



## 2009 FIA WTCC

World Touring Car Championship

# 2009 FIA WTCC. Contents.



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**Editorial deadline: 27<sup>th</sup> February 2009.**

# 1. BMW determined to return to the top.



## **New season, old goals.**

The BMW national teams find themselves in a rather unusual position going into the 2009 FIA World Touring Car Championship (WTCC): for the first time in the history of the championship, the BMW drivers are faced with the task of winning back the title, rather than defending it. Last year the Munich-based manufacturer picked up six individual race victories, but still had to play second fiddle to the diesel-powered cars of the SEAT team in both the Manufacturers' and the Drivers' Championship, where Yvan Muller (FR) was crowned world champion. Prior to last season, BMW had won every World Touring Car Championship. In 1987 Roberto Ravaglia (IT), at the wheel of a BMW M3, claimed the first World Championship in touring car racing. When the series made its comeback in 2005, it was dominated by Andy Priaulx (GB) who won three World Championships in succession between 2005 and 2007. In the Manufacturers' Championship, BMW had also enjoyed three back-to-back victories, before having to make do with second place in 2008.

"Obviously I hope that we will be able to regain the title in both classifications," says BMW Motorsport Director, Mario Theissen. "But you cannot plan results in motor racing, you can only work on your performance. That's what we have done over the winter. It will be another close fight between SEAT and us, and Chevrolet will also be a strong rival. But we are definitely well prepared. We cannot regard ourselves as the favourites for winning the title. SEAT won both championships last year – so we are in the role of the hunter this year. That said, the limitation of the turbocharger pressure certainly is a step into the right direction and will make for a more levelled field in 2009. We also favour the new compensation weight, as it will make it easier to compare the performances among the drivers."

## **Three WTCC titles in the bag: Priaulx back on the attack.**

BMW will again start the 2009 season with three national teams, which are each supported by the respective national BMW sales organisations. Triple world champion Priaulx will once again be doing battle for BMW Team UK. Together with the RBM team, and boss Bart Mampaey (BE), the driver from the Channel Island of Guernsey (GG) is looking to be a permanent guest on the podium. After finishing the 2008 season in fourth place, and claiming one race victory in Pau (FR), Priaulx has his eyes firmly set on his fourth World Championship.

### **Four winning drivers and one full of ambition.**

As in 2007 and 2008, BMW Team Germany will rely on the driver pairing of Augusto Farfus (BR) and Jörg Müller (DE). Last year, Farfus was the only BMW driver to win two races – in Pau and in Oschersleben (DE). Furthermore, the 25-year-old clocked the fastest qualifying time on three occasions. Only world champion Müller could equal this number of pole positions. Müller is the evergreen in the Schnitzer Motorsport team. The 39-year-old was there as far back as 2002, when the team competed in what was the European Touring Car Championship for the first time under team manager Charly Lamm (DE). By the end of the 2008 season, Müller had taken his tally of race victories at World Championship level to ten – only regular champion Priaulx had the same number of wins to his name.

In BMW Team Italy-Spain, under the leadership of Umberto Grano (IT) and Roberto Ravaglia, Alessandro Zanardi (IT) will this year be driving alongside a new teammate: Sergio Hernández (ES) follows in the footsteps of his compatriot Félix Porteiro (ES), who has left the team after two seasons and the same number of victories. Hernández made a lasting impression on the World Touring Car Championship in 2008 by coming through to take the title in a very competitive Independents' Trophy. The 25-year-old is now rewarded with his first opportunity to drive at the highest level with a BMW national team. 2009 will be Zanardi's fourth season in the World Touring Car Championship, and he has proved on more than one occasion that he has what it takes to be a winner: in 2005, in Oschersleben, he was the first driver with a prosthetic leg to win a World Championship race. The following season he once again stood at the top of the podium – this time in Istanbul (TR). Last year he followed the first pole position of his WTCC career in Brno (CZ) with his third victory.

### **New to the successful model from Munich.**

For 2009, many areas of the vehicle were enhanced. The spring/damper system was significantly improved as well as the ECU404 engine control unit, which had been developed by BMW Motorsport. It now makes for a better driveability of the gearbox and makes shifting easier. In addition, the new chassis components for the BMW 320si WTCC "facelift", which will be used from Marrakech onwards, were integrated into the concept of the car.

### **Uncharted waters for the World Touring Car Championship.**

For the third time in a row, the race for the World Championship title kicks off in Brazil. Local hero Farfus will once again be at the centre of attention when the first of 24 sprint races gets underway in Curitiba. After a further overseas event in Puebla (MX), the World Touring Car Championship celebrates a premiere on 3<sup>rd</sup> May 2009: the races in Marrakech (MA) find the WTCC on the African continent for the first time, underlining its status as a truly global race series.

Africa is followed by the European season, which offers an attractive mix of challenging street circuits and well-known tracks: BMW has enjoyed success at both the "Circuit de Pau-Ville", venue for the two French legs of the World Championship, and the street circuit in Porto (PT), which returns to the race calendar in 2009 in place of Estoril (PT). The imposing, undulating tracks of Brno and Brands Hatch (GB) are extremely popular among the drivers, and spectators have also been treated to some thrilling races at Valencia (ES), Oschersleben and Imola (IT) in the past.

An exciting final spurt sees the BMW national teams travel to the Far East. In Okayama (JP) it will be all about establishing a perfect position going into the spectacular finale, which traditionally takes place at the "Guia Circuit" in Macau (MO).

### **Formula One qualifying and new weight system.**

Two important aspects of the World Touring Car Championship will look rather different in 2009. Qualifying, which previously consisted of a 30 to 45-minute session, will be divided into two sections. In "Q1", all drivers are out on the track and have 20 minutes in which to drive the perfect lap. The ten fastest drivers progress to "Q2", which lasts 10 minutes. The lap times achieved during this session determine the top-ten grid positions for the first race on Sunday. The rest of the field is sorted behind the first ten places, according to the times from "Q1". In the second race, the top eight from race one start in reverse order, as usual.

The "compensation weight" is also new. This replaces the "success ballast", which was previously calculated based on the individual results of each driver. Instead of this, the new system takes into account the performance of each car model represented in the WTCC, using a complex lap-time calculation. The performances will then be balanced out by adding or removing weight where necessary. The maximum compensation weight is 60 kilograms.

## 2. Timeline – key dates.



### **The BMW national teams' success story since 2005.**

20 <sup>th</sup> April 2005	At Monza (IT), the BMW national teams contest the first World Touring Car Championship race since 1987. By securing pole position, winning the race and setting the fastest race lap, Dirk Müller makes it an instant “hat-trick”.
1 <sup>st</sup> May 2005	At Magny-Cours, (FR), Jörg Müller (DE) succeeds in winning both sprint races, while Andy Priaulx (GB) gives BMW its first one-two by finishing runner-up in the first round.
28 <sup>th</sup> August, 2005	In the first Oschersleben round (DE), Priaulx secures his maiden WTCC win, with Alessandro Zanardi (IT) winning race two. The Italian is the first amputee driver ever to win a World Championship race. The “Magdeburger Börde” crowd rewards him with a standing ovation.
2 <sup>nd</sup> October 2005	In the 18 <sup>th</sup> round, held at Valencia (ES), Müller gives BMW its tenth fastest race lap.
20 <sup>th</sup> November 2005	At Macau (MO), BMW secures the Constructors' Championship while Priaulx wins the World Touring Car Championship's drivers' title at the “Guia Circuit” with a total of 101 points to his tally. At the end of the season, the BMW national teams have secured a total of nine race wins, four pole positions and set eleven fastest race laps.
2 <sup>nd</sup> April 2006	Reigning champion Priaulx kicks off the second WTCC season by winning the first race, held at Monza, in the brand-new BMW 320si WTCC from pole position. It's the tenth WTCC triumph for BMW.

4 <sup>th</sup> June 2006	In the home event at Oschersleben, Priaulx and Müller give BMW two race wins.
2 <sup>nd</sup> July 2006	At Curitiba (BR), Zanardi sets the first fastest race lap of his World Touring Car Championship career.
3 <sup>rd</sup> September 2006	At Brno (CZ), Müller and Zanardi give BMW its tenth World Touring Car Championship one-two.
24 <sup>th</sup> September 2006	At Istanbul (T), Zanardi celebrates his second WTCC win.
19 <sup>th</sup> November 2006	Both Priaulx and Müller win a round in the season finale to finish first and second in the championship. Priaulx secures his second consecutive world championship title with a lead of just one point, while BMW also defends the Manufacturers' Championship with 254 points to its tally. This year, the brand's record book features eleven race wins, three pole positions and five fastest race laps.
11 <sup>th</sup> March 2007	By winning one round apiece, at Curitiba, Müller and his new team-mate, Augusto Farfus (BR), make for a successful season kick-off. By finishing runner-up in both rounds, Priaulx completes the excellent BMW result.
17 <sup>th</sup> June 2007	At Brno, Félix Porteiro (ES) celebrates his maiden WTCC win for BMW Team Italy-Spain, with Müller winning the second round of the weekend. In the first race, all top-four positions are secured by BMW drivers. At the same time, Müller's success represents the 25 <sup>th</sup> WTCC race win for BMW.
29 <sup>th</sup> July 2007	At Anderstorp (SE), Zanardi gives BMW its 25 <sup>th</sup> fastest race lap.
23 <sup>rd</sup> September 2007	At Brands Hatch (GB), Priaulx and Porteiro make for the 20 <sup>th</sup> BMW one-two.
18 <sup>th</sup> November 2007	In Macau, Priaulx secures his 25 <sup>th</sup> podium and thanks to his triumph in the final round of the season wins the World Touring Car Championship for the third consecutive time. With 255 points, BMW also celebrates its third consecutive Manufacturers' Championship title. The BMW national

teams can look back on nine race wins, two pole positions and nine fastest race laps.

- 18<sup>th</sup> May. 2008 At Valencia, Jörg Müller sets the tenth fastest race lap of his WTCC career.
- 1<sup>st</sup> June 2008 Pau's (FR) wet street circuit suits Farfus and Priaux better than anybody else and consequently they both leave the French track with a race win under their belts. Farfus secures his win with the biggest lead in WTCC history by crossing the finish line 17.861 seconds ahead of the runner-up, Yvan Muller (FR, SEAT).
- 15<sup>th</sup> June 2008 In the first of the Brno rounds, Zanardi and Porteiro give BMW Team Italy-Spain a one-two. In the second race, Zanardi is pipped in the battle for the win and crosses the line just tenths of a second behind the winner. In qualifying, Zanardi secured his maiden WTCC pole – representing the tenth for BMW.
- 27<sup>th</sup> July 2008 At Brands Hatch, Müller secures his only win of the 2008 season, though it's the tenth of his WTCC career. With this triumph he draws level with WTCC record holder Priaux.
- 31<sup>st</sup> August 2008 In the BMW home event at Oschersleben, Farfus and Porteiro give the brand another double victory.
- 5<sup>th</sup> October 2008 Following the second round at Monza, BMW has amassed more than 1,000 Manufacturers' Championship points.
- 16<sup>th</sup> November 2008 Having scored 274 points, BMW finish runner-up in the Manufacturers' Championship. Priaux is the best of the BMW drivers finishing fourth in the Drivers' Championship. Over the course of the season, the brand secured six race wins, four pole positions and set 13 fastest race laps.
- 8<sup>th</sup> March 2009 At Curitiba, BMW kicks off its fifth World Touring Car Championship season. Andy Priaux (BMW Team UK), Augusto Farfus, Jörg Müller (both BMW Team Germany), Alessandro Zanardi and Sergio Hernández (both BMW Team Italy-Spain) will contest the season for the three BMW national teams.



### 3. Fascinating races all over the world.



#### **World Touring Car Championship becomes even more international.**

Diversified and challenging: every year the FIA World Touring Car Championship race calendar takes the drivers of the BMW national teams to some of the most attractive circuits in the world. The 2009 season welcomes a newcomer to the programme: Marrakech. The metropolis in South West Morocco plays host to an official FIA World Championship for the first time since the Formula One race in 1958. This event is particularly special for the World Touring Car Championship: for the first time, the series will visit twelve different countries on four continents within one season. This makes the WTCC currently the only automobile world championship to stage any of its races in Africa.

The new street circuit in Marrakech is not the only gem on the world championship calendar. The drivers will also do battle between the tightly arranged crash barriers in Pau (FR), which will stage the only FIA world championship event on French soil in 2009, and Porto (PT). The track with the highest degree of difficulty, however, is the "Guia Circuit" in Macau, the venue for the season finale for the fifth time. Exotic race tracks such as those in Curitiba, Puebla and Okayama once again promise an exciting overseas programme, while European fans can also look forward to Valencia, Brno, Brands Hatch, Oschersleben and Imola.

#### **Interest in FIA WTCC continues to grow.**

The World Touring Car Championship is followed by spectators around the globe, and is enjoying growing popularity. 75 TV stations broadcast the races in over 160 countries. During the 2008 season, over 300 million TV viewers watched the 24 races – 20 percent more than the previous year.

More and more motorsport fans are also turning up to watch the thrilling WTCC action live. 674,000 spectators streamed through the gates at the twelve racetracks in 2008, where they were able to observe the BMW national teams at first hand.

