



MINI WRC TEAM.

Media Information





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The legend returns: MINI lines up in the FIA WRC in 2011.

Munich, 2nd February 2011. The countdown is on to the return of MINI on the international motorsport stage. This season, the new MINI WRC Team will compete at selected rounds in the FIA World Rally Championship (WRC). The aim is to gain valuable experience, in order to be perfectly prepared for the complete 2012 World Championship season. The MINI WRC has been developed by Prodrive, based on the MINI Countryman. It is equipped with a 1.6-litre turbo engine derived from the MINI production models, which was developed by BMW Motorsport for use in series run according to FIA Super2000 regulations, including the World Touring Car Championship. As well as its works involvement with the MINI WRC Team, Prodrive is supplying the customer car to private rally teams, who will also run the car in the S2000 class of the World Rally Championship.

"The FIA World Rally Championship is the pinnacle of rallying, making it the ideal platform for demonstrating the competitive spirit of our brand," says Ian Robertson, Member of the Board of Management, Sales and Marketing BMW Group. "Experience is a very important factor in motorsport. For that reason it is essential we learn as much as possible within a very short time, in order to make up ground on our rivals. The new regulations mean the gap to the top is smaller than it would have been at another time. We want to annoy the opposition as soon as possible."

The MINI WRC Team will be putting its faith in experienced drivers when it faces up to the challenge of the WRC for the first time in 2011. Kris Meeke (UK) and his co-driver Paul Nagle (UK) have proven their ability in impressive style, listing the 2009 Intercontinental Rally Challenge (IRC) title as just one of their achievements. Daniel "Dani" Sordo (ES), who will compete alongside his new co-driver Carlos del Barrio (ES) in 2011, has many years of World Championship experience. Twenty nine podium finishes from 84 starts in the WRC just go to show the former Citroën works driver has what it takes to battle it out at the top.

Rallying is far from new territory for MINI. In the past, success in this popular motorsport discipline has played a crucial role in defining the brand's image. Three victories at the Rally Monte Carlo in the 1960s made the MINI Cooper S a true legend. MINI also competed in the European Rally Championship, where it once again notched up countless triumphs.

"MINI can look back on a successful tradition in rallying," says Dr Wolfgang Armbrecht, Senior Vice President Brand Management MINI. "Even up to the present day, there is a core group within the MINI community for which MINI and motorsport just belong together. The WRC provides an excellent communications platform for the MINI Countryman, upon which the MINI WRC is based."

The latest phase of developments for the MINI WRC are currently undergoing an intensive testing programme. The car to be used in the 2011 World Rally Championship will be presented at the official Team Launch on 13th April 2011 at the MINI Plant Oxford.





Prodrive, an experienced motorsport operation, was chosen as the partner in the quest to continue the brand's success story. The company, founded by David Richards, is viewed as one of the most respected and successful in rallying. "This project is a truly passionate opportunity," believes Richards. "MINI is a cult brand which left a lasting impression during its previous motorsport campaigns. We are both extremely happy and proud to be on board as a partner when MINI returns to rallying. We aim to use 2011 as a preparatory year, amassing experience in order to ensure we are fully competitive from the start of the following season. But let's not underestimate the task ahead of us nor the stiff competition we will face on the way. However, our target is firmly set on winning the World Championship title again with MINI."

Prodrive was founded in 1984, and has established itself as one of motorsport's leading independent teams. Currently employing about 500 staff, the company is based in Banbury (GB). Among other successes, Prodrive has to date won six World Rally Championships, five British Touring Car titles, and scored three class victories in France's classic Le Mans 24 Hours.

The MINI Countryman is the youngest MINI model and also the first to be equipped with an all-wheel-drive system. Therefore this model provided the logical basis for a competitive rally derivative. The flagship MINI Cooper S Countryman is powered by a 1,6-litre, four-cylinder petrol engine, supplemented not only by a twin-scroll turbocharger and direct fuel injection, but also fully variable valve management – so offering by far the best relationship between engine power and fuel consumption in its class. The engine produces an impressive 135 kW / 184 bhp, and accelerates the MINI Cooper S Countryman from 0 to 100 km/h in 7.6 seconds.

As part of the MINIMALISM concept, a range of fuel- and emission-reducing features are fitted as standard and/or in appropriate combinations, including Brake Energy Regeneration, the Auto Start/Stop function, Shift Point Display and the need-based operation of ancillary components.

