IN POLE POSITION

Focus and Precision at the Highest Level – Twenty-Five Years of Motorsports at Schaeffler



Jörg Walz Helge Gerdes





Focus and Precision at the Highest Level – Twenty-Five Years of Motorsports at Schaeffler +



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MARIA-ELISABETH SCHAEFFLER PARTNER OF THE SCHAEFFLER GROUP

DEAR READERS,

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otorsports is unique in many ways, starting with a history that is virtually as old as the automobile itself.

Team spirit, the talent of individuals, technology, innovative and dynamic capacity, decisiveness, and courage also characterize the discipline and form the backbone of every winning strategy in motorsports. Schaeffler approaches day-to-day business with a similar perspective and has evolved to become one of the world's leading automotive suppliers and specialists in rolling bearings.

Additional factors that make or break success on the track and in business include meticulous preparation, focused teamwork, and the ability to leverage technology as far as possible. Determination and the ability to push the limits of what's feasible while providing the highest level of quality and reliability are equally as important.

Schaeffler has been shaping automotive design with precision products since 1949 and is guided by its mission "together we move the world", which applies in equal measure to relationships with customers and employees of the Group. The world of motorsports also benefits from this philosophy as evidenced by the joint success of Audi, Team Phoenix, an excellent driver, and Schaeffler in the 2011 DTM season.

Although our longstanding affiliation with racing can be traced back over two and a half decades, it is this championship title won by Martin Tomczyk in 2011 in the Schaeffler Audi that represents a particularly special achievement.

Now enjoy the pages and pictures that follow for a chronicle of Schaeffler's involvement in motorsports.



CROWNING ACHIEVEMENT

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SCUSSION

The success is something of a Davidand-Goliath story as Martin Tomczyk pilots the green-and-yellow race car to three surprise wins in ten DTM races. At the final race in Hockenheim, fans celebrate him as ADAC Motor Sportsman of the Year. SCHAEFFLER IN MOTORSPORTS Gallery

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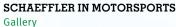
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Schaeffler boldly decides to be the main sponsor of a DTM race car to increase awareness for its products, which are found in almost all forms of transportation. Adding to this are the colors of the Group, which become the year-end favorites.





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They are racers through and through, have focus, and are "geared" toward victory but are still great guys. Audi offers an extremely well-balanced and closely-knit drivers' line-up in 2011.

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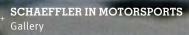
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Promoting young talent is a tradition at Schaeffler. In the 1980s, the Group became a series sponsor of the legendary Formula Ford class. Drivers are acclimated to the rigors of Formula 1 on Formula 3 circuits. This picture shows Michael Bartels in 1989.

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SCHAEFFLER IN MOTORSPORTS Gallery

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> Armin Schwarz discovers his passion for rally sports in the 1980s and works hard to execute the perfect power slide. "Neighboring" Schaeffler supports Schwarz and becomes a long-term partner.

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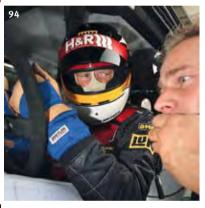
















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Modern cars would not be what they are without Schaeffler, which makes some 60 products for automotive applications. The company, based in Herzogenaurach in Germany, is also a global leader in other sectors.

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Schaeffler is a world-renowned supplier to the automotive industry and a specialist in rolling bearings for over 60 sectors of industry. The product range for automotive applications includes wheel bearings, chassis, steering, and transmission components, and engine components and valve control systems. Schaeffler innovations are helping to prepare the automobiles of today and tomorrow for the challenges of the future. Schaeffler is making a substantial contribution to the successes of modern automotive manufacturing, especially in terms of energy efficiency and therefore in minimizing fuel consumption and emissions.

As well as reducing fuel consumption and emissions, Schaeffler products make an important contribution to increasing safety and driving pleasure. Above all, this involves chassis, steering and transmission components. Innovative spirit and manufacturing expertise ensure that Schaeffler is one of the most important companies in the automobile industry.



- 1 Distinguished: The balancer shaft with rolling bearing supports has been formally recognized numerous times
- 2 Smart design: The lightweight differential takes up less space and lowers the weight of the vehicle
- 3 Core: The eDifferential is an active electronic differential and forms the core component of the ACTIVEDRIVE system



Schaeffler's product range is very comprehensive and includes UniAir, camshaft phasing systems, belt drive systems and overrunning alternator pulleys, lightweight differentials with face spline, dual mass flywheels and lightweight balancer shafts, fundamental components for manual, double-clutch, CVT, and automatic transmissions, twin tandem bearings or wheel bearings with face spline, and components for hybrid vehicles and electric mobility.

Elements and systems from Schaeffler's various brands (LuK, INA, FAG) can be found in the vehicles of almost all manufacturers, whether in Europe, Asia, South or North America. On average, every car worldwide contains around 60 components from Schaeffler.

The challenges facing the automotive sector today require optimizing vehicles with conventional drivetrains as well as hybrid and fully-electric solutions. Schaeffler's concept vehicles CO₂ncept-10%, Schaeffler Hybrid, and ACTIVeDRIVE are testament to the company's diverse approach to modern automobility and provide an insight into Schaeffler's wide product range.

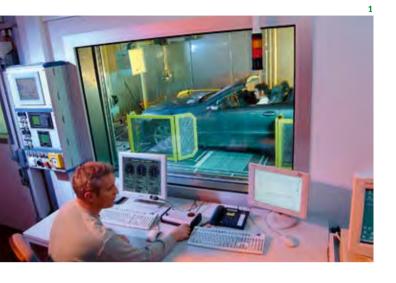
 CO_2 ncept-10% is a vehicle that presents a range of optimization options in vehicles with internal combustion engines that can be implemented in a short space of time. The Schaeffler Hybrid presents various hybrid solutions and compares various operating modes. \rightarrow

- 4 Challenging task: UniAir is the world's first fullyvariable hydraulic valve control system
- 5 Innovative: The thermal management module from Schaeffler
- 6 Established: Double clutches are now popular all around the world



SCHAEFFLER'S THREE CONCEPT CARS REFLECT THE BROAD SPECTRUM OF MODERN AUTOMOBILITY

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ACTIVeDRIVE is a purely electric, or battery electric vehicle (BEV). "Furthermore, all three of these concept cars serve as test platforms for realistic testing of various components and systems", says Professor Peter Gutzmer, Chief Technical Officer at Schaeffler.

The main innovation of Schaeffler's ACTIVeDRIVE, which is based on a Skoda Octavia Scout, is the active electric differential (eDifferential) mounted on the front and rear axle. This component combines an electric drive with the option of controlling the drive power in each wheel individually. This facilitates torque vectoring (distribution of torque between the right and left wheels), which is beneficial for driving dynamics, safety and comfort. "The eDifferential permits intervention in driving dynamics through selective power supply instead of through braking intervention and thus power reduction as is the case with ESP. The active electric differential significantly improves the transmission of force when driving on surfaces with varying frictional values. It also supports the steering system and has a positive effect on driving dynamics, safety, and driving comfort. Using two eDifferentials likewise enables the longitudinal distribution of drive forces", explains Prof. Gutzmer. The ability to actively distribute these forces in the transverse and longitudinal directions makes the eDifferential an ideal platform for innovative control of vehicle dynamics. The solution demonstrated in the ACTIVEeDRIVE makes Schaeffler a pioneer of such electric concepts in one vehicle drive. "Accordingly, the potential range of applications for the eDifferential spans from extremely dynamic sports cars and vehicles in conventional automobile categories right up to agricultural machinery", explains Dr. Tomas Smetana, Head of Advance Development in Transmissions Systems at Schaeffler Automotive.

The eDifferential integrates two water-cooled permanent magnet synchronous motors (PMSM) of different dimensions, a planetary gear, a transmission for active torque distribution and, as a key element, a Schaeffler lightweight differential.

Due to the use of two active electric differentials, the concept vehicle has an overall output of up to 210 kW and

features four-wheel drive. Thanks to its performance and traction capacity, the test vehicle, which weighs 1,900 kilograms, accelerates from 0 to 100 km/h in 8.5 seconds.

The Schaeffler Hybrid is an advance development project – a 'car full of ideas' that facilitates a practical comparison of the various options available in electric mobility. It demonstrates various vehicle configurations and driving conditions. This means the Schaeffler Hybrid not only has a volume-produced internal combustion engine from a basic vehicle, but also a central electric motor and two wheel hub motors.

"Presenting various concepts with informative comparisons as well as realistic testing played a decisive role in the implementation of the Schaeffler Hybrid", says Prof. Gutzmer. The elements can be actuated separately and cover a wide range of driving conditions. These options range from classic operation using an internal combustion engine, operation as a parallel hybrid or serial hybrid to operation using the electric motor only. The internal combustion engine can power the vehicle and be coupled for use as a range extender. An automated manual transmission increases the options available.

The transmission naturally incorporates clutch products specially matched to the requirements of hybrid vehicles from Schaeffler brand LuK. The energy storage facility – a 16 kWh lithium-ion battery (400 V, 400 A) – can be recharged via energy recovery, the range extender, or an external power supply (plug-in hybrid). "Another important aspect of this advance development project are the networked development activities of the Schaeffler brands", says Prof. Gutzmer. Specifically, these are INA, LuK, FAG as well as IDAM and AFT.

The central unit is flange located to the automated manual transmission by means of a toothed chain and drives the front wheels. The unit comprises a liquid-cooled 50 kW and 95 Nm electric motor that was designed and manufactured by Schaeffler subsidiary IDAM. eWheel Drive is the name that has been given to the wheel hub motors also >

- Test laboratory: Prototypes are subjected to testing on a dynamometer before they are released for volume production
- 2 Forward thinking: ACTIVEeDRIVE is an innovative electric vehicle
- 3 Broad spectrum: The Schaeffler Hybrid

- 4 Mature: Detailed solutions à la CO₂ncept-10%
- 5 Fully automatic: The assembly process for rolling bearings
- 6 All ears: Automotive products are optimized with regard to acoustic performance during noise testing





Strong by tradition: Schaeffler not only helps meet the very demanding restrictions of DTM racing, but also realizes innovations that can be applied to volumeproduction vehicles

PROFESSOR PETER GUTZMER

CHIEF TECHNICAL OFFICER AT SCHAEFFLER

"THE SCHAEFFLER HYBRID SERVES AS A CONCEPT CAR THAT VISUALLY UNDERSCORES OUR HOLISTIC APPROACH TO ALTERNATIVE DRIVE SOLUTIONS." developed by Schaeffler. The second-generation motors mounted in the Schaeffler Hybrid have an output of around 70 kW each and torque of around 700 Nm. Schaeffler profits from its profound expertise in the field of wheel bearings and direct drive technology during the design and manufacture of these high-performance components. Accordingly, these wheel hub motors form a compact unit that integrates wheel bearing, drive and brake. The advantage of these drive units is the fact that they can be integrated in an existing vehicle platform for testing without making any major changes to the vehicle architecture. In addition, the eWheel Drive from Schaeffler is already making a convincing case due to its appealing torque development as well as a remarkably low noise level.

"The 'Schaeffler Hybrid' will not go into volume production", says Prof. Gutzmer, "rather it serves as a vehicle of ideas. For example, with the 'CO₂ncept-10%' based on a Porsche Cayenne, we have successfully demonstrated advantages in fuel consumption and emissions by reducing



friction in the drivetrain. With the Schaeffler Hybrid, we want to demonstrate that the Schaeffler Group takes a holistic approach to mobility and that it is giving serious consideration to innovative products for e-mobility solutions."

Along with the components shown in the Schaeffler Hybrid, Schaeffler's range of products tailored to the requirements of hybrid vehicles and electric mobility includes, amongst others, hybrid clutches (as used in high-end hybrid SUVs), electromechanical chassis and steering components, as well as various differentials. These differentials include the space-saving lightweight differential and the eDifferential in the ACTIVEDRIVE.

 CO_2 ncept-10% is a joint advance development project implemented by Porsche and the Schaeffler Group that has achieved a total reduction in fuel consumption and CO_2 emissions of 10 percent by using new and optimized components.

The CO₂ncept-10% is a CO₂ demonstration vehicle based on a Porsche Cayenne with a V8 engine. Various new and optimized components from Schaeffler's product range are used in the drivetrain and chassis to reduce the fuel consumption of the standard vehicle by 10 percent.

"This project is a good example of the successful cooperation between automobile manufacturers and suppliers. Networking in this way reduces development times, prevents costly redundancies, and makes an important contribution to competitiveness", says Prof. Gutzmer. "CO₂ncept-10% is impressive proof of additional potential for optimization in a system close to volume-production standards. However, this is not the end of the line. CO₂ncept-10% is the sum of the individual components. And these are only some of the components that are part of Schaeffler's product range that enable comparable improvements to be made in terms of energy efficiency in other vehicles."

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MOTORSPORTS AS A MIND-SET

Teamwork, inspiration, and ideas: Motorsports is more than a technological competition. An interview with Professor Peter Gutzmer on requirements, team spirit, and motivation. 000

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ARTIN TOMCZYK AND AUDI SPORT TEAM PHOENIX HAVE NOW FAMIL-IARIZED MOTORSPORTS FANS WITH THE SCHAEFFLER NAME.

PROFESSOR PETER GUTZMER The 2011 season was exceptional. When we discussed the possibilities of a color scheme and whether to sponsor an entire vehicle for 2011 at the Geneva Motor Show in March, we had no idea what direction DTM racing would take that year.

WHAT IMPRESSED YOU THE MOST?

The achievements of Martin Tomczyk and his race team. I can imagine that Martin was not very pleased after learning that he would have to drive a "used car", but that did not stop him from devoting all his energy to the task at hand and embracing the opportunity that lay before him. Ernst Moser and Dirk Theimann of Audi Sport Team Phoenix also sensed this opportunity, at which point Ernst said the objective would be to win one race. The team then went on to deliver a performance that was nothing short of spectacular as did Schaeffler employees, who followed the season very closely. Schaeffler has been involved in motorsports for two and a half decades. Race cars bearing the FAG, INA, and LuK logos have won titles and were successful in the Paris–Dakar and other rallies, the DTM, the World Touring Car Championship, the 24-Hour Race at the Nürburgring, the Truck Grand Prix, and the Long Distance Cup. The



- 1 Uncompromising: The solutions that motorsports demands require utmost precision from engineers
- 2 Teamwork as driving force: Everything must be in place at DTM pit stops
- 3 Moment of truth: The final minutes before the race begins
- **4** Total commitment: There is no room for error in the DTM
- 5 We're here: Dr. Geissinger and Professor Gutzmer (right) pay a visit to the DTM in Valencia
- 6 Total focus: Martin Tomczyk concentrates on the race



Schaeffler Audi also showed the level of teamwork that can be exhibited in motorsports. Posters and stickers of "our" DTM race car can be seen in numerous production halls and offices around the world and are respected equally by employees who previously have sided more with the INA, LuK, or FAG brand.