## Information on the races in the 2009 World Touring Car Championship.

Races	Circuit and Location	Date	Length	Race Distance	2008 Winner	2008 Pole Position	2008 Fastest Lap Times
01 & 02 Brazil	Autódromo Internacional de Curitiba, Curitiba	08.03.	3.695 km	51.73 km 14 laps	Y. Muller (SEAT) G. Tarquini (SEAT)	Y. Muller (SEAT) 1:24.295 Min.	A. Priaulx (BMW) A. Farfus (BMW)
03 & 04 Mexico	Autódromo Miguel E. Abed, Puebla Amozoc	22.03.	3.240 km	51.84 km 16 laps	J. Gené (SEAT) T. Monteiro (SEAT)	J. Gené (SEAT) 1:40.808 Min.	T. Monteiro (SEAT) Y. Muller (SEAT)
05 & 06 Morocco	Marrakech Street Circuit, Marrakech	03.05.	4.540 km	54.48 km 12 laps	Not on calendar	Not on calendar	Not on calendar
07 & 08 France	Circuit de Pau Ville, Pau	17.05.	2.760 km	52.44 km 19 laps	A. Farfus (BMW) A. Priaulx (BMW)	A. Farfus 1:21.960 Min	A. Farfus (BMW) R. Rydell (SEAT)
09 & 10 Spain	Circuit de la Comunitat Valenciana Ricardo Tormo, Valencia	31.05.	4.005 km	52.07 km 13 laps	R. Huff (Chevrolet) A. Menu (Chevrolet)	Y. Muller (SEAT) 1:58.816 Min.	J. Müller (BMW) A. Menu (Chevrolet)
11 & 12 Czech Republic	Automotodrom Brno, Brno	21.06.	5.402 km	54.02 km 10 laps	A. Zanardi (BMW) G. Tarquini (SEAT)	A. Zanardi (BMW) 2:08.913 Min.	F. Porteiro (BMW) A. Zanardi (BMW)
13 & 14 Portugal	Circuito da Boavista, Porto	05.07.	4.700 km	51.70 km 11 laps	Not on calendar	Not on calendar	Not on calendar
15 & 16 Great Britain	Brands Hatch Grand Prix Circuit, Brands Hatch	19.07.	3.703 km	51.84 km 14 laps	J. Müller (BMW) A. Menu (Chevrolet)	A. Farfus (BMW) 1:32.794 Min.	R. Huff (Chevrolet) A. Farfus (BMW)
17 & 18 Germany	Motorsport Arena Oschersleben, Oschersleben	06.09.	3.696 km	51.74 km 14 laps	A. Farfus (BMW) F. Porteiro (BMW)	R. Huff (Chevrolet) 1:35.675 Min.	A. Farfus (BMW) A. Farfus (BMW)
19 & 20 Italy	Autodromo Enzo e Dino Ferrari	20.09.	4.909 km	53.99 km 11 laps	Y. Muller (SEAT) J. Thompson (Honda)	R. Rydell (SEAT) 1:54.761 Min.	J. Thompson (Honda) T. Monteiro (SEAT)
21 & 22 Japan	Okayama International Circuit, Okayama	01.11.	3.703 km	51.84 km 14 laps	R. Rydell (SEAT) T. Coronel (SEAT)	A. Farfus (BMW) 1:37.040 Min.	J. Müller (BMW) J. Thompson (Honda)
23 & 24 Macau	Circuito da Guia, Macau	22.11.	6.117 km	55.05 km 9 laps	A. Menu (Chevrolet) R. Huff (Chevrolet)	A. Menu (Chevrolet) 2:30.285 Min	A. Priaulx (BMW) A. Farfus (BMW)

## **08<sup>th</sup> March 2009, “Autódromo Internacional de Curitiba”, Curitiba (BR).**

This season is the fourth visit of the World Touring Car Championship to Curitiba. For the third time in succession, the angular circuit is the venue for the curtain-raiser to the WTCC season. The city was established in 1693 by Portuguese settlers. It is now home to 1.8 million inhabitants, is the seventh largest city in Brazil, and is about one hour's flight from the metropolis of Sao Paulo. The “Autódromo Internacional de Curitiba” was built as an oval track in 1965. The winding infield was only added in the 1990s. Coming from Curitiba, BMW Team Germany driver, Augusto Farfus, enjoys hero status at the Brazilian World Championship races every year.

### **Circuit data.**

Length:	3.695 kilometres
Number of laps:	14
Race distance:	51.73 kilometres
WTCC debut:	2006
Previous winners:	Jordi Gené (SEAT), 2006/1 Andy Priaulx (BMW), 2006/2 Jörg Müller (BMW), 2007/1 Augusto Farfus (BMW), 2007/2 Yvan Muller (SEAT), 2008/1 Gabriele Tarquini (SEAT), 2008/2

### **Technical requirements.**

Following the winter tests, midsummer track temperatures await the BMW national teams in Curitiba. The circuit is the fastest on the World Championship calendar, and allows the drivers to adapt a flowing style. The high altitude of 934 metres above sea level causes the engines to lose some performance. The cars are set up to keep them stable in the high-speed corners and to take as much speed as possible into the straights. At the same time, the cars must also be able to deal with bumps on what is sometimes an uneven track surface.

### **Drivers' viewpoint.**

Augusto Farfus: “Curitiba is my hometown. I was born and grew up there. Of course, I always enjoy coming home. Although the WTCC is a global series, most of the races are staged in Europe. In Curitiba, my friends and family have the chance to follow the races live. At the same time, it goes without saying that you feel extra pressure as the local hero. Overall, however, it is a positive feeling to know that the thousands of people in the stands are all behind you. Last year things did not go to plan for me in Curitiba. That has made me all the more determined to get the 2009 season off to the right start.”

## **22<sup>nd</sup> March 2009, “Autódromo Miguel E. Abed”, Puebla (MX).**

Following successful visits in 2005, 2006 and 2008, the World Touring Championship returns to Mexico for the fourth time this year. Puebla, the capital of the state of the same name, has around 1.5 million inhabitants and lies at over 2,200 metres above sea level. Central America's twin volcanoes Popocatepetl and Iztaccihuatl can both be seen from the city. About 15 kilometres from Puebla is Cholula, the site of the “Tepanapa” pyramid. According to literature, this is the largest example of this type of architecture in the world. The circuit in Puebla was constructed in 2005, and sees the cars race in an anti-clockwise direction. The drivers must master a total of 18 corners.

### **Circuit data.**

Length:	3.240 kilometres
Number of laps:	16
Race distance:	51.84 kilometres
WTCC debut:	2005
Previous winners:	Fabrizio Giovanardi (Alfa Romeo), 2005/1 Peter Terting (SEAT), 2005/2 Salvatore Tavano (Alfa Romeo), 2006/1 Augusto Farfus (Alfa Romeo), 2006/2 Jordi Gené (SEAT), 2008/1 Tiago Monteiro (SEAT), 2008/2

### **Technical requirements.**

The “Autódromo Miguel E. Abed” is the slowest circuit on the calendar. The extremely high altitude causes a drastic loss of performance for all cars in the field. Originally an oval track, a winding infield was added, which sees the cars twisting and turning within a very tight space, similar to a go-kart track. The corners at this low-grip circuit are invariably slow ones, making good traction on the way out of turns crucial. The drivers must be able to accelerate early and aggressively without the wheels spinning. To allow this, a suitably soft set-up is used for the rear axle.

### **Drivers' viewpoint.**

Augusto Farfus: “Unfortunately, from a BMW point of view, Puebla is not exactly the ideal WTCC venue. The circuit is far better suited to front-wheel drive cars. To date, no BMW driver has ever managed to win there. Personally, however, I like this location. Mexico has a lot to offer. I always enjoy racing on the American continent – even if Puebla has little in common with Curitiba. I hope we can optimise our performance there in 2009, and improve on previous positions.”

### **3<sup>rd</sup> March 2009, “Marrakech Street Circuit”, Marrakesh (MA).**

The two sprint races in Morocco see the World Touring Car Championship travel to Africa for the first time – the only FIA world championship to stage races on this continent in 2009. An imposing street circuit has been set up in the centre of Marrakech especially for the WTCC event. There promises to be plenty of action when the BMW national teams line up for the first time in front of the impressive backdrop of the Atlas Mountains. On paper, this track has everything that a street circuit should have: tight corners, tricky chicanes, and ominously close crash barriers.

#### **Circuit data.**

Length:	4.540 kilometres
Number of laps:	12
Race distance:	54.48 kilometres
WTCC debut:	2009
Previous winners:	-

#### **Technical requirements.**

The “Marrakech Street Circuit” is completely new, meaning that no previously-acquired data is available. The BMW national teams will only discover details regarding the track surface, braking and steering points, corner radiants, and nature of the kerbs once they are actually on site. For this reason, it will be very important to acquire comprehensive data during the free practice sessions.

#### **Drivers’ viewpoint.**

Andy Priaulx: “The two races in Marrakech are bound to be very interesting for all the drivers. Street circuits are always very challenging anyway, but the fact that it is new and completely unknown just goes to make it all the more complicated. At new venues like this you never know whether the track will behave as you hoped and expected. There is always a certain sense of uncertainty, but this also generates a special kind of excitement. It is always fantastic getting to know new places. It is especially pleasing when they are 100 percent behind touring car racing, as Marrakech is.”

### **17<sup>th</sup> May 2009, “Circuit de Pau Ville”, Pau (FR).**

The "Circuit de Pau" is one of the most historical circuits in the world. Automobile races were held in the narrow streets as far back as 1901. In 1930, Pau was the venue for the very first “Grand Prix”. Up to this point, this name was only reserved for horse races. Since then, the “Grand Prix de Pau” has become an institution in French motor racing. In 2009 it will be held for the 69<sup>th</sup> time, with the World Touring Car Championship providing the main event for the third time. Formula One was also staged in Pau between 1950 and 1963. However, these races were not part of the official world championship.

#### **Circuit data.**

Length:	2.760 kilometres
Number of laps:	19
Race distance:	52.44 kilometres
WTCC debut:	2007
Previous winners:	Alain Menu (Chevrolet), 2007/1 Augusto Farfus (BMW), 2007/2 Augusto Farfus (BMW), 2008/1 Andy Priaulx (BMW), 2008/2

#### **Technical requirements.**

At 2.760 kilometres, the “Circuit de Pau” is the shortest circuit on the 2009 WTCC programme. Despite this, this narrow street circuit has a lot to offer. For long sections it is not bordered primarily by crash barriers, but by pavements, which sometimes form part of the racing line. Overtaking opportunities are few and far between, which only serves to make qualifying all the more important. The start-finish straight is followed by a sequence of three hairpins, which demand excellent traction. As soon as the uphill climb has been negotiated, the drivers are faced with a relatively quick and rhythmical downhill section, with several blind turns.

#### **Drivers' viewpoint**

Augusto Farfus: “Pau is a very special place for me. I suffered one of the worst crashes of my career there in 2007, when I rolled the car in qualifying. Despite that I came back to win the second race. Last year I also managed to finish up on the top of the podium. That just goes to show how at home I feel in Pau. The circuit is very narrow, but also has some fast corners and is very unforgiving. It is a good circuit for BMW. We will be trying to repeat the double success we enjoyed there in 2008.”

### **31<sup>st</sup> May 2009, “Circuit de la Comunitat”, Valencia (ES).**

The “Circuit de la Comunitat Valenciana Ricardo Tormo”, to give the track its full name, is one of the most modern race tracks in Europe. As well as the World Touring Car Championship, many other series also regularly stop in Valencia. The BMW Sauber F1 Team has launched its new Formula One car at this circuit every year since 2006. The “Circuit de la Comunitat” is also home to the Formula BMW Racing Center, where the licence and scholarship courses for the international Formula BMW junior series are held. With over 800,000 inhabitants, Valencia is the third largest city in Spain, behind Madrid and Barcelona. It is also the capital of the region of the same name in the east of the country.

#### **Circuit data.**

Length:	4.005 kilometres
Number of laps:	13
Race distance:	52.07 kilometres
WTCC debut:	2005
Previous winners:	Jordi Gené (SEAT), 2005/1 Jörg Müller (BMW), 2005/2 Augusto Farfus (Alfa Romeo), 2006/1 Jörg Müller (BMW), 2006/2 James Thompson (Alfa Romeo), 2007/1 James Thompson (Alfa Romeo), 2007/2 Robert Huff (Chevrolet), 2008/1 Alain Menu (Chevrolet), 2008/2

#### **Technical requirements.**

Valencia is traditionally the venue for many test sessions during the preparations for the season. As a result all the teams know this circuit like the back of their hands. The circuit offers a bit of everything. As in Puebla, the winding layout of the track creates a stadium atmosphere.. However, the track is influenced greatly by external conditions: a minimal change to the outside temperature can massively change the grip conditions. The engineers must anticipate the right set-up as quick as a flash.

#### **Drivers’ viewpoint.**

Sergio Hernández: “There is always something happening out on the track in Valencia. The circuit has been used a lot by Formula One teams for testing, and talented juniors are coached in the Formula BMW Racing Center. It is not a bad track for touring cars, but it is also not really perfect. There are not many overtaking opportunities. Valencia is just 40 minutes away from my hometown, so a lot of friends and family will come to support me. I did not really have the greatest luck in Valencia during my days in GP2. However, I did manage to win there in the Independents’ Trophy in 2008. Now I want to make my mark on the overall standings.”

## **21<sup>st</sup> June 2009, “Automotodrom Brno”, Brno (CZ).**

The “Automotodrom Brno” – also known as the “Masaryk Ring” in the Czech Republic – is one of the big names in international touring car racing. The imposing, natural race track featured in the very first World Championship back in 1987. Before the WTCC returned to the Czech Republic three years ago, Brno had hosted races in the European Touring Car Championship. BMW has good memories of Brno. A BMW driver has crossed the finishing line first in eight out of twelve European and World Touring Car Championship races. Last year Alessandro Zanardi scored his first pole position in the WTCC, and went on to claim victory.

### **Circuit data.**

Length:	5.402 kilometres
Number of laps:	10
Race distance:	54.02 kilometres
WTCC debut:	1987
Previous winners:	Klaus Ludwig, Klaus Niedzwiedz (Ford), 1987 Jörg Müller (BMW), 2006/1 Robert Huff (Chevrolet), 2006/2 Félix Porteiro (BMW), 2007/1 Jörg Müller (BMW), 2007/2 Alessandro Zanardi (BMW), 2008/1 Gabriele Tarquini (SEAT), 2008/2

### **Technical requirements.**

The “Automotodrom Brno” is one of the faster circuits on the WTCC calendar, and is a classic, undulating track. The corners flow into each other, and the track surface is flat, thanks to recent resurfacing. The drivers must master numerous left-right combinations. After the start-finish straight, the circuit descends for almost three kilometres. The subsequent climb requires a high degree of torque and engine performance.

### **Drivers’ viewpoint.**

Alessandro Zanardi: “The Automotodrom is a fantastic race track. Even if I hadn’t enjoyed such good results there in the past I would still say: Wow! What a circuit. Fortunately I also have an excellent record in Brno. Our team has always performed well there. The BMW 320si WTCC really likes this track. My victory in 2008 was great, but the pole position on the Saturday was even better. It is all about pure performance on the decisive qualifying lap. It is a great feeling to come out as the fastest. As you can see, my memories of Brno are more than positive.”



### **5<sup>th</sup> July 2009, “Circuito da Boavista”, Porto (PT).**

The “Circuito da Boavista” can look back on a long tradition, which includes hosting races from the Formula One World Championship on two occasions. In 1958 Stirling Moss (GB) was victorious, while Australia’s Jack Brabham came out on top two years later. The first automobile race on this street circuit took place in 1931. The Formula One races were staged at a 7.5 kilometre circuit. In the meantime, however, the layout has undergone some considerable changes. The drivers from the BMW national teams will be faced with 11 4.720-kilometre laps. As well as the circuit layout, the infrastructure around this classic track was modified. These changes include three new stands, giving it a capacity of 24,000 seats. Last year, Estoril (PT) was the venue for the Portuguese legs of the WTCC.