All MINI Cooper S Countryman and MINI Cooper D Countryman are optionally available with permanent MINI ALL4 all-wheel drive, with an electro-hydraulic differential positioned directly on the final drive varying the distribution from front to rear in an infinite process. Under normal driving conditions up to 50 per cent of the engine's power goes to the rear wheels; under extreme conditions up to 100 per cent, offering a new, high-traction rendition of the agile handling so typical of MINI.

"MINI powered by BMW Motorsport": The heart of the MINI WRC is the 1.6-litre, four-cylinder Di turbo engine, which is also available in the MINI production models. The production engine was further developed by BMW Motorsport for the use in various categories according to FIA Super2000 regulations. The power transmission takes place via an Xtrac 6-speed, sequential gearbox. For its outings on the rally stages, the MINI Countryman chassis has been fitted with a roll cage developed by Prodrive, which exceeds the strict safety requirements of the International Automobile Federation (FIA).





Ian Robertson: “MINI is returning to its roots.”

Ian Robertson, Member of the Board of Management, Sales and Marketing BMW Group, speaks about the importance of motorsport for the MINI brand, the goals in the World Rally Championship and the MINI Countryman, on which the MINI WRC is based.

Mr Robertson, MINI is back in motorsport. What does this move mean for the brand?

Ian Robertson: “Our involvement in the World Rally Championship effectively sees MINI returning to its roots. In the early years, success in the world of motorsport contributed significantly to the rapid rise of the MINI. Back then, people saw that this little car not only looked good in everyday traffic, but also had a sporty side. This has not changed since then. We chose the World Rally Championship for our stage in order to prove the sportiness of MINI cars to today’s generation of drivers. The commitment also reinforces the key values of the MINI brand, ‘excitement’ and ‘energy’ as well as underlining the manly side of the brand.”

Why is the MINI brand so well suited to rallying?

Robertson: “On the one hand, MINI can look back on a unique success story. On the other hand, MINI is the epitome of excitement for millions of fans around the world and thrills them with its energy. This is precisely what we are able to authentically and sustainably represent through our motorsport involvement in the World Rally Championship. Thrilling rally events, ultimate performances by man and machine, and as much success as possible, of course: motorsport is pure emotion – just as MINI is for its fans.”

How are the roles distributed in the World Rally Championship involvement?

Robertson: “MINI is the manufacturer of the MINI Countryman series car. It forms the basis for the MINI WRC, which has been developed by Prodrive since the start of 2009. MINI is also playing the role of Team Partner. The 1.6-litre turbo engine derived from the MINI production models was developed by BMW Motorsport in Munich for the use in various motorsport series. Prodrive is also responsible for our appearances in the WRC and the production of customer rally cars.”

What goals have you set for the first season in 2011?

Robertson: “Anyone wanting to be successful in a World Championship must first gain experience and put in a lot of hard work. We will do that together with our partner Prodrive. David Richards’ team is very familiar with the World Rally Championship, so we can start at a very high level. Several rallies are planned for this year. In 2012 we will compete for the full season. It goes without saying we want to be competitive as quickly as possible, and I am optimistic we will succeed.”





When do you think you will be able to challenge Ford and Citroën for the title?

Robertson: "Experience is a very important factor in motorsport. For that reason it is essential we learn as much as possible within a very short time, in order to make up ground on our rivals. The new regulations mean the gap to the top is smaller than it would have been at another time. We want to annoy the opposition as soon as possible. You can plan your own performance in motorsport, but not a title win. All you can do is work as hard as possible to move closer to your goal. Our goal is to win the World Championship."

What are the outstanding characteristics of the MINI Countryman, on which the MINI WRC is based?

Robertson: "The MINI Countryman is a car, the type of which there has never been before in the history of MINI. As a crossover it combines the classic MINI concept with the characteristics of a Sports Activity Vehicle – in a MINI that is at home far beyond the boundaries of the urban environment. It is the first MINI with four-wheel drive, which makes it predestined for the World Rally Championship. With its four doors and four seats it fits the motto: MINI on the outside, maxi on the inside. Because it is a true MINI, the Countryman is particularly low on fuel and emissions."

What will MINI's involvement in the Rally World Championship cost?

Robertson: "The costs of developing a car and running it in the World Rally Championship have fallen significantly since the introduction of the new regulations. We assume the costs will be about 25 percent lower than would have been the case in previous years. This was a huge influence on our decision to become involved. The 1.6-litre turbo engine can not only be used in the WRC, but also in other categories as the World Touring Car Championship. In addition, the sale of customer rally cars has a positive effect on the total calculation. The WRC offers MINI an attractive platform – with manageable costs. The cost/performance ratio is excellent."