WHAT DO YOU MEAN BY THAT?

In a global company that offers several strong brands, each of which has its own history, it is normal for employees to identify with "their" brand. Our colleagues in Bühl, for example, are close to the LuK brand, while those in Herzogenaurach work for INA. This is changing, however. We are a supplier of components, whereby each brand offers its parts and complements the other brands. The increasing complexity that comes with offering breakthrough systems for engine, transmission, and chassis assemblies has long made it necessary for Schaeffler employees to work hand in hand regardless of the brand, since this is the only way that innovations can be realized. Our eMobility Systems Division is a good example of how such synergy leads to results, which are symbolized by the green-and-yellow DTM car. Racing also has a special appeal in a technology company.

ARE THERE ANY ASPECTS OF MOTORSPORTS THAT CAN SERVE AS INSPIRATION TO SCHAEFFLER ENGINEERS?

Without question. The complexity and speed of motorsports requires targeted solutions. Competition provides a further incentive, and races start on specific dates. Motorsports competitions focus efforts on that which is critical and necessitate feasible solutions that must be implemented by a particular time. Team spirit is also encouraged and is evidenced not only at pit stops. Even the example of Martin going to Phoenix can transfer to everyday business by occasionally considering what can be gained by reorganizing teams. I myself learned a great deal in my motorsports days as a young engineer at Porsche and was able to gain valuable experience through competition, and the motivation that came with Formula 1 racing opened new perspectives.

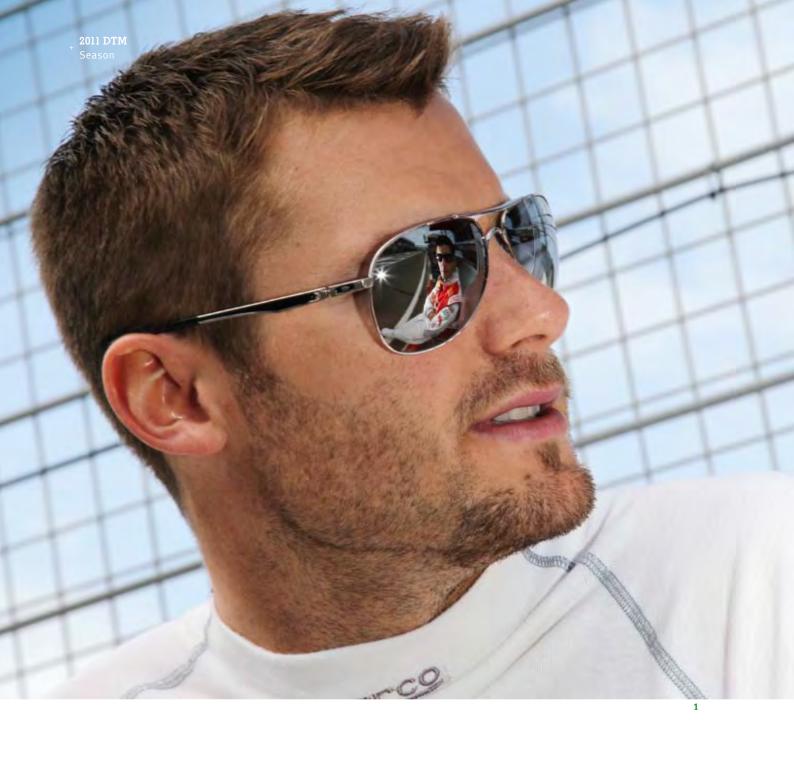
SO WHAT IS NEXT?

We will continue to commit to motorsports, be it professional truck or DTM racing, and search for ways to advance new ideas such as the interesting opportunities offered by electric mobility.



PERFECT ALIGNMENT

Spectators of the 2011 DTM season rub their eyes in amazement as Martin Tomczyk works his way from the second row to win race after race, coming closer to holding the season title. The man from Rosenheim is in his first year commanding a new team. It is also Schaeffler's first year acting as a main sponsor of a car. All parties succeed, and yellow and green become the colors to beat. Eleven races capture the range of emotions from the hunger for success to euphoria.



artin Tomczyk has to go. After having spent ten years with Abt Sportsline, he leaves his roots as an "old hand" to join Phoenix Racing. A professional in every respect, Tomczyk has grown accustomed to winning but also losing. Things get worse as he learns he will be driving the 2008 Audi instead of a 2009 model in light of development restrictions set by the DTM racing committee. Tomczyk can also no longer seek comfort in assisting favored title candidate Mattias Ekström as a loyal colleague and friend. Instead, he is thrusted into the position of team leader and trainer for his young teammate and DTM novice Rahel Frey.

Many DTM stars rose through the ranks with Phoenix Racing and flourished under team leader Ernst Moser, team manager Dirk Theimann, shop manager Jörg Baldes, and technical manager Jürgen Jungklaus, who promoted a professional and demanding, yet familial atmosphere. No other team knows how to better motivate its drivers to achieve top performance by combining the human factor with a reliable approach that takes each individual into account. The desire to succeed is not communicated explicitly but is instilled, and Tomczyk intends to use his apparent demotion to second rank to an advantage.

- "Looking ahead" in the rear-view mirror: Martin Tomczyk gets out to make room for Mike Rockenfeller
- 2 Schaeffler Audi: The distinguished green-and-yellow race car piloted by Martin Tomczyk is christened the "Caipirinha Express"
- 3 Likeable: Timo Scheider represents the Schaeffler colors as does Tomczyk
- 4 Full house: Audi and Mercedes-Benz peak interest by "dueling it out" in 2011
- 5 Decision maker: Dr. Wolfgang Ullrich, head of the Audi motorsports program, assigns Martin Tomczyk to the second row – a wise choice



Schaeffler decides to take a new angle in motorsports sponsoring before the season begins by putting the LuK, FAG, and INA logos on a single car rather than promoting several cars to a lesser extent. A conscious decision is made in Herzogenaurach to go with a "used car" that advertises the company in all modesty but in a way that does not go unnoticed, and green and yellow become the colors of the season. Initially christened the "Caipirinha Express", the almost 500 horsepower DTM prototype is quickly revered as "the Schaeffler Audi". It is not only the car that enjoys wide recognition, however, but also Phoenix, Tomczyk, and Schaeffler, who pull off the coup of the year.





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DTM AT THE HOCKENHEIMRING OPEN END

Classifying race cars with respect to their age is always among the most heated aspects leading up to a season, whereby the base weight is used to level the performance of the 2011 DTM cars from 2009 and 2008. How reliable is this classification, you ask? Manufacturers are traditionally reluctant to be totally honest about their lap times before the season begins because they do not want to give opponents too much information. True performance only becomes more evident at Hockenheim, where initial qualifying takes place over four sessions to establish the starting lineup. The four slowest candidates are first eliminated, followed by six more in the so-called shoot out. In the fourth and final session, only four cars remain, all of which fight for the pole position. Martin Tomczyk is not particularly fond of Hockenheim, which does not connect with him. An ambivalent relationship, then. This year is different, however, as the "Rosenheimer" is able to prove himself right away. Starting in sixth place, Tomczyk gains ground by moving up to position five. A solid step forward with a car that has many laps under its belt. The tone is now set and Tomczyk has no intention of slowing down.

- 1 Model choreography: Pit stops require teamwork
- 2 Highlights at opening race: Ralf Schumacher wins his first place on the podium in a Mercedes, while Timo Scheider takes fourth in the Audi
- 3 Racing for third place: Schumacher, Scheider, and Tomczyk







- 1 Fine tuning: Martin Tomczyk finds the perfect setup in Zandvoort
- 2 Rosy outlook: Tomczyk is one point ahead of his ex-teammates Mattias Ekström and Timo Scheider after just two races

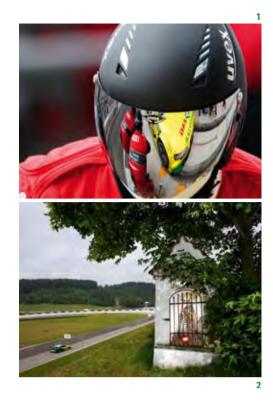
DTM IN ZANDVOORT PURE ENJOYMENT

Many things change for Martin Tomczyk in 2011, including a new team, a car used in the previous season, and a new race engineer. The 29-year-old immediately takes to Jürgen Jungklaus, who sees to technical matters and gradually fine-tunes handling to find the almost ideal setup for race trim. Working under these conditions is a joy. In Zandvoort, Tomczyk experiences a race that could not go better: Starting in fourth place, he executes a flawless strategy with perfectly timed pit stops, two of which are mandated. Tomczyk is also recognized as performing the best passing maneuver on the Dutch North Sea coast. Holding off competitors three times in the famous Tarzanbocht, the first corner after the start and finish line, he finally makes his move to pass Jamie Green, who becomes a season-long rival. "The car handled brilliantly throughout the race", comments Tomczyk. "Performance was consistent at the beginning or end of a stint and with a full or empty tank. Simply perfect." Tomczyk does find the lack of feedback from the pit a bit unusual, however, since his previous race engineer Dave Benbow always gave him updates on how the race was progressing. Not so with Jürgen Jungklaus. "Every now and then I would radio in to see if he was still there", chuckles Tomczyk after the race. Jungklaus looks at the data and responds in a direct but reassuring manner: "Martin, what do you want to know? Just do what you have been doing all along. There's nothing I need to say." The result speaks for itself: third place and the first podium spot of the season.

DTM IN SPIELBERG VICTORY IN AUSTRIA

Phoenix Racing has a long list of wins, including legendary victories at the Total 24 Hours of Spa and the 24-Hour Race at the Nürburgring. As the team unloads its trucks at the re-opened Spielberg circuit and prepares for the upcoming race, however, it becomes all too clear that its last triumph in the DTM was ten years ago. Back then, Manuel Reuter won on home turf at the Nürburgring driving an Opel Astra V8 coupe. The car started to collect dust in Rüsselsheim while Reuter moved on to become a DTM commentator for German television, but the will to succeed remained strong. Timo Scheider almost won the race in Zandvoort in 2003, with Oliver Jarvis close to victory in 2009.

Things may be picking up speed in 2011, as the chances of winning a race are as good as ever. Built on a hillside, the Spielberg circuit is perfect for the 25 kilogram lighter race car. The incline between the start/finish line and the second corner, or Remus corner, is almost 70 meters, for example. The 2008 A4 is also slightly more aerodynamic than more recent versions, making the car especially fast on the long straight sections. All that is needed are a race engineer and a driver to make it happen. Jürgen Jungklaus and Martin Tomczyk are a winning combination. Practice training in the dry or qualifying in the wet? The green-and-yellow Schaeffler A4 dominates. For the first time since 2000, Phoenix will again be successful in a DTM race by executing a simple, yet effective strategy. For Tomczyk, this will be his first win since 2009. No signs of weakness surface at any time between Friday and Sunday.



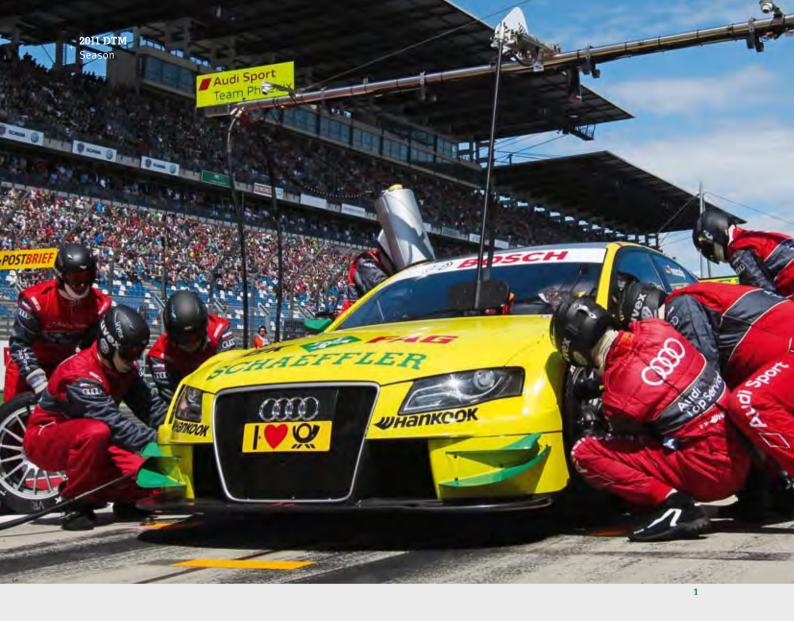


TIMO SCHEIDER ON THE RACE IN SPIELBERG

"EVERYTHING MUST 'CLICK' TO BE ON TOP OF YOUR GAME IN THE DTM. UNFORTUNATELY, I DIDN'T HAVE SUCH LUCK IN SPIELBERG. THINGS WENT MUCH BETTER FOR MARTIN, HOWEVER, WHO DID A FANTASTIC JOB."

- 1 On the ball: Phoenix makes no mistakes in Austria
- 2 Premiere: The win in Spielberg marks the first victory for the Schaeffler Audi in the 2011 season
- 3 Look where I am: Martin Tomczyk is close to topping the table after Spielberg



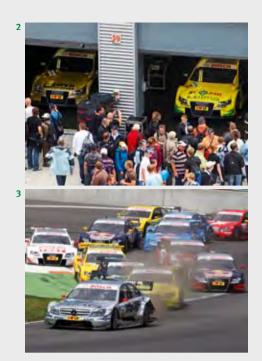


DTM AT THE LAUSITZRING YECKEDIYECKEDI YEAH!

Those who meet race engineer Jürgen Jungklaus see him as a calm, balanced individual who lives motorsports by giving his all for Phoenix and perfecting his own technique at home with highly advanced remote-control cars. Jungklaus loves to laugh although he continually leads one to believe that he is also going over the latest data in his head. This was clearly not the case at Spielberg, where Jungklaus surprised Tomczyk by yelling "yabba dabba do!" into the microphone as he sped across the finish line to claim the team's first win of the season. Rare moments such as this quickly become not so rare. Fast forward to the Lausitzring, where "yabba dabba do!" becomes a "yeckediyeckedi yeah!" in response to a further victory that is even more impressive than the one in Spielberg. And Jungklaus played a significant role in this victory. Starting from fourth place, Martin Tomczyk quickly blows past Audi colleague Mattias Ekström and again makes quick work of Jamie Green by passing him in turn 1 of the first stint. Jungklaus takes care of the rest by asking Tomczyk to make his first stop two laps after leading driver Bruno Spengler pulls in. The table-topper soon becomes history, and Timo Scheider makes his move by applying an aggressive strategy to finish second, ahead of Spengler, after having started eight cars behind the pole position.



