's weekend every bit as much as the opening and closing of the pit lane.

The meetings are run to strictly defined agendas and address every aspect of car performance and strategy. They commence in the week prior to a race and are permanent fixtures before and after every session at the racetrack. The objective of the time invested here is to maximise every second spent on the circuit: when the pit lane opens and the clock starts ticking, everyone knows exactly how many runs are intended, how many laps duration they will last, and the programme of changes to be implemented.

Different people attend various meetings, but the ever-presents are race engineers Phil Prew and Mark Slade. You cannot legislate for every eventuality in racing, of course, but these meetings enable Team McLaren Mercedes to react to any setback from a position of strength.

Testing restrictions mean that the technical direction of the cars is increasingly fashioned through the use of complex simulation equipment back at the McLaren Technology Centre, but there is one valuable commodity that no machine can yet emulate: human experience.

“The good teams, drivers and engineers come into their own when you reach the track,” explains Team McLaren

CLOCKWISE FROM ABOVE The work of those in the garage remains largely unseen by the public; but it is this mix of preparation and perspiration that makes grand prix wins possible

Mercedes Third Driver, Pedro de la Rosa. “As conditions change throughout the weekend, so does the grip level. The best people are changing the cars with minor tweaks to go with the circuit, rather than waiting for the car to get understeer, say, and then changing it. These changes may be minor but results in this sport are often dictated by hundredths of a second.”

The most pressing issue to be resolved on a Friday is the choice from two compounds of tyres. As Michelin engineer Andy Fern explains, the decision isn't always as simple as you might think.

“It's not as easy as just picking the tyre which feels the fastest on day one,” he says. “Sometimes the best tyre for Sunday's race might show little potential on the Friday when the track is often what we call 'green', by which we mean there is not much rubber on the surface. As the weekend progresses, more rubber is laid down and you have to predict how that will change performance.”

Although Friday's running will help refine the race strategy, the team already has a reasonable idea of its strategic direction before the cars are even unloaded from their transporters.

“It's very important not to fool yourselves with the fuel levels you run on Friday,” says Pedro. “The level we run is >>



dictated by how many stops we anticipate making in the race. If you run a lot of fuel, the tyres suffer more because the car's heavier; if you run lower fuel loads, you can afford to run a softer compound."

Throughout Friday and Saturday the team is working to achieve the best possible set up to improve the cars' handling. In testing, drivers will evaluate big changes in order to establish whether a certain direction is worth following. At a grand prix, though, most of the homework has already been done. You can't risk losing direction, so the changes tend to be subtle.

"We are trying to balance the car," says race engineer Phil Prew. "The main parameters of adjustment are changing the configuration of the front and rear springs and anti-roll bars. The changes are based primarily on driver feedback."

That feedback is delivered after every session in a debrief between the driver and race engineer. Such is the amount of data to be sifted through – five million bits of information are sent back from the car to the pits every second – that these sessions are often anything but brief! A data engineer sits in on the meetings to help translate the mass of telemetry data into practical engineering solutions.

"A driver might return to the pits and say he's got oversteer or understeer," explains Assistant Race Engineer

Dave Redding. "From the data we have seen, I might be able to suggest we change the differential, the traction control or perhaps an engine setting to counteract the problem."

The Team McLaren Mercedes drivers and engineers have access to the sister car's telemetry data and set up. This is very much a team game. It's a point underlined by Michelin, which has input too. Whilst it will keep each team's data confidential, it will produce predictions for tyre performance based on the general trends it has seen amongst all the cars it supplies.

The tension at the racetrack moves up another notch on Saturday afternoon with the one-lap qualifying shootout. With the cars now impounded in parc ferme on Saturday night, and only minor technical changes like tyre pressures, brake balance and front wing flap adjustments permitted, qualifying has become an extension of the race itself.

It's a change that has thrown even more emphasis onto teamwork. Gone are the days when cars were set up for what Mika Häkkinen, one of the team's former world champions, would call "maximum attack." Instead, the engineering teams have made their decisions on fuel loads, tyre choice and set up based on the need to have a good car for the whole of the grand prix.

Race day. Music blasts out of the track speaker system;

CLOCKWISE FROM ABOVE: Kimi waits for the all clear before leaving the pits; the potential reward; getting ready to hit the circuit

butterflies race around the stomach. All the big engineering decisions are now beyond the point of no return. Instead, it is race strategy that consumes everybody's thoughts. A final meeting is convened to consider the variables, like weather forecasts and predicted levels of tyre degradation, but from now on critical decisions must be made in response to events on-track.