Dr Wolfgang Armbrecht: “For us 2011 is a learning year.”

Dr Wolfgang Armbrecht, Senior Vice President Brand Management MINI, is a true rally fan. In this interview he outlines the sporting objectives behind the brand's return to world championship rallying, and explains why MINI fans across the world have every reason to look forward to the World Rally Championship programme.

Dr Armbrecht, when did you first become passionate about motorsport?

Dr Wolfgang Armbrecht: “I have fervently followed motorsport since my childhood. I grew up in a rural area, and became extremely interested in two-wheeled motorsport. At the age of 14 I had my first trials riding experiences, and rode a 500cc enduro bike later. Since then I have also followed four-wheeled rallying. From my angle this is a fascinating discipline, which demands the highest levels of performance from man and machine.”

What does MINI's return to rallying mean for the brand?

Dr Armbrecht: “In the Sixties MINI dominated the European rally scene. I could name not only three Monte Carlo Rally victories, but also wins in Finland's Rally of 1000 Lakes. With this WRC programme MINI returns to its roots as it focuses on the present.”

How big is the motorsport following among MINI customers?

Dr Armbrecht: “In the MINI community we presently find two categories of interests. On the one hand we have those people who enjoy urban lifestyles, innovations and a certain pioneering spirit. In the second group there are fans who appreciate the MINI production models and their superb vehicle dynamics. Rallying perfectly fuses these two groups. We will also have a lot to offer MINI enthusiasts away from the rally stage. For instance we plan to set up an event programme in close proximity to the Start/Finish area, in order to create a small MINI United at each major event.”

Therefore the MINI WRC rally car attracts all MINI enthusiasts?

Dr Armbrecht: “Absolutely. The MINI WRC has a powerful 1.6-litre turbo engine, one which is based on the MINI unit, but modified by BMW Motorsport specifically for motorsport. The resultant performance and also the visual appearance of the car are impressive. The MINI WRC is a highly innovative car, with its bright red livery not only pointing to its rally roots, but propelling it into the future. Finally, the MINI WRC incorporates our ALL4 four-wheel drive system, which is perfect for rallying.”





The competition has the advantage of years of experience. How quickly can MINI catch up?

Dr Armbrecht: "In Prodrive, MINI has an extremely experienced partner. Our colleagues in England were and are responsible for the development of the MINI WRC. Taken in combination with the MINI turbo engine and the know-how of the BMW Group in motorsport, this has created a unique mix of qualities which will enable us to move to the front quickly. Due to its technology and driving dynamics the car is perfectly suited to the rally stage. In addition, the MINI WRC Team has strong drivers. We are convinced they will make full use of the car's potential. "

Which criteria were brought to bear on your selection of drivers?

Dr Armbrecht: "Driving skill, technical understanding and the will to win were the characteristics upon which we particularly concentrated. In Kris Meeke and Dani Sordo we know these requirements have been met 100 per cent."

In 2011 the team will contest selected rallies. What are your objectives for the first year?

Dr Armbrecht: "For the MINI WRC Team, 2011 is a learning year. We realise we are up against stiff competition. To immediately go from 0 to 100 in such a short period of time does not make sense. Instead we need a sensible ramp up phase to gain experience. This will be the case with our participation in several rallies under competition conditions in 2011. In 2012 we will then face the full and challenging season. During this year's selected events we will thoroughly analyse the amassed data in order to further develop our car. We will be able to draw meaningful conclusions about the characteristics of the MINI WRC, and the performance of our entire team and its drivers from every single appearance in 2011."





Prodrive – a strong partner for MINI's comeback to rallying.

Prodrive is one of the world's largest and most successful motorsport and automotive technology businesses, with 500 staff operating in Europe, Australia and Asia. Today the company runs motorsport programmes for Aston Martin Racing in world sports car racing, Ford Performance Racing in the Australian V8 Supercar Series and MINI in the World Rally Championship.

The company also works with vehicle manufacturers to help develop new technologies and performance vehicles for the road, and is increasingly involved in the aerospace, marine and defence industries, manufacturing specialist components for applications as diverse as commercial passenger aircraft, satellites, nuclear submarines and racing yachts.

Prodrive is the world's leading independent motorsport business. It has won six World Rally Championship titles; five British Touring Car Championships (BTCC); three GT1 titles at Le Mans; and the Le Mans Series title in 2009; as well as managing the BAR F1 team to second place in the 2004 F1 championship.