#### **Circuit data.**

Length:	4.700 kilometres
Number of laps:	11
Race distance:	51.70 kilometres
WTCC debut:	2007
Previous winners:	Alain Menu (Chevrolet), 2007/1 Andy Priaulx (BMW), 2007/2

#### **Technical requirements.**

On paper, the “Circuito da Boavista” seems more like a normal track than a street circuit. In this sense it resembles American street circuits. Different to Pau, the track is flat and drivers are faced with long straights and 90 degree corners in Porto. As a result, the average speed here is almost 20 km/h faster than in Pau. As is usually the case with street circuits, crash barriers lurk, waiting for drivers to slip up. Since the circuit made its WTCC debut in 2007, several modifications have been made, particularly to the chicane before the start/finish straight in 2009.

#### **Drivers’ viewpoint.**

Jörg Müller: “Although I have been around in motor racing for quite a while, I still really enjoy racing at new circuits. That is why I was so much looking forward to racing in Porto in 2007. I was not disappointed. They were thrilling races. I had a great duel with Andy Priaulx, and ended up in the runner-up position on the podium. I love street circuits, and Porto is without doubt one of the most attractive street circuits I have experienced so far. It is not as narrow as other circuits of this kind, but has both slow and quick sectors. This is a perfect combination.”

### **19<sup>th</sup> July 2009, “Brands Hatch Grand Prix Circuit”, Brands Hatch (GB).**

Brand Hatch has been hosting races since 1926. At that time, motorcyclists raced anti-clockwise around a grassy track. The circuit was tarmaced and the race direction changed in the 1950s. The Grand Prix circuit used by the WTCC for its two races was built in 1959. Between 1964 and 1986, Formula One staged the British Grand Prix twelve times on this challenging, natural race track. This event twice went under the title of the European Grand Prix. Brands Hatch is in the borough of Fawkham, close to Dartford in the English county of Kent. Dartford is the administrative seat of the district of the same name, and has around 58,000 residents.

#### **Circuit data.**

Length:	3.703 kilometres
Number of laps:	14
Race distance:	51.84 kilometres
WTCC debut:	2006
Previous winners:	Yvan Muller (SEAT), 2006/1 Alain Menu (Chevrolet), 2006/2 Alain Menu (Chevrolet), 2007/1 Andy Priaulx (BMW), 2007/2 Jörg Müller (BMW), 2008/1 Alain Menu (Chevrolet), 2008/2

#### **Technical requirements.**

The Grand Prix circuit at Brands Hatch is a flowing track and includes some of the best-known corners in international motor racing. Nothing is symmetrical at this circuit, which is rich in tradition and nestled perfectly in the surrounding countryside. The very first corner, “Paddock Hill” is a challenge in itself, with drivers heading blind into a corner before descending into a dip. In the return sector of the track, four fast right-handers really put the drivers to the test. The car must react extremely precisely to the driver’s steering.

#### **Drivers’ viewpoint.**

Andy Priaulx: “I am looking forward to another great weekend in Brands Hatch, even if I know I will always be the centre of attention there. It is always a huge challenge to race at the Grand Prix circuit at Brands Hatch. For me, the track is like a miniature version of the Nürburgring-Nordschleife. It is not simple to overtake there, and it is easy to make mistakes. The immense motor racing tradition, which Brands Hatch can look back upon, is everywhere.”

### **6<sup>th</sup> Sept. 2009, “Motorsport Arena Oschersleben”, Oschersleben (DE).**

BMW drivers have enjoyed numerous World Touring Car Championship victories at the “Motorsport Arena Oschersleben”. A BMW driver has crossed the finishing line as winner in seven of the eight races at the 3.696 kilometre circuit. However, it was Alessandro Zanardi who created the most moving moment in Oschersleben with his maiden WTCC victory in 2005. The twisty track is one of the long-term fixtures on the FIA WTCC race calendar. It hosted six races in the European Touring Car Championship between 2002 and 2004. BMW finished with an impressive record of five victories. Priaulx also enjoyed two wins in the European Championship, while Müller stood atop the podium once.

#### **Circuit data.**

Length:	3.696 kilometres
Number of laps:	14
Race distance:	51.74 kilometres
WTCC debut:	2005
Previous winners:	Andy Priaulx (BMW), 2005/1 Alessandro Zanardi (BMW), 2005/2 Andy Priaulx (BMW), 2006/1 Jörg Müller (BMW), 2006/2 Yvan Muller (SEAT), 2007/1 Augusto Farfus (BMW), 2007/2 Augusto Farfus (BMW), 2008/1 Félix Porteiro (BMW), 2008/2

#### **Technical requirements.**

The “Motorsport Arena” is a flat circuit with a good mixture of slow corners, in which traction is important, and flowing sections. One key spot is the chicane leading into the back straight. At this point in particular, the car must be able to drive aggressively over the kerbs without losing time. When it comes to average speed, Oschersleben lies in the middle of the twelve World Championship circuits used in 2009.

#### **Drivers’ viewpoint.**

Jörg Müller: “I always look forward to returning to Oschersleben. The races there are always rather special for me, as they are the only races in Germany. BMW is a German company and I have a German flag on my car – it couldn’t be clearer that this is my home race. Traditionally, many family members and friends travel with me to the Magdeburger Börde region. BMW has always been competitive in Oschersleben. I am sure this will also be the case this year, and that I will put everything into winning there again for the first time since 2006.”

## **20<sup>th</sup> September 2009, “Autodromo Enzo e Dino Ferrari”, Imola (IT).**

The BMW national teams have already lined up in Imola as part of both the European Touring Car Championship and the World Touring Car Championship. The motorsport history of the town in the Emilia Romagna, with its 66,000 residents, goes back as far as the 1940s, when the first races took place on public streets. In 1950 the foundations were laid for the first race track, which was used from 1952 onwards. Formula One cars first came to Imola on 21<sup>st</sup> April 1963. At that time, public streets still formed part of the course. This did not change until 1979. Imola hosted a race from the FIA Formula One World Championship every year between 1980 and 2006.

### **Circuit data.**

Length:	4.909 kilometres
Number of laps:	11
Race distance:	53.99 kilometres
WTCC debut:	2008
Previous winners:	Yvan Muller (SEAT), 2008/1 James Thompson (Honda), 2008/2

### **Technical requirements.**

The “Autodromo Enzo e Dino Ferrari” in Imola is the second fastest circuit on the 2009 World Championship calendar, behind Curitiba. Last year the circuit underwent expensive modification work, and the visit of the WTCC marked its comeback on the international motor racing stage. This undulating circuit requires a rhythmical driving style, and includes three chicanes that must be approached aggressively. The cars must be able to absorb the kerbs, some of which are high, in order for the drivers to accelerate as early as possible.

### **Drivers’ viewpoint.**

Alessandro Zanardi: “I like Imola. It is a beautiful circuit. It is long and undulating, and has some blind corners. This makes the circuit ideal for races in the World Touring Car Championship. I have good memories of Imola. When I was a little boy, my uncle used to work there as a marshal. He took me with him once. That was the first time I experienced a Formula One racing car. This experience captured my heart, and I became a motorsport addict. Fortunately I was able to convert this passion into a career as a racing driver. So, in a way, it all started in Imola for me.”

### **1<sup>st</sup> November 2009, “Okayama International Circuit”, Okayama (JP).**

The name “Okayama International Circuit” refers to the Japanese prefecture of the same name. The city of Okayama is located about 60 kilometres south of the track. The circuit actually belongs to Mimasaka, which was only founded in 2005 by merging several townships. The race track was built in 1992, under the name “Tanaka International Circuit Aida”. New owners took over the circuit in 2003, and it was renamed on 1<sup>st</sup> May 2004. Alongside the World Touring Car Championship, the Japanese Formula Nippon and various national GT and touring car championships also race at the 3.703-kilometre circuit. The WTCC event in 2008 was the first time an official FIA world championship had been staged in Mimasaka for 13 years. In 1994 and 1995 the circuit was the venue for two Formula One races. The winner of the Pacific Grand Prix on both occasions was Michael Schumacher (DE).

#### **Circuit data.**

Length:	3.703 kilometres
Number of laps:	14
Race distance :	51.84 kilometres
WTCC debut:	2008
Previous winners:	Rickard Rydell (SEAT), 2008/1 Tom Coronel (SEAT), 2008/2

#### **Technical requirements.**

The race track in Okayama is similar to the “Motorsport Arena Oschersleben”. However, the circuit has flatter kerbs and is less undulating. The corners can be taken in a rhythmical sequence, and there are several overtaking opportunities. Fog and rain can lead to conditions in the forest area around Mimasaka changing dramatically within minutes.

#### **Drivers’ viewpoint.**

Sergio Hernández: “I will always remember Okayama, as that was the scene of my first podium finish in my WTCC career – and hopefully not my last. As a driver you can concentrate fully on the race, as there is literally nothing around the circuit to distract you. The track is very varied, and offers all kinds of corners. At some points, you are driving the car at its absolute limit.”

## **22<sup>nd</sup> November 2009, “Circuito da Guia”, Macau (MO).**

Macau consists of a peninsula and two islands, which are connected by bridges. The majority of the 500,000 inhabitants live on the peninsula. In total, Macau covers an area of 25.4km<sup>2</sup>. The official languages are Chinese and Portuguese. In 1999 Macau was integrated into the People's Republic of China as a second special administrative region. The “Guia Circuit” is regarded as one of the most challenging tracks in the world. The Formula 3 race and the spectacular Motorcycle Grand Prix take place on the same weekend as the WTCC season finale. In 2005, 2006 and 2007 BMW drivers not only claimed race victories at the legendary circuit, but also celebrated World Championship titles: Andy Priaulx was crowned World Champion three times in a row in Macau, with BMW replicating this achievement in the Manufacturers' Championship.

### **Circuit data.**

Length:	6.117 kilometres
Number of laps:	9
Race distance:	55.05 kilometres
WTCC debut:	2005
Previous winners:	Augusto Farfus (Alfa Romeo), 2005/1 Duncan Huisman (BMW), 2005/2 Andy Priaulx (BMW), 2006/1 Jörg Müller (BMW), 2006/2 Alain Menu (Chevrolet), 2007/1 Andy Priaulx (BMW), 2007/2 Alain Menu (Chevrolet), 2008/1 Robert Huff (Chevrolet), 2008/2

### **Technical requirements.**

The “Circuito da Guia” has everything a race track could possibly offer. The drivers reach the highest speeds of the season along the long straight, while it is prohibited to overtake in the ultra-slow “Melco” hairpin. This bottleneck marks the start of the high-speed section with four corners in the space of almost three kilometres. The “Mandarin Corner” is the supreme test of courage in the WTCC. The drivers approach it blind in the highest gear. The set-up is a compromise of top speed and high grip for the city labyrinth.

### **Drivers' viewpoint**

Andy Priaulx: “Macau has a special place in my heart. The first time I raced there was with Formula 3, and the enormous challenge posed by this circuit impressed me immediately. I have celebrated some of my greatest touring car successes there, and have been crowned World Champion three times in a row. It is no wonder that I feel very comfortable in Macau.”

## 4. The formula for exciting on-track action.

### Enthralling sprint races for pure excitement.

The race weekends of the 2009 FIA World Touring Car Championship are organised as follows:

- In Curitiba, Puebla, Marrakech, Porto, Okayama and Macau drivers have one private test session, which is 30 minutes long on normal circuits and 45 minutes long on street circuits.
- On Saturdays there are two free practice sessions of 30 minutes each and a 30-minute qualifying, which determines grid positions for race 1. After 20 minutes, the first qualifying session comes to an end, with the ten fastest drivers advancing into “Q2”. In this ten-minute session the drivers fight for grid position in the top five rows and pole position. The other grid positions are determined by the times set in “Q1”.
- Race Sundays begin with a warm-up (15 minutes).
- Race 1 is staged over a distance of 50 kilometres with a “rolling” start. Race 2 gets underway with a “standing” start.
- The teams only have a small length of time between races to prepare the cars for the second race. The Parc-Fermé regulations apply up until 25 minutes before the formation lap for race 2. This means that cars cannot be worked on.
- The grid positions for race 2 are determined by the results of the first race. However, the top eight start in reverse order (the winner from position 8, the runner-up from position 7, etc.). Drivers failing to complete race 1 go to the back of the starting grid.
- Race 2 is also 50 kilometres long.

The top eight drivers in each race are awarded championship points as follows:

1st	2nd	3rd	4th	5th	6th	7th	8th
10	8	6	5	4	3	2	1

At the end of the season the WTCC awards championship titles both to the most successful driver and the best manufacturer. The manufacturers’ classification is based on the race results of the two best drivers for each competing brand. Private drivers compete for the coveted Independents’ Trophy. Last year, Sergio Hernández claimed the title at the wheel of a BMW 320si WTCC.

### **“Compensation weight” to ensure more even competition.**

In 2009, article 79 of the sporting regulations for the FIA World Touring Car Championship introduces new controls to balance out differences in performance by altering car weights. Where the drivers' individual results were previously decisive in determining the amount of “success weight” carried by each car, the weight of the racing cars is now calculated using lap times.

The best lap times of the two fastest cars of each model in qualifying (with the factor 1.5) and the two best lap times of the two fastest cars of each model in both races are averaged to produce the decisive reference time. The new rule will be applied for the first time after the first two events in Curitiba and Mexico. After this, the previous three events will be used to calculate reference times.

In this way, the results from the races in Mexico, Marrakech and Pau determine the weight situation for both races in Valencia. At the first two races overseas, all cars will compete at their respective minimum weights – in the case of the BMW 320si WTCC this is 1,170 kilograms, minus 15 kilograms for using rear-wheel drive.

The maximum compensation weight is 60 kilograms (up to 40 kilograms can be added as ballast, up to 20 kilograms can be deducted from the cars' minimum weight). In Marrakech, all competitors must carry 40 kilograms. If the previously determined reference time for a model lies within 0.3 seconds over that of the fastest model, this remains at 40 kilograms. For every additional tenth of a second slower, all drivers in this model can remove 10 kilograms. This system ensures that drivers are no longer “punished” for bringing in good results, and helps to level the different performances of the car models used in the WTCC.