- 1 Perfect timing: Martin Tomczyk rises to the top of the table thanks to well-coordinated pit stops
- 2 Bring on the music: Martin Tomczyk and the Schaeffler Audi are loved by spectators
- 3 One down and two to go: Martin Tomczyk passes Mattias Ekström at the start, then pulls off a spectacular takeover of Jamie Green and manages to get away from Bruno Spengler in the pit lane
- 4 Hard at work: Starting from fourth place,
 Tomczyk maneuvers
 through the pack and wins at the Lausitzring





DTM AT THE NORISRING RISING FROM THE ASHES WITH PHOENIX

Audi has something of a problem with the Norisring. Although the company has been involved in DTM racing since starting with an A4 in 2004, it has yet to win here. The last success with the four rings of the Audi logo dates back to 2002, when Laurent Aiello and his private Abt Audi TT-R won by a hair in the last corner. None of this would be anything to worry about if the Norisring were not a hop, skip, and a jump away from the company based in Ingolstadt. It doesn't get any more local. Which is not to say that the ten-time winner at Le Mans has rested on its laurels or tried nothing to break the winning streak of Mercedes-Benz. Audi even built its own replica of the circuit at the Cochstedt airport grounds to better prepare for the challenge while Mercedes continues to profit from tradition - the deciding factor on the bumpy city streets of Nuremberg. Making things worse is the fact that Ingolstadt's best hope and table-topper Martin Tomczyk also has an issue with the Norisring. Simply put, Tomczyk and the Norisring do not mix. It does not come as a surprise, then, when he finds himself starting from tenth place. Hope is not lost, though, and on Sunday, an interesting development takes place in the form of a torrential downpour. Can the tables turn? Will Tomczyk catch others off guard? True to form, he demonstrates that which will become his claim to fame as the season progresses: the drive to win. With the rain showing no signs of letting up, Tomczyk gradually gains ground. A late first stop and one shortly thereafter help him secure a tentative third place, at which time the event is interrupted and the safety car comes out. An overall score is taken, however. Bruno Sprengler wins, followed by Mercedes teammate Jamie Green, and Audi's top driver no longer leads the season. Third place is not bad either and the setback is hardly critical at race number five.



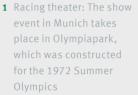


- No room to breathe: Every inch counts at the Norisring
- 2 Hitting the mark: Schaeffler racer Timo Scheider comes in fourth

DTM SHOW EVENT IN MUNICH SITES TO SEE

2011 is a year of transition in the DTM. The last showdown of brands before BMW returns in 2012 with its M3. DTM at its finest. The best thing that can become of a series. The first taste of the upcoming new era is a show event in Munich, where BMW presents its future DTM car. No points are awarded but speed is in the air as a "Race of Champions" attitude provides the driving force behind a heated knock-out duel. The track is not far from BMW headquarters, in one of Germany's largest structures built during the 20th century – the Olympic Stadium. No shortage of attendance is experienced during the two-day event, when fans pour into Olympiapark to mingle with their DTM heroes. A show to behold and one that can make or break a team's chances of seizing the championship, although nothing tangible is won. Martin Tomczyk decides to adopt a conservative approach, and the Schaeffler Audi stands down to Christian Vietoris and his Mercedes in the quarter final. A knock out that isn't.





- 2 Quality time: Martin Tomczyk enjoys talking to his fans
- 3 Over and done with: Timo Scheider is knocked out right at the beginning





DTM AT THE NÜRBURGRING HOME, **"SWEDE" HOME**

Contesting a race on home turf is always something to look forward to. Friends, family, and business partners are in the crowd, and the short trip to the track raises one's spirits still further. Events such as these are fondly remembered by drivers and their teams. For Phoenix, the home race at the Nürburgring holds particularly special significance and could not be any closer. Located in the commercial area of Meuspath, the company is headquartered only a stone's throw from the famous Nordschleife of the Nürburgring and is a hive of activity as Ernst Moser's team prepares the two Audi A4s for Martin Tomczyk and Rahel Frey. The team gets special permission to drive its race cars – albeit at walking speed and with warning lights – on the main road to the paddock, a distance of only three kilometers. This weekend will not belong to









- 1 Total concentration: Martin Tomczyk before qualifying
- 2 Looking ahead: Audi Motorsport Director Dr. Wolfgang Ullrich believes Martin Tomczyk can win the title
- 3 Fighting spirit: Tomczyk remains a strong candidate with his seven-point deficit
- 4 Dark clouds: The weather "spices up" qualifying
- 5 Unwavering: Timo Scheider secures fourth place after a duel with Tomczyk

Martin Tomczyk, however, but to his Swedish friend Mattias Ekström, who became DTM champion with Schaeffler in 2007 and proves to be in a class of his own during qualifying. The race on Sunday also inspires Ekström, who leads the entire time and turns the field into a cut-throat competition for the remaining points. Martin Tomczyk enjoys an impressive start from seventh place but contacts Jamie Green in the first corner. The front end is damaged, compromising aerodynamics and forcing Tomczyk to compensate with the tires. Teamwork is now more important than ever. At the first pit stop, the Phoenix crew rushes into action and gives a model performance. The front end is mended, the tank refilled, and the tires changed – all in record time. The stop is well worth it and Tomczyk becomes the fifth fastest racer that afternoon.



- 1 Dry run: Team Phoenix changes tires in the sun. The race is dominated
- 2 Turning the tables: Martin Tomczyk impresses again at Brands Hatch
- 3 Elated: Tomczyk wins his third race in 2011 at the "Indy" circuit
- 4 Balancing on a knife's edge: Eighty-eight laps are completed on the shortest track of the season. Tomczyk takes the lead on the tenth

DTM AT BRANDS HATCH THREE, TWO, ONE ... WIN!

Making the right decision is never easy when it comes to the weather. Audi has had great success in choosing the setup and tires required at just the right time. More than one Le Mans victory can be attributed to this phenomenon, which has led to captivating stories of underdog teams that were brave enough to beat the competition by going against the grain. Embarrassing defeats that could have been avoided are also part of Audi's repertoire. Nothing new in the DTM. At Brands Hatch, the moment of truth occurs shortly after one o'clock in the afternoon, when the right decision is critical. Pouring rain floods the "Indy" circuit, the extremely short 2-kilometer stretch that resembles the famed racetrack. The question is will it keep raining or will conditions improve in the final two hours? Audi decides to go with a pure rain setup, while opponent Mercedes-Benz adopts a mixed approach that works on a wet or dry surface. This time around, Audi makes the right move but must be daring yet careful to win. The result is nothing short of success.



Martin Tomczyk starts in third position, behind Mike Rockenfeller and Gary Paffett, sharing the second row with Jamie Green. Meanwhile Bruno Spengler is back in seventh and has secured a fair number of points in the season. A good opportunity, then, to keep the Mercedes driver from Canada at bay. This, of course, is not good enough for Martin Tomczyk, who takes matters into his own hands by climbing his way to the top in the first ten of 88 laps as the Mercedes team makes the best of its setup but continues to lose ground. Edoardo Mortara is also enjoying the day. A rising rookie with Team Rosberg, he, too, is quickly becoming a force to be reckoned with. The Formula 3 Euro Series champion comes in third behind Mattias Ekström in the seventh round to secure his first place on the podium. A rising star for 2012, much like 29-year-old Tomczyk, who in 2011 seizes more opportunities to collect points than any other driver. He never came in under fifth place and managed to win three races – a performance that only friend Mattias Ekström can rival with a strong second half of the season. Two champions in the making.



DTM IN OSCHERSLEBEN ONE-LAP WONDER

Oschersleben is Audi territory. The angular, tight course with 14 corners spread out over 3,696 meters is slightly better suited to the A4 DTM than the C-Class. The chances of winning are 4 to 3 or 5 to 2 with respect to the pole positions. Table-topper Tomczyk and his Audi also enter the Magdeburger Börde region carrying a single point more than Bruno Sprengler in the Mercedes. The task: To extend the lead as far as possible without taking too many risks. Qualifying Saturday turns out very differently, however. Regarded as the "one-lap wonder", Tomczyk has displayed courage and the ability to instigate chaos during a qualifying round. This is not the case today, when the new setup initially becomes more of a hindrance than a help. Tomczyk can only manage fifthteenth place and starts at position 14 on the grid because Ralf Schumacher is moved back in his Mercedes. This is not good news because a good start is critical at this of all racetracks. Is it all downhill from here? Possibly, if it weren't for the weather and the "one-lap wonder". In the rain, Tomczyk takes a leap of faith, drives at the limit, even passing opponents on the outside, and moves forward by eight positions in the first lap and one more in the second. By lap ten, Tomczyk is already in third position, right behind his direct competitor for the championship title, Bruno Spengler, who started from second position. Spengler makes an unplanned stop two thirds into the race and is forced to quit later on. His position is now up for grabs as Mattias Ekström leads the pack by a wide margin. Next up: showdown in Valencia.







MARTIN TOMCZYK

ON THE RACE IN OSCHERSLEBEN

"FOR ME, THE STORY OF THE DAY WAS CLEARLY THE FIRST LAP. CLIMBING EIGHT POSITIONS TO FINISH SECOND IS ANYTHING BUT EASY."



- 1 So close: Martin Tomczyk narrows the gap for the race in Valencia
- 2 Looking back: Qualifying proves disastrous for Tomczyk
- 3 Mind over matter: Abt technical specialist Albert Deuring and others use new processes to improve results
- 4 Back in the pack: Schaeffler driver Timo Scheider exhibits modest performance
- 5 In the corners: Martin Tomczyk discusses strategy with race engineer Jürgen Jungklaus



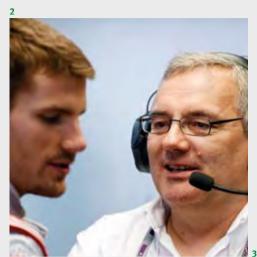


DTM IN VALENCIA TRUE WONDERS

Sunday. It's almost 8 am, and a biting cold prevails in Georgia, USA. Executives from Audi Sport and Team Joest, who suffered a bitter loss against archrival Peugeot the day before during the legendary "Petit Le Mans" at Road Atlanta, have gathered to follow the DTM race in Valencia via a live Internet stream. The only way to get in on the action. Audi Motorsport Director Dr. Wolfgang Ullrich and his employees "race into position" behind the monitor tuned to German television. Although Martin Tomczyk will be starting from position ten, the good news is that title favorite Bruno Spengler is two cars behind and there are only three



Mercedes in front, two of which are under a steward's inquiry. All Tomczyk needs is two points more than Spengler to take the overall lead. This is a day for bold moves, even if everything goes by quickly. It's lap one and Tomczyk manages to pass four cars while Spengler continues to stay behind. Tomczyk keeps on going and eventually secures third. Spengler also makes progress but cannot move past ninth. The rest is routine and "slightly boring", Tomczyk later recalls. What's worse is the seemingly endless number of times one has to brake, accelerate, and shift to complete the race distance. The last stint alone lasted 15 laps - a mental challenge. Tomczyk crosses the finish line in third place and wins the title in a "used car" - a DTM first. Meanwhile Audi Director "Dr. U.", as he is known, finds himself overwhelmed with emotion some 7,200 kilometers away. It is, after all, a wonder and a wonderful thing.



- 1 THE moment: Martin Tomczyk crosses the finish line as the new champion
- 2 Martin Tomczyk and race engineer Jürgen Jungklaus
- 3 Ecstatic I: High fives at the Parc Fermé
- 4 Pure routine: Pit stop during the race
- 5 Ecstatic II: Team Phoenix and the surprise champion
- 6 Less than ideal: Tomczyk is forced to start from tenth position after the qualifying round



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- Champion maker: The pit crew of Audi Sport Team Phoenix, which also celebrates coming in third as a team
- 2 New role: Martin Tomczyk signs autographs as the champion of the 2011 DTM season
- **3** Twilight: The Audi A4 era closes its final chapter in the 2011 DTM as Audi prepares to race its A5
- 4 Two in and one to go: BMW has committed to the 2012 DTM and marks the third manufacturer in the series. Hockenheim, then, stages the last duel between Audi and Mercedes





DTM FINALE AT THE HOCKENHEIMRING A MATTER OF PRIDE

The atmosphere at the final race of the season is always something special and is particularly pronounced at the Hockenheimring in 2011. Team Phoenix, which has risen back to glory, is celebrated everywhere as an entire paddock takes to the likeable troop from Meuspath at the Nürburgring. A big "No. 1" in the pit, on the new winning car, and on stickers and posters symbolizes triumph before the race even begins. As the Schaeffler Audi enters its starting position, team mechanics are called into action and prepare the car wearing green and yellow wigs. Will the champion and champion maker take it easy this time around? Hardly, since winning again, in Hockenheim, is a matter of pride and giving something up without a fight is not part of a racer's DNA. The name of the game today? To put the icing on the cake of course! Mattias Ekström has won three of the past four races and taken second place, and there is something of a hype about the Swede. "What would have happened if he had not had such a bad first half of the season, and what could be made of Martin Tomczyk if he did not have to drive so skillfully for the title?". mumble others in the Phoenix pit. A "wewanna-see-what-happens" attitude characterized the last race. Tomczyk, once again, didn't let fans down. Today he starts from third position, behind Miguel Molina in the 2008 Audi and Jamie Green in the 2009 Mercedes. Molina has a good start, but it is not enough to hold off Green and Tomczyk, who do even better and take the lead. A routine race unfolds, whereby the first three positions remain "set in stone" all the way through to the end. Tomczyk takes second and finishes a great season in style.

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David beats eight Goliaths in a previousseason race car that bucks the establishment in the DTM. Martin Tomczyk is indeed quite a guy and the most likeable champion the series has ever had. Chummy, witty, composed – an interview with the DTM star of 2011.

AN YOU STILL REMEMBER THE MOMENT WHEN YOU REALLY INTERNALIZED THE FEELING OF BEING A CHAMPION? HOW DID YOU EXPERIENCE THIS FEELING?

MARTIN TOMCZYK *It did actually take a while for things to sink in, and I experienced the feeling alone. You wake up in the morning, open your eyes, and think, "Man, I'm a DTM champion". That is something very special.*

HOW WAS IT BEING CONGRATULATED ON YOUR TITLE?

It was great seeing that my colleagues were truly happy with and for me, and I have yet to cross paths with anyone in the paddock who feels otherwise. Celebrating with family members was definitely the most emotional part.