Prodrive was behind the Subaru World Rally Team's rise to fame from 1990 to 2008. However, Prodrive's rallying history is far more than this. Over the years, it has won more than 130 international rallies with other great motorsport names like BMW, Porsche and MG. Indeed, it was with a BMW M3 that Prodrive won its first ever World Rally Championship event in Corsica in 1987.

David Richards (GB), the chairman and chief executive of the Prodrive Group, says: "I have been involved in the World Rally Championship for more than 30 years, firstly co-driving Ari Vatanen and then subsequently managing several teams. I can honestly say that in all this time, I have personally never been so excited or seen so much interest in a new entrant, as we are seeing today with MINI. In the 1960s the original little red and white MINI captured the imagination of the world and won what was then the most challenging motor race in the world, the Monte Carlo rally. More than 40 years on and people still talk about this achievement with great fondness."

In touring car racing, Prodrive has worked with BMW, Alfa Romeo, Honda, Ford and Volvo, winning BTCC titles in the 1980s, 90s and in 2000. In 2003, Prodrive moved into the Australian V8 Supercar Series, creating Ford Performance Racing, now one of the leading teams in this championship.

The same year, the team achieved its ultimate circuit racing accolade by winning the GTS class at the Le Mans 24 Hours with a Ferrari 550 GTS Maranello. Now the company manages Aston Martin Racing, which saw the British company return to sports car racing in 2005 with the DBR9. In 2007 and 2008 the team won the GT1 class at Le Mans and in 2009 its new LMP1 car took the Le Mans Series title. In September 2010, Prodrive announced it was developing an all new Aston Martin LMP1 car to challenge for outright honours at Le Mans.





From the beginning of 2002 to the end of the 2004 season, under the stewardship of chairman, David Richards, Prodrive managed the BAR Honda Formula One Team, taking it from the middle of the grid to second in the constructors' championship.

During the 1990s, Prodrive began offering its technical expertise and project engineering skills to the mainstream automotive market. Over the years, this part of the business has grown rapidly to represent nearly half the company's turnover. The company has the capability to take concepts through to full working prototypes. It has particular expertise in the design, calibration and testing of powertrains, drivelines and vehicle dynamics, as well as control and systems integration. In recent years, it has begun to specialise in the development of emission reducing technologies such as electric and flywheel hybrids and variable compression ratio engines.

In the UK, Prodrive has its own 250-acre proving ground, including a 2.5 mile test track; low friction straights; areas for suspension and dynamics performance testing; and a high speed, six lane, mile-long straight. It is this track that has been used in the development of the new MINI WRC.

"I firmly believe the new MINI WRC car will capture the imagination of today's generation of rally fans just as it did then," says Richards. "As in 1964, this interest will spread well beyond the world of motorsport. I have had so many people coming up to me and say they had read about the new programme and would be cheering us on. I'm therefore sure MINI's participation will lead to a rejuvenation of interest in the World Rally Championship and bring a whole new audience to this spectacle."





MINI WRC driver Kris Meeke in profile.

After leaving Queen's University in Belfast with an honours degree in mechanical engineering, Kris Meeke spent his first three years working as a designer for a leading rally-preparation business. But it was the draw of active competition that saw him make his first move into becoming a professional rally driver after winning a competition for new rally drivers in 2000. The prize was a fully supported drive in a national rally in Wales. The following year, while competing in the Peugeot 106 Super Cup, he took his first category win at the Swansea Bay Festival National Rally. The same year, he drove a 300 bhp Group A Subaru Impreza in the Galloway Hills Rally. It was his first time in a four-wheel drive car and he clinched his first outright rally win.

In 2002, Meeke secured a contract with McRae Motorsport and drove a Super 1600 Ford Puma in the British Junior Championship. Under his mentor, Colin McRae, he managed to secure victory in the series at his first attempt, and in only his second year in rallying.

With the backing of Colin McRae, Meeke graduated to the JWRC (Junior World Rally Championship) in 2003, driving an Opel Corsa run by Team Palmer and continued to compete in the UK, winning both the British Junior and Super 1600 titles. 2004 saw him record ten fastest stages on JWRC events and take second place in the Rally of Spain.

In 2005, Meeke joined Citroen for the JWRC driving a factory supported C2 Super 1600. He set 36 fastest stage times during the year winning the first event of the season in Monte Carlo and finishing third overall in the championship. At the end of the year, Meeke competed in a Prodrive-prepared Subaru Impreza World Rally Car on Wales Rally GB. He made an impressive debut in this car, finishing tenth overall and only 11 seconds behind his mentor, Colin McRae.