"The first pit stop is defined by the qualifying fuel load but from there you have flexibility and have to adapt to situations," explains Phil Prew. "The decisions are based on where you are on the circuit, who you are racing with and how the tyres are performing. Are you in a positive position; or are you defending your place?"

Even for grand prix veterans, the atmosphere on the grid is electric. Any fatigue is banished by pulsing adrenaline as the technical staff climb onto their seats at the pit wall. The engineers are in a stressful position, yet the succinct, matter-of-fact instructions over the team's radio headsets betray no trace of tension. Top technical staff need many qualities to succeed. Ice in the veins must be one of them!

Win or lose, one important meeting remains after the race. The drivers and engineers head for a final debrief. Even before anybody has left the circuit, preparation for the next grand prix has already begun. ■

TASTING times

Grana Padano, the illustrious Italian cheese maker, is a new addition to the McLaren Technology Centre Partner Portfolio. *Racing Line* went along to its special evening reception to mark the start of the relationship

WORDS GEMMA BRIGGS PHOTOGRAPHY STEVE ORINO

Along the length of the boulevard stand a collection of McLaren racing cars. Mingling amongst the tyres of the McLaren F1, M23 et al are wheels of a different kind... cheese. This evening the McLaren Technology Centre is celebrating its new Partnership with Consorzio Tutela Formaggio Grana Padano.

The consortium of 200 cheese producers based in north Italy's Padana Valley has become an Official Partner, a development which will allow Grana Padano to use the McLaren brand to promote itself globally. The product – a long-ripened, hard cheese – is the world's best-selling PDO (Protected Designation of Origin) cheese and a household name in Italy. The Partnership will help forge a close relationship between Grana Padano and Absolute Taste – the McLaren Group's catering business – who will

serve the product at each grand prix and test during the season, as well as at the facility itself.