### **Calculation example:**

The BMW 320si WTCC proves to be the fastest car in the field in Curitiba and Puebla. The SEAT León TDI is 0.2 seconds slower, while the Chevrolet Cruze lies 0.5 seconds back. According to this scenario, the compensation weight for the two races in Marrakech is calculated as follows:

BMW 320si WTCC	+40 kilograms
SEAT León TDI	+40 kilograms (as within 0.3 seconds)
Chevrolet Cruze	+20 kilograms (20 kilograms less ballast, as 0.2 seconds outside the 0.3 second range in comparison to the fastest car).



**Close to production series.**

The BMW 320si WTCC competes in the WTCC in accordance with Super2000 regulations issued by the FIA. Only four-seater, four-door saloon cars measuring at least 4.2 metres in length are permitted as basic vehicles in this class. At least 2,500 units of their production versions must have been manufactured in the last twelve months, and they must come from a production family selling at least 25,000 units per year. Homologated as Group A cars for motor sport, they must be equipped with an FIA-approved conversion kit for the WTCC (consisting of special components for the engine and the car, for instance).

Displacement is limited to 2,000 ccm, while maximum rpm levels depend on the engine type. Four-cylinder units like the BMW P45 are allowed up to 8,500 rpm (six-cylinder 9,000 rpm, five-cylinder 8,750 rpm). Engines must survive at least four successive races. If they are changed before their due time, the driver drops back ten places on the starting grid. Substitute cars (T-cars) are not permitted.

## 5. Four successful drivers and a newcomer.



### **Gentlemen, start your engines.**

Five drivers in three BMW national teams will represent BMW Motorsport in the 2009 FIA World Touring Car Championship. In a joint interview, the quintet speaks about its goals for the new season, changes in motorsport, and much more.

### **Sergio, this is your first year in BMW Team Italy-Spain. How do you feel you have been accepted into the BMW family?**

Sergio Hernández: "I've been received with open arms. During our visit to BMW Motorsport in February, Alessandro Zanardi introduced me to all the engineers and mechanics involved in the project, so that I was very quickly able find my way around. I then got to know the entire team on the track at the first test session in Portimão. The relationships between the BMW national drivers are good, and it is great fun to be part of this team and represent BMW in the World Touring Car Championship."

### **You can even speak German, can't you?**

Hernández: "Yes, I can speak a bit of German. My mother comes from Hamburg. She spoke a lot of German with my older sister, but then less with me. However, I still understand a lot."

### **Augusto, like Sergio Hernández you are just 25 years old – despite this, you are one of the longest serving drivers in the World Championship. Are you still learning?**

Augusto Farfus: "Absolutely. A racing driver never stops learning, right the way through his career. It is always important to improve with every lap and every test. We want to improve constantly. Last year I didn't have a good season. In too many situations I failed to convert my performance into points. That hurt, and I am absolutely determined to do better in 2009."

### **As a younger driver, are you accepted by the older competitors in the field?**

Farfus: "I have a very good relationship with most drivers. So far I have always been fortunate enough to work with very experienced team-mates in the World Touring Car Championship, as is the case now with Jörg Müller. That helps me tremendously to develop further. Age plays less of a role in our championship than in other series. If you stay concentrated and work hard, you can enjoy a long and successful spell in the World Touring Car Championship."

**Jörg, you are an old hand. Are you still finding areas where there is room for improvement?**

Jörg Müller: "If you don't follow this approach, then you may as well stop being a racing driver straight away. You never stop learning in racing. What Augusto said also applies the other way round. I learn a lot from him too. He sees some areas from a completely different perspective to me. Despite all the experience, you have to accept that the old way is not always the best way. Although our car is now entering its fourth season, we are still learning about it from a technical point of view. That keeps our job interesting, even after so many years in the business."

**Alessandro, how much has motorsport changed during the course of your career?**

Alessandro Zanardi: "Are you trying to say that I am old? It goes without saying that racing has changed. However, I believe the people involved, like me, have also developed with it. One thing never changes: you have to work hard enough in the cockpit to ensure that you are ultimately faster than the opposition. That is why I still enjoy it so much."

**Andy, you won't have enjoyed having to watch Yvan Muller celebrating winning the title in 2008...**

Andy Priaulx: "It is not the case that you feel like the World Champion all year long. You work very hard, and in an ideal situation you are rewarded with the title. It was clear from very early on that Yvan and some other drivers would have a good chance of claiming the overall victory. For that reason the disappointment was not so large in Macau. Since my early days in motorsport I have always known that every run has a beginning and an end. That is why it is such good advice to simply always do your best. That is precisely what we did last year."

**How do you rate your World Championship chances with BMW this year?**

Priaulx: "We ought to have better chances than in 2008. However, it is unbelievably difficult to win a title. Race wins themselves are not easy, but everything has to fit into place in order to win championships. That was always the case for us until 2007, and that is what we want to build upon."

**Jörg, how do you see the balance of power in the WTCC field in 2009?**

Müller: "We will have to wait until after the first races before we can get a clear picture. Most of the time we are all testing at different circuits and nobody shows their full potential during the preparation stage. I am always optimistic. For that reason I am hopeful that we will have the necessary material to win the championship again in 2009. If that is the case, I, like the other four drivers, will be doing everything in my power to ensure that it is me at the very top."

**Alessandro, you will be racing with a sequential gearbox for the first time in 2009. What are the advantages of this?**

Zanardi: "We are convinced that it will make my life a bit easier. There is a lot in the car that I have to operate with my hands. The new gearbox will make this simpler. It will not be so advantageous for me in qualifying, as I will be carrying an extra 30 kilograms, and that will have a considerable effect on the one fast lap. However, I am hopeful that I will benefit in the races, and particularly in the second race of the weekend. The sequential gearbox should allow me to get off to good standing starts."

**Jörg, how do you motivate yourself before a race weekend – and how do you manage to switch off again afterwards?**

Müller: "I don't have to do an awful lot to motivate myself before a weekend. I still have that desire to win out there on the track. As soon as I put my helmet on, it is all about being faster than the rest. I always give my all for this goal. Racing drivers don't have much time to relax. We have 24 races, and do a lot of travelling and testing. In the winter I get away and do some skiing, and I love diving in the summer. After that it is back to concentrating fully on my job."

**Sergio, in 2008 you won the Independents' Trophy. What does this title mean to you?**

Hernández: "As Andy just said: it is always difficult to win a championship. That is certainly the case for the privateers' competition in the WTCC. You are fighting against your direct opposition, but must also take into account drivers who are fighting for the title in the overall ranks. It is important to finish on a consistent basis, and to pick up points. It goes without saying that my ten race victories and the overall success helped me secure a place in BMW Team Italy-Spain for 2009. It just goes to show that good performances as an independent are a good advertisement for higher positions."

**Do you feel more pressure now?**

Hernández: "I am representing BMW – that is something special. We are aiming to bring the titles in both the Drivers' and Manufacturers' Championships back to Munich. This brings a certain amount of pressure, but that is the same for all drivers. That is what motorsport is all about. Nobody applies greater pressure than you do yourself."

**Andy, what role does your family play in your life?**

Priault: "My family is very important, and has always spurred me on to produce great performances throughout my career. An example: I won my first race in Formula 3 within two weeks after the birth of my son Sebastian. It would be awful to celebrate success, but not have anyone to share that success with. When I'm at home, I can hardly wait to get back to testing or racing. And when I am at the circuit, then I pine for my family. It really cannot get much better than that."

**Alessandro, your wife Daniela is at every race. How important is her support?**

Zanardi: "The fact that she is with me at every race has been one of the great constants in my career. It no longer seems so extraordinary that she is there. My friends say that Daniela is so clever that, when she is near me, I switch off my own head and use hers. Seriously though: she is always there when I need some advice. However, she also understands when to leave me alone. Sometimes I am simply hot-headed, and need to find a solution by myself. Daniela has, and remains, very important to my career."

**Andy, what do you make of the new qualifying format?**

Priaulx: "It is important that we always put on a good show for the fans on the Saturday of the race weekend. I'm sure it was not particularly exciting in the past to watch five white, five yellow and three blue cars driving round one after another without overtaking. The new format is bound to add a bit of spice. However, the Sunday remains the core of our weekends. There is a lot going on, and the races are extremely exciting."

**Profile: Andy Priaulx (GB) – Car number 6.**

Exceptional driving talent, superb strategic skills and nerves of steel: Andy Priaulx has demonstrated all of the above. When combined with excellent team work and impressive base speed, these qualities contribute to making this driver from Guernsey (GG) in the Channel Isles the perfect racer. Priaulx, though, is more than a beaming winner who has won four of the most sought-after titles in international touring car racing. He is also a hard worker whose unwavering determination has seen him through some extremely difficult periods during his career.

It is no secret that Priaulx's route to the top was fraught with numerous obstacles, which he and wife Jo overcame together. During his early racing years the couple sold their home in Guernsey, and moved into a small caravan situated within sight of the Silverstone circuit. There Priaulx financed his way to the top by working as a racing instructor. "I was convinced that I had to devote my entire life to my dream," says the father of two. "How else could I expect a sponsor to support me if I was unable to demonstrate my determination?"

The dream referred to has long since become reality – and yet the 2004 European Touring Car Champion and winner of three successive world titles between 2005 and 2007 is still hungry for success. He is determined to wrestle his World Championship title back from Yvan Muller in 2009. Although Priaulx has recently achieved universal acclaim, his extraordinary talent was clear to see at an early age. Like father Graham, he was a class act in hillclimbing. As freshly crowned British Formula 1 Hillclimb Champion he switched to single seater racing cars in 1996. Three years later he claimed the Renault Spider Series with 13 victories in as many races. Priaulx's route to touring cars came via British Formula 3. Since contesting the ETCC with Team RBM in 2003, one success has followed the other.

Priaulx has always been versatile. On Guernsey he carved a reputation for himself in motocross and powerboat racing. With BMW he won the legendary 24 Hour Nürburgring Race. In addition, he has tested for the BMW WilliamsF1 Team and driven the BMW Sauber F1 Team's Formula One car in the Pit Lane Park and as part of the support programme for the WTCC races in Brands Hatch last year. In 2008 he received a very special honour, when Queen Elizabeth II awarded him the title of "Member of the British Empire".

Born: 8<sup>th</sup> August 1973 in Guernsey (GG)  
 Residence: Guernsey (GG)  
 Marital status: Married to Joanne,  
 one son Sebastian, one daughter Danniella  
 Website: [www.andypriaulx.com](http://www.andypriaulx.com)

1984 Kart racing in the Channel Islands  
 1985–1990 Motocross  
 1990 1<sup>st</sup> place Motocross 250 cc Championship in the Channel Islands  
 1991–1995 Hillclimb racing  
 1995 1st place RAC MSA British Hillclimb Championship  
 1996 Formula Renault (selected races)  
 1997 British Formula 3 Championship scholarship  
 1998 Renault Spider Cup (selected races)  
 2<sup>nd</sup> place Formula Palmer Audi Winter series  
 1999 1<sup>st</sup> place Renault Spider Cup, 13 wins from pole  
 BTCC test driver for Renault Williams, Vauxhall and Ford  
 Awards: BARC President's Cup, Guernsey Ambassador of the Year  
 2000 British Formula 3 Championship for Renault UK  
 F3 races in Macau and Korea for Manor Motorsport  
 2001 British Formula 3 Championship  
 2<sup>nd</sup> place from pole in the F3 Super Prix in Korea  
 2<sup>nd</sup> place in Vauxhall invitational drive in BTCC  
 F3 Grand Prix in Macau  
 2002 5<sup>th</sup> place British Touring Car Championship  
 Competed in Australian long-distance Bathurst 1000  
 and in Queensland 500 (Holden TWR)  
 2003 3<sup>rd</sup> place FIA ETCC (BMW 320i), BMW Team Great Britain  
 1<sup>st</sup> place in BMW Sports Trophy  
 2004 1<sup>st</sup> place FIA ETCC (BMW 320i), BMW Team Great Britain  
 2<sup>nd</sup> place Macau Grand Prix – Guia Race  
 24 Hour Race Spa-Francorchamps (BMW M3 GTR)  
 2005 1<sup>st</sup> place FIA WTCC (BMW 320i), BMW Team UK  
 1<sup>st</sup> place 24 Hour Race Nürburgring (BMW M3 GTR)  
 Formula One tests with BMW WilliamsF1 Team  
 2006 1<sup>st</sup> place FIA WTCC (BMW 320si), BMW Team UK  
 2007 1<sup>st</sup> place FIA WTCC (BMW 320si), BMW Team UK  
 2008 4<sup>th</sup> place FIA WTCC (BMW 320si), BMW Team UK  
 Awarded MBE by Queen Elizabeth II

**Profile: Jörg Müller (DE) – Car number 7.**

In terms of career World Touring Car Championship victories, Jörg Müller shares top billing with triple champion Andy Priaulx. Both BMW works drivers had ten WTCC wins to their credit before the start of the 2009 season. Müller, though, impressively headed another statistical table: with twelve fastest laps to his credit, he held the record. Should further proof of this veteran's talent be required, this surely is the clincher.

Müller is the constant in BMW Team Germany, having been with the Schnitzer team managed by Charly Lamm since first entering the European Touring Car Championship in 2002. He represented his team at the then-pinnacle of touring car racing with equal consistency. Twice Müller was a title contender going into the final round of the ETCC, having won no less than 12 races during his career. The return of the World Touring Car Championship in 2005 saw him stake a claim on victory, with three wins going his way in that comeback year. The following year this personable racer went one better: After four victories he lost the title to BMW brand-mate Priaulx by a single point at the season finale in Macau.

At the same circuit he had previously made history when he added the 2004 round to his victory in the 1993 Macau Formula 3 Grand Prix. He became only the second driver in the history of the event to win in both disciplines on the challenging street circuit. In 2006 he claimed another WTCC victory on Macau's "Guia Circuit".

As a 15-year-old Müller first experienced karting. Titles in significant single seater championships soon followed. He then carved a reputation for himself as test driver for the Arrows, BMW and Sauber Formula One teams. He is equally passionate about endurance racing, having contested the 24 Hour Le Mans classic for BMW, Nissan and Porsche. In the American Le Mans Series he celebrated victories with the BMW V12 LMR and won the GT Class in 2001 with a BMW M3 GTR. In an identical vehicle he won the 24 Hour Nürburgring Race in 2004 with Team BMW Motorsport, finishing second in the same event a year later.