Meeke continued to compete for Citroen in the JWRC during 2006, setting more fastest stage times than anyone else, but was unable to challenge for the title due to a number of mechanical failures. Recognising his testing ability, Citroen also asked Meeke to help in the development of the Xsara WRC and the new C4 WRC, working alongside Sébastien Loeb.

In 2007 Meeke continued to build up his World Rally Car experience, competing in a Prodrive-prepared Subaru Impreza in the Irish Tarmac Championship, winning three events from four starts. Meeke also competed in the inaugural WRC round of Rally Ireland and held sixth place after the first day.

The following year, Meeke continued to compete in Ireland, but this time in a Renault Clio Super 1600. Despite giving away significant performance, he still managed to set fastest stage times against a 20 strong field of World Rally Cars. This pace led to events with Renault Sport in Russia in the Intercontinental Rally Challenge (IRC), as well as in Spain and Germany in the WRC.

2009 saw Meeke return to Peugeot to compete in the IRC in the 207 Super 2000 car. With co-driver Paul Nagle, he took outright wins in Brazil, Portugal, Belgium and San Remo helping him clinch the IRC title. In 2010 he re-signed for the team and celebrated another IRC race victory and ended the season in third place overall.





Facts and figures – Kris Meeke.

Born:	2 nd July 1979/Dungannon (UK)
Nationality:	British
Residence:	County Tyrone (UK)
Marital status:	Single
Co-driver:	Paul Nagle (UK)

Career highlights.

2000	1 st place Peugeot talent trials
2001	Peugeot Super 106 Cup
2002	1 st place British Junior Rally Championship (Ford)
2003	1 st place British Junior Rally and Super 1600 Championship (Opel) 11 th place FIA J-WRC, Super 1600 (Opel)
2004	7 th place FIA J-WRC, Super 1600 (Opel)
2005	3 rd place FIA J-WRC, Super 1600 (Citroën) 10 th place FIA WRC Wales GB Rally (Subaru)
2006	7 th place FIA J-WRC, Super 1600 (Citroën)
2007	1 st place Irish Tarmac Championship Various starts in FIA WRC
2008	Irish Tarmac Championship (Renault)
2009	1 st place Intercontinental Rally Challenge (Peugeot)
2010	3 rd place Intercontinental Rally Challenge (Peugeot)





MINI WRC driver Dani Sordo in profile.

Daniel "Dani" Sordo has been a big name in the FIA World Rally Championship for years. The 27-year-old Spaniard is undisputedly one of the top drivers in the field. An impressive 29 podium finishes in the WRC and 102 special stage wins speak for themselves. "Dani has been competing at the very highest level for the last five years," says David Richards, Chairman of Prodrive, heaping praise on the 2005 Junior World Rally champion.

And yet the experienced Sordo will be entering uncharted waters in 2011: new team, new car, new crew, and new co-driver. Sordo has been behind the wheel for Citroën for half a decade. He now lines up alongside co-driver Carlos del Barrio for the new MINI WRC Team, which is aiming to replicate the brand's huge success of the past. Richards says: "I believe with the new MINI WRC and in the right environment, he can now take the next step and add to his 29 podiums with victories on WRC events and become a challenger for a WRC title." Sordo is also more than confident: "To be part of this new team is a fantastic opportunity for me. I'm sure MINI has a big future in the sport, and I'm looking forward to working with Kris Meeke."

Sordo, together with Meeke, completed a two-day test in Sardinia in November 2010 and was immediately impressed by the new MINI WRC. "The first impression was excellent," confirmed Sordo after the first outings. The cooperation with Meeke also immediately worked very well. Since his first drive for the MINI WRC Team, Sordo has been applying his experience and has played a large role in the rapid development of the new car. His excellent performances over the past years have contributed significantly to Citroën winning the Manufacturers' Championship three times in succession.

Sordo began his career in motocross when he was 12 years old, achieving success also in hillclimbing, karting and touring cars. He first drove in a WRC event at the Rally Catalunya, the Spanish round of the series, in 2003 in a Mitsubishi Lancer Evo VII, finishing 18th overall. He won the Spanish Junior Rally Championship that year, and retained the title in 2004, while gaining further international experience at WRC rounds in Argentina, France and Spain.