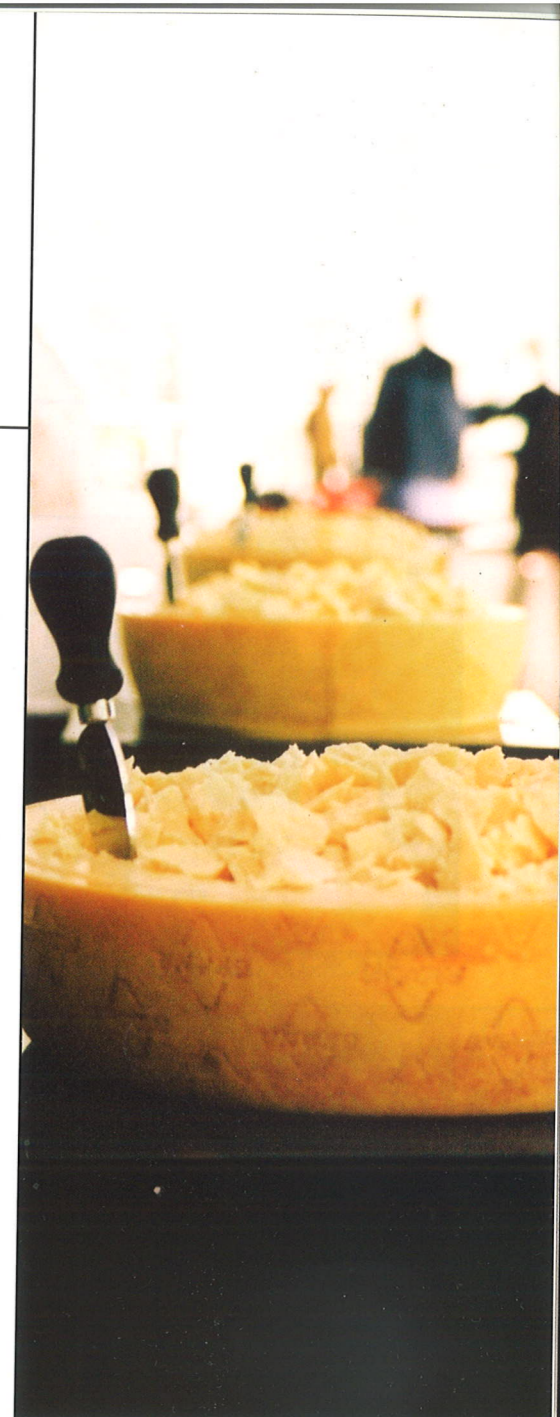
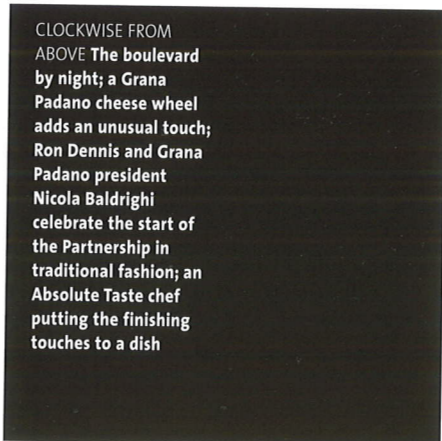
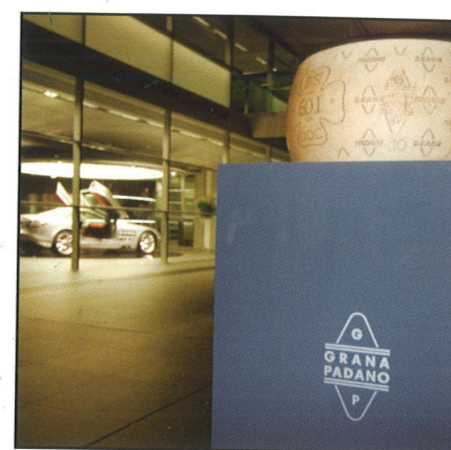
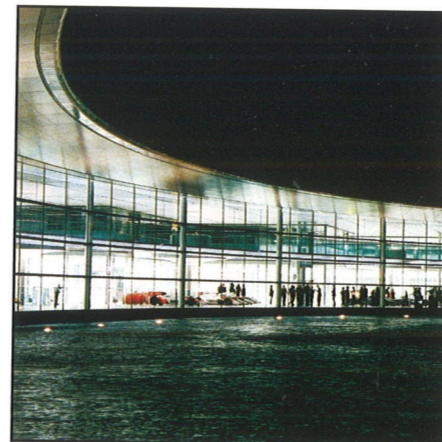
It is a daunting task to impress the guests present: who range from elite food journalists to trade buyers from multinational supermarket chains, the Italian Trade Commission are also here. Many of these people are wine and dine on a daily basis, but the awe with which they receive the McLaren Technology Centre suggests this event is going to be a very special occasion. Stepping in from the cool evening air into the subtly-lit boulevard, heads

turn as the guests take in the splendour of their surroundings.

While the close proximity of the famous racing cars immediately grabs their attention, it is the waiters who cause the biggest stir, bearing trays of canapés which resemble miniature works of art. Zucchini fritters with a warm Grana Padano sauce are dispensed, while carpaccio of beef piled with shavings of Grana Padano are quickly devoured. Meanwhile, three wheels of the cheese, weighing around 36kg each, have been laid out ready to taste, each representing a different vintage – 12, 16 and 22 months old.

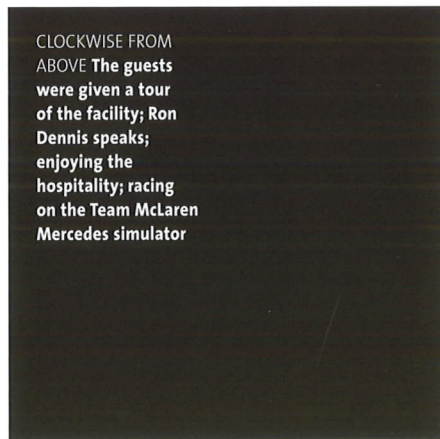
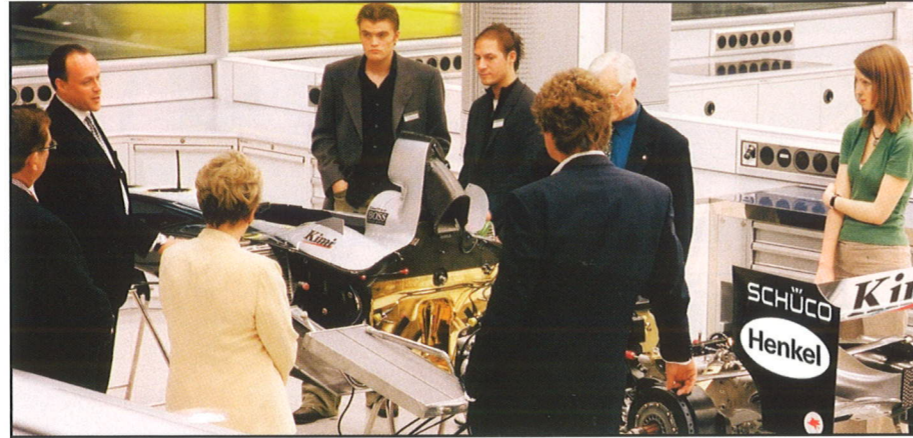
Taking to the stage, Nicola Baldrighi, president of the Grana Padano Consortium, explains to the gathered crowd why the Partnership has been created. "We are here tonight because our future goal is to focus promotion of the cheese in the United Kingdom," he says. "For Grana Padano, the Partnership provides a fantastic opportunity to increase understanding and awareness of our brand in a high-profile international marketplace."