In parallel with his racing career, Jörg Müller devotes time to developing promising young drivers. As instructor at the Formula BMW Racing Center in Valencia he imparts valuable tips for a successful career as a race driver to the young candidates. Having proven himself over many years at the very top of motorsport, he surely is an excellent role model.



Born: 3rd September 1969 in Kerkrade (NL)  
 Residence: Monte Carlo (MC)  
 Marital status: Divorced  
 Website: [www.joerg-mueller.org](http://www.joerg-mueller.org)

1984–1987	Karting
1988	1 <sup>st</sup> place German Formula Ford Championship
1989	1 <sup>st</sup> place German Formula Opel Lotus Challenge
1990	1 <sup>st</sup> place Formula Ford European Championship 5 <sup>th</sup> place German Formula 3 Championship
1991	1 <sup>st</sup> place Formula 3 Grand Prix in Monaco
1992	7 <sup>th</sup> place German F3 Championship
1993	German Formula 3 Championship 1 <sup>st</sup> place F3 GP in Macau
1994	1 <sup>st</sup> place German F3 Championship
1995	BMW works driver ADAC Super Touring Car Cup
1996	1 <sup>st</sup> place Formula 3000 European Championship BMW works driver ADAC Super Touring Car Cup 1 <sup>st</sup> place 24 Hour Race Spa (BMW 318is)
1997	Formula 1 test driver for Arrows, 24 Hour Race Le Mans
1998	Formula 1 test driver for Sauber 2 <sup>nd</sup> place 24 Hour Race Le Mans (Porsche GT1)
1999	BMW works and F1 test driver: one ALMS victory, 24 Hour Race Le Mans (BMW V12 LMR)
2000	5 <sup>th</sup> place ALMS, two victories (99er BMW V12 LMR) Formula 1 test driver for Michelin
2001	1 <sup>st</sup> place GT Class ALMS, four victories (BMW M3 GTR)
2002	2 <sup>nd</sup> place FIA ETCC, (BMW 320i) BMW Team Germany
2003	2 <sup>nd</sup> place FIA ETCC, (BMW 320i) BMW Team Germany 24 Hour Race Nürburgring (BMW M3 GTR)
2004	1 <sup>st</sup> place 24 Hour Race Nürburgring (BMW M3 GTR) 1 <sup>st</sup> place Macau Grand Prix – Guia Race (BMW 320i) 4 <sup>th</sup> place FIA ETCC (BMW 320i), BMW Team Germany Class win GT2 24 Hour Race Spa (BMW M3 GTR)
2005	5 <sup>th</sup> place FIA WTCC (BMW 320i), BMW Team Germany 2 <sup>nd</sup> place 24 Hour Race Nürburgring (BMW M3 GTR)
2006	2 <sup>nd</sup> place FIA WTCC (BMW 320si), BMW Team Germany
2007	7 <sup>th</sup> place FIA WTCC (BMW 320si), BMW Team Germany
2008	7 <sup>th</sup> place FIA WTCC (BMW 320si), BMW Team Germany

**Profile: Augusto Farfus (BR) – Car number 8.**

It is not unknown for race drivers to adopt unusual measures to toughen themselves mentally in preparation for their exploits on the race circuits of the world. One such driver is Augusto Farfus. Each year the BMW Team Germany driver targets a particular passion and then proceeds to deny himself its pleasures. One year, for example, he abstained from eating chocolates, while another time he spent an entire year without meat. "It may sound unspectacular," explains Farfus, "but that way I prove to myself that I can manage it. Discipline is an important part of motorsport." Fortunately, though, he has not targeted champagne, or else he would have found his numerous visits to the podium a lot less enjoyable. In 2007, his first season with BMW, the 25-year-old scored a total of three victories. In 2008 he added a further two wins to his collection.

His racing debut in the BMW 320si WTCC in Curitiba in 2007 went off as though specifically tailored for the city's hometown hero. In front of thousands of cheering compatriots Farfus stood on the podium after finishing third in race one – following that up with victory in the second heat. The deafening "Farfus, Farfus" chants of his enormous army of fans created an electric atmosphere. Last year Farfus proved to be the fastest driver in the field on many race weekends, but was unable to convert this speed into success. In 2009 he will be out to improve this record and challenge for the title. That he had become an important member of the BMW family within an exceptionally short space of time was proven when he was granted the opportunity of driving a BMW Sauber F1 Team Formula One car at Valencia in November 2007.

In 2005 Farfus won his first World Touring Car Championship race on the challenging Macau street circuit. A year later he made a decisive breakthrough in the WTCC: Having started the season with low expectations, he took three victories to become one of three drivers besides Andy Priaulx and Jörg Müller to retain title hopes going into the last round. After an accident, Farfus consoled himself with third place in the Drivers' Championship.

Career milestones abound for this exceptional talent. Having tasted numerous successes in motocross and karts, Farfus made the move to Europe in 2000 and entered the European Formula Renault Championship. He won the title a year later. The 2003 F3000 Euro Series, too, went his way in his second season in the category. For 2004 Farfus switched to touring cars.

The BMW driver's personal life is marked by equally courageous steps: during the week leading up to the season opener in 2008, he married his long-time partner Liri in Curitiba.

Born: 3<sup>rd</sup> September 1983 in Curitiba (BR)  
Residence: Monte Carlo (MC)  
Marital status: Married to Liri  
Website: [www.farfus.com](http://www.farfus.com)

1991	First motorsport experiences in motocross
as of 1992	Started kart racing
	Raced in a range of American and Italian championships
1999	2 <sup>nd</sup> place in World Karting Championships (Formula A)
2000	12 <sup>th</sup> place European Formula Renault Championship
2001	1 <sup>st</sup> place European Formula Renault Championship
2002	9 <sup>th</sup> place F3000 Euro Series
2003	1 <sup>st</sup> place F3000 Euro Series
2004	6 <sup>th</sup> place FIA ETCC (Alfa Romeo)
2005	4 <sup>th</sup> place FIA WTCC (Alfa Romeo)
2006	3 <sup>rd</sup> place FIA WTCC (Alfa Romeo)
2007	4 <sup>th</sup> place FIA WTCC (BMW 320si), BMW Team Germany
2008	6 <sup>th</sup> place FIA WTCC (BMW 320si), BMW Team Germany

### **Alessandro Zanardi (IT) – Car number 9.**

Alessandro Zanardi is a phenomenon. Just when one believes the 42-year-old has achieved the maximum in a given discipline, he simply seeks another challenge – and promptly masters it with his unique level of enthusiasm. Since losing both legs in an accident on the Eurospeedway Lausitz in 2001, Zanardi has given new hope to many who met the same fate. “I am out to prove that there are no obstacles for the disabled,” the driver with 41 Formula One GP starts to his credit says succinctly.

Examples of his irrepressible spirit abound. Very few foresaw a comeback to motorsport after his accident. However, drawing on cast-iron determination and his enormous will to live the Italian fought his way back. In 2003 he impressed the sport greatly by entering the final event of the European Touring Car Championship at Monza.

This races in front of his home crowd whetted his appetite for more, and in 2004 Zanardi contested the entire ETCC season, going on to represent BMW Team Italy-Spain – ROAL Motorsport in the 2005 to 2008 World Touring Car Championship seasons. Merely competing, though, was simply not enough for the racer from Bologna. He targeted victories. And so it transpired: On 28<sup>th</sup> August 2005 Zanardi at Oschersleben sensationally became the first disabled person to win a world championship motor race. He followed this success with another victory in Istanbul a year later. In 2008 he was climbing the steps to the top of the podium again in Brno, having previously claimed the first pole position of his WTCC career. Zanardi and his team have been able to gradually perfect the controls of the car, thereby improving its competitiveness. He accelerates via hand controls, and brakes with the assistance of his prosthesis. In 2009 Zanardi will race with a sequential gearbox for the first time. “I can still win races,” he says convincingly.

This immense ambition ensures Zanardi remains an utterly unique sportsman. Wherever the double ChampCar champion competes he aims for the top. At the end of 2007 he made his debut in the popular New York Marathon with a handbike, promptly finishing fourth in his class.

A Formula One car, too, has seen Zanardi go to the limit: When he left the pits of Valencia’s “Circuit de la Comunitat” 25<sup>th</sup> November 2006, those fans and media present immediately realised they were witnessing history in the making as he rolled off the first laps in a BMW Sauber F1 Team Formula One car. It was no surprise, either, that Zanardi’s lap times continuously fell as he increasingly badgered his engineers for information.

Born: 23<sup>rd</sup> October 1966 in Bologna (IT)  
 Residence: Padova (IT)  
 Marital status: Married to Daniela, one son Niccolo  
 Website: [www.alex-zanardi.com](http://www.alex-zanardi.com)

1980–1984	Kart racing
1985	1 <sup>st</sup> place Italian Kart Championship
1986	1 <sup>st</sup> place Italian Kart Championship
1987	1 <sup>st</sup> place European Kart Championship
1988	12 <sup>th</sup> place Italian Formula 3 Championship
1989	7 <sup>th</sup> place Italian Formula 3 Championship Debut race in International FIA Formula 3000 Championship in Dijon
1990	2 <sup>nd</sup> place Italian Formula 3 Championship 1 <sup>st</sup> place Le Mans Formula 3 European Cup Pole at Formula 3 Grand Prix Monaco
1991	2 <sup>nd</sup> place International FIA Formula 3000 Championship Three Formula 1 races for Jordan
1992	Formula test driver for Benetton, three GPs for Minardi
1993	Formula 1 season with Lotus
1994	Formula 1 test driver, then team driver for Lotus
1995	British Racing Production Championships (Lotus Esprit), one win in GT2 class
1996	3 <sup>rd</sup> place IndyCar World Series (Chip Ganassi Racing) Rookie of the Year
1997	1 <sup>st</sup> place CART World Series (Chip Ganassi Racing) Award: PPG Colourful Character Award
1998	1 <sup>st</sup> place CART World Series (Chip Ganassi Racing)
1999	Formula 1 season with WilliamsF1
2001	CART Championship (Mo Nunn Racing) 15 September: in a serious accident on EuroSpeedway Lausitz Zanardi loses both legs
2003	Comeback in the final round of the FIA ETCC in Monza with BMW Team Italy-Spain (BMW 320i)
2004	14 <sup>th</sup> place FIA ETCC (BMW 320i), BMW Team Italy-Spain
2005	10 <sup>th</sup> place FIA WTCC (BMW 320i), BMW Team Italy-Spain 1 <sup>st</sup> place Italian Touring Car Championship (BMW 320i)
2006	11 <sup>th</sup> place FIA WTCC (BMW 320si), BMW Team Italy-Spain
2007	15 <sup>th</sup> place FIA WTCC (BMW 320si), BMW Team Italy-Spain
2008	13 <sup>th</sup> place FIA WTCC (BMW 320si), BMW Team Italy-Spain

**Sergio Hernández (ES) – Car number 10.**

The only newcomer in the ranks of the BMW national teams is Sergio Hernández. The 2009 World Touring Car Championship will see the Spaniard race alongside Alessandro Zanardi in BMW Team Italy-Spain, replacing his compatriot Félix Porteiro.

Hernández earned his rise from privateer to BMW national team driver by consistently producing excellent performances. Having made his World Touring Car Championship debut in 2007, he crowned an excellent season in 2008 by winning the Independents' Trophy. Ten victories in the privateers' class and one overall podium finish (third place in Okayama) caught the eye and demonstrated the 25-year-old's extraordinary talent.

"It is not so easy to catch the eye as a privateer," says the racing driver from Javea. "Third place in Japan last year was great. It showed that I can play with the big boys in the WTCC. I am grateful to BMW for giving me the opportunity to go on and prove myself at a higher level. I am very familiar with the BMW 320si WTCC, so I had no problem finding my feet in the new team."

Before switching to the WTCC, the keen skier and Real Madrid fan gained valuable experience in the GP2 series, in which he picked up four points in 2005 and 2006. In 2007 his concentration was almost exclusively focussed on the World Touring Car Championship, with the final race weekend of the year in Valencia his only GP2 appearance.

After three years in karting, Hernández moved up to Formula racing in 2001. He then worked his way through the British and Spanish Formula 3 series into the World Series by Nissan, which he eventually left for GP2 in 2005. Three years later he was able to celebrate as World Champion in the FIA WTCC Independents' Trophy.

Born: 6<sup>th</sup> December 1983 in Javea (ES)

Residence: Javea (ES)

Marital status: Single

Website: [www.sergiohernandez.es](http://www.sergiohernandez.es)

1998 to 2000 Karting

2001 7<sup>th</sup> place Formula BMW Portugal

3<sup>rd</sup> place Formula Supertoyota

2002 9<sup>th</sup> place Spanish Formula 3 Championship

2003 7<sup>th</sup> place Spanish Formula 3 Championship

British Formula 3 Championship and World Series Light

2004 3<sup>rd</sup> place Spanish Formula 3 Championship

Nissan World Series

2005 20<sup>th</sup> place GP2 series

2006 23<sup>rd</sup> place GP2 series

2007 4<sup>th</sup> place FIA WTCC Independents' Trophy (BMW 320si)

20<sup>th</sup> place FIA WTCC (BMW 320si)

6<sup>th</sup> place Le Mans series (GT2 class)

2008 1<sup>st</sup> place FIA WTCC Independents' Trophy (BMW 320si)

16<sup>th</sup> place FIA WTCC (BMW 320si)

## 6. Experience and determination: the BMW national teams.



### **BMW Team UK – RBM.**

Andy Priaulx (GB) – Car number 6.

Hardly any other team in Motorsport has made it to the top as fast as BMW Team UK – RBM. Under the auspices of boss Bart Mampaey, the team from the Belgian city of Mechelen with driver Andy Priaulx not only managed to win the European World Touring Car Championship title in 2004; they also proved to be the measure of all things in the World Touring Car Championship season 2005 to 2007, when the last race of the season in Macau each time left the RBM pit resounding with jubilation.

But success doesn't come easy – it is the result of a lot of meticulous work both on and off the track. "You can't afford to sit back in motorsport," says Mampaey, explaining his philosophy. "You have to keep your eyes firmly on the future. There are so many different areas where you can improve things. Everybody on the team knows that and we are all pulling together."

For RBM efficiency is one of the main conditions of their daily work, with Mampaey making consistent efforts to improve the performance of the BMW 320si WTCC by utilising time and resources perfectly. The team also benefits from the infrastructure of the Mampaey family's own BMW dealerships, which operate under the name of JUMA. Synergies between the team and the dealerships in administration and logistics, for example, leave RBM free to concentrate on the more essential aspects of their work: getting the car out on to the race track.