After clinching the Junior World Rally Championship title in 2005, Sordo then joined the Kronos Total Citroën World Rally Team in 2006 when he was first paired with Loeb. Sordo finished the 2006 season with four podium places, 49 points and fifth overall in the Drivers' Championship. He has driven for the Citroën Total World Rally Team since 2007, and while in the WRC has achieved a total of 17 second place finishes, taking the third step of the podium 12 times. In 2007, Sordo finished fourth in the WRC Drivers' Championship, was placed third in the standings in 2008 and 2009 and finished the 2010 season fifth overall.





Facts and figures Dani Sordo.

Born:	2 nd May 1983/Torrelavega, Cantabria (ES)
Nationality:	Spanish
Residence:	Puente San Miguel, Cantabria (ES)
Marital status:	Single
Co-driver:	Carlos del Barrio (ES)

Career highlights.

2003	Spanish Junior Rally Champion
2004	FIA P-WRC outings (Group N Mitsubishi Lancer) Spanish Junior Rally Champion
2005	FIA J-WRC Champion (Citroën C2) and Spanish Champion
2006	World Rally Car debut (Kronos Citroën) 5 th place FIA WRC Drivers' Championship, four podiums
2007	4 th place FIA WRC Drivers' Championship (Citroën), seven podiums
2008	3 rd place, FIA WRC Drivers' Championship (Citroën), six podiums
2009	3 rd place FIA WRC Drivers' Championship (Citroën), seven podiums
2010	5 th place FIA WRC Drivers' Championship (Citroën), five podiums

FIA WRC statistics.

First WRC rally:	2003, Rally Catalunya
WRC starts:	84
Podium places:	29
Stage wins:	102
Total points:	393





Meticulous development work the key to success.

The MINI WRC has been developed by Prodrive, based on the production model of the MINI Countryman, and complies with the new regulations enforced by the International Automobile Federation FIA. The development started back in 2009 when Prodrive assembled a team of engineers, which was given complete freedom to design a new rally car. The goal was to gain a precise idea of what the ideal car must look like, in accordance with the new rules.

The engineers focussed on analysis for the initial months. Every minute detail of a rally car was mapped mathematically. This work produced some interesting results, which had a fundamental influence on the subsequent approach when designing the MINI WRC and on the allocation of technical resources at Prodrive. The company examined more than a dozen cars from a variety of different manufacturers, measuring key areas such as wheel base, centre of gravity, weight, tread width, etc.

After performing detailed measurements on the production model of the MINI Countryman, it soon became clear to the Prodrive engineers this car would provide an excellent basis for a WRC car. MINI shared all the essential data with the colleagues in Banbury, so that Prodrive could apply the general design they had come up with previously to this car. One of the key requirements of the development team was to keep the servicing effort required for the MINI WRC to an absolute minimum for private teams, without causing high maintenance costs. At the same time, the performance should not be compromised. Twenty five to 30 models will be manufactured per year – a relatively high number by motorsport standards. For this reason, Prodrive had to ensure the car could also be run easily and economically at remote locations around the world.

The result of these endeavours is the MINI WRC. From an engineering point of view, its design is extremely linear and simple. Prodrive invested a lot of time and effort to achieve this. Among other features, all four uprights are interchangeable as are the anti-roll bars. This means customer teams require relatively few spare parts in order to run their cars. In addition, the car also offers many other innovations. These include the design of the roll cage, which makes the MINI WRC extremely safe.

"I am very proud of what our team of engineers has been able to achieve," says David Richards. "By combining the experience of David Lapworth our technical director, who has been with Prodrive since the very beginning, with the inspiration and new ideas from a team of young engineers we have been able to produce a radically new car. However, let's not underestimate the challenge that faces us as I'm sure our competitors are working equally hard on their new cars for 2011, but if you are going to be a new entrant to any championship, there is no better time to join than when there's a new set of technical regulations and a new tyre supplier."





The MINI WRC: Technical specifications.

Dimensions:

Length: 4,110 mm
Width: 1,820 mm
Weight: 1,200 kg (FIA minimum weight)

Engine:

"MINI powered by BMW Motorsport"
1,600 cc, four-cylinder direct injection petrol engine
Garrett turbocharger - maximum boost 2.5 bar
Dry sump

Transmission:

Permanent four wheel drive
Gearbox: Xtrac 6-speed sequential
AP Racing sintered twin plate clutch
Plated limited slip (front and rear axle)

Steering:

Hydraulic power assisted

Chassis:

MINI Countryman bodysell with Prodrive roll cage
exceeding FIA regulations

Suspension:

Prodrive Öhlins Macpherson strut, 3 way adjustable damper
(front and rear axle)

Wheels/Tyres:

ATS wheels and Michelin tyres
Gravel: 15" diameter
Tarmac: 18" diameter



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Brakes:

AP Racing

Gravel:
four piston, 300 mm (front and rear axle)

Tarmac:
four piston, 355 mm (front and rear axle)

Castrol brake fluid (SFX)

Lubricants and coolants:

Castrol

Seats:

Sparco race seats and safety belt system





The benchmark in the 1960s: the MINI Cooper S.