Explaining the synergies between the two parties, McLaren Group Chairman and CEO Ron Dennis talks about the passion shared by the Group and Grana Padano. "I am always proud when a new organisation joins the McLaren Group's extensive and world-class Partner group. Grana Padano, a prestigious product with a heritage of 1,000 years, is a particularly welcome addition. Both the McLaren Group and Grana Padano adhere to similar core values such as attention to detail, pushing boundaries and using the >>



CLOCKWISE FROM ABOVE The boulevard by night; a Grana Padano cheese wheel adds an unusual touch; Ron Dennis and Grana Padano president Nicola Baldrighi celebrate the start of the Partnership in traditional fashion; an Absolute Taste chef putting the finishing touches to a dish

"IT IS A DAUNTING TASK TO IMPRESS THE GUESTS, MANY OF WHOM ARE WINED AND DINED ON A DAILY BASIS"



CLOCKWISE FROM ABOVE The guests were given a tour of the facility; Ron Dennis speaks; enjoying the hospitality; racing on the Team McLaren Mercedes simulator



finest resources available, and this synergy will lead to a long and successful Partnership."

To officially mark the occasion a special cake bearing both parties' motifs is cut and, the formalities now over, the guests enjoy tours around the facility. For some, the first port of call is the race bays. For others, the state-of-the-art kitchens are the biggest pull. Here, Absolute Taste chefs roll Grana Padano cheese straws, while the intrigued visitors sample delights fresh out of the oven.

Back on the boulevard, Michelin-

starred chef Giorgio Locatelli is explaining the wisdom behind a unique array of Grana Padano treats created especially for the occasion. "I want to show how versatile a product Grana Padano is," he says. Meanwhile, the guests appreciate the delights on offer, from delicate Grana

"BOTH THE McLAREN GROUP AND GRANA PADANO ADHERE TO SIMILAR CORE VALUES"

RON DENNIS, CHAIRMAN AND CEO, McLAREN GROUP

Padano mousse and even ice cream!

As the evening draws to a close, the final mouthfuls are taken and the last laps completed in the Team McLaren Mercedes simulator. As the guests head towards the exit, they pick up a large gift bag, bearing a portion of Grana Padano nestled in a presentation box with accompanying cheese knife.

It is often said that it is the small details that make the difference and as the evening has shown, the McLaren Group never fails to strive for the best in all its areas of operation, whether it is the minutiae of the Formula 1 car or the cheese adorning its delicious dishes. ■



CHEESEMAKING THE TRADITIONAL WAY

With a heritage of over 1,000 years, it comes as no surprise that Grana Padano is Italy's number one selling cheese. Lyndy Redding, Managing Director of Absolute Taste, says that having used Grana Padano as a chef, she was very excited about the possibilities the Partnership will bring.

"I went to Italy with a group of Absolute Taste chefs to visit some of the Grana Padano dairies and this confirmed my excitement," she says. "We had a fantastic time tasting the cheese and looking at the dairies, which are all family owned. We also found out exactly how to cut the wheel, which is actually very difficult."

As the canapés at the evening showed, Grana Padano is a versatile cheese which can be used in a number of ways from hot sauces to polenta and decorative shavings.

