

Brackley Presse-Information

# MERCEDES AMG PETRONAS Formula One Team 2015 Press Pack

01. Februar 2015

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#### **Driver Profiles**

### **Lewis Hamilton**

Nationality: British

Date of Birth: 7 January 1985
Place of Birth: Tewin, UK
Lives: Monaco
Height: 1.74m

Website: <a href="www.lewishamilton.com">www.lewishamilton.com</a>
Twitter: @LewisHamilton
Facebook: /LewisHamilton
Instagram: /lewishamilton

Google+: +LewisHamilton

YouTube: /LewisHamilton

Debut: Australia, 18 March 2007

Best World Championship: World Champion – 2008, 2014

First Win: Canada, 10 June 2007

Last Win: Abu Dhabi, 23 November 2014

 Wins:
 33

 Podiums:
 70

 Pole Positions:
 38

 Front Row Starts:
 72

 Fastest Laps:
 20

Starts: 148 Points: 1,486

2015 Formula One: MERCEDES AMG PETRONAS –

Car No 44

2014 Formula One: MERCEDES AMG PETRONAS –

Champion

2013 Formula One: MERCEDES AMG PETRONAS – 4th

2012 Formula One: McLaren Mercedes – 4th 2011 Formula One: McLaren Mercedes - 5th 2010 Formula One: McLaren Mercedes - 4th 2009 Formula One: McLaren Mercedes - 5th 2008 Formula One: McLaren Mercedes - Champion 2007 Formula One: McLaren Mercedes - 2nd 2006 GP2 Series: ART Grand Prix - Champion Formula Three Euro Series: ASM – Champion 2005 2004 Formula Three Euro Series: Manor Motorsport – 5th Formula Renault UK: Manor Motorsport – Champion 2003 2002 Formula Renault UK: Manor Motorsport – 3rd

### **Driver Profiles**

### Nico Rosberg

Nationality: German
Date of Birth: 27 June 1985

Place of Birth: Wiesbaden, Germany

Lives: Monaco Height: 1.78m

YouTube: /nicorosbergtv

Debut: Bahrain, 12 March 2006
Best World Championship: 2nd – 2014
First Win: China, 15 April 2012

Last Win: Brazil, 9 November 2014

Wins: 8
Podiums: 26
Pole Positions: 15
Front Row Starts: 25
Fastest Laps: 9

Starts: 166 Points: 887.5

2015 Formula One: MERCEDES AMG PETRONAS –

Car No 6

2014 Formula One: MERCEDES AMG PETRONAS –

2nd

Formula One: MERCEDES AMG PETRONAS – 6th
 Formula One: MERCEDES AMG PETRONAS – 9th
 Formula One: MERCEDES GP PETRONAS – 7th
 Formula One: MERCEDES GP PETRONAS – 7th

2009Formula One: Williams – 7th2008Formula One: Williams – 13th2007Formula One: Williams – 9th2006Formula One: Williams – 17th

2005GP2 Series: ART Grand Prix – Champion2004Formula Three Euro Series: Team Rosberg – 4th2003Formula Three Euro Series: Team Rosberg – 8th2002German Formula BMW: VIVA Racing – Champion

### **Key Personnel Profile**

# **Toto Wolff, Head of Mercedes-Benz Motorsport**

Nationality: Austrian

Date of Birth: 12 January 1972 Place of Birth: Vienna, Austria

Lives: Lake Constance, Switzerland

Career History:

2013 Appointed Head of Mercedes-Benz Motorsport 2012 Appointed Executive Director of Williams Grand Prix

Holdings PLC

2009 Invested in Williams F1

2006 Invested in HWA AG; winner of Dubai 24 Hours

Founded Marchsixteen Investments

FIA NGT World Championship, 6th overall with one win

Founded Marchfifteen Investments
Class winner, Nürburgring 24 Hours

1992 Began motorsport career in Austrian Formula Ford

Championship

### Career Profile:

After a short career as an amateur driver, including class and overall wins in endurance racing, Christian 'Toto' Wolff founded the investment company Marchfifteen in 1998, followed by Marchsixteen in 2004, focusing on strategic investments in medium-size industrial companies and listed companies. These included the IPO of HWA AG, the company responsible for developing and racing Mercedes-Benz cars for the DTM (German Touring Car Championship) as well as Mercedes-Benz Formula 3 engines. Toto has been a member of the HWA AG board of directors since 2007.