Paddy Hopkirk (GB), Timo Mäkinen (FI) and Rauno Aaltonen (FI) made history with their Rally Monte Carlo victories in 1964, 1965 and 1967. The trio laid the foundation for the long tradition of the MINI brand in international motorsport. The MINI Cooper S was the car to beat in the 1960s.

Well before Alec Issigonis drew up his legendary drafts for the MINI, he was already friends with one of the leading racing car designers: John Cooper. Cooper purchased Morris engines to use in his single-seater junior racing cars. It was for this reason that technical director Issigonis valued his advice so highly when it came to engine designs. As a result, John Cooper was involved with the development of the MINI right from the start.

The more the MINI project took shape, the more certain Cooper became this new car would bring something to the market, for which he had been looking for a long time: the basis for a sports car that could compete with the Lotus Elite at that time. Cooper had tried with a Renault Dauphine, into which he had transplanted a Coventry Climax engine, but he was far from happy with the handling. As soon as he got his hands on one of the new, small cars he began tuning it. It was with this prototype of the MINI Cooper that he travelled, with driver Roy Salvadori, to the Italian Grand Prix in Monza. The journey to the event became a race in its own rights with Reg Parnell, a renowned racing driver who was heading to the circuit in his Aston Martin DB4. When they arrived, Cooper's new MINI was a full hour faster, more than confirming the racing car designer's suspicions about the potential of the MINI.

Cooper contacted Issigonis and proposed using the MINI to develop a small GT racing car. However, Issigonis saw his car as nothing more than an everyday vehicle. John Cooper did not give up though: he contacted George Harriman, the head of BMC, directly. The British Motor Corporation (BMC) was formed in 1952 by a consortium of British automobile manufacturers, including the brands Austin, Morris, MG and Wolseley. Harriman was impressed by Cooper's idea and agreed on a small series of 1,000 MINI Coopers, in order to test the response.

The engine must not have greater than one litre capacity. For this reason, Cooper balanced the stroke, which he had increased from 68.3 to 81.3 mm, by reducing the bore from 62.9 to 62.4 millimetres. Distributed over four cylinders, this resulted in a capacity of exactly 997cc. The compression ratio rose from 8.3 to 9.0, while larger intake valves and twin carburettors were also added. Further modifications were made to the drilled outlet openings and the crankcase was reinforced to achieve greater efficiency. Cooper also changed the transmission ratios of the individual gears in the gearbox, in order to increase the maximum speed. As a result, the engine performance rose to 55 bhp and the maximum speed to about 130 km/h. In order for the brake performance to also keep pace with the increased efficiency, Cooper mounted 7-inch Lockheed disc brakes on the front wheels. For many involved in motorsport, this car came just at the right time, and a series of successes convinced BMC that the concept had a future.





Issigonis also changed his mind now and worked together with John Cooper on the next stage of performance improvements. John Cooper had already successfully tried and tested the formula with his single-seater junior engines: small stroke and large bore, combined with more solid pins to attach the cylinder head. With this in mind, the engineers for the Cooper S selected the engine with a capacity of 848cc.

The 68.2 millimetre stroke remained unchanged, while the bore was increased to its limit of 70.6 millimetres. Cooper had now achieved two important objectives: the 1,071cc capacity remained under the planned class limit of 1,100cc and the short stroke allowed high revs. The new car now produced 70 bhp at 6,200 rpm, with the maximum rpm at 7,200.

After Rauno Aaltonen and Paddy Hopkirk had finished first and second in their class at the Rally Monte Carlo in 1963 with a MINI Cooper, Hopkirk achieved MINI's first overall victory in the new Cooper S in 1964. With a top speed of 160 km/h, the car was even more competitive than its predecessor and accelerated from 0 to 100 km/h in 13 seconds rather than 19. The foundations had been set for future triumphs at the "Monte" and the MINI Cooper S success story.





Rauno Aaltonen: “Every child must first be nurtured.”

Rauno Aaltonen made MINI history in the 1960s. The Finn stepped onto the podium at the Rallye Monte-Carlo on no less than three occasions and, at the side of co-driver Henry Liddon, won the most iconic rally in the world in 1967. In addition he claimed victory in the European Rally Championship in 1965 and added several national titles in his native Finland.