"There are also several vintages available, which are very different, not just in the taste but in the cooking process. The younger cheeses have different properties

to the older cheeses," she says. "Another thing that surprised me is the nutritional value. Grana Padano is high in protein and calcium but low in fat as it has been made with partially skimmed milk."

Last year, the consortium celebrated its 50th anniversary and the announcement of the Partnership is one of the ways of celebrating the milestone.

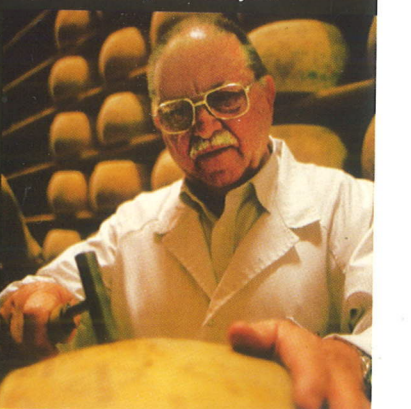
For Absolute Taste it brings the benefit of collaborating with a Partner as passionate about quality as it is. "We are loving working with Grana Padano and look forward to the coming year when we will be taking it all over the world," concludes Redding.



Absolute Taste's Lyndy Redding



The Grana Padano cheesemakers have a tradition stretching back 1000 years





MICK EAST

PATTERN FACILITY MANAGER McLAREN RACING

WORDS GEMMA BRIGGS PHOTOGRAPH STEVE ORINO



How long have you been working for the team?

I've been here for 22 years now. I came from British Aerospace, where I was an apprentice engineer working with carbon fibre, which was then a relatively unknown material. When I started working at McLaren there were only 70 people employed here, at a much smaller site. They had just started building the carbon fibre chassis – the first team in Formula 1 to do so. It was a huge step forward which today is universal in the sport. We were a small department so we assisted in other areas and I started running the pattern shop. This was amalgamated with the tooling department and I became Manager of Specialised Tooling.

What does your role involve?

Until very recently, the department I managed machined all the jigs and fixtures for the car, especially the carbon fibre components. The department has, however, grown considerably, with the result that I now manage the pattern facility and the tooling facility has been taken on by another of our department managers. My section produces the pattern before it goes to the composite department to make the mould. They make the component and it is returned to us to be machined into its final form.

How have things changed in the time you've worked here?

When I started at McLaren we had

no computer-controlled machines: there was just one computer in the whole building – in the finance department! The pattern shop produced everything by hand, but now as the technology has developed it is all machined. Back then it could easily take a week to make a pattern or tool, whereas now the time it takes is more than halved. The increase in work produced today with the same number of people is amazing. So the biggest change is the technology, which has

“THE BIGGEST CHANGE IS THE TECHNOLOGY, WHICH HAS MOVED ON AND IS STILL PROGRESSING”

moved on and is still progressing.

As we have become more technologically advanced the amount of carbon fibre parts we produce and the work we do on them has grown. We used to make a component that came out of the mould and could be used straight away, whereas now 50% of the carbon fibre parts made are also machine-finished.

What does an average day involve for you?

My first task each day is to check the progress of the night shift, then receive

new work that must be started. I will look at how complicated it is and how much time it will take to manufacture. I then check and chase parts. We have some input with the designers in order to make sure the parts they are designing can be made. There's also a lot of administration, such as ensuring that we have got the correct materials.

My role is an on-going challenge as the environment changes rapidly. A job can be scheduled, but a more urgent one arises with a part that perhaps needs to be fitted to a test car. It is often a case of reassessing the priority to make sure the most important components are produced first.

How has the move to the McLaren Technology Centre improved the running of the department?

One of the benefits of the move is that we can now run almost continuously. On the old site we were a satellite department which required us to move from one building to another, but here we are all under one roof. When we relocated to the facility the majority of the machines were brand new and it has been carefully laid out, so we have a better environment.

I still find it difficult to believe that, despite the technological advancements in Formula 1, we're still doing the same job and sending two cars to each grand prix of the year. We may produce a lot more components than we used to, but the end result is the same, and that gives me great satisfaction. ■

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VICTORY SALUTE

All fans of grand prix racing can name their favourite victory and Team McLaren has decided to ask you, the members, to tell us about the McLaren win you love the most. Each month we will be printing a member's report of a classic team win, beginning with one fan's look back to the 1975 World Championship and a special race at Silverstone in the UK.