Further motor racing interests include co-ownership with Mika Häkkinen of a driver management company and, since November 2009, investment in Williams F1. Toto became an Executive Director of Williams in July 2012 before accepting the role of Executive Director at MERCEDES AMG PETRONAS in January 2013; including taking a 30% shareholding in Mercedes-Benz Grand Prix Ltd.

In his role as the Head of Mercedes-Benz Motorsport, Toto has full responsibility for the success of the entire Mercedes-Benz motorsport programme, including the DTM and Formula 3 engine programmes. He is based at the Formula One team's headquarters in Brackley, UK.

### **Key Personnel Profile**

# Paddy Lowe, Executive Director (Technical)

Nationality: British
Date of Birth: 8 April 1962
Place of Birth: Nairobi, Kenya
Lives: Oxford, England

Career History:

2013 Executive Director (Technical), MERCEDES AMG

**PETRONAS** 

2011 Technical Director, McLaren 2005 Engineering Director, McLaren

2001 Chief Engineer, Systems Development, McLaren 1993 Head of Research & Development, McLaren

1987 Joint-Head of Electronics, Williams

#### Career Profile:

Paddy Lowe has been Executive Director (Technical) at MERCEDES AMG PETRONAS since June 2013. After graduating with an engineering degree from Sidney Sussex College, University of Cambridge in 1984, he has worked in various capacities in Formula One since 1987.

Paddy's first experience in the premier class of motor racing came as Joint-Head of Electronics during a six-year stint with the Williams team; overseeing the Active Suspension project which helped Nigel Mansell to the 1992 World Drivers' Championship.

In 1993, Paddy moved to McLaren where he steadily worked his way up through the hierarchy during the ensuing two decades. Heading up the research and development department of the Woking-based outfit over an eight-year period, Paddy oversaw various innovative control system projects in addition to laying the groundwork for the simulator facility.

Having been appointed Chief Engineer, Systems Development in 2001, Paddy then held the position of Engineering Director from 2005 to 2011; playing a key role in Lewis Hamilton's 2008 World Championship success before his promotion to Technical Director in January 2011.

### **Key Personnel Profile**

### Andy Cowell, Managing Director, Mercedes AMG High Performance Powertrains

Nationality: British

Date of Birth: 12 February 1969
Place of Birth: Blackpool, England

Lives: Market Harborough, England

Career History:

2013 Managing Director, Mercedes AMG High Performance

Powertrains

2008 Engineering and Programme Director, Mercedes-Benz HPE

2006 Chief Engineer, Engines, Mercedes-Benz HPE

2005 Chief Engineer, V8 Engine Project, Mercedes-Benz High

**Performance Engines** 

2004 Principal Engineer, V10 Engine, Mercedes-Ilmor

2000 Principal Engineer, F1 Design and Development, Cosworth

Racing

Head of Pre-Development, Formula One, BMW Motorsport 1997 Principal Engineer, F1 Design and Development, Cosworth

Racing

1994 Senior Engineer, F1 Design and Development, Cosworth

Racing

1992 Project Engineer, F1 Design and Development, Cosworth

Racing

1991 Graduate Engineer, Cosworth Racing

### Career Profile:

Following a year out from his Mechanical Engineering degree, spent on the Reynard Scholarship Scheme, Andy Cowell's career path was set. He joined Cosworth Racing Ltd straight from university on their graduate scheme; rotating through the company's technical departments before specialising in the design and development of Formula One engines. By 1999, Andy was leading the engineering project group responsible for the top end of the innovative CK engine; as raced by Stewart-Ford in 1999.

After a year spent with BMW Motorsport, where he managed the engineering group responsible for the concept and detail of the 2001 engine used by Williams BMW, Andy returned to Cosworth as Principal Engineer for F1 design and development; managing the new engine projects in 2001 and 2004.

Andy joined the company then known as Mercedes-Ilmor in 2005 as Principal Engineer for the FQ V10 engine project, which delivered the most race wins of any manufacturer that season. He was then Chief Engineer on the V8 engine project before taking on responsibility for the technical and programme leadership of all engine projects; including the KERS Hybrid which made its race debut in 2009. Andy was Engineering and Programme Director for Mercedes-Benz High Performance Engines from July 2008 to January 2013, responsible for technical and programme leadership of all engine and powertrain projects, plus the strategy and organisation of the engineering group.