In this interview, the 73-year-old talks about the return of MINI to rallying.

Mr Aaltonen, how do you rate the technical development in rallying since the 1960s?

Aaltonen: “The way rallying has developed is very positive. I particularly like the four-wheel drive. To a certain degree, the sport is returning to its roots. For example, no electronic driving assistance is allowed in the WRC. Despite this, the developers at MINI WRC have left no stone unturned. The modern engine management catches the eye, as does the powerful propulsion made possible by the MINI four-wheel drive system. Nevertheless pushing a rally car to the limit is still a big challenge for today’s drivers.”

Do you believe Kris Meeke and Dani Sordo will first have to get used to their new car?

Aaltonen: “Kris and Dani are absolute professionals. Even after just a few outings, top drivers like them are able to push the car to the limit. The tests give reason for confidence. I am sure the MINI WRC will make it very easy for the drivers to quickly get the absolute maximum out of the total package.”

The MINI WRC team will be starting at selected WRC rallies in 2011. What do you expect from the team in its first year?

Aaltonen: “I always say that every child must first be nurtured. In the case of motorsport, this means it is initially all about gaining experience so you can improve the car. Even the best computers cannot provide this experience. As MINI is in such an advanced stage of technical development, the team is able to start under competitive conditions. This obviously means you are a step further into your preparations for the second season.”

What do you make of the production model, the MINI Countryman?

Aaltonen: “The new MINI Countryman is an outstanding car, which I can well imagine getting for myself. It has a lot of interior space, is extremely easy to drive, and gives you that typical MINI feeling when you drive it. The MINI Countryman is a genuine surprise.”





Historic victories: MINI in international motorsport.

MINI scored its first success in the year of its birth: In 1959 Pat Moss (GB) won the Mini Miglia National Rally with a MINI 850. In 1962 the MINI Cooper S first caused a stir in Monte Carlo. With Rauno Aaltonen at the wheel, the small car embarked on a David versus Goliath crusade against obviously more powerful opponents. However, just three kilometres from the end, Aaltonen, leading at the time, misjudged a corner and rolled out of the event. The following year, though, the Finn made up for this disappointment: Driving a MINI Cooper S he was placed third overall and won his class.

It would get better: During the 1963/1964 winter rally season power was increased even further. Driving spectacularly, Paddy Hopkirk (IR) was placed first overall in the Rally Monte Carlo in the tiny sprinter. Thus the MINI acquired legendary status. In 1965 Finland's Timo Mäkinen and co-driver Paul Easter (GB) repeated the Monte triumph. They were the only crew to complete thousands of kilometres without penalty – despite gruelling winter conditions. Only 35 cars – including three MINI Cooper S – made it to the finish out of a total field of 237 entries.

A hat trick was targeted for the following year. Drivers Timo Mäkinen, Rauno Aaltonen and Paddy Hopkirk sensationally achieved the feat by mounting the finish ramp in first, second and third respectively. However, bitter disappointment was to follow: The trio was disqualified after the rally's stewards decreed the MINI's headlight dipping mechanism did not conform to homologation requirements. For the general public this technicality, though, mattered little, with their enthusiasm for the three MINI drivers remaining undiminished.

Hopkirk, Aaltonen and Mäkinen entered the annals of the Rally Monte Carlo as the "Three Musketeers". The MINI's third Monte Carlo victory, achieved in 1967 by Aaltonen, was celebrated all the more enthusiastically after the events of the previous year. This time there were absolutely no doubts about the car's eligibility. In 1965 the "Rally Professor" Aaltonen had triumphed in the European Rally Championship, with Tony Ambrose (GB) and Mäkinen completing an excellent result for the MINI Cooper S by finishing second and third respectively. In addition, various MINI drivers celebrated numerous individual victories across Europe.

However, the MINI did not shine only in rallying. In the 1960s the car achieved equal success on motor racing circuits. With its sporting qualities, it became one of the definitive racing cars of the decade, with many legendary drivers starting their careers with MINI. In April 1968 Niki Lauda (AT) contested his first hill climb near Linz (AT) in a classic MINI, finishing second. Just two weeks later he scored his first victory, displaying the sort of talent which would ultimately net him three Formula One titles. Like Lauda, other Formula One world champions such as Graham Hill, Jackie Stewart, John Surtees, Jochen Rindt and James Hunt all collected their first competition experiences in a classic MINI.



MINI WRC TEAM

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