Members can submit 250 word reports of their favourite race win, from any season. You should include details on the circuit, the McLaren driver and how his season was going. Mention any interesting facts which affected the outcome – such as weather – and tell us why you think this is the best ever race win by a McLaren driver. Be as creative as possible and also tell us a few details about yourself such as age, where you live and how long you have been a Team McLaren member.

Send your reports, along with a photo of yourself, to racingline@mclaren.com or the address below. (*Racing Line* reserves the right to edit all contributions).

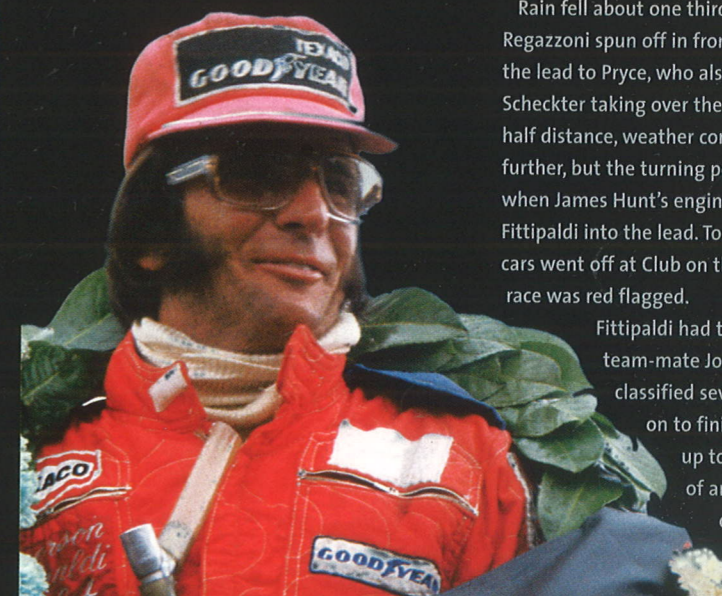


ABOVE A rainy Silverstone was the scene of a classic victory by Emerson Fittipaldi (right) in a McLaren M23. The year was 1975

MEMBER: Graham Steele
FROM: Preston, England
YEARS AS A TEAM McLAREN MEMBER: Eight
FAVOURITE TEAM VICTORY: Emerson Fittipaldi, British Grand Prix 1975

There are several memorable victories by Niki Lauda and Ayrton Senna that I have witnessed, but I have made my choice of favourite race simply because it was the first grand prix that I had ever been to, and a McLaren victory at that! The circuit was Silverstone in the UK and the year was 1975.

Up and coming British driver, the late Tom



Pryce, claimed pole and shared the front row with the late Carlos Pace. Eventual winner Emerson Fittipaldi started from the fourth row in the McLaren M23.

I took up position at Club corner after paying the princely sum of £2.50 for a general admission ticket. At the appointed time, the grid was away in a distant wall of sound. We heard over the public address that Clay Regazzoni had successfully pulled off a then-outrageous overtaking manoeuvre in the new Woodcote chicane, sited there as a result of the 1973 debacle in which eight cars crashed and the race had to be restarted.

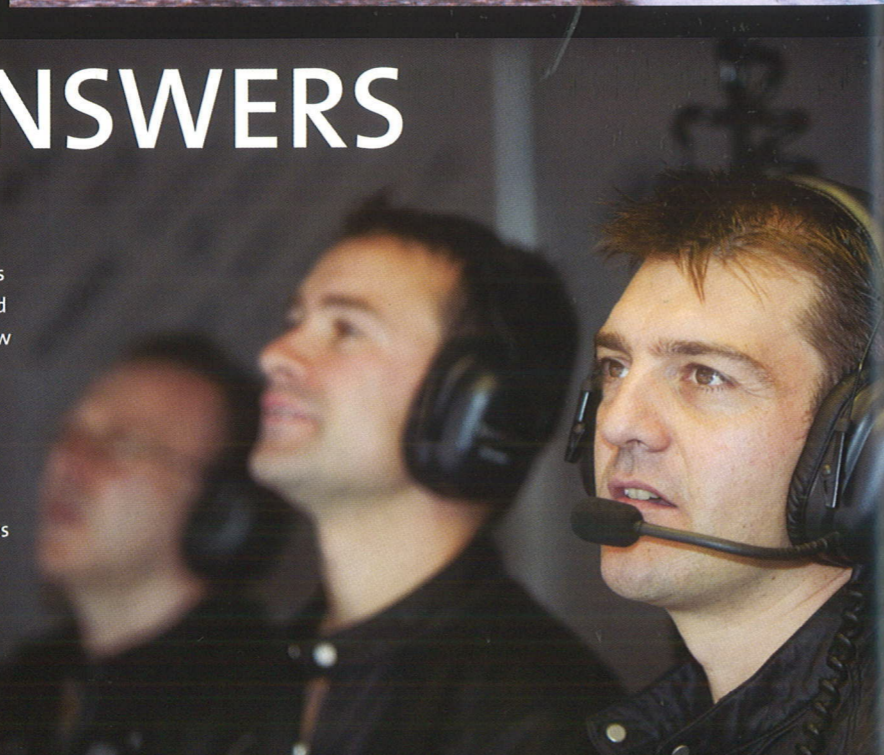
Rain fell about one third into the race and Regazzoni spun off in front of us. This handed the lead to Pryce, who also went off, with Jody Scheckter taking over the front position. Around half distance, weather conditions deteriorated further, but the turning point came on lap 43 when James Hunt's engine blew, propelling Fittipaldi into the lead. To my amazement, eight cars went off at Club on the same lap and the race was red flagged.