Since 1 January 2013, Andy has been Managing Director of Mercedes AMG High Performance Powertrains.

# **Key Personnel List**

# Non-Executive Chairman

Niki Lauda

# **Head of Mercedes-Benz Motorsport**

Toto Wolff

# **Executive Director (Technical)**

Paddy Lowe

# Managing Director, Mercedes AMG High Performance Powertrains

Andy Cowell

# **Engineering Director**

Aldo Costa

# **Technology Director**

Geoffrey Willis

# **Performance Director**

Mark Ellis

# **Sporting Director**

Ron Meadows

### **Chief Race Engineer**

Andrew Shovlin

# **Chief Track Engineer**

Simon Cole

# Race Engineer, Lewis Hamilton

Peter Bonnington

# Race Engineer, Nico Rosberg

Tony Ross

### **Chief Mechanic**

Matthew Deane

#### The Car

# **MERCEDES AMG PETRONAS F1 W06 Hybrid Technical Specification**

### Chassis

Monocoque: Moulded carbon fibre and honeycomb

composite structure

Bodywork: Carbon fibre composite including engine

cover, sidepods, floor, nose, front wing and

rear wing

Cockpit: Removable driver's seat made of

anatomically formed carbon composite, Sabelt six-point driver safety harness,

HANS system

Safety Structures: Cockpit survival cell incorporating impact

resistant construction and penetration panels, front impact structure, prescribed side impact structures, integrated rear impact structure, front and rear roll structures

Front Suspension: Carbon fibre wishbone and pushrod

activated torsion springs and rockers

Rear Suspension: Carbon fibre wishbone and pullrod activated

torsion springs and rockers

Wheels: Advanti forged magnesium

Tyres: Pirelli

Brake System: Carbon / carbon discs and pads with rear

brake-by-wire

Brake Calipers: Brembo

Steering: Power assisted rack and pinion

Steering Wheel: Carbon-fibre construction

Electronics: FIA standard ECU and FIA homologated

electronic and electrical system

Instrumentation: McLaren Electronic Systems (MES)
Fuel System: ATL Kevlar-reinforced rubber bladder

Lubricants & Fluids: PETRONAS Tutela

Transmission

Gearbox: Eight-speed forward, one reverse unit with

carbon fibre maincase

Gear Selection: Sequential, semi-automatic, hydraulic

activation

Clutch: Carbon plate

**Dimensions** 

Overall Length:5000mmOverall Width:1800mmOverall Height:950mmOverall Weight:702kg

### The Car

# Mercedes-Benz PU106B Hybrid Technical Specification

### **Power Unit Specification**

Type: Mercedes-Benz PU106B Hybrid

Minimum Weight: 145 kg

Power Unit Perimeter: Internal Combustion Engine (ICE)

Motor Generator Unit - Kinetic (MGU-K) Motor Generator Unit - Heat (MGU-H)

Energy Store (ES) Turbocharger (TC) Control Electronics (CE)

Power Unit Allocation: Four Power Units per driver per season

**Internal Combustion Engine** 

1.6 litres Capacity: Cylinders: Six Bank Angle: 90 No of Valves: 24

15,000 rpm Max rpm ICE:

Max Fuel Flow Rate: 100 kg/hour (above 10,500 rpm)

Fuel Injection: High-pressure direct injection (max 500 bar,

one injector/cylinder)

Pressure Charging: Single-stage compressor and exhaust turbine

on a common shaft

Max rpm Exhaust Turbine: 125,000 rpm

**Energy Recovery System** 

Architecture: Integrated Hybrid energy recovery via

electrical Motor Generator Units

Energy Store: Lithium-Ion battery solution, between 20

and 25 kg

Max energy storage/lap: 4 MJ

Max rpm MGU-K: 50,000 rpm Max power MGU-K: 120 kW (161 hp)

Max energy recovery/lap MGU-K: 2 MJ

Max energy deployment/lap MGU-K: 4 MJ (33.3 s at full power) Max rpm MGU-H: 125,000 rpm

Max power MGU-H: Unlimited Max energy recovery/lap MGU-H: Unlimited

Max energy deployment/lap MGU-H: Unlimited

**Fuel & Lubricants** 

Fuel: **PETRONAS Primax** Lubricants: **PETRONAS Syntium** 

### 2015 Regulation Changes

### **Technical Regulations**

#### Power Units

Teams are now restricted to four power units per driver, per season – one fewer than in 2014. Should this total be exceeded, a grid penalty will be imposed on the driver concerned as per the below.