WHEN YOU THINK BACK TO YOUR FIRST MEE-TING WITH ERNST MOSER, YOUR NEW TEAM LEA-DER FOR THE 2011 SEASON, WHAT OBJECTIVES DO YOU RECALL TALKING ABOUT?

For me one thing was clear: I wanted to be the best driver in a previous-season car. It was in this mind-set that I promised Ernst a win. We were on the same wavelength and had the same objectives from the outset. Winning a race certainly did not fall on deaf ears, and making good on my promise so early in the season was a real treat.

 Interview: Martin Tomczyk talks with author Jörg Walz

2 No. 1 supporter: Fiancée Christina Surer



PHOENIX WAS AN ALL-NEW TEAM FOR YOU AF-TER HAVING SPENT TEN YEARS WITH ABT SPORTS-LINE. WHAT HAVE YOU COME TO APPRECIATE?

The first thing that comes to mind is that Ernst Moser thinks like a racer. He also genuinely values his employees and is very approachable as a boss. It goes without saying, then, that he is a dedicated member of the team, an attitude that has a very positive effect on morale.

THE FIRST THREE RACES ALONE SAW PLENTY OF IMPROVEMENT. YOU STARTED BY TAKING FIFTH PLACE, WHICH WAS FOLLOWED BY YOUR FIRST PO-DIUM POSITION AND THEN A WIN. SELDOM DOES A SEASON PROGRESS SO FAVORABLY FOR ANYO-NE, BUT WHEN IT DOES, AT WHAT POINT IS A RACE CAR DRIVER INCLINED TO THINK THAT THIS YEAR COULD LEAD TO A TITLE?

It was only after the seventh race and the win at Brands Hatch that I entertained that thought, which was when I accumulated the seven points I needed to pose a serious threat to Bruno Spengler. Up to this point I didn't think very far out and was concerned entirely with the race at hand. This changed in the last third of the season, when timing was of the essence and I began focusing more on my opponent Bruno Spengler and taking more interest in the table.

SCHAEFFLER STARTED THE YEAR WITH A VERY SERIOUS COMMITMENT AND AN ABUNDANCE OF ENTHUSIASM. HOW DID THAT AFFECT YOU?

I paid my first visit to Schaeffler prior to the race at the Norisring and it was incredible to see how "infected" everyone was by motorsports. They were all very proud knowing that their car was in the limelight. As we made our way through various departments, we passed one poster after another. I also did an autograph session and could hardly take a breath! When a company stands so strongly behind a project in such a short time frame, racers like myself also become "infected". It's simply great having a global corporation with you every step of the way.

YOUR BROTHER TOBIAS AND YOUR FIAN-CÉE CHRISTINA SURER ARE ALWAYS SEEN AT THE TRACK, AND YOUR FATHER, ADAC SPORT PRESIDENT

HERMANN TOMCZYK, HAS BEEN KNOWN TO HAND OVER A TROPHY OR TWO. HOW IMPORTANT IS FA-MILY IN THIS REGARD?

Very. I am of course well aware that my family hangs on the edge of their seats. After all, we are motorsports fans, and it's fun to share the lifestyle and openly discuss anything on our minds.

WHAT DID YOU REALLY THINK WHEN AUDI MO-TORSPORT DIRECTOR DR. WOLFGANG ULLRICH BROKE THE NEWS THAT YOU WOULD HAVE TO DRIVE A "USED CAR" FOR 2011 AND, ON TOP OF THIS, LEA-VE ABT SPORTSLINE?

I was speechless and had no idea this was coming and I admit that at first it was hard to accept. After one or two days, however, I accepted matters and started to make the best out of my new situation.







MARTIN TOMCZYK ON OBJECTIVES TO PURSUE IN THE 2011 DTM SEASON

"FOR ME ONE THING WAS CLEAR: I WANTED TO BE THE BEST DRIVER IN A PREVIOUS-SEASON CAR. IT WAS IN THIS MIND-SET THAT I PROMISED ERNST A WIN, AND IT TURNED OUT WE WERE ON THE SAME WAVELENGTH FROM THE OUTSET." WHEN YOU WON THE TITLE, DR. ULLRICH WAS OVERSEAS AT ANOTHER RACE. WHAT WENT THROUGH YOUR HEAD WHEN HE CONGRATULATED YOU ON THE PHONE AS YOU WERE LIVE ON TELEVISION?

The live feed took place as soon as the race ended and it was sad that he couldn't celebrate with us. It was clear, however, that he was very happy for me, and I believe that he also didn't think we would come so far this season. It was wonderful receiving his recognition as confirmation of the hard work.

CAN YOU EXPLAIN WHY YOU IMMEDIATELY HIT IT OFF WITH ENGINEER JÜR-GEN JUNGKLAUS?

Jürgen has been in the business for a long time and is very experienced as well as laid back.

DID YOU KNOW THAT ...

... on April 22nd, 2001, Martin Tomczyk became the youngest racer to make his debut in the DTM? At the season opener in Hockenheim, he piloted an Abt Audi TT-R for the privately financed Abt Sportsline team in his first touring car race ever.

... after having been a member of Audi Sport Team Abt Sportsline for a decade, Tomczyk switched to Audi Sport Team Phoenix and drove a previous-season race car all in 2011?

... Tomczyk loves technology and is the first person his friends go to when they have questions about laptops, cell phones, and flat-screen TVs?

... at 1.88 meters, Tomczyk was the tallest driver in the 2011 DTM?

... he completed an apprenticeship as an office administrator but secretly always wanted to become a teacher?

... Tomczyk lives with his fiancée Christina Surer near Basel?

... it wasn't too long ago that Tomczyk could be seen walking down the runway with supermodels such as Karen Mulder?

... Tomczyk loves to cook in his spare time and has been known to buy women's magazines to try out new recipes?



Having an engineer who is able to keep his calm has always been important to me. Jürgen also makes this very clear, since he is no longer the daredevil of his youth and that is a good thing in his position. I personally feel that the ability to stay on top of things without getting too excited is of particular importance in a racing series, when the difference between winning and losing is measured in millimeters and hundredths of a second.

CAN YOU LIST THREE REASONS WHY YOU HAVE KEPT BOTH FEET ON THE GROUND DESPITE HAVING WON THE DTM TITLE?

I'll start by saying I have a great family that raised me well in that respect. Second, there is no reason to think too highly of myself, since I of all people know how difficult it is to be successful in the DTM. And last but not least, I'm not that kind of guy. "I am who I am".

A man of pleasure: Martin Tomczyk can't resist a good cup of coffee



MARTIN TOMCZYK BIO

BORN ON December 7th, 1981 PLACE OF BIRTH Rosenheim (D) RESIDENCE Aesch near Basel (CH) MARITAL STATUS Engaged HEIGHT 1.88 meters WEIGHT 75 kilograms PROFESSION Race car driver HOBBIES Swimming, skiing WEBSITE www.tomczyk.com

WINS, WORDS, WAYS OF LIFE

Twenty-five years before Martin Tomczyk wins the DTM, Kurt Thiim – "powered by Schaeffler" – secures the championship. Everything now comes full circle, not only for the Group.

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- 1986 champion: Kurt Thiim, who is sponsored by Schaeffler brand LuK
- 2 Power slide: atn lines up with its Rover Vitesse
- 3 Team leader and driver: Frieder Nickel from Aachen (left) and Kurt Thiim from Denmark
- 4 Epochal: Airfield raceways were common back in the day

The differences between the eras could not be more pronounced, yet there are many parallels. Take, for example, the fact that both drivers started the season as underdogs, or that the championship was decided only one race before the last. The DTM also remains very competitive. In 1986, Kurt Thiim wins in his first year driving for Frieder Nickel's atn team from Aachen and is supported by Schaeffler Group brand LuK. In 2011, 25 years later, Martin Tomczyk is the winner of the DTM and is king of hearts – in the green-and-yellow Schaeffler Audi. There is one more thing that both racers have in common: their champion maker.

Jürgen Jungklaus, who in 2011 did his part as racing engineer to help Martin Tomczyk take the field by surprise, financed his studies by working as chief mechanic for atn. "In reality, I did more wrenching than anything else." It is in Aachen that Jungklaus preps the Rover

Vitesse for Dane Kurt Thiim, who on the weekend pilots the car in the still young DTM and is also assisted by a second mechanic and the team manager. Jungklaus also manages to attend lectures at the Cologne University of Applied Sciences and later receives his diploma in vehicle systems and technology.

"Back then, the only teams out there were privately funded and the DTM was a lot less well organized than today, although for 1986 standards this was quite professional", remembers Jungklaus. "The paddock had more of a family atmosphere and on the track it was cut-throat competition. There was no shortage of help when someone had a problem with tools and spare parts, however. Eventually the weekend was over and we all looked forward to seeing each other on the track again soon." atn used a converted bus that towed the race car to wherever the next weekend event was being held. At midday, the team leader went to the food stand to get hot dogs for everyone, a real treat for the head mechanic and assistant. "The concept of hospitality didn't exist back then", comments Jungklaus. "In the evening, everyone gathered at the local restaurant for a schnitzel."

It's still 1986 and the Ford Sierra XR4Ti is this year's favorite. The car is not the most reliable, however, primarily because of the engine electronics. The Ford is by no means the only vehicle with technical problems, since main competitor Volker Weidler has had to deal with a faulty transmission in his "Baby Benz". atn, on the other hand, has considerably more luck, as colleagues frequently determine only after a race that their car was driving with a defect the entire time. "We put our tools in the pit and rolled the cars in whenever a pit area was available. Many races were held on runways, though, and tents were all that was available", recalls Jungklaus. "The setup was also simpler as well. Sure, a spring was changed now and then, but overall, we wouldn't experiment with the proven settings selected in the workshop at home."

In the penultimate race, Kurt Thiim and his atn Rover Vitesse have all but won the series. Weidler, the last remaining opponent, would have to give the performance of the >



JÜRGEN JUNGKLAUS CHAMPION MAKER IN 1986 AND 2011

"THE PADDOCK HAD MORE OF A FAMILY ATMOSPHERE AND ON THE TRACK IT WAS CUT-THROAT COMPETITION. THERE WAS NO SHORTAGE OF HELP WHEN SOMEONE HAD A PROBLEM, HOWEVER."





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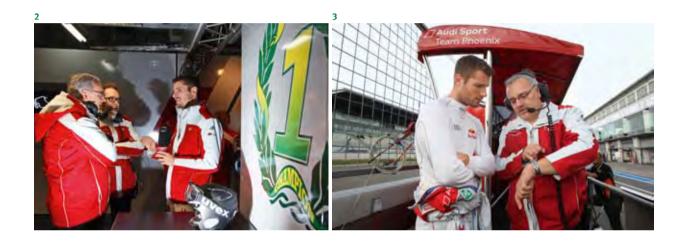
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1 Unreliable: The LuKsponsored Ford Sierra XR4Ti is quick but suffers from faulty engine electronics and is frequently seen in the pit

- 2 Today's winning combination: Race engineers Jürgen Jungklaus and Laurent Fedacou with Martin Tomczyk
- 3 Perfect team: Martin Tomczyk and Jürgen Jungklaus instantly hit it off



century while Thiim's car would have to have total mechanical failure to enable Weidler to grab the title. Fortunately, this scenario remains just that – a scenario – and Thiim becomes that year's DTM champion. "That was definitely a great moment and perfect timing, since this was when manufacturers started sponsoring teams", says Jungklaus. "The following year Alfa Romeo partnered with us. For a three-man team, this was comparable to winning the lottery!"

Fast forward to 2011. Jürgen Jungklaus celebrates another title together with Martin Tomczyk. The chemistry between the race engineer and driver could not be better. "We were on the same wavelength. Martin developed a solid battle plan that we implemented as a team", comments Jungklaus on the 2011 title. "For us, it was clear that we were dealing with a driver whose realistic objectives allowed him to transform our work into results on the track. Martin also noticed that his input was taken very seriously. For example, in 2011, we installed a mirror for the first time so that Martin could see what was going on as we changed tires. That was his idea, and it allowed us to improve our pit stop routine overall."

As was the case with atn in 1986, Phoenix Racing is the underdog in the 2011 championship. No one seriously considers Phoenix as a worthy top contender before the season, and even as the team's performance starts to open eyes, the skepticism remains high. "I could best compare the situation to a small boy who sees a large present under the Christmas tree but doesn't believe it's for him", describes Jungklaus, who has no interest in considering the impossible until the season is almost over. "It was only after the race in Oschersleben, when we were heading to Valencia with a nine-point lead and two races left, that I thought we had a serious chance of taking the championship." Jungklaus & Co. then went on to do nothing less and made history in the process. Twenty-five years later, everything comes full circle. +

SCHAEFFLER TO THE POINT

Technicians ask questions, a racer answers. A different type of interview with Timo Scheider and Schaeffler employees on racing, personality, and risk.

There a secret that you could share with those who are not in motorsports but also find it necessary to be patient during day-today work?

TIMO SCHEIDER You mentioned the word patience, which is key. That and believing in yourself. And on days when things aren't going so well, it is important to keep in mind that a turn-around will come and the situation will improve. I also know the feeling of not wanting to continue. This is the moment that separates the men from the boys. Those who are strong carry on, while the rest simply give up. Perseverance and self-belief are the best tools you can have and they can move mountains.

AT SCHAEFFLER, WE ARE ALSO INVOLVED WITH STRENGTH BY DESIGN, OR THE DURABILITY OF COM-PONENTS. HOW DOES THIS TRANSLATE TO RACING, SUCH AS A 24-HOUR RACE? TO WHAT EXTENT ARE THE LIMITS APPROACHED?