Fittipaldi had taken victory, while team-mate Jochen Mass was classified seventh. Fittipaldi went on to finish the season runner up to the emerging talent of another future McLaren champion, Niki Lauda.

ALL THE ANSWERS

New for 2005, Team McLaren is offering members the chance to put questions to top Team McLaren Mercedes personnel. If you want to know what it feels like to hold the lollipop out to Kimi Räikkönen in the pit lane or how to go about organising a test session, then now is your chance to ask and find out.

Over the coming months, we will be putting your puzzlers to a range of key team players, starting in a forthcoming issue with Indy Lall, Test Team Manager. We'd like you to send your questions about testing to us by emailing racingline@mclaren.com with 'Q&A' in the subject bar, or writing to the address below, and we'll put the best teasers to Indy. We would also like suggestions for other team personnel to feature in the Q&A, so please get in touch and let us know which other areas you'd like to have an insight into.



BORED? TRY WINNING OUR EXCLUSIVE GAME...

If you fancy a spot of Formula 1 fun before the new season, here's your chance to win an exclusive board game from Team McLaren Mercedes Technology Partner Siemens.

Developed to raise money for charity, the game allows up to six players to take part in the Siemens Grand Prix. On their way around the track, contestants must make pitstops and overcome obstacles such as accidents and oil spills. They must also avoid obtaining penalties for speeding and other situations such as spins.

For your chance to win this unique prize, email your details to racingline@mclaren.com

with 'Siemens board game' in the subject bar or send your name and details on a postcard to the address below. A winner will be chosen at random. Good luck!



COMPETITION WINNERS...COMPETITION WINNERS...

In the October issue of *Racing Line*, we gave two Team McLaren members the chance to win a signed scale model of the MP4-17D. The

lucky winners are Francisco Ruiz Zafra from Martos, Spain and Norman Schwartz from Rodgau, Germany. Well done!

ONLINE GRAND PRIX LEAGUE IS A WINNER

Throughout 2004, many Team McLaren members and fans took part in the unique Team McLaren Mercedes Grand Prix League. The online game was so successful that a 2005 competition will soon be announced.

The 2004 league was the inaugural year for the game, with participants entering online at www.mclaren.com for the chance to win a signed TAG Heuer Formula 1 watch and additional bonus prizes. Each team entered had a virtual \$75 million budget to play the game, choosing a combination of drivers and teams, with points awarded for qualifying and race finishes.

To make sure you don't miss out, watch for full details of how to enter the Team McLaren Mercedes Grand Prix League 2005 in a forthcoming issue of *Racing Line*.