#### Power Unit Penalties

The replacement of a complete Power Unit no longer results in an automatic penalty, as per last season. Instead, penalties are applied cumulatively based on the replacement of individual components within the Power Unit perimeter – i.e the Internal Combustion Engine (ICE), Turbocharger (TC), Motor Generator Unit-Kinetic (MGU-K), Motor Generator Unit-Heat (MGU-H), Energy Store (ES), or Control Electronics (CE).

In another change from 2014, grid penalties will no longer roll over to the next event in the event they cannot be fulfilled at a single race. If a driver is unable to take their full grid penalty, the remainder will be applied as a time penalty for the relevant Grand Prix as follows:

- 1-5 grid places: five-second time penalty
- 6-10 grid places: drive-through penalty
- 11-20 grid places: ten-second stop-and-go penalty
- More than 20 grid places: a time penalty

#### Gearbox

In 2014, teams were permitted to change gear ratio specifications once during the season. They also had five opportunities per driver, per season, to change the physical components of the ratios. For 2015, gear ratio specifications must remain fixed from the opening Grand Prix of the season, while ratio components must now last for six race distances.

# Suspension

From 2015, any suspension systems fitted to either the front or rear wheels may only react to direct changes of load applied to the relevant section. Front-and-Rear Interconnected Suspension (FRIC) systems will therefore be formally outlawed.

### Minimum Weight

The minimum weight for a car, not including fuel, has increased from 691 kg in 2014 to 702 kg in 2015. This 11 kg change includes allowances for tyre weights.

### Nose Designs

In an amendment to rules introduced in 2014 designed to improve driver safety, nose designs will adopt a more uniform appearance for the 2015 season.

### Cockpit Safety

The Zylon anti-intrusion panels on both sides of the survival cell have been extended upwards to the rim of the cockpit and alongside the driver's head.

### 2015 Regulation Changes

# **Sporting Regulations**

### New Penalties

In addition to the five second penalty introduced for 2014, race stewards also have the option to hand out ten second penalties for minor infringements in 2015.

#### Double Points

Double points will no longer be applied for the season finale in 2015.

### In-season Testing

There will now be two in-season tests lasting two days each, down from four in 2014. Two of the four days in total must be reserved for young drivers. These will be conducted in Barcelona and Spielberg during the week following the Spanish and Austrian Grands Prix respectively.

### Unsafe Releases

For 2015, unsafe releases will be met with an automatic ten second stop-and-go penalty for the relevant driver. Additional penalties may be imposed at the stewards' discretion.

### Clearing the Grid

A driver will be forced to start from the pit lane if any member of his team, or any relevant equipment, remains on the starting grid after the 15 second signal has been shown.

#### Standings Restarts

A proposal for standing restarts has been rescinded, meaning Safety Car restarts will follow the same procedure as in previous years.

### Virtual Safety Car

In a bid to improve safety, particularly in the event of double waved yellow flags, a Virtual Safety Car system designed to ensure drivers slow sufficiently has been introduced for 2015. This can be used to neutralise a race without having to introducing the safety car itself.

### Safety Car Lapped Drivers

As was the case in 2014, lapped cars may still un-lap themselves behind the safety car. However, the Safety Car will no longer need to wait until said drivers have caught back up to the back of the field before leaving the track. Instead, the Safety Car is free to pull back into the pits on the following lap after the last lapped car has been waved through.

### Race Suspensions

For 2015, drivers must proceed slowly into the pit lane, rather than back onto the starting grid, in the event of a race suspension.

**Title Partner: PETRONAS** 

PETRONAS, the acronym for Petroliam Nasional Berhad, was incorporated on 17 August 1974 and is vested with the ownership and control of the petroleum resources in Malaysia.

Fully-owned by the Malaysian government, PETRONAS operates like a multinational petroleum corporation with sound business management practices and principles guided by a complementary set of mission, vision and values.

Engaged in a wide spectrum of oil and gas operations domestically and internationally; its activities include exploration and production (E&P) to downstream oil refining; marketing and distribution of petroleum products; gas processing and liquefaction; gas transmission pipeline network operations; marketing of liquefied natural gas (LNG); petrochemical manufacturing and marketing; trading; shipping; and property investment.

Over the years, PETRONAS has grown to become a fully-integrated oil and gas corporation with expanding business in Malaysia and overseas.