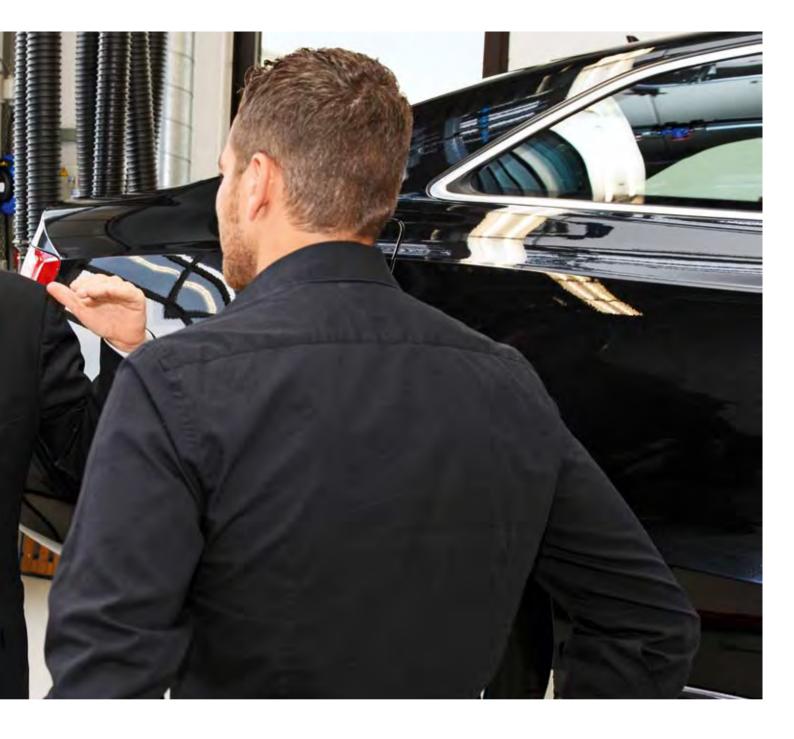
You have to make a distinction between sprint and endurance racing. During a 24-hour race, the name of the game used to be minimizing the number of technical problems over a long distance. Today, these competitions have evolved into genuine sprints, especially at the start. It goes without saying that drivers demand absolutely everything from their machines. The longer the race lasts, however, the more the focus turns to taking care of the mechanicals, such as when accelerating out of the pits or during braking. An interesting note in this context is that the Audi R8 LMS, which we used to win the Total 24 Hours of Spa, consciously incorporates many production parts. Nowadays, the quality is so good in some areas that these parts can simply be transferred to a racing application.

A LOT OF STANDARDIZED PARTS CAN BE FOUND IN DTM CARS. WOULDN'T IT BE MORE INTERESTING



IF THE RACING COMMITTEE RELAXED ITS STRICT HARDWARE RESTRICTIONS FOR THE DRIVETRAIN, FOR EXAMPLE, SO THAT THE QUATTRO SYSTEM COULD BE USED AGAIN?

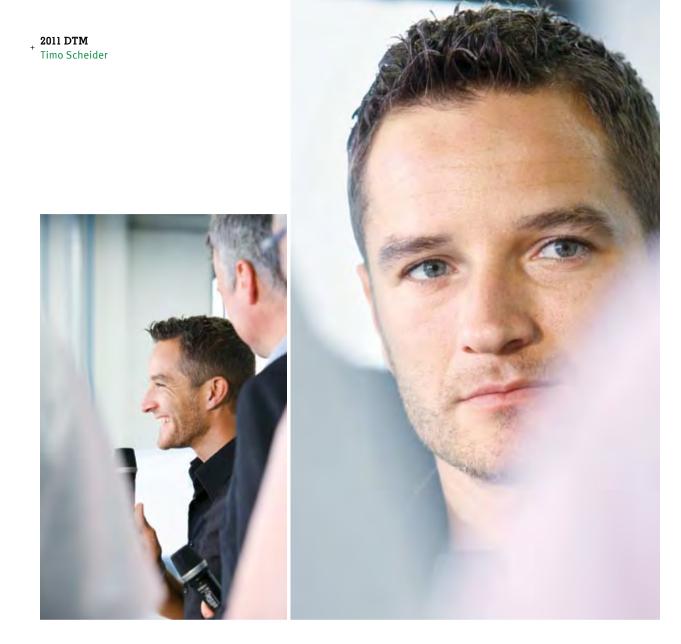
I would love to have an all-wheel-drive system in the rain, that's for sure. At the same time, however, you can't overlook the fact that standardizing many parts has been very effective at reducing costs. It is important that the DTM remains affordable for manufacturers without sacrificing the spirit of racing and, yes, OEMs could get a lot more out of their cars if they were allowed to.



LOTUS FOUNDER COLIN CHAPMAN ONCE SAID SOMETHING MEMORABLE ABOUT MOTORSPORTS, WHEREBY THE BEST RACE CAR LITERALLY COMES APART AS SOON AS IT CROSSES THE FINISH LINE. THE GIST OF HIS COMMENT IS THAT NO COMPONENT NEEDS TO LAST ANY LONGER THAN ABSOLUTELY NECESSARY. DOES THIS ALSO HOLD TRUE FOR YOUR DTM CAR?

It's not quite that extreme. For example, rules dictate that each team has three engines at its disposal during a season. A penalty is imposed should this number increase. This prevents manufacturers from using a high-cost, over-the-top engine with low miles that only holds for one weekend. DTM cars, especially those entered by Audi, are extremely reliable and durable. All components have a designated service life. Once this is reached, the components are replaced. This, in turn, rules out noteworthy defects throughout the season.

Exchanging know-how: Professor Peter Pleus, President of the Engine Systems Business Division at Schaeffler, and DTM driver Timo Scheider



Question-and-answer session: Timo Scheider is interviewed by Schaeffler employees

HOW DO YOU PREPARE FOR A RACE? DO YOU ALSO USE A GAME CONSOLE?

Tracks such as the Nürburgring Nordschleife, which are very accurately depicted in virtual environments, are easy to memorize along with the tricky parts. I am now so familiar with most race tracks, however, that I no longer need to practice on a game console. Instead, I like to walk the course again to see what small changes have been made since I raced there the last time.

WHY DO FORMER FORMULA 1 DRIVERS HAVE SUCH A HARD TIME ADJUSTING TO THE DTM?

That's a question I've often asked myself and I have spoken to many drivers about it, including Mika Häkkinen, Jean Alesi, Ralf Schumacher, and David Coulthard. DTM cars weigh about twice as much as the machines used in Formula 1 and have only two-thirds the power. That means that you have to work in the bends to ensure that you keep your speed up. It's a different type of driving. Carrying momentum through the bends is not really that important in Formula 1, since the cars have extremely good acceleration on the exit and can brake much more quickly. If I had to hazard a guess, the reason why Formula 1 drivers have such difficulty adjusting to the DTM is that their feeling of what a car should do is no longer in line with the abilities of the new car they find themselves piloting. They simply lose the rhythm. But, again, that's just a guess.

IN THE 2011 LE MANS RACE, AUDI DRIVERS MIKE ROCKENFELLER AND ALLAN MCNISH CRASHED PRET-TY BADLY BUT CAME AWAY ALMOST UNSCATHED. WHAT GOES THROUGH A COLLEAGUE'S MIND WHEN HE SEES THAT?

I still get goose bumps when I think about it. Those are definitely moments that you don't want to experience as a racer. While we are well aware of the risks associated with our sport, I personally feel that it is more dangerous to drive in daily traffic. The advancements in safety that have been made in the last few years are nothing short of amazing and are state of the art. I think that Mike and Allan can be grateful that the Audi engineers did such a great job in that respect, and it's nice knowing that such a terrible crash can end on a positive note.

DO RACERS ACTUALLY GET INVOLVED IN DEVEL-OPING PRODUCTION CARS?

I think that if people like me were to choose the setup, every car out there would be a race car! While we are frequently seen presenting new cars, such as during a market launch, we never get involved in development programs. This was not so with the Audi R8, however. We were actually asked to share our know-how and opinions, such as how the car should handle when the driver pushes it to the edge.

I WORKED FOR AUDI SPORT IN THE DTM FROM 1988 TO 1996, AND I DISTINCTLY REMEMBER TIMES WHEN WE WOULD WORK UNTIL FIVE IN THE MORN-ING. IS THIS STILL THE CASE?

Unfortunately, yes. Depending on the program and day, they have been known to put in extra hours. If the car has been in accident, the shift is especially taxing. In 2010, for example, I managed to wreck my car as I was training for the final race of the season. The crew worked through the night and affixed the last sticker at 10 a.m. As a racer, you know that these are the real heroes, but no one hears about them because they are never in the spotlight. Saying a heartfelt thank you is the least we can do, and if it weren't for them, we'd all be stuck between a rock and a hard place.

TIMO SCHEIDER

BORN ON November 10th, 1978 PLACE OF BIRTH Lahnstein (D) RESIDENCE Lochau (A) MARITAL STATUS Single HEIGHT 1.78 meters WEIGHT 74 kilograms PROFESSION Race car driver HOBBIES Cooking, supermoto, snowboarding WEBSITE www.timoscheider.de

BEHIND THE WINNER

EKRA

Consistent and ambitious, easy going and friendly, approachable yet demanding: Many DTM stars have found their way back to success working with Audi Sport Team Phoenix. An exceptional troop with a story worth telling.

-Man - Man





The man commands respect as soon as he enters a room but prides himself in being reserved. A man who doesn't have to shout, then. This in no way reduces the impact he has on employees, however. Moser is a good boss who strikes the perfect balance between being encouraging and assertive, and knows how to take matters into his own hands. Values that are also highly regarded at Schaeffler.

In 1999, Moser founded Phoenix Racing together with marketing expert Dirk Theimann at his kitchen table. A handful of Zakspeed employees did not hesitate to sign up and decided to use the new chapter in their lives by following their former boss and colleague. Moser had 100,000 Marks of his own to contribute; the rest would have to be financed. On February 18th, 1999, Phoenix Racing GmbH was entered in the Koblenz trade register under number 14305. The young company is fueled by passion, since the DTM is Ernst Moser's life. It was back in 1988 that he got his first taste of the series working as a mechanic. In 2000, the team started out using Opel Astra V8 coupes and made a distinct choice to settle in Meuspath close to the Döttinger Höhe stretch of the Nürburgring. Four races are won that season, but the championship title goes to rival Mercedes. Although the team has better luck in >



- 1 Sorted out: Logistics and planning are also required in a DTM team
- 2 Briefing: Communication is valued at Phoenix
- 3 Collectible: Martin Tomczyk takes eight trophies for Phoenix back to the Eifel region in 2011
- 4 Boss full of character: Ernst Moser founds Phoenix Racing GmbH in 1999

UK FAG SCHAEFFLER





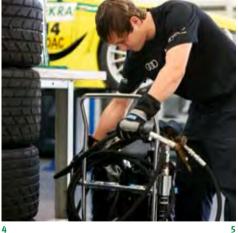
Audi Sport Team Phoenix

other categories, such as the FIA GT World Championship, the Total 24 Hours of Spa, Nürburgring challenges, and the legendary Dakar Rally, victories and the big breakthrough in the DTM remain a dream rather than a reality. Timo Scheider almost wins in Zandvoort in 2003, and in 2009, history repeats itself with Oliver Jarvis. Then Martin Tomczyk arrives on the scene.

Moved to a "second-rate" team at the start of 2011, the man from Rosenheim flourishes under the direction of team leader Ernst Moser, manager Dirk Theimann, shop manager Jörg Baldes, and race engineer Jürgen Jungklaus. It was in exactly this team, however, that Mike Rockenfeller and Timo Scheider managed to regain lost ground, and the unwavering desire to be successful, the drive to fight to pursue one's goals, are qualities that hold true for everyone at Phoenix. "I always try to discover in what areas my employees are experiencing difficulty and to give them what they need as soon as possible by looking them in the eye and making a difference", Moser explains about the success behind the team. "This approach doesn't always work, however, since I also can't afford to lose sight of the business side of things." Speaking of business, where does Ernst Moser see his team in 2012 now that 2011 – a fantastic year – is over? The answer comes without hesitation: "In the DTM." And in 2021? "Still in the DTM. I would also like to add that it would be an honor for us to represent Audi in the 24 Hours of Le Mans."









- 1 Leader: Workshop manager Jörg Baldes
- 2 A question of precision: The setup is always carefully prepared
- 3 Heart and soul: Team manager Dirk Theimann is the man of the first hour
- 4 No fluctuation here: Phoenix employees are loyal, reliable, and have been committed for years
- **5** Head technician: Jürgen Jungklaus
- 6 Strong troop: Phoenix Racing celebrates the first DTM title in high spirits







IN LOVE WITH MICKEY MOUSE

Tight and with lots of corners. Oschersleben is a unique location for races, and Mike Rockenfeller associates the beginning of his career and a very special race with the track in the Börde region of Germany.

onaco has more glamour. The Nordschleife more tradition. And Road Atlanta more atmosphere. Oschersleben is in many respects the exact opposite of the famed tracks found across the globe and is yet one of the most challenging. Mike Rockenfeller, who started in the DTM right here back in 2007, has many memories of the circuit that measures just shy of 3.7 kilometers. "Oschersleben represents the birth of my career in motorsports and is among the racetracks I've driven the most", says Rockenfeller. "It was then that I had won the Jörg van Ommen go-cart series and went to the location to try out for the Formula König. Since I wanted to get some practice beforehand, I did a little preliminary training in Oschersleben with Timo Rumpfkeil's team, which is headquartered in the immediate vicinity of the track. Although that was not against the rules, a couple of my opponents soon saw me driving around and reported it. I then became worried that that would have consequences for me but I still managed to give a good performance. It was my first race in Oschersleben and I was thrilled that I secured the pole position straight away in my Formula König car."

Be it the Porsche Carrera Cup, FIA GT, DTM, or Formula König, Rockenfeller almost always shines in Oschersleben, and his first appearance in an almost 500 horsepower DTM prototype car is especially dear to him and many fans. "I was a newcomer and racing my second race", comments



Rockenfeller. "Behind Mika Häkkinen, I almost made pole position. Mika Häkkinen! He won the Formula 1 series twice. I did notice, however, that even Formula 1 stars aren't gods, since I was able to pass him at the start and took the lead. Unfortunately, I lost it at a pit stop. Mika and I had a great race and towards the end I executed a bold, but fair maneuver. I then secured third and a place on the podium in my very second DTM competition. That was a fantastic feeling."

Rockenfeller continues to go to Oschersleben in good spirits. "The track represents a constant in my motorsports life. I have been in motorsports since 2001 and in every series I have entered; I have done a race there each year except for one season. "I also always jogged around the track the day I arrived. There is not one aspect about it that I'm not completely familiar with despite the construction work that has taken place."

- 1 Daring duel: Mike Rockenfeller steals the race from Mika Häkkinen at Oschersleben in 2007
- 2 Good feeling: Mike Rockenfeller always looks forward to racing in the Magdeburger Börde region

MIKE ROCKENFELLER

BORN ON October 31st, 1983 PLACE OF BIRTH Neuwied(D) RESIDENCE Altnau (CH) MARITAL STATUS Single HEIGHT 1.75 meters WEIGHT 67 kilograms PROFESSION Race car driver HOBBIES Weight training, skiing WEBSITE www.mike-rockfenfeller.de



Wälzlager

WELCOME TO SCHAEFFLER

Schaeffler invites employees to its company employee day in September 2011. At the center of attention for over 30,000 visitors is the firm's involvement in motorsports.