The acronym JUMA stands for Julian Mampaey, father of the current RBM team boss, whose passion for motorsport has passed into the next generation. In the 70s and 80s the JUMA team built up a reputation, but unlike RBM, which is measuring up against the tough competition of today's WTCC, Julian Mampaey concentrated his effort on one single race: the 24 Hour Race at Spa-Francorchamps. The JUMA team's results for the long distance classic certainly need no apologies: from 1977 to 1984 they achieved three overall victories and five second places – all with BMW cars.



Nine years after JUMA's last race, Bart Mampaey followed in his father's footsteps. Initially his RBM team fielded cars in the Belgian BMW Compact Cup, but the Mampaey family was soon to celebrate a successful return to Spa-Francorchamps with Group N one-two in the 24 Hours Race in 1997. One year later an overall victory followed – the last for the BMW brand to date on the Ardennes rollercoaster circuit.

By this stage it was clear that Mampaey could take a team to victory. But still he decided to carry on gaining experience and widening his horizons. He went to the USA to find out more about the American Le Mans Series (ALMS) and was involved in long-distance classics like Daytona, among other things. "It was good for me to experience different ways of working," Mampaey recalls.

On his return to Belgium the race strategist set his mind to a new challenge: RBM sent a BMW 320i into the European Touring Car Championship for Belgium, with Fredrik Ekblom (SE) at the wheel. One year later the team sported the colours of Great Britain for the first time, taking Andy Priaulx under contract as driver. "Andy and the team just fit together so well," Mampaey says. After starting out in 2003, the RBM team quickly caused a sensation, when Priaulx secured the title in Dubai in the 2004 ETCC. Subsequent world championship title wins in 2005, 2006 and 2007 were to prove that the team's success in 2004 was more than just a flash in the pan.

"We still have a lot of mechanics and team members on board who were there right at the beginning," said Mampaey, who appreciates their loyalty. But he also values the idea of trying out new ways to set up the cars, and it is this mixture of teamwork, innovative power and unflagging commitment that has made RBM one of the top teams in the WTCC.

Team manager: Bart Mampaey  
Address: E. Walschaertstraat 2A, 2800 Mechelen, Belgium  
Founded: 1995

Biggest successes:

1995–1997	BMW Compact Cup
1997	1 <sup>st</sup> and 2 <sup>nd</sup> Place Group N 24 Hour Race, Spa (BMW)
1998	1 <sup>st</sup> place 24 Hour Race Spa (BMW Fina Bastos Team)
1999	4 <sup>th</sup> place 24 Hour Race Spa (Nissan)
2002	6 <sup>th</sup> place FIA ETCC (BMW 320i)
2003	3 <sup>rd</sup> place FIA ETCC (BMW 320i)
2004	1 <sup>st</sup> place FIA ETCC (BMW 320i)
2005	1 <sup>st</sup> place FIA WTCC (BMW 320i)
2006	1 <sup>st</sup> place FIA WTCC (BMW 320si)
2007	1 <sup>st</sup> place FIA WTCC (BMW 320si)
2008	4 <sup>th</sup> place FIA WTCC (BMW 320si)

## **BMW Team Germany – Schnitzer Motorsport.**

Jörg Müller (DE) – Car number 7.

Augusto Farfus (BR) – Car number 8.

For BMW Team Germany – Schnitzer Motorsport, racing is a family affair: in the Bavarian town of Freilassing, which is home both to his team and to his BMW dealership, team owner Herbert Schnitzer takes care of the business side of things while his half-brothers Karl (a.k.a. Charly) and Dieter Lamm are responsible for race operations. Charly the strategist, who is in command in the pit, regularly sets the course for another Schnitzer victory.

The success story of Schnitzer Motorsport in the international racing arena is as long as it is illustrious. The team was founded in 1963 by the brothers Herbert and Josef Schnitzer and celebrated its debut one year later at the Hillclimb in Bad Neuenahr with a BMW 1800 TI. Its early years were marked by a string of successes until the Schnitzer family was devastated by Josef's fatal accident on the way to a race in Zolder. Since then, Herbert Schnitzer and his half-brothers have continued the success of Schnitzer Motorsport.

"Motorsport plays a fundamental role in our family," he says. "Josef and I laid the foundation for the team all those years ago and we have built it up since then. Nobody could possibly have known back then that Schnitzer Motorsport would be running for so long and have so many successes to celebrate." Twins Charly and Dieter Lamm were already on board when Harald Ertl won the first German Race Championship in 1978. But Charly in particular developed a taste for travelling as a young student, and in 1980 he took on his first Grand Prix adventure in Macau.

"I had read about the race in the newspapers and just had to be part of it," says Charly Lamm, recalling Schnitzer Motorsport's first appearance at the traditional "Guia Race" in the former Portuguese colony. "Before us, no European team had ever managed a win in Macau. We were on the grid with a BMW 320 with Hans-Joachim Stuck as the driver, and when I made my motorsport debut we managed a victory straight away – and that was when I decided to carry on." But that was not to be the Schnitzers' last triumph in Macau: to date, the team has managed no less than eleven victories in Macau, all in BMW cars.

Together, Schnitzer Motorsport and BMW have won almost two dozen titles around the world. The list of drivers who have raced for the family business over the years reads like a "Who's Who" of motorsport and includes a total of 39 former F1 stars – Keke Rosberg and Nelson Piquet among them.

The team also has fond memories of the first ever World Touring Car Championship back in 1987, when Roberto Ravaglia won at the wheel of a Schnitzer BMW M3. Another speciality of Lamm & Co is long-distance racing: their Schnitzer Motorsport open-topped prototype BMW V12 LMR triumphed in the classic Le Mans 24 Hour Race in 1999, and further victories and title wins in the American Le Mans Series (ALMS) followed – this time in a BMW M3 GTR. In 2004 and 2005 the same car took Team BMW Motorsport to two one-twins in two 24 Hour Races at Nürburgring. In total Schnitzer has notched up four successes in the “Green Hell”, but there have also been five BMW victories under the aegis of Lamm at the 24 Hour Race in Spa-Francorchamps.

Over the years drivers from BMW Team Germany – Schnitzer Motorsport have always been among the leaders and candidates for victory in both the European Touring Car Championship, which started in 2002, and in the World Touring Car Championships from 2005 to 2008. Since 2002 Schnitzer has clocked up 39 European and world championship victories. “Over the last few years we have always been among the front runners,” said Charly Lamm. “But as yet we have only ever made it to vice-champions. Of course we are highly motivated and want to be the BMW national team that ends this year right at the top.”

This year sees Jörg Müller on the team for the eighth consecutive year. The experienced driver first joined the field for Schnitzer Motorsport in the mid 1990s and has since achieved countless successes with the team from Freilassing. Augusto Farfus is also pursuing ambitious goals. In 2008, the Brazilian finished his second season with BMW Team Germany in sixth place. Aged just 25, he is bringing a fresh breeze into the team. “He also means we have to speak more English again,” says Herbert Schnitzer. “We used to do that when we had drivers like Roberto Ravaglia or Steve Soper on the team. We were successful then – so hopefully we can do the same again this season.”

Team manager: Charly Lamm  
 Address: Görlitzer Straße 2a, 83395 Freilassing, Germany  
 Founded: 1963  
 Website: [www.schnitzer.de](http://www.schnitzer.de)

Biggest successes:

1966	1 <sup>st</sup> place German Championships (BMW 2002 ti)
1968–1972	1 <sup>st</sup> place European Hillclimb Championships (BMW 2002 ti, BMW 2002 tii, BMW 2800 CS)
1975	1st place Formula 2 European Championships (Martini BMW)
1976	2 <sup>nd</sup> place GT Manufacturers' World Championship (BMW 3.5 CSL)
1978	1 <sup>st</sup> place German Racing Championship (BMW 320)
1980–2004	ten victories in touring car races in Macau ' Guia Race` (BMW 320, BMW 635 CSi, BMW M3, BMW 320i)
1983, 1986, 1988	1 <sup>st</sup> place European Touring Car Championships (BMW 635 CSi, BMW M3)
1985, 1986, 1988 1990, 1995	1 <sup>st</sup> place 24 Hour Race Spa (BMW 635 CSi, BMW M3, BMW 320i)
1987	1 <sup>st</sup> place World Touring Car Championship (BMW M3)
1989, 1991	1 <sup>st</sup> place 24 Hour Race Nürburgring (BMW M3)
1989	1 <sup>st</sup> place DTM (BMW M3)
1989, 1990	1 <sup>st</sup> place Italian Touring Car Championship (BMW M3)
1993	1 <sup>st</sup> place British Touring Car Championship (BMW 318i)
1994	1 <sup>st</sup> place Asia Pacific Championship (BMW 318is)
1995	1 <sup>st</sup> place Japanese Touring Car Championship (BMW 320i)
	1 <sup>st</sup> place ADAC Super Touring Car Cup (BMW 320i)
1998	1 <sup>st</sup> place German Super Touring Car Championship (BMW320i)
1999	1 <sup>st</sup> place 24 Hour Race Le Mans (BMW V12 LMR) 1 <sup>st</sup> place 12 Hour Race Sebring (BMW V12 LMR)
2001	1 <sup>st</sup> place GT Class ALMS (BMW M3 GTR)
2002	2 <sup>nd</sup> place FIA ETCC Team Championship (BMW 320i) 2 <sup>nd</sup> and 4 <sup>th</sup> place FIA ETCC Drivers' Championship
2003	2 <sup>nd</sup> and 5 <sup>th</sup> place FIA ETCC (BMW 320i)
2004	1 <sup>st</sup> and 2nd place 24 Hour Race Nürburgring (BMW M3 GTR) 2 <sup>nd</sup> and 4 <sup>th</sup> place FIA ETCC (BMW 320i)

	1 <sup>st</sup> and 2 <sup>nd</sup> place Macau GP – Guia Race (BMW 320i), Class victory GT2 und 6th place overall 24 Hour Race Spa- Francorchamps (BMW M3 GTR)
2005	1 <sup>st</sup> and 2 <sup>nd</sup> place 24 Hour Race Nürburgring (BMW M3 GTR) 2 <sup>nd</sup> and 5 <sup>th</sup> place FIA WTCC (BMW 320i)
2006	2 <sup>nd</sup> and 6 <sup>th</sup> place FIA WTCC (BMW 320si)
2007	4 <sup>th</sup> and 7 <sup>th</sup> place FIA WTCC (BMW 320si)
2008	6 <sup>th</sup> and 7 <sup>th</sup> place FIA WTCC (BMW 320si)

## **BMW Team Italy-Spain – ROAL Motorsport.**

Alessandro Zanardi (IT) – Car number 9.

Sergio Hernández (ES) – Car number 10.

In 1977 BMW Italy made its motorsport debut with Eddie Cheever in the cockpit for his first race. Even in those days BMW Team Italy-Spain's current project manager Umberto Grano had close connections to the BMW brand, having won the European Touring Car Championship for them in 1978, 1981 and 1982. Today Grano is up on the bridge alongside team principal, Roberto Ravaglia, directing BMW Team Italy-Spain's fight for victory in the WTCC. Ravaglia himself celebrated an anniversary in 2007: it had been 20 years since he won the first Touring Car Racing title.

In leading the team, both Grano and Ravaglia benefit from their own experiences as successful touring car drivers. "In a way it helps to have been a racing driver yourself," Grano confirms. "But motorsport has changed enormously. Things are much more professional nowadays." Ravaglia adds, "The job of driver was basically easier for me than being the team manager. When I started out as manager I had to learn a lot and go out into uncharted territory."

BMW Team Italy-Spain is aiming high this season as it looks to close the gap to the top teams of the WTCC. As it works towards this goal, it is relying on the services of ROAL Motorsport, founded in 2001 by Ravaglia and his partner Aldo Preo. "I am convinced that Roberto will take the team a long way up toward the top," says Grano. "He is one of the biggest Touring Car stars ever, and just the man for our mission."

Over the last four seasons the team has already clearly shown that it is moving in the right direction, with three race victories for Alessandro Zanardi and another two wins for Félix Porteiro to its name. The team is currently working on taking the next step in 2009. Zanardi, who made a sensational comeback with BMW Team Italy-Spain in 2003, will be joined by Sergio Hernández, who won last year's Independents' Trophy and now enters his first season as a BMW national team driver.

In Zanardi the team has one of the most popular racers on the international scene within its ranks, while Hernández is seen as a huge talent. Both drivers are determined to make it onto the podium side by side this year.

Project manager: Umberto Grano  
Team manager: Roberto Ravaglia  
Address: Via Svizzera 18, 35157 Padova, Italy  
Founded: 2001  
Website: [www.roal-motorsport.com](http://www.roal-motorsport.com)

Major successes:

2001	1 <sup>st</sup> place ESPC Drivers' Championship (Peter Kox, BMW 320i)
2002	8 <sup>th</sup> place FIA ETCC (BMW 320i)
2003	8 <sup>th</sup> and 9 <sup>th</sup> place FIA ETCC (BMW 320i)
2004	7 <sup>th</sup> and 14 <sup>th</sup> place FIA ETCC (BMW 320i)
2005	9 <sup>th</sup> and 10 <sup>th</sup> place FIA WTCC (BMW 320i)
2006	11 <sup>th</sup> and 13 <sup>th</sup> place FIA WTCC (BMW 320si)
2007	12 <sup>th</sup> and 15 <sup>th</sup> place FIA WTCC (BMW 320si)
2008	10 <sup>th</sup> and 13 <sup>th</sup> place FIA WTCC (BMW 320si)



## 7. The BMW 320si WTCC.



### **A race winner from the word go.**

When the BMW 320si WTCC made its debut in the FIA World Touring Car Championship on 2<sup>nd</sup> April 2006, the impressive race car immediately showed evidence of its capabilities: Andy Priaulx not only took pole position in Monza, but also drove the car to victory in the first race. Twenty five further triumphs followed by the end of the 2008 season. In 2006 and 2007 the BMW 320si helped BMW to both the drivers' and manufacturers' titles, and was the strongest car in the field. The BMW national teams are gunning for a return to the top of the sport in 2009 with this successful model.

BMW based the BMW 320si WTCC on the series model of the same name. Following the successful introduction in the 2006 season, the engineers in Munich have been able to constantly improve the car. Therefore, it comes as no surprise that there has been an increase in demand for the racing kit of the BMW 320si WTCC, with which customer teams can compete in various championships, thanks to the Super2000 regulations. By the start of 2009, BMW Motorsport Distribution had supplied over 60 models. The BMW 320si WTCC has already won titles in many national championships.