Ranked among FORTUNE Global 500® largest corporations in the world, PETRONAS has presence in more than 30 countries worldwide in its aspiration to be a leading oil and gas multinational of choice.

# Team Partner: BlackBerry

A global leader in mobile communications, BlackBerry, (formerly Research In Motion), revolutionized the mobile industry with the introduction of the BlackBerry solution in 1999. Today, BlackBerry aims to inspire the success of millions of customers around the world by continuously pushing the boundaries of mobile experiences.

BlackBerry empowers customers with an end-to-end suite of secure mobile solutions, delivering innovative mobile technologies to users and organizations that value productivity and achievement.

BlackBerry is focused on driving growth through four key lines of business: Enterprise, Devices, Messaging, and Technology Solutions (including Embedded Systems).

BlackBerry operates offices in North America, Europe, Middle East and Africa, Asia Pacific and Latin America. The Company trades under the ticker symbols "BB" on the Toronto Stock Exchange and "BBRY" on the NASDAQ. For more information, visit <a href="https://www.BlackBerry.com">www.BlackBerry.com</a>

**Team Partner: UBS** 

UBS has made Formula 1® the centerpiece of its international sport sponsorship portfolio. The partnership constitutes a key element of its branding activities and underscores the values UBS shares with Formula 1 – a commitment to high performance, and success through teamwork. Alongside the Team Partnership with MERCEDES AMG PETRONAS Formula 1 Team, UBS has been a Global Partner of Formula 1 since 2010.

UBS draws on its 150-year heritage to serve private, institutional and corporate clients worldwide. It is the world's pre-eminent wealth manager and is also the leading universal bank in Switzerland. Together with a client-focused Investment Bank and a well-diversified Global Asset Management business, UBS is well-positioned to capitalize on the compelling growth prospects in the businesses and regions in which it operates.

Headquartered in Zurich and Basel, Switzerland, UBS has offices in more than 50 countries, including all major financial centers, and approximately 60,000 employees.

**Team Partner: Allianz** 

Together with its customers and sales partners, Allianz is one of the strongest financial communities.

Over 83 million private and corporate customers insured by Allianz rely on its knowledge, global reach, capital strength and solidity to help them make the most of financial opportunities and to avoid and safeguard themselves against risks.

In 2013, around 148,000 employees in over 70 countries achieved total revenues of 110.8 billion euros and an operating profit of 10.1 billion euros. Benefits for our customers reached 93.0 billion euros.

This business success with insurance, asset management and assistance services is based increasingly on customer demand for crisis-proof financial solutions for an aging society and the challenges of climate change.

Transparency and integrity are key components of sustainable corporate governance at Allianz SE.

 $\underline{https://www.allianz.com/en/about\_us/sports\_culture/formula1/index.html}$ 

**Team Partner: EPSON** 

Epson is a global innovation leader dedicated to exceeding expectations with solutions for markets as diverse as the office, home, commerce and industry. Epson's line-up ranges from inkjet printers, printing systems and 3LCD projectors to industrial robots, smart glasses and sensing systems and is based on original, compact, energy-saving and high-precision technologies.

Led by the Japan-based Seiko Epson Corporation, the Epson Group comprises more than 72,000 employees in 94 companies around the world, and is proud of its on-going contributions to the global environment and the communities in which it operates.

### Team Partner: IWC Schaffhausen

The Swiss watch manufacturer IWC Schaffhausen is proud to be the Official Engineering Partner of the MERCEDES AMG PETRONAS Formula One™ Team for the years 2013 to 2015.

The partnership enables IWC Schaffhausen to share its passion for high-level engineering, its quest for ultimate perfection and the aim for top performance – referred to by both companies as performance engineering.

With a clear focus on technology and development, IWC Schaffhausen has been producing timepieces of lasting value since 1868. The company has gained an international reputation based on a passion for innovative solutions and technical ingenuity.

One of the world's leading brands in the luxury watch segment, IWC Schaffhausen crafts masterpieces of haute horlogerie at its finest, combining supreme precision with exclusive design.

**Team Partner: HUGO BOSS** 

HUGO BOSS is a leading player in the premium and luxury segments of the global fashion market, and is focused on creating and marketing high quality apparel and accessories for men and women.

The fascinating brand world of the Metzingen-based group brings together the distinctive collections of the brands BOSS, BOSS Orange, BOSS Green and HUGO.