SEPTEMBER 2011 THE APPEAL OF MOTORSPORTS

Rally legend Armin Schwarz is here and attributes a large part of his motorsports career to Schaeffler and the support it has provided. Martin Tomczyk is also present. This year, he "took off" in the DTM with Schaeffler at his side. Their race cars can be seen as well: the 1987 Audi coupé and the Audi A4 DTM, the latter of which started the 2011 season. Two-and-a-half decades of motorsports have a magical effect on the employees behind Schaeffler brands LuK, INA, and FAG. The Group employs some 70,000 and over 30,000 visitors made it to the big event that is a genuine hit in Herzogenaurach. Schwarz and Tomczyk can hardly keep up with those wanting autographs, and the crowd really identifies with its stars. The two idols remain approachable as ever and capture the hearts of Schaeffler employees.

- Autograph session: Martin Tomczyk gives out autographs at employee day
- 2 Present: Maria-Elisabeth Schaeffler is presented a drawing of Tomczyk's Audi A4 DTM
- 3 Member of the family: Armin Schwarz and Schaeffler go back 25 years
- 4 Talk, talk, talk: Tomczyk, Schwarz, and author Jörg Walz in discussion



MARTIN TOMCZYK

"IT'S UNBELIEVABLE TO SEE THE LEVEL OF ENTHUSIASM PEOPLE AT SCHAEFFLER HAVE WHEN IT COMES TO BACKING THE DTM PROJECT. POSTERS CAN BE SEEN IN EVERY DEPARTMENT AND AT ALMOST EVERY DESK."



IT'S HIS CHOICE

The rally career of Armin Schwarz is one of passion, the never-ending drive to set and achieve clear goals and pursue a rewarding partnership with next-door neighbor Schaeffler.

Caption

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- 1 Highlight: At the 1986 Metz Rallye in the south of Nuremberg, second place is won and trophy metal glitters
- 2 Demonstration: The motto is to play hard and never sacrifice an inch
- Home grown: The mechanics in the INA rally team are all Schaeffler employees.
 From left to right: Jörg Rybczynski, Bernd Heinze, Klaus-Peter Hagen, Herbert Kamm, Jürgen Seiler, Jürgen Paul, and Oliver Baltz.
 Some of them can still be seen at Schaeffler



The angry growl of the four-cylinder engine, which has two open twin carburetors, "hot" cams, and a sporty, truncated exhaust pipe, is getting louder and louder. The closer it comes, the more you can hear gravel being thrown around – gravel that pummels the underfloor of the white Fiat 131. The widened wheel arches grumble with stones that are hurled toward the body, and the rear of the car, with its pronounced spoiler, paints the dusty picture you'd expect as the car races across the landscape. Cyclists traveling from Oberreichenbach to Tanzenheit on this road have pushed their bikes to the adjacent field. They've seen this before and know what to do. Armin Schwarz, the rising rally star from Oberreichenbach, is powering down the road-turned-racetrack in the Middle Franconian village of 600 inhabitants, which is located just outside Herzogenaurach.

Schwarz works as a mechanic at the Münchaurach-based Fiat repair shop of dealer Stadie in the 1980s and is fascinated by the show that Walter Röhrl puts on at rally courses around the world. After making a trip to the "Monte", he decides to embark on a rally career, and the first few runs in the prepped Fiat, which is on its last legs, are all it takes to see that this local has talent. The question of how to move forward in the sport is answered at Schaeffler in neighboring Herzogenaurach, where the young, aspiring racer communicates his objectives and infects executives with his enthusiasm. "Well give it a shot, then!", said CEO Wolfgang Falk, the predecessor to Dr. Juergen Geissinger, who since 1998 has played an instrumental role in positioning the flourishing global company.

The switch to Audi, the "local" brand, is a done deal, and the body of the Audi 80 quattro is already available. Now, to transform the skeleton into a veritable rally machine, Schwarz must collaborate with Schaeffler's lead developer. After all, Schaeffler and Audi have a great track record. The mechanics who help Schwarz build the car are also committed as ever and can be seen during the day in the company's development, trial testing, and production areas. "We then ordered the racing parts we needed directly from Audi", recalls the future rally legend. "Every part had a number and was itemized in a list, which was sent to a dot-matrix printer with fanfold paper and faded ink. When the list arrived at Schaeffler, I was asked to present my case once again to upper management, since the sum total of every screw, bolt, and part was comparable to what you'd have to pay for a luxury sedan."

BILST

ARMIN SCHWARZ

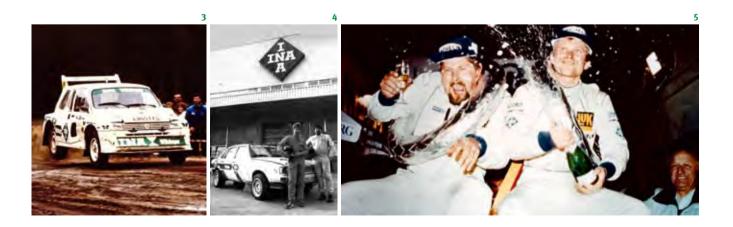
GERMAN RALLY CHAMPION IN 1987

"THE FIRST FEW YEARS WERE CHARACTERIZED BY AMBITION AND UNWAVERING COMMITMENT AND WERE SHARED AS SUCH BY THE TEAM AND OUR PARTNERS. THE EXPERIENCE I GAINED THEN LAID THE FOUNDATION FOR MY CAREER."



The end result: A white-and-green Audi 80 quattro that Armin Schwarz and his amateur team use in the 1986 Mitropa Cup, a European rally championship, to slowly, but surely gain ground and cause a lot of commotion in the process. Schaeffler founder Dr. Georg Schaeffler also shows interest by paying a visit to the Schwarz workshop to see the custom rally monster and motorhome used to tow the car. As confirmation of the good job Schwarz does in representing the firm, the rally troop is now also free to use the company's transport vehicles on rally weekends.

As the season closes, the novice becomes a serious candidate for taking the title. Second place at the Drei-Städte-Rallye (rally across three cities) would be enough for an initial win in the first full season. Standing in the way is a Peugeot 205 turbo 16, a Group B car from the World Rally Championship, piloted by Michèle Mouton. In a direct comparison, the nearly stock Audi does not have much to offer. Schwarz musters up his courage and presents another idea in Herzogenaurach: the racer would also like to have a Group B car. He gets what he wants and rents a 450 horsepower MG Mini Metro 4x4. The objective is nothing less than winning the title. Konrad Schmidt loans the car and is also based nearby, in Cadolzburg. The rest is history and Schwarz goes on to take the Mitropa Cup, thus paving the way toward a new career as a rally professional.





In 1987 and '88, Schwarz drives for Audi and is supported by the SMS troop from Konrad Schmidt, with Schaeffler as partner. Schwarz enters the German Rally Championship and pilots his all-wheel-drive Audi quattro coupé with noticeable understeer and moderate performance (210 horsepower) on course for the title win. In 1988, he drives a more powerful but challenging "executive's car", the Audi 200 quattro, and successfully defends the title.

When the Franconian is not busy racing in the fast and competitive series over sticks and stones, he spends a good portion of his day helping out with test driving and development for Audi's new circuit program. The DTM commitment is prepared for in the Trans-Am Series held in the U.S.

Schwarz does what he can to be of assistance. In Ingolstadt, executives decide to focus on circuit racing instead of rally events in the future. Armin Schwarz, on the other hand, wants to stay true to his roots by continuing to fly over gravel. The two then part ways. While Audi heads to the DTM, Schwarz uses his then record of three titles in three years to gain access to the World Rally Championship and begins a long career in championship racing with Toyota, Mitsubishi, Ford, Hyundai, and Škoda.

ARMIN SCHWARZ

BIO

BORN ON Juli 16th, 1963 PLACE OF BIRTH Neustadt/Aisch (D) RESIDENCE: Neustadt/Aisch (D) MARITAL STATUS Married WEBSITE www.armin-schwarz.com

- 1 Executive's car? Yeah, right!: The Audi 200 quattro outputs 240 horsepower ...
- ... but is no flyweight at 1,250 kilograms
- 3 Powerhouse: The 450 horsepower MG Metro from the Group B era
- 4 Poised: Armin Schwarz tunes up the Audi 80 quattro in 1986
- 5 Finished: Schwarz celebrates in high spirits
- 6 Transmission change: Extensive service work is required in the 1986 Drei-Städte-Rallye (rally across three cities)





LONG-TERM RELATIONSHIP

Wolfgang Kaufmann started "wearing" yellow in 1990, when LuK became his sponsor for Formula and sports car racing. A personal story of several highlights.

The "marriage" between the Schaeffler Group and Wolfgang Kaufmann started with a memorable race. It is 1990, when "Piranha", as he is later called by his opponents, enters the German Formula 3 Championship for Opel team Schübel. The year is full of firsts. Kaufmann starts in the Formel 3 Series as Opel agrees to supply engines and LuK becomes Kaufmann's personal sponsor. Some of his opponents will also move on to make a name for themselves, including Michael Schumacher, Jörg Müller, Franz Engstler, Marco Werner, and Ralf Kelleners. "The cars were almost identical", recalls Kaufmann, "and the first race was nothing short of turbulent." Kaufmann wins and is followed by team colleague Eduar Neto in second and Michael Schumacher in fourth place. "That was an absolutely outstanding event for me."

Another highlight in the Kaufmann-LuK relationship is the Le Mans premiere in 1995, when the teams have to prove themselves in pre-qualifying to obtain their starting positions. Kaufmann starts with a Freisinger Porsche in a densely packed field of works and semi-works teams. "It was there that I turned in the fastest Porsche lap by far," says Kaufmann. "The next works car was a whole three seconds behind!"

The fact that Kaufmann is a man for monumental premieres is demonstrated at the Lausitzring in 2000. The FIA GT World Championship is being held for the first time on the newly opened track. Rain dominates the weekend and the DTM race, which is also in progress, is canceled. The GT race, however, finishes beforehand. Kaufmann and Haupt,

WOLFGANG KAUFMANN BIO

BORN ON January 24th, 1965 PLACE OF BIRTH Dernbach (D) RESIDENCE Molsberg (D) MARITAL STATUS Single PROFESSION Race car driver HOBBIES Go-carts, mountain bikes WEBSITE www.wolfgang-kaufmann.de

a dynamic duo, charge through the rain and manage to take the first overall victory for Porsche in the history of the series.

Kaufmann then develops a special weakness for the Nordschleife, where he lands a coup with LuK in 2001. The racer pilots a street-legal Porsche with road tires from Gemballa and turns in a track record of 7:32. The time is not beaten until 2004. Another highlight with LuK comes in 2001 as well, when Kaufmann wins the Porsche World Cup. "A distinguished result." Like many in his long career.



- 1 Premiere: Wolfgang Kaufmann celebrates Porsche's first overall victory in the FIA GT World Championship together with Hubert Haupt in 2000
- 2 "Posing" at the premiere: Kaufmann and LuK team up for the first time in the 1990 Formula 3. Also present: Opel ambassador Steffi Graf

SCHAEFFLER IN MOTORSPORTS Memories – Andy Priaulx

CASINO ROYALE

The legend of Macau. Touring car champions are crowned in special places. Andy Priaulx, for example, triumphed in the world championship here three times in a row. A tribute from the BMW driver to the most challenging city course in the world.

> t is one of only four automotive world championships and is extremely competitive: the World Touring Car Championship. Time to be cautious, you ask? A forbidden trait when it comes to choosing the best of the best in 20, 22 races, two of which are held on a racing weekend. Extreme sprints in the quest to gain points and secure a place on the podium. So far, so ... everyday motorsports, except for the fact that this time, the stakes are higher. The finale in Macau is of paramount importance, the dramatic pinnacle of a world tour. The overall ranking has led to the final starting position, and the journey for Europeans is the longest in the season. The pause before the race is always a little longer and creates mental tension. And then there are the 6,115 meters of track, times seven, times 14 meters in width. The relentless guide rail section of a casino center, which starts with a steep incline, then takes a steep drop down to the finish line. Nerve rattling when it comes to winning a world championship title.

> "Macau has a unique profile and when you win here, you really have the feeling that you accomplished something", says Andy Priaulx. "Macau is a casino in every aspect. Doing a perfect lap here is even more difficult than on the Nürburgring Nordschleife. You have to get really close to the walls and rails to be fast and drive a clean, precise line. There is no other track that is like Macau. All other city courses, such as in Europe, are slower. Even Monaco pales by comparison." Priaulx has won no less than three world championship titles in Macau. "I have always loved focusing on this one particular event the way that I do. In the World Touring Car Championship, you can never afford to not have done your homework. In Macau, however, you need to react in the blink of an eye. A game that I have always been good at."



Title number one: an emotional highlight. Nine drivers have the potential to become world champion in Macau, but the man with the most consistent performance of the season seizes the day – Priaulx. Title number two is taken the next year and is sweet confirmation on the heels of the first victory. Priaulx also has a special place in his heart for Macau. "My most emotional moment was in 2003, when I started for BMW in Macau during an invitational race. My daughter was keen on coming into the world one month earlier than expected and I was not there. Every time I got the chance, I would take my cell phone out to the bridge in front of our hotel and wait for it to ring to hear to the good news." And he wasn't disappointed. In the years to come, the Priaulx name will continue to be associated with the most challenging city course in the world.

> Legend meets legend: Andy Priaulx celebrates the World Championship title three times in a row with BMW. Each time, the victory is won in Macau

ANDY PRIAULX BIO

BORN ON August 8th, 1974 PLACE OF BIRTH Guernsey (GB) RESIDENCE Guernsey (GB) MARITAL STATUS Married PROFESSION Race car driver HOBBIES Water skiing, hiking WEBSITE www.andypriaulx.com



OF MONSTERS AND MEN

The Nordschleife is tradition. Twentythree kilometers of legends, courageous corners, and top speed. Klaus Niedzwiedz has been starting here, in the "green hell", for 40 years and continues to respect the most dangerous and challenging race track the world has ever seen.

KLAUS NIEDZWIEDZ BIO

BORN ON February 25th, 1951 PLACE OF BIRTH Dortmund (D) RESIDENCE Waltrop (D) MARITAL STATUS Married PROFESSION TV journalist HOBBY Driving a motorcycle y first race on the Nordschleife was in 1971 in the Formula Vau, an entry-level Formula category with 1.3 Volkswagen engines", recalls 60-year-old Klaus Niedzwiedz. "It was in 1969, however, that I drove my very first laps – in the Mini that I owned. Back then, there were no guard rails. The only thing that offered you any protection were the hedges, and things weren't different in the Formula 1 either. The profile of the track has not changed one bit. You still need guts to be fast and it always helps to brace yourself for the unexpected."

Niedzwiedz has experienced a lot on the Nordschleife, including memorable successes and great stories. "1987 was my first year with LuK as a sponsor and had a winning feel about it. I was the runner-up world champion in the



World Touring Car Championship and we took the brand title with Ford. Walter Demel was in charge of Schaeffler's motorsports program and he handed out the relatively limited supply of money to his racers. Even today, I don a helmet with my own LuK sticker."