For 2009, many areas of the vehicle were enhanced. The spring/damper system was significantly improved as well as the ECU404 engine control unit, which had been developed by BMW Motorsport. It now makes for a better driveability of the gearbox and makes shifting easier. In addition, the new chassis components for the BMW 320si WTCC "facelift" were integrated into the concept of the car.

### **Cutting edge development.**

The BMW 320si WTCC is the first BMW Group race car to have been developed using the virtual tool CATIA V5 throughout. Digital car data were used to test the fit and function of parts before first trial components were even made. Meanwhile, virtual drivers provided by the 3D computer model RAMSIS helped development engineers adjust driver and drivetrain positions. These differ quite strongly in the enhanced WTCC version from those in the production BMW 320si. RAMSIS also helped in the early stages of testing for new seating and steering positions and accessibility of controls.

Engineers used computational fluid dynamics (CFD) to refine the new model's aerodynamics, and computer technology also helped optimise the chassis geometry and kinematics and find the best axle mounting points. At the same time, computerised crash tests with complex calculations simulated body shell distortions produced by exposure to extreme forces.

### **Common roots.**

The self-supporting BMW 320si WTCC body is manufactured in BMW Plant Regensburg alongside the production body shells for the BMW 1 and 3 Series. Some of its sheet metal components originate from the press shop in BMW Plant Dingolfing. Here, sheet metal measuring between 0.6 and 2.00 mm in thickness is rolled off huge coils and pressed into flat body components called blanks. These are then shaped under enormous pressure using state-of-the-art pressing tools.

Once in Regensburg, the car's 550 sheet metal components are assembled by the 971 industrial robots at the plant. More than 5,500 spot welds and a total of 52m of adhesive seams are applied, producing a complete car body weighing just 355 kg in its unpainted state. After body assembly, shells produced for customer cars make their way to the paint shop while those destined for a career in motorsport leave the series production lines and go into an adjacent hall to be converted by hand for race deployment.

### **Top priority: safety.**

For the BMW Group, passive safety is not only top priority in series production automobiles; in the BMW 320si WTCC a safety cage provides extra protection for race drivers. The steel safety cell was developed and designed using CAD engineering and simulation calculations by BMW Motorsport, which is an FIA accredited analysis centre for safety cells. During the concept phase of the BMW 320si WTCC, a series of virtual crash tests using simulation models revealed how and where the shell distorted and whether or not the driver's survival space remained in tact on impact. For extra safety during the race, a six point safety belt system restrains drivers, strapping them firmly into their safety seats. Additional protection is provided by the HANS (head and neck support system), while crash-pads in the doors and special foams inside hollow sections of the car absorb the energy of an impact.

Constructing the safety cage is the job of the well-rehearsed team of experienced body shell specialists at BMW Plant Regensburg. Together, they channel some 200 hours of work, about 38 m of steel tubing and a range of sheet metal sections, brackets and collars into producing the cage, which is then fitted into a special, pared down version of the production body. The race version of the body comprises

only the most important components, with any unnecessary parts removed, certain sections broken through and reinforcements added.

### **Slimming down in every respect.**

In the world of motorsport, every single gram counts. The lighter the car, the easier it is for the teams to balance it out later with ballast. So when it comes to paint, the absolute minimum is used. Time spent on details of this kind is time well spent, especially in view of the fact that a production BMW 3 Series Saloon Car is covered in some 19.5 kg of coatings and paint. In series production 72 robots set to work on painting the car. But in race car production the whole operation is carried out by hand, using spray guns to apply the base, filler and top coats.

The rear-wheel drive, H-transmission BMW 320si WTCC weighs 1155kilograms, including the driver. If it is lighter than permitted, the teams can compensate by weighing it down with metal ballast sheets. Where they position the sheets depends largely on the circuit profile, so the extra weight is carefully distributed across the floor, the boot or the interior of the car to give it the best possible balance on the track. As they work to find potential weight savings, the mechanics and engineers use every option that race regulations allow. Every possible excess gram of material is removed without compromising safety to enable maximum flexibility for achieving optimal weight distribution when the car goes into a race.

### **Step by step.**

Building a car is a team game in which everybody works side by side. Because of the different heights and builds of the BMW national teams' drivers, the development team decided to fit standing pedals in the foot well of the car, which is a first in BMW race car development. The new pedal arrangement enables the perfect adjustment of the distance to the seat and a better, lower centre of gravity.

The clutch pedal is generally only used when drivers pull away from standstill. During the race, however, the integral strain gauge in the BMW 320si WTCC's gear stick emits an electrical impulse as soon as the driver touches the lever. This makes the engine management system cut ignition, briefly reducing traction force slightly to enable the driver to shift gently but firmly without using the clutch. The car's large brake pedal demands a strong push from the race pilot. But pressure needs to be carefully controlled, as electronic assistance systems like ABS are not allowed under FIA regulations. The accelerator works by transmitting an electronic signal via the throttle flap to the engine management system, which then translates it directly into performance.

**Clear visibility without the weight.**

Conventional glass screens like the one in the predecessor model BMW 320i had certain shortcomings: they were unable to withstand the stresses and strains of normal race operations and were frequently damaged by stone chips. They would often have a racing life of just one or two races before having to be replaced. The BMW 320si WTCC features a new windscreen made of a considerably lighter special plastic called Makrolon. The new screen is much more resilient to the pressures of racing, even under harsh conditions, and it weighs 3.6 kg less than the conventional one. Worked into its surface in front of the driver is the electric screen heating, which keeps the driver's field of view clear from condensation in wet conditions.

**The electrical distributing centre.**

The BMW 320si WTCC is the first BMW Motorsport race car to feature CAN bus technology. The new system simplifies the transmission of electrical and control signals and enables data exchange between the different control units. It also reduces considerably the number of cables and components such as fuses, switches and plugs, and eliminates the need for relays. All of these reductions are another contribution to weight savings, and, with fewer unreliable parts, the electrical systems are much less susceptible to faults.

The central player in the BMW 320si WTCC's on-board electronics system is the new, high-performance Power400 control unit. Developed by BMW Motorsport the Power400 continually controls the electrical power distribution and all the actuators in the car, including those for the lights, windscreen wipers and electrical pumps. Devices are switched on or off using the controls on the multi-function steering wheel. These send a signal via the CAN bus to the control unit, where a micro controller processes it to activate or deactivate the device.

The CAN bus also connects to the new ECU404 engine management unit, which now offers a wider range of functions. Developed by BMW Motorsport, the unit has a simpler user interface, which is particularly relevant for making track-side engine adjustments. Its other special features include switches and controls for the engine map as well as for individual cylinder injection and ignition and for the engine data memory system. The unit also masterminds the quick shift function with variable shift times enabling high-speed, clutch-free gear changes. It also kicks in when the speed limiter on the steering wheel is activated on entering the pit lane.

### **Customised axle designs.**

Although the production BMW 320si had an extremely high-performance chassis, the WTCC version of the car needed modifications to the axles – which became one of the main focal points of development work. Engineers were faced with the task of designing the axles to include a camber setting that could be adjusted independently of any other settings parameters, such as roll centre and track. This would make the new axles easier for semi-professional teams to set up. Given the strong forces that work on the car during a race, the fixing points for the five-link axle and casing needed to be reinforced. The geometry also had to be modified to accommodate a specially developed adjustable shock absorber (tension and compression stroke adjustment). In addition, the longitudinal carrier of the chassis was altered to take a spring stabiliser, and the track-width and camber were increased. The wheel carrier and bearing were carried over from the production model.

On the front axle, a reinforced control arm helps the car deal with the pressures of racing and, as in most race cars, ball joints replace the rubber mounts to keep the car on track better. Meanwhile, the reinforced stabiliser bar on the front axle reduces body roll and stops the inside wheel from lifting in extreme bends. It is connected to the spring struts by a stabiliser link fixed to the stabiliser bar via the anti-roll bar blade. The pre-tensioning of the stabiliser bar can be altered by changing the grid position of the anti-roll bar blade and adjusting the length of the stabiliser link. The car's tendency to over or understeer can also be controlled by different tube diameters and wall thicknesses of the stabiliser bar.

### **Go faster, brake later.**

A race car not only needs to accelerate fast, it also needs to brake effectively. For optimum performance, the BMW 320si WTCC uses inner-vented, perforated brake discs and four-piston aluminium brake callipers at the front. The grey cast iron discs measure 332 mm in diameter and are 32 mm thick. The car's rear brakes feature 18 mm thick full discs measuring 291 mm in diameter, and two-piston aluminium callipers. The complete braking system can slow the car from 200 km/h to standstill in a mere 4.6 seconds, requiring just a 130 m braking distance to do so. The force of deceleration presses the driver into his safety belts with a force of 1.5*g*. During the course of a race the balance of the car changes as the tyres wear down and the weight of the fuel load diminishes. To counter this development the driver can shift the braking force between the front and rear axles by means of a regulator in the cockpit. This redistributes braking capacity via the spindle connecting the two brake cylinders of the front and rear axles.

### **It's all in the dampers.**

The driving characteristics of the BMW 320si WTCC are very much determined by its springs and damper settings. Lengths and characteristics of the springs chosen depend largely on the track profile as well as on surface conditions and the amount of additional weight being carried. Ground clearance is determined by the length of the springs and has to accommodate the ballast while still complying with the minimum clearance of 80mm stipulated in the race regulations. The tension and compression stroke on the front and rear axle shock absorbers also affect the car's driving characteristics. They are independently adjustable, with various possible settings influencing how the car handles sudden changes of direction or, kerbstones or corrugations. The electro-hydraulic assisted rack and pinion steering in the BMW 320si WTCC originates from the production model. Only the overall steering ratio has been made more direct in the race version.

### **The BMW P45 engine.**

BMW Motorsport draws on its own production competence, manufacturing core components for its high-performance Formula 1 and WTCC engines in Plant Landshut, where series engine components are also made. The crank case and cylinder head of the BMW 320si WTCC are just two of the 1184 different components that go into its engine – but they are the two that involve the most development work and the greatest process competence. The BMW P45 engine is designed to have a racing lifespan of about 2,500 race kilometres. If it fails to survive the minimum two weekends stipulated in the regulations, premature replacement will mean the driver drops ten positions further back on the starting grid – so precise testing certainly pays off.

### **A solid foundation.**

The 2.0-litre, four cylinder production engine of the BMW 320si (delivering 127 kW/173 hp) provided the ideal basis for developing the race unit. However, a number of modifications were needed to produce a competitive race engine. Modifications included not only the different bore-stroke ratio, but also the crankshaft drive (crankshaft with reduced bearings diameters, extremely high-performance steel conrod, forged skirt pistons) and the cylinder head of the all-aluminium engine. The valve train (which includes non-variable camshafts, valves and valve springs) was thoroughly revised and the lighter flywheel now weighs just 4.0 kg. The inner walls of the combustion chamber and the intake and exhaust ducts feature quality surface finishes, and together with the individual cylinder injection, large valves and adapted flanges they optimise the fuel/air mix. The ignition process is triggered by special spark plugs which are controlled by dedicated ignition coils with integrated boosters. In addition, a flow-optimised CFRP intake plenum with ram tubes and a single throttle flap combines with a high-performance header in the exhaust system to enable a free exchange of gases.

### **Continuity for the transmission.**

In the BMW 320si WTCC, BMW Motorsport once again offers a five-speed, dog-type, unsynchronised H-gate race transmission. This has a number of advantages compared with the sequential transmission: as well as reducing the basic weight of the car by 30 kg as per regulations, the H gate gear system is based on the production transmission, which makes it a particularly cost-effective solution that is much appreciated by racing customers. Only Alessandro Zanardi will race with a sequential gearbox in 2009.

The H-gate and the sequential transmissions have virtually identical shift times. In the BMW 320si WTCC times were shortened mainly by the cut ignition, which makes pressing the clutch unnecessary. But the engine management system also enables variable shift times, depending on the gear level. The BMW 320si WTCC benefits from an oil/air cooler which keeps transmission oil temperatures constant. Given the average of 400 gear changes made per race, the cooler system is vital.

### **Breathe in deeply.**

Unlike the production version of the car, the BMW 320si WTCC does not have its radiator directly behind the BMW kidney grille. Instead, the engine's air intake guide is positioned there. This frontal position of the inlet cross section causes the airflow to produce a build-up of pressure, which literally forces the fresh air through the filter and into the intake plenum. This leaves the engine having to do less suction work and also fills its cylinder up better.

Given that the race engine needs less cooling than the production unit, its smaller radiator fits in the vent under the BMW kidney grille. Meanwhile, cooling for the transmission is provided by air entering through the opening in the front apron. The side air channels cool the brakes, although the need for cooling is limited, as the brakes are not normally taken to the extreme.

### **Special conversions for Alessandro Zanardi.**

BMW Motorsport and BMW Team Italy-Spain have specially converted the BMW 320si WTCC to suit Alessandro Zanardi's needs. The Italian, who lost both legs in an accident in 2001, uses a lever on the steering wheel to accelerate, with a potentiometer activating an electrical servo motor on the throttle flap. The clutch works on a similar principle: when Zanardi pulls the gear lever up with two fingers a control unit activates a stepper motor which in turn moves the hydraulic master cylinder of the clutch.

Braking, however, is quite a show of strength for Zanardi, as he has to press the brake pedal in the footwell with his prosthetic legs. In spite of its power assistance, he still has to press with the force of up to 85 kg. An old hand in racing, Zanardi personally supervised the construction and conversion of his race car, joining forces with the engineers in finding the ideal cockpit solution to compensate for his disability. His third world championship victory in 2008 in Brno and his numerous podium appearances are a testimony to the success of the man and his team. Zanardi himself said, "We have reached a point where technical advances will only be possible if I can grow new legs."