POSTCARDS FROM STARS AND CARS

IN ASSOCIATION WITH CANON

The annual Mercedes-Benz *Stars and Cars* event is one of the highlights of the year for thousands of DaimlerChrysler personnel and motorsport fans. Kimi Räikkönen was one of the stars present in Stuttgart. *Racing Line* took some snaps of his day



Joined by Norbert Haug, Kimi faced a busy schedule of appearances at this year's Stars and Cars, Mercedes-Benz's famous motorsport celebration



Thousands of supporters attended the day, held at the DaimlerChrysler plant in Stuttgart, and they were all keen to have their mementoes autographed by Kimi



Team McLaren Mercedes stars past and present took to the stage, including Mika Häkkinen, who announced his intention to drive in the DTM series in 2005



The stars were happy to swap life behind the wheel for a passenger ride, as they assembled for the drivers' parade, cheered on by excited fans lining the route



One of the great things about the Stars & Cars event is that it allows people the opportunity to get closer to the action: this young man tries Alex's car for size

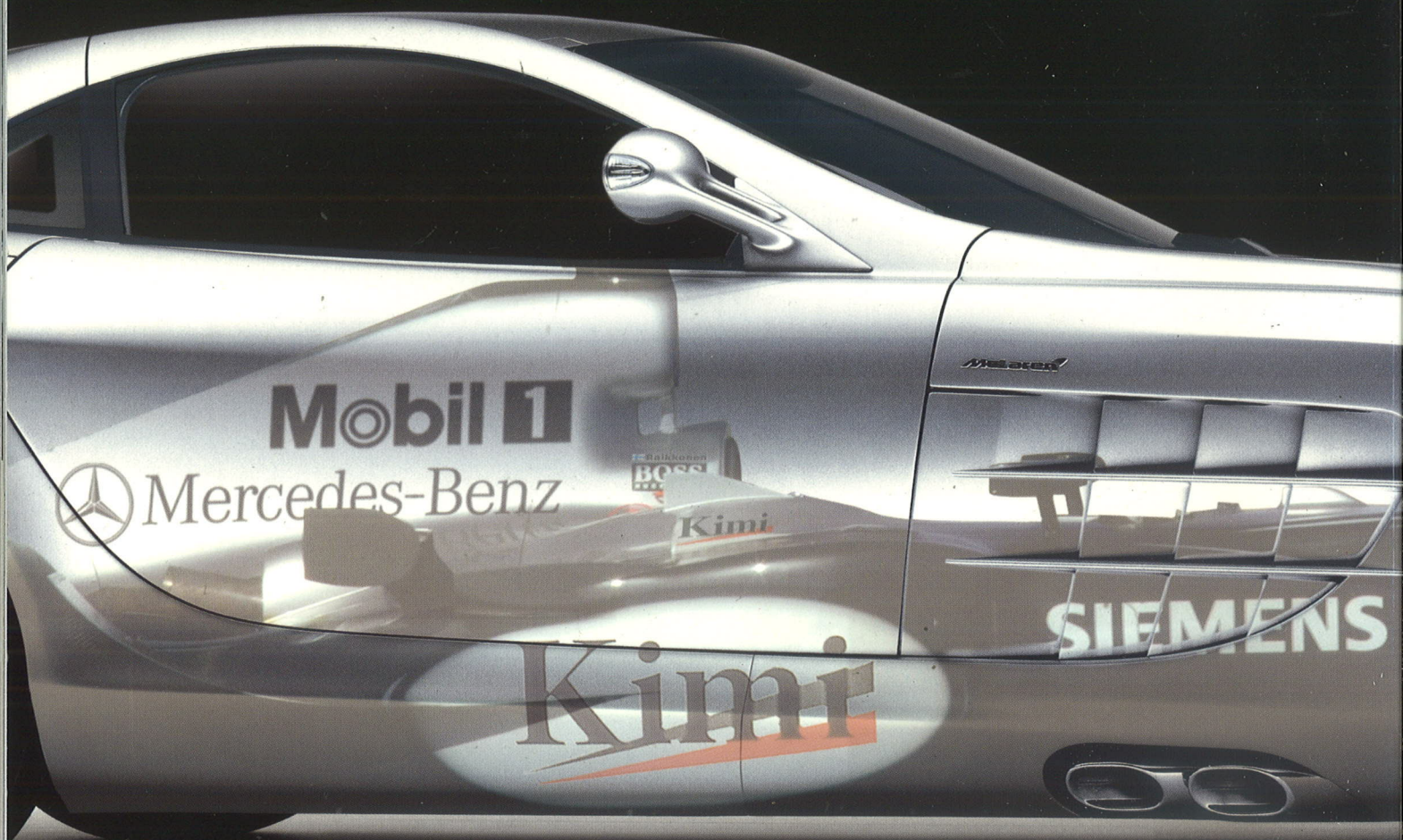


IN THE NEXT ISSUE

ALL CHANGE

Racing Line gives you the lowdown on Formula 1's rule changes for the 2005 season

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