Niedzwiedz can now be seen in the 24-hour race piloting a natural-gas powered Scirocco for Volkswagen. At the time, he was commanding a fire-breathing monster. "I still hold the record on the then concrete strip and the Nordschleife in a turbocharged Capri with 600 or 700 horsepower. Some of our prototypes were quite 'adventurous' racing down the Nordschleife", says Niedzwiedz. "In the 1988 DTM, I lost control at about 300 km/h where the zoo is because my right rear tire exploded. I had started in sixteenth position and managed to climb to second place, behind Armin Hahne. I broke a shoulder and an arm in the crash, which was the worst one I have ever had. Fortunately, however, my injuries were not that bad considering the forces involved. And 'LuK' was embroidered on my overalls, which I still have hanging in my office."

Niedzwiedz is not ready to start thinking seriously about giving up. As long as he feels OK and turns in good lap times, he has no problem returning to the Nordschleife. An anecdote or two also connects the man to the track. "One day I had the ideal breakdown in my career, if you can say that. My car stopped at the Pflanzgarten section, and a young, beautiful woman happened to be standing there. I was not that young anymore, but it didn't matter and an interesting love story developed." Like with the Nordschleife itself. SCHAEFFLER IN MOTORSPORTS History

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LONG LIVE SPORTS

Racing success with INA, LuK, and FAG go back to the beginnings of motorsports. The Schaeffler colors of yellow, green, and red do not become a frequent sight on race tracks until the mid-1980s, however.

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n 1911, Ray Harroun wins the 500-mile race on the oval course, the legendary Brickyard of Indianapolis, thanks in part to a technical innovation – the first rear-view mirror in automotive history. The mirror, mounted in front of the cockpit, makes having a front passenger entirely unnecessary. Weight is reduced and the driver can look forward at all times. Wheel bearings from FAG are also on board. Georg Fischer, founder of Fischer AG and commonly referred to as "the bearing guy", invented the ball grinding mill, which made it possible to manufacture ball bearings that integrated precision-honed balls capable of supporting high loads. The victory at Indianapolis marks the first international win in motorsports that has a connection to a Schaeffler brand. While FAG and the ball bearing go hand in hand, Schaeffler is synonymous with breakthrough innovations and a comprehensive range of rolling bearing solutions. It all starts with the needle bearing cage, which was invented by Georg Schaeffler and allows the compact bearings to be installed in automotive transmissions, for example. Today, the company's portfolio has long been supplemented to include clutch solutions, transmission parts, components for chassis applications, and a large number of engine components that Schaeffler offers around the world under the INA, LuK, and FAG brands.







1 Contested: The British Touring Car Championship (BTCC) is another good communications platform for LuK

3

- 2 Dab of color: The bright green Alpina M3 brings color into the DTM in the late 1980s
- **3** The Ford juniors start with the Sierra XR4Ti in 1987
- 4 Migrant labor: DTM starts for Alpina are a welcome change for Christian Danner, who is then focused on a Formula 1 career

- 5 Big brother: The highpowered Ford Sierra Cosworth boldly follows in the previous model's footsteps. Here, Frank Biela can be seen fighting for position at the Norisring
- 6 Blue period: Mattias Ekström helps Audi Sport Team Abt Sportsline and LuK win races and take titles in the DTM





LuK is the most prevalent of these brands for those into motorsports, since the clutch specialist has been committed to racing since the mid-1980s. A driving force behind the move is the aftermarket organization, which interfaces with professional repair shops to supply parts as well as with the end customer, the driver, unlike the OEM business with manufacturers. As a supplier, workshop outfitter, and technology specialist, going motorsports seems a proven way to improve brand awareness and contact opportunities.

The first race starts in the mid-1980s with a partnership with Ford. LuK remains sponsor for the Formula Ford into the early 1990s, a junior series that gives go-cart racers \rightarrow +

- Ambassadors: Augusto Farfus and Andy Priaulx represent the Schaeffler colors in the World Touring Car Championship
- 2 Sensational: The Scirocco is one of the race cars that LuK uses to make a name for itself in motorsport for the masses
- 3 Talent pool: Müller and Alexander Zanardi also drive for BMW in the World Touring Car Championship





a taste of what it is like to drive a formula race car around well-known tracks. The yellow square with the characteristic LuK logo can be seen on all vehicles and overalls. Racers who use their success in the Formula Ford to begin a career in professional racing include Michael Schumacher, Michael Bartels, Ellen Lohr, and Alexander Wurz. "I continually found myself referring to LuK's Meister-Service concept", recalls Rainer Braun, who frequently worked as a commentator at the Formula Ford.

For the 1987 season, LuK aftermarket sponsor manager Walter Demel and Ford race director Lothar Pinske concoct another plan. In Cologne, Pinske assembles a promising young team with Bernd Schneider, Frank Biela, and Manuel Reuter, who start to make a name for themselves at the DTM in their Ford Sierra. LuK is also on the scene. In 1986, Armin Schwarz joins the squad of racers backed by Schaeffler and will soon be seen driving one of several Audis. For now, however, a quick decision is made to rent a Group B MG Metro with INA decals for the 1986 Drei-Städte-Rallye (race across three cities), a key event that decides the championship. LuK also sponsors other vehicles in the years that follow, such as a Peugeot 205 turbo 16 from opponent Michèle Mouton and a handful of additional rally cars of different makes and models. Noteworthy examples include the Ford Sierra Cosworth, which took DTM titles from 1987 to 1992, and a bright red Porsche 911 GT3 RS, which Dobberkau and König use to bring color into the 2007 German Rally Championship.

In 1980, Volkswagen wins the second Paris-Dakar Rally with its Iltis. On board the car are specially sealed bearings for the throttle valve shaft by the carburetor. The stresses of rallying are a good way to test the new bearings, which have been fitted to modern cars for years. Schaeffler components are also used when Volkswagen decides to enter the Dakar Rally again with its Race Touareg. This time, however, turbochargers with rolling bearing supports are installed. The technology proves itself under motorsports conditions and eventually transitions to volume-production vehicles. LuK also partners with Volkswagen Motorsport and takes its first breath of desert air in 2001, when it sponsors Jutta Kleinschmidt and Andy Schulz in their red Mitsubishi Pajero, which wins the toughest rally in the world.

Sponsoring efforts in previous years are often tied to people as well. Just as Timo Scheider currently represents Schaeffler and its brands in the DTM and during endurance races such as the Total 24 Hours of Spa, LuK supports >



- 4 All-rounder: The Ford Sierra Cosworth is a machine of choice on the race track and at the German Rally Championship
- 5 Pioneer: Volkswagen builds a Golf to kit car specifications long before entering the World Rally Championship
- 6 To behold: The rear-wheel drive Porsche 911 GT3 RS from the German Rally Championship

+











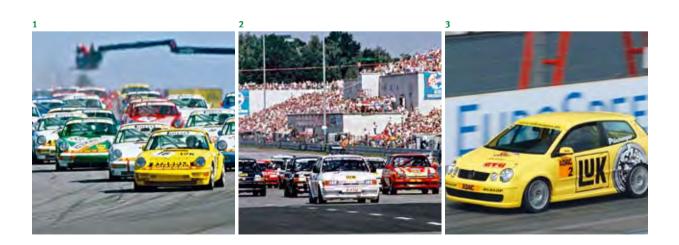
- Powerful: Tractor pulling is an impressive way to demonstrate clutch performance
- 2 Surprise success: BMW wins the legendary 24-Hour Race at the Nürburgring in 2010 with its M3 GT2
- 3 Setting the stage: Michael Bartels' performance at the Formula 3 race in Monaco proves he is ready to take the next step
- 4 Springboard: The
 Van Diemen with which
 Michael Schumacher
 transitions from go-carts
 to the race track
- 5 Formula school: Multiple Le Mans winner Marco Werner is also part of the driver line-up that has been sponsored by LuK
- 6 Aspiring: Michael Schumacher as a young Formula Ford driver

- Non plus ultra: Roland Asch is tough to beat in the first years of the Porsche Carrera Cup
- 2 Ladies' invitation: Ford lines up "fast women" at the Fiesta Ladies Cup
- 3 Early birds: Youngsters who must still wait a while for their driver's license get the opportunity to race at the ADAC Volkswagen Polo Cup

Michael Bartels and Marco Werner as they switch to the Formula 3 from the Formula Ford series. For Bartels, appearing in the prestigious F3 race as part of the Monaco Grand Prix is one of the door openers that paves the way to the Formula 1. Werner finishes as vice champion in the German Formula 3 Championship in 1991 and 1992. In 1992, he also wins the international F3 race in Monte Carlo. Among the opponents of the multiple Le Mans winner are Michael Schumacher, Heinz-Harald Frentzen, Wolfgang Kaufmann, and Tom Kristensen.

Kurt Thiim, Klaus Niedzwiedz, and Peter Oberndorfer are some of the many touring car specialists who can count on support from Langen. LuK logos also decorate a number of cars through the end of the first DTM era in 1992, including the Ford Sierra XR4i, the Cosworth RS 500 Alpina, the BMW M3, and the Mercedes-Benz models used by the teams headed by Helmut Marko and Jochen Mass. Schaeffler and Audi join forces in the 2007 DTM, when Mattias Ekström wins the series, and with Martin Tomczyk taking the most recent title in 2011, joint participation in the now fourth DTM era is already a done deal. Mattias Ekström and his blue A4 with yellow LuK logo are not the only ambassadors of Schaeffler, however. Mike Rockenfeller represents INA in the red Audi A4, which sports a green INA diamond.

LuK and INA also partner with BMW in the World Touring Car Championship, a move that sets the stage for Schaeffler's Andy Priaulx and Augusto Farfus to collect wins and titles. The legendary 24-hour race on the Nürburgring Nordschleife is likewise won with BMW, and Ford, Porsche, Alfa Romeo, and Volkswagen, together with Schaeffler, are a common sight at the starting line of branded events such as the Fiesta Ladies Cup, the Carrera Cup, the Alfa 147 Cup, and the ADAC Volkswagen Polo Cup. Heavyweights are also "fair game" and make ideal candidates for increasing brand awareness and advertising the company's product portfolio. The race trucks from Buggyra and the MKR team as seen in the European Truck Racing Championship are thus just as much a part of the Schaeffler family as the high-torque tractors that demonstrate the strength of LuK's clutches in tractor pulling.



RACING XXL

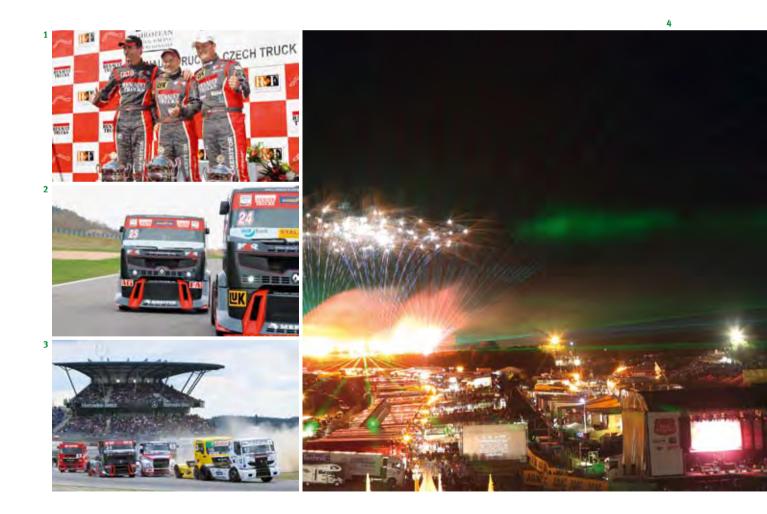


They tip the scales at just under five tons and have 1,140 horsepower and 5,500 Nm of torque. It goes without saying, then, that a race truck is for "real men".



rom zero to 100 km/h in 4.8 seconds. Even a Porsche 911 GT3 would struggle to beat such a time. An impressive performance. What happens when a vehicle that weighs three-and-a-half times as much as a super sports car does a sprint? What happens when it is not a small race car that is thrusted toward the horizon, but a large, imposing race truck? It's not difficult to understand that such mass requires high-tech solutions of the finest caliber. The ideal stage on which to prove technological proficiency.

Schaeffler has been supporting race truck teams since 2003. First Buggyra, then MKR. Successful designer Mario Kress, who works for Buggyra and later assembles his own team for the sport, trusts in LuK's know-how. MKR trucks are equipped with a race clutch, powersteering pump, and clutch release bearing from Herzogenaurach for maximum power and precision. To put things into perspective, while a standard clutch pressure plate is rated for 2,500 to 3,000 Nm of torque, a race variant must handle between 5,200 and 5,500 Nm. MKR trucks, however, have a pressure plate that exceeds even these figures and can transfer up



to 6,000 Nm of torque. MKR clutch disks feature sintered facings, the optimal design when high friction and temperature levels are encountered. The LuK power-steering pump offers up to 20 percent greater assist as compared to series production applications for easy and precise steering under racing conditions.

Nevertheless, the sport remains one for those who are not weak at heart. Markus Bösiger, Markus Oestreich, Adam Lacko, and Anthony Janiec are four drivers in the MKR team who, together with Schaeffler, skillfully pilot the five-ton behemoths to victory in cut-throat competitions. Schaeffler has been involved in professional truck racing for almost a decade now. The sponsoring and technical assistance

- 1 Thumbs up: In 2011, Markus Oestreich, Markus Bösiger, and Adam Lacko share the winners' podium in Most after finishing the FIA European Truck Racing Championship run in the Czech Republic
- 2 Strong presence: Schaeffler Automotive Aftermarket shows its colors for Team MKR with FAG and LuK
- 3 Five tons, piece of cake: The Schaeffler powersteering pump enables power and precision
- 4 Impressive: The Truck Grand Prix at the Nürburgring attracts around 200,000 spectators each year – more than the Formula race held in the same location.

Direct contact with the fans provides for further excitement

- 5 Ideal stage: Schaeffler clutches master torque of up to 5,500 Nm, thereby demonstrating proficiency in clutch technology
- 6 Great success: The Schaeffler Group enjoys victories, titles, and success with Team Buggyra

initially provided for the Buggyra team immediately pays off with a title. The following year leads to another victory as David Vršecký breaks the top-speed record by accelerating the Buggyra "Speed special" to exactly 281.723 km/h in Dubai in February 2004. In 2005, Buggyra announces its participation in the "truck race class". Since this class is restricted to manual transmissions, unlike the super race trucks and their automatic transmissions, Schaeffler Automotive Aftermarket sees another opportunity and supplies the team with the appropriate power-steering pump and race clutch. Two years later, Team Buggyra achieves its greatest success as Markus Bösiger, who is now one of the four drivers in the MKR team, wins the European World Championship title in his first season for Buggyra. David Vršecký takes third place in the overall standing.