## 8. Technical specifications.



### Technical specifications for the BMW 320si WTCC.

#### Vehicle.

Length:	4,539 mm
Width:	1,858 mm
Height:	approx. 1,350 mm
Wheel base:	2,760 mm
Weight:	depending on compensation weight
Tank capacity:	approx. 45 litres
Chassis/body:	unitary construction steel body with welded safety cell made of extremely rigid precision steel tubing; safety fuel tank in CFRP sandwich tray; pneumatic three-stamp rapid jack system
Aerodynamics:	Front apron, rear apron, rear wings, front wings and flared rear wheel arch made of CRPF; rear wing made of aluminium and composite material
Transmission:	single-twin-disc carbon fibre clutch operated by a hydraulic central slave cylinder; five-speed dog-type racing transmission based on the production variant; additional air/oil cooler; quick shift system with ignition cut-off controlled by shifting force; production rear axle casing with mechanical limited slip differential and additional oil/air cooler
Front axle:	double joint strut suspension with increased wheel caster angle, enlarged track width and enhanced wheel camber compared with the production version adjustable shock absorbers tubular stabiliser bar
Rear axle:	five-link axle with enlarged track width and enhanced wheel camber compared with the production version adjustable shock absorbers, stabiliser

Front brake system:	four-piston aluminium brake callipers inner-vented grey-cast iron brake discs 332 mm in diameter and 32 mm thick
Rear brake system:	two-piston aluminium brake callipers grey-cast iron brake discs 291 mm in diameter, 18 mm thick
Steering:	rack and pinion steering with electro-hydraulic power assistance
Wheels:	aluminium rims 9 x 17 inches
Tyres:	Yokohama race tyres 240/610 R 17 (front and rear)

### **BMW P45 engine specifications.**

Type:	four-cylinder inline
Capacity:	1,999 ccm
Bore x stroke:	86 x 86 mm
Compression:	11 : 1
Max. output:	approx. 280 hp at approx. 8,300 rpm
Max. torque:	approx. 245 Nm at approx. 7,250 rpm
Max. engine speed:	8,500 rpm (as per regulations)
Cylinder block:	aluminium cylinder block construction with "bed plate" lower section
Crankshaft:	steel crankshaft with reduced bearing diameters
Pistons:	forged skirt pistons
Conrods:	high-performance steel
Cylinder head:	aluminium DOHC (Double Over Head Camshaft) construction; four valves per cylinder
Valvetrain:	two overhead chain-driven camshafts
Intake system:	single throttle valve (64 mm, as per regulations) made of CFRP, air box with load change optimised ram tubes

Exhaust system:	header, silencer, catalytic converter
Fuel system:	single cylinder multipoint injection with one injection valve per cylinder injection pressure: 5.0 bar
Lubrication:	wet sump lubrication with optimised oil sump/oil/suction system
Cooling:	water/air cooler and oil/water heat exchanger
Flywheel:	steel, weight-optimised to 4 kg
Fuel:	standard fuel, super plus unleaded (E10: 10% Ethanol, second generation)

### **Electrics/Electronics.**

Engine management:	BMW Motorsport ECU404 with two high-performance micro-processors; individual cylinder injection and ignition; BMW Motorsport Lambda controller; pit speed limiter function, quick shift function; engine data memory system
Energy management:	electric energy management and monitoring with BMW Motorsport POWER400 control unit, networking of all sensors and actuators through bus system
Wiring harness:	weight-optimised
Ignition coil:	four high-performance pencil coils with integrated ignition drivers
Spark plugs:	NGK high-performance spark plugs
Cockpit:	free programmable LCD display with integrated indicators
Steering wheel:	quick-release multi-function steering wheel with integrated display control

## 9. Statistics.



### Facts and figures from the World Touring Car Championship.

Although BMW ended last year's World Touring Car Championship without a title for the first time, the brand still clearly led the way in many important statistics. No manufacturer can look back on so many successes in the WTCC as BMW (status: end of 2008 season).

### Driver statistics.

#### World Touring Car Champions.

Year	Driver	Car
1987	Roberto Ravaglia	BMW M3
2005	Andy Priaulx	BMW 320i
2006	Andy Priaulx	BMW 320si
2007	Andy Priaulx	BMW 320si
2008	Yvan Muller	SEAT León TDI

### Victories.

Pos	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	10
	Jörg Müller	BMW	10
3	Augusto Farfus	BMW	9
	Alain Menu	Chevrolet	9

### Pole positions.

Pos	Driver	Manufacturer	Total
1	Augusto Farfus	BMW	6
	Alain Menu	Chevrolet	6
3	Gabriele Tarquini	SEAT	5
4	Andy Priaulx	BMW	4
	Yvan Muller	SEAT	4

**Fastest laps.**

Pos	Driver	Manufacturer	Total
1	Jörg Müller	BMW	11
2	Augusto Farfus	BMW	10
3	Gabriele Tarquini	SEAT	8

**Podium appearances.**

Pos	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	34
2	Jörg Müller	BMW	23
3	Augusto Farfus	BMW	20
	Yvan Muller	SEAT	20

**Points.**

Pos	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	347
2	Augusto Farfus	BMW	263
3	Gabriele Tarquini	SEAT	262

**Races with points scored.**

Pos	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	64
2	Gabriele Tarquini	SEAT	52
3	Augusto Farfus	BMW	51

**Races contested.**

Pos	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	86
	Jordi Gené	SEAT	86
3	Augusto Farfus	BMW	84
	Robert Huff	Chevrolet	84
	Alain Menu	Chevrolet	84

**Most laps in the lead.**

Pos	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	148
2	Augusto Farfus	BMW	131
	Jörg Müller	BMW	131

## **Manufacturers' statistics (since 2005).**

### **Manufacturers' championship wins.**

Year	Manufacturer	Car
2005	BMW	BMW 320i
2006	BMW	BMW 320si
2007	BMW	BMW 320si
2008	SEAT	SEAT León TDI

### **Victories.**

Pos	Manufacturer	Total
1	BMW	35
2	SEAT	22
3	Alfa Romeo	14
	Chevrolet	14
5	Honda	1

### **Pole positions.**

Pos	Manufacturer	Total
1	SEAT	13
2	BMW	12
3	Alfa Romeo	10

### **Fastest laps.**

Pos	Manufacturer	Total
1	BMW	39
2	SEAT	19
3	Alfa Romeo	13

### **Podium appearances.**

Pos	Manufacturer	Total
1	BMW	104
2	SEAT	76
3	Chevrolet	38

### **Points.**

Pos	Manufacturer	Total
1	BMW	1056
2	SEAT	996
3	Chevrolet	652

## 10. BMW in touring car racing.



### **A success story spanning almost 50 years.**

Right from the very beginning of the company's history, BMW has enjoyed racing success around the world, whether on motorcycles, in sports cars, at rallies, in Formula 2 or Formula One. However, touring cars have always been particularly important for the brand. Successful works drivers and victories by numerous BMW private teams have ensured the company has a unique history in this discipline.

### **Touring cars – a key pillar of BMW motorsport.**

In the 1960s, touring car racing became the central pillar of BMW's motorsport activities. Hans Stuck Senior, at the wheel of a BMW 700, took the German Championship title in 1960. In 1964, Hubert Hahne drove the BMW 1800Ti to victory in the German Circuit Championship. Following the launch of the BMW 2000Ti, Josef Schnitzer carried off the German Touring Car Championship two years later. The BMW 2002 in which Dieter Quester claimed the European Touring Car Championship in 1968 and 1969 marked the first use of a turbocharger, and between 1973 and 1979, another six European Touring Car Championship titles were taken with the BMW 3.0 CSL. Formula One greats such as Chris Amon, Ronnie Peterson and Niki Lauda drove BMW touring cars. At the wheel of the BMW 320 fielded by the Schnitzer Team, Harald Ertl won the German Motor Racing Championship in 1978.

In the mid-1980s, the impressive BMW 635 CSi Coupé was the force to be reckoned with in the European Touring Car Championship. Following individual race wins in 1985, Italian driver Roberto Ravaglia secured the European Championship in 1986. 1987 saw the slim-line, earthy successor to the 6 Series Coupé lining up on the grid: the BMW M3 was a driving machine with a 2.5-litre power unit that packed 355 bhp. In its first year on the race track, BMW managed to take the World Championship title (Ravaglia), the European Championship (Winni Vogt) and nine further titles. The M3 became legendary, whether competing in the Asia-Pacific Championship, the European Hill-Climb Championship or in rally events. By the end of 1992, BMW M3 drivers had secured more than 1,500 individual wins and over 50 international titles.

### **Super touring cars – stars of the 1990s.**

For the introduction of a new category of near-production touring cars – initially known as Class 2 or the two-litre class, later Super Touring Cars or STC for short – BMW set about building another superlative touring car: the BMW 320i. From 1993 through to 1998, this 320i (E36) won BMW 29 championship titles around the world, including three in Germany.

### **Revival of the European Touring Car Championship.**

After a gap of 13 years, the FIA once again gave its sanction to the European Championship in 2001. BMW followed developments with great interest and made its mark on the series. Peter Kox (NL) immediately took the 21<sup>st</sup> European Touring Car Championship title in 2001, driving a BMW 320i fielded by Ravaglia Motorsport. From 2002 onwards, the European Touring Car Championship (ETCC) was a firm fixture on BMW's motor racing agenda, though not as a traditional factory involvement: the competitors were backed by various national subsidiaries, which put up to five country teams on the grid. In 2002, BMW Team Deutschland (Schnitzer-Motorsport) fared best of all with BMW works drivers Jörg Müller and Dirk Müller finishing second and fourth in the European Championship, while BMW came runner-up in the manufacturers' standings.

In 2003, BMW managed to secure the Manufacturers' title in the penultimate race. In the battle for the Drivers' title, Jörg Müller had to concede defeat just one point short of the winner's score. BMW again took the Manufacturers' title before the close of the 2004 season. This time the Drivers' Championship also went to BMW courtesy of Andy Priaulx (GB), bringing BMW's total of European titles in touring car racing to 24.

### **BMW world touring car champions again in 2005, 2006 and 2007.**

2005 saw the staging of another world championship in touring car racing for the first time since 1987. The FIA World Touring Car Championship (WTCC) was launched to replace the ETCC. In 1987 the winner was Roberto Ravaglia in a BMW. In 2005, 2006 and 2007, Andy Priaulx of BMW Team UK/RBM took the World Championship title, driving a BMW 320i in 2005 and the new BMW 320si WTCC in 2006 and 2007. Thanks to the strong performance of the other national teams, BMW also secured the Manufacturers' World Championship in all three years.



## 11. Partners.



### **Premier Technical Partner.**

#### **Castrol.**

Think Castrol and you think performance lubricants. Whether on the race track or on the road, the Castrol name is synonymous with the most technically advanced lubricants available. With operations in some 70 countries, and over 100 agencies worldwide, Castrol meets the diverse needs of customers across the globe. Best known for its automotive lubricants, Castrol also produces lubricants for commercial vehicles, construction equipment, for industry and for the marine sectors.

Castrol's pioneering spirit and its involvement in the heat of competition can be traced to the company's very earliest days. Founder, Charles Wakefield believed passionately in building the Castrol brand through an association with record-breaking achievements on land, water and in the air. As early as 1910, Wakefield produced a series of publications to chronicle Castrol's contribution to these achievements - a legacy that remains to this day. Castrol continues to follow a philosophy of using motorsport to improve its products, pushing back technological barriers and forcing lubricants to the extremes of performance in a variety of applications.

As experts in finding ways to improve performance, Castrol, through its application of analysis, technology and innovation is able to provide unique insights into what it takes to create a winning performance in football. Castrol highlighted this expertise through its proud sponsorship of the UEFA EURO 2008™ and is on the road to continue this success with its sponsorships of the upcoming 2010 FIFA World Cup™ and 2014 FIFA World Cup™.

Research and development is carried out in laboratories around the world, working closely with leading manufacturers, scientific and technical centres and universities. This background has earned Castrol an unparalleled reputation for innovation and quality.

Today, Castrol is part of the BP Group - one of the three largest integrated energy companies in the world employing over 100,000 employees. The combination of the Castrol and BP lubricants businesses provides new and exciting opportunities for the future and places the company in the world's top three lubricants manufacturers. 2009 sees Castrol continue in its Strategic partnership with the BMW Group and with BMW Motorsport. This partnership remains imperative to Castrol's never-ending development of high quality products, both for competition racers and the production car owners around the world.

### **Official Supplier.**

#### **NGK.**

NGK Spark Plug Co., LTD headquarter is located in Nagoya, Japan. With branches in Europe, USA, Canada, South-East Asia, China, Korea, India, Brazil and Australia, NGK is one of the world's leading manufacturers of spark plugs, ignition cables, spark plug covers, glow plugs and lambda sensors for the automotive industry. High Quality and economy, long durability and eco-friendliness distinguish NGK's high-performance products. NGK has supported the BMW Sauber F1 Team and BMW Team Germany in the FIA WTCC since the 2006 season.

#### **PUMA.**

PUMA is one of the world's leading sport lifestyle companies that designs and develops footwear, apparel and accessories. It is committed to working in ways that contribute to the world by supporting Peace, Creativity, and SAFE Sustainability, and by staying true to the values of being Fair, Honest, Positive and Creative in decisions made and actions taken. PUMA starts in Sport and ends in Fashion. Its Sport Performance and Lifestyle labels include categories such as Football, Running, Motorsports, Golf and Sailing. The Black label features collaborations with renowned designers such as Alexander McQueen, Yasuhiro Mihara and Sergio Rossi. The PUMA Group owns the brands PUMA, Tretorn and Hussein Chalayan. The company, which was founded in 1948, distributes its products in more than 120 countries, employs more than 9,000 people worldwide and has headquarters in Herzogenaurach/Germany, Boston, London and Hong Kong. [www.puma.com](http://www.puma.com)

**Recaro.**

Recaro seats stand for best quality in ergonomics, safety, technology, design and comfort. You can find Recaro products everywhere where people and their needs have priority. Professional racing drivers must be able to rely on the quality and safety of their material. After all, spectacular racing such as the 24h Race at the Nürburgring or at the Macau Grand Prix, require absolute best performance – even from the material. Recaro racing seats exceed all relevant standards and thus offer a basis of trust. As a seat manufacturer, Recaro is the pioneer with regard to quality, safety and innovation.

## 12. Service.



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**Press releases** in English and German are available in various email formats (text only, pdf, html) or by fax.

Requests for changes to the **mailing list** should be sent to Florian Haasper: [f.haasper@sport-media-service.de](mailto:f.haasper@sport-media-service.de), fax +49 (0) 89-51 55 58 11.

**Previews** are generally sent out on the Monday ahead of a WTCC race weekend.

**Qualifying and race reports** are sent out on race weekends around 60 minutes after the end of the last session or the end of the race.

The latest **online** WTCC press releases, press kits and photos are available at [www.press.bmw-motorsport.com](http://www.press.bmw-motorsport.com).

The **BMW Group PressClub** can be found at: [www.press.bmwgroup.com](http://www.press.bmwgroup.com).

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