The HUGO BOSS sports sponsorship activities are concentrated on Formula One racing, golf, sailing and soccer, all of which comprise ideal vehicles for transporting the brand values of dynamism, perfection and precision.

The partnership with the MERCEDES AMG PETRONAS Formula One Team centers on outfitting the entire crew, including the drivers. At Grand Prix races around the globe, they are equipped with performancewear designed to withstand both extreme cold and tropical heat, while offering top functionality, wearing comfort and fashion appeal. The new World Champions also wear BOSS at official functions and en route to the world's F1 circuits.

A high-quality "BOSS for Mercedes-Benz" collection reflecting Formula One racing and the Mercedes-Benz design is also produced twice a year.

# **Team Partner: Monster Energy**

Based in Corona, California, Monster Energy is the leading marketer and distributor of energy drinks and alternative beverages. Refusing to acknowledge the traditional, Monster Beverage Corporation supports the scene and sport.

Whether motocross, off-road, F1, NASCAR, BMX, surf, snowboard, ski, skateboard, or the rock and roll lifestyle, Monster is a brand that believes in authenticity and the core of what its sports, athletes and musicians represent.

More than a drink, it's the way of life lived by athletes, sports, bands, believers and fans. See more about Monster Beverage Corporation including all of its drinks at <a href="https://www.monsterenergy.com">www.monsterenergy.com</a>

### **Team Partner: Starwood Hotels & Resorts**

Starwood Preferred Guest (SPG) has often been recognised as the hospitality industry's best redemption programme by frequent travellers worldwide.

We offer access to an amazing hotel portfolio consisting from our nine internationally renowned and unique brands; St. Regis, The Luxury Collection, W, Westin, Le Méridien, Sheraton, Four Points by Sheraton, Aloft and Element with over 1200 properties in nearly 100 countries.

As a Starwood Preferred Guest member, you'll earn valuable Starpoints redeemable for amazing options.

SPG offers faster points accumulation and zero blackouts on Free Night Awards.

Starpoints can lead you to room upgrades, Award Flights on over 350 major airlines, merchandise awards and travel privileges.

Bid Starpoints through our SPG Moments Programme for access like no other to the best in music, sports and the arts!

Team Partner: PUMA

PUMA is one of the world's leading Sports Brands, designing, developing, selling and marketing footwear, apparel and accessories. For over 65 years, PUMA has established a history of making fast product designs for the fastest athletes on the planet.

PUMA offers performance and sport-inspired lifestyle products in categories such as Football, Running, Training and Fitness, Golf, and Motorsports. It engages in exciting collaborations with renowned design brands such as Alexander McQueen and Mihara Yasuhiro to bring innovative and fast designs to the sports world.

The PUMA Group owns the brands PUMA, Cobra Golf, Tretorn, Dobotex and Brandon. The company distributes its products in more than 120 countries, employs more than 10,000 people worldwide, and is headquartered in Herzogenaurach / Germany.

### Team Partner: ebm-papst

ebm-papst is a worldwide innovation leader in fans and motors with over 15,000 different products, providing the ideal solution for virtually all air technology and drive engineering tasks.

ebm-papst engineering services are available throughout the world, however the source of the company's engineering skills originates in Germany where more than 650 engineers and technicians conduct intensive work in the fields of motor technology, electronics and aerodynamics.

Close cooperation between the company's three central locations in Mulfingen, St. Georgen and Landshut creates a high level of expertise in a variety of sectors. These include ventilation, air-conditioning and refrigeration technology, household appliance and heating engineering, electronic cooling for IT and telecommunications, and finally R&D services provided to many major automotive brands.

ebm-papst has developed off-board cooling solutions for the MERCEDES AMG PETRONAS F1 W05 racing cars, in addition to working closely with the team to improve the garage working environment at Grand Prix venues through innovative, custom-built heat extraction and cooling solutions which will be introduced later in the 2014 season.

Furthermore, MERCEDES AMG PETRONAS and ebm-papst is working hand-in-hand on future projects to improve the energy efficiency of the team's operational facilities at Brackley, in addition to holding technical working groups to share expertise and best practice in areas such as Computational Fluid Dynamics (CFD), turbine technology and energy efficiency.

By signing with MERCEDES AMG PETRONAS, ebm-papst becomes the first major partner to enter Formula One as a direct consequence of the new efficiency based rules introduced for the 2014 season and beyond.

Winner of the 2013 German Sustainability Award (GSA) in the category "Germany's most sustainable companies" – one of the most prestigious prizes of its kind in Europe – ebm-papst has been recognised for its outstanding achievements in sustainability.

### Team Partner: Pirelli

Pirelli is among the main tyre makers globally and world leader in the Premium segment, with high technological content. Founded in 1872, it has a presence in over 160 countries, with 22 manufacturing facilities on four continents and 38,000 employees.

Pirelli has been involved in motor racing – a proving ground for technical innovation – since 1907, and is currently the exclusive Formula 1® tyre manufacturer for the 2014-2016 championship seasons, as well as equipping World Superbike and many other global series.

For the 2015 season, Pirelli is once more the tyre manufacturer most heavily involved in motorsport. Excluding Formula 1, Pirelli supplies nearly 150 other international championships on road and track, underlining the company's sporting DNA.

Team Supplier: TUMI

Since 1975, TUMI has been creating world-class business and travel essentials, designed to upgrade, uncomplicate, and beautify all aspects of life on the move. Blending flawless functionality with a spirit of ingenuity, we're committed to empowering journeys as a lifelong partner to movers and makers in pursuit of their passions. Designed in America, for Global Citizens everywhere. The brand is sold in over 260 stores from New York to Paris to London and Tokyo, as well as the world's top department and specialty stores and travel retail in more than 75 countries.

# **Team Supplier: TATA Communications**

TATA Communications is proud to be the 'Official Managed Connectivity Supplier' to the MERCEDES AMG PETRONAS Formula One Team. We power MERCEDES AMG PETRONAS with three times faster trackside connectivity, greater bandwidth and lower latency to transfer race data live from every race location to and from the teams' base in the UK, in less than a quarter of a second.

In a sport where every split-second decision is critical, our superior connectivity enables MERCEDES AMG PETRONAS to improve car performance by making crucial race strategy decisions faster than ever before, giving a strong competitive advantage to the team.

TATA Communications is a leading global provider of a new world of communications. We leverage our advanced solutions capabilities and domain expertise across our global network to deliver managed solutions to multi-national enterprises. The TATA Communications global network includes one of the most advanced and largest submarine cable networks, a Tier-1 IP network, with connectivity to more than 200 countries and territories across 400 PoPs, and nearly one million square feet of data centre and collocation space worldwide.

MERCEDES AMG PETRONAS is plugged into this world class TATA Communications global network, which is the only one to have a wholly owned fibre ring across the globe. This superior connectivity is giving the team the speed of communications, the speed of reaction and the Speed To Lead.

# Team Supplier: assos

Based in Ticino "Terra di Ciclismo", Switzerland, ASSOS SA was founded in 1976 with the creation of the first ever Lycra® cycling shorts. Thanks to its continued investments in R&D, the company has developed a number of innovations that have imposed the direction in which the bicycle industry has evolved – most of them are now industry standards: first Lycra® shorts ('76), first carbon bicycle frame ('76), first sublimation on a cycling jersey ('80), first Elastic Interface cycling short insert (2001), Choose your Comfort concept (2003), Project Starbust, the fastest cycling bodysuit on earth (2004), S5 the next cycling shorts generation (2008) are only a few examples. Today, ASSOS proudly provides the Total Cycling Comfort to more than 30 countries around the world: the integrity of the brand is safeguarded by carefully selected distributors who present ASSOS products to their markets with local expertise.

# **Team Supplier: Spies Hecker**

Spies Hecker, one of the global refinish coating brands from Axalta Coating Systems, delivers optimum and practical paint system solutions that make bodyshop work easier and more efficient.

With more than 130 years of success behind it, Spies Hecker always puts customers first. High-quality product systems, superior service and targeted training result in more environmentally compatible vehicle refinishing.

Based in Cologne, Germany, it is one of the world's leading vehicle refinish brands, and is available in over 65 countries worldwide.

# **Team Supplier: Schuberth**

Based in Magdeburg, Germany, helmet manufacturer Schuberth has been developing and producing head protection systems for over 90 years. With a vast range of innovative products, the company is amongst the world's leading manufacturers of helmets for motorcycle,

Formula One and motorsport use, and of innovative head protection for professionals, fire brigade, police and military purposes. Their experience acquired in Formula One continuously provides new ideas for product developments that are the benchmark for head protection systems.