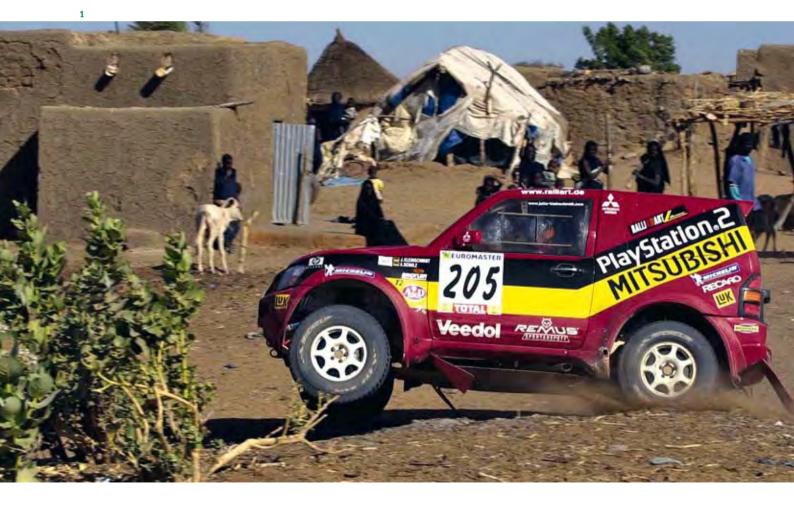






SUCCESSFUL BALANCING ACT

In almost no other discipline is the difference between winning and losing as close as it is in marathon rallies. Behind the next crest, it can all be over. LuK as partner has contributed to team success in the Dakar Rally. The sport isn't even sneered at in the beginning because no one pays attention to it. Nevertheless, on December 26th, 1978, 182 participants enter the first Dakar Rally, which starts at the Trocadéro in Paris. Or better put, a group of 182 adventurous souls, primarily French. Among them are also seven women, who agree to take part in the bold event and ride the rough terrain on motorbikes. Not only is the competition distant to the average central European, but also the media coverage of it. Although 20 journalists from 13 media companies follow the adventurers and broadcasts from legendary German radio host Max Meynier can be taken in every evening on RTL between 8:30 and 10 p.m., you have to be in France to hear them. In Germany, RTL plus doesn't start as a television station until five years later. Then fast forward from the Paleozoic era of motorsports to more recent times. The Dakar Rally is an established competition that has distinguished itself from the classic World Rally Championship and typically attracts a different type of driver, manufacturer, and fan. In 1997, Jutta Kleinschmidt enters the history books as the first woman to win



a stage of the Dakar. Two years later, the German leads the competition and takes third place in the overall ranking.

The big breakthrough happens in 2001, however. Her red Mitsubishi Pajero, which prominently bears the yellow LuK logo at the front and on the sides, wins a dramatic rally competition. Right up to the very end, Hiroshi Masuoka from Japan pits his Mitsubishi against Frenchman Jean-Louis Schlesser and his self-built buggy for the victory. Using a trick, Schlesser and his colleague Josep-Maria Servia manage to squeeze by Masuoka before embarking on the last stage of the race. This is not to Masuoka's liking and the racer attempts to pass

JUTTA KLEINSCHMIDT'S VICTORY AT THE "DAKAR" IN 2001 IS NOT THE ONLY MOMENT IN HISTORY THAT HAS SOMETHING TO DO WITH SCHAEFFLER.



- Aiming high: LuK backs the "right horse" in 2001 by sponsoring Jutta Kleinschmidt
- 2 Carlos the Great: Rally world champion Carlos Sainz switches to the marathon rally sport and receives support from LuK. In 2010, he wins with Volkswagen
- 3 Turn of an era: Those who want to get ahead in the Dakar Rally suddenly need diesel power, with Volkswagen leading the way



- Ascent: Volkswagen impressively demonstrates the superiority of the TDI drivetrain and wins three times
- 2 Doing it yourself: Marathon rally professionals like Giniel de Villiers must rely on themselves in the desert
- 3 Diamonds are a girl's best friend: Jutta Kleinschmidt trusts in Mitsubishi to lead her to victory in 2001



2



3

- 4 Technical assistance: The Volkswagen race truck assists the Race Touareg drivers
- Lady in red: Jutta
 Kleinschmidt wins in
 2001 together with
 Andreas Schulz



outside the boundaries of the course, thereby destroying his suspension. Schlesser receives a time penalty of one hour. Jutta Kleinschmidt and colleague Andreas Schulz reap the rewards for their smart driving and win. The German becomes the first woman to take the prize for the hardest rally in the world, a feat no other woman has achieved since.

This is not the only moment in history that has something to do with LuK, however. The Volkswagen works team also showcases its TDI technology with the Race Touareg, which uses a turbocharging system with Schaeffler rolling bearings before the technology is introduced on a mass scale. By now, more than 25 stations report on the event with over 600 hours of coverage. In 2005, Jutta Kleinschmidt and her Italian codriver Fabrizia Pons are the first team to take a place on the podium with a diesel-powered vehicle. They come in third. One year, later, Volkswagen improves its performance when Giniel de Villiers and Tina Thörner take second place. In 2009, the company takes the overall victory and also won the race in 1980, albeit without a TDI drivetrain. The success keeps on coming, and VW wins in 2010 and 2011 as well. Pictures of the red desert stormer in 2001 and of the blue Race Touareg will long remain in the memories of fans and continue to be published by media companies.



GOOD THINGS COME IN SMALL PACKAGES

The Schaeffler Group has sponsored many motorsports legends over the years, all of which are also top candidates for a place of honor in the model collector's cabinet.

otorsports promotes innovation. Lightweight construction, composite fiber, double-clutch transmissions, and efficiency are just a few examples of new, forward-looking concepts that first made their way into race cars, and then created a sensation in production vehicles. It stands to reason, then, that a global company such as Schaeffler supports the motorsports cause with its brands LuK, FAG, INA. Since the legends of the track are also prized role models for miniatures, an interesting starting field comes together for the collector's cabinet.

It goes without saying that the victory car of current DTM champion Martin Tomczyk is currently parked in the pole position. Two miniatures of the 2011 Audi A4 are already available, with start number 14, one of which is made by Asian provider Spark Model to international collector scale 1:43 and also features the final details of the touring car prototype. Marc Hufenbecher, who oversees the miniature program for Spark customer Audi: "We want to sell miniature versions of the cars as they appeared in the last race of the season and were able to do just that in the last two years." Schaeffler race car number two as driven by Martin Tomczyk is all handmade. The body is a plastic kit from Revell and rolls down the track on a slot-racing chassis. These 1:24 miniatures are rare copies of the speedway specialists from the slot-racing plant in Havighorst and are the product of hours of work and skilled crafts-manship. The DTM sponsor logos of the Schaeffler Group have been impossible to overlook since 2006, and Schaeffler has supported the Abt Sportsline (LuK), Rosberg (INA), and Phoenix (INA) teams all the way through 2011. All these DTM cars can be purchased in miniatures as well, in the two most popular sizes (1:43 and 1:18).

- Rare items: Roland Asch's Cup Porsche and Mouton and Harryman's rally Peugeot
- 2 A love of details: The 1:18 model of the Volkswagen Race Touareg 2
- 3 In collectors' scale 1:43: The 3 Series BMW from Nußbaumer/König and Kurt Thiim
- 4 The smallest of the small: Models of the RT2, 3 Series and A4 DTM in 1:87 scale
- 5 Well done: The Audi 80 quattro driven by the Schwarz/Hösch team in the rally days of old







The 1:18 miniatures from Norev are particularly well detailed. Although collectors must do without swiveling doors and removable hoods, the car mirrors the exact proportions and look of the exterior. Michael Borgeest representing the French company in Germany: "This size makes it possible to add more details and finesse, especially when it comes to the racing cockpit and roll bar as well as the numerous ventilation apertures and aerodynamic pieces on the Audi A4 DTM."

Sponsored vehicles from Audi weave through Schaeffler's motorsports history in miniature format as well, and the limited production specialist offers a wide variety of models to choose from in 1:43 scale. Be it the Audi 80 quattro driven by Armin Schwarz in 1986, the Audi 200 quattro, also driven by Schwarz and sponsored by Hertz in the 1988 RAC Rally, or the Audi 200 quattro with the same man at the controls in the Acropolis Rally of 1989 – everything is available in this size. The early Audi 80 quattro raced by Armin Schwarz in particular is crafted with attention to detail and this is immediately apparent in the exceptional quality of decals and paintwork.

Audi's parent company Volkswagen also profited from the sponsoring venture out of Herzogenaurach as the Race Touareg 2 bears the yellow-and-black LuK logos on its front fenders. Jutta Kleinschmidt also doesn't go empty handed in 1999 either, when her Mitsubishi is decorated >



"Schaeffler style". Both winners are available in 1:18 and 1:43 scale. A special Race Touareg 2 in 1:87 scale can be purchased as well. A real head-turner is Norev's desert VW in 1:18 scale, which has many movable features. Room is found for the 5-cylinder, 285 horsepower diesel engine, too, which is tucked beautifully behind the front axle in the transverse direction. Removing the hood also provides a great view of the cooling ductwork and the tubeframe structure of the front end. This is not to be outdone by the cockpit, however, which is easily accessible when the doors are opened. Among the first things to be noticed are the sports seats and high center console in the truck driven by Carlos Sainz. The interior is completed with pedals, multi-point seat belts, and full instrumentation with indicator lamps. Schaeffler also enjoys a very special relationship with the touring car specialists from BMW. In 2007, for example, LuK sponsored an extraordinary vehicle in the World Touring Car Championship, the BMW 320 si from Alessandro Zanardi, which secured a podium position in Brno, among other places. The miniature version of this car is offered in 1:43 scale by Minichamps in Aachen and features clean proportions and a look that is hard to distinguish from the original. The 3 Series entered in the 1988 DTM likewise sported LuK badging. Driven by Kurt Thiim, the car won the Eifel race.

The LuK-badged 3 Series world championship touring car of 2006 is also available from Autoart, in 1:18 scale,

- 1 Latest addition: Martin Tomczyk's 2011 winning car in 1:43 scale
- 2 Brawny even when miniaturized: The Buggyra race truck used by Markus Bösiger
- **3** Rally models copied to perfection: The 1:43 scale replicas
- 4 3 Series in 1:18 scale: The BMW world championship touring car driven by Jörg Müller

with start number 42 from Jörg Müller. Andy Priaulx won that championship in this car. Noteworthy of the Autoart model are such technical intricacies as the detailed fourcylinder engine with wiring under the movable hood, the racing tank with matching quick fasteners in the trunk, and the racing cockpit with authentic roll bar and full fire extinguishing system. The predominantly white paintwork is also perfect. Even a genuine exotic takes its place in the field in the form of the LuK-sponsored Buggyra MK-R08, which Markus Bösiger successfully pulled up to the starting line in the 2009 European Truck Racing Championship. Abrex supplies this powerhouse of a truck in 1:43 scale.

Three additional rare specimens are added by Modellautodreams from Saarlouis, all of which are one of a kind in 1:43 scale: the Opel Manta B 400 Klans/Ostmann/ Demant/Uyttenhoven from the 2003 24-hour race, the Audi 200 quattro SMS DTM Schwarz/Hertz from the 1988 RAC Rally, and the Audi GT quattro coupe with INA sponsoring driven by Schwarz and Hösch in the Drei-Städte-Rallye (rally across three cities). Particularly hard to find among collectors is Roland Asch's 911 Cup racer with start number 16 as used in the 1991 Porsche Carrera Cup. This model, which pays tribute to the title win that year, was custom finished for Kager based on a Vitesse miniature. Also rare is a 1:43-scale model from Ixo, which replicates the car driven by Mouton and Harryman in the 1986 "Monte". <



GONE BUT NOT FORGOTTEN

Schaeffler has been involved in motorsports for 25 years. Along the way its Group brands FAG, LuK, and INA have helped many race cars and their drivers achieve success and even become legends. The cars that follow now have cult status.

RF 88

Formula Ford traditionally marks the first step toward Formula 1 after the go-cart circuit and has seen the likes of Ayrton Senna and Michael Schumacher. The now seven-time F1 champion sits in one of the wingless open-wheel cars of the LuK-sponsored series as did many professionals who followed him.

FORD FIESTA

Races such as the Fiesta Ladies Cup that started in 1982 almost always provide plenty of action, since competitors eager for success take part with identical equipment to create a more level playing ground. The fact that the Cup was initially intended only for women attracted even more attention.





Engine In-line 4-cylind	er Engine	In-line 4-cylinder
Output 77 kW/105 hp	Output	71 kW/96 hp
Capacity 1,598 cm ³	Capacity	1,597 cm ³
Weight 410 kg	Weight	745 kg

FORD SIERRA XR4 TI

The DTM started in 1984 as the DPM (Deutsche Produktionswagen-Meisterschaft) and was known as the "classless society". The name was soon changed to DTM (Deutsche Tourenwagenmeisterschaft) and became wildly popular. Handicap weights put more onus on driver skill and livened up races between vehicles of different makes and configurations.

MERCEDES-BENZ 190E 2.5-16 EVO1

Mercedes-Benz also kept its touring car up to date with the advent of its DTM-optimized Evolution models. Large wheel arches, a wide track, and more pronounced wing work created enough space for larger tires and brakes. Frank Biela and others drove the car, which was managed by the Mercedes-Benz team headed by Jochen Mass and funded by LuK.



Engine	In-line 4-cylinder	Engine	In-line 4-cylinder
Output	316 kW/430 hp	Output	232 kW/315 hp
Capacity	2,299 cm ³	Capacity	2,496 cm ³
Weight	1,200 kg	Weight	1,040 kg

FORD SIERRA COSWORTH

The German Touring Car Trophy (DTT) ranked below the DTM series for class A race cars and saw vehicles that were more closely related to their production equivalents as per tight Group N regulations. Although the second "Cossie" looked more civil, it had an ace up its sleeve with its allwheel-drive system.

RACE TOUAREG 2

The Race Touareg 2 has made Volkswagen an expert in winning the Dakar Rally and enjoyed its first success in 2007, when the diesel all-rounder claimed more stages than any other vehicle at the last "Dakar" held on African soil. The rally then moved to South America following a one-year break and Volkswagen won it three times in a row – with the help of innovations from Schaeffler.

Engine	In-line 4-cylinder	Engine	In-line 5-cylinder
Output	221 kW/300 hp	Output	202 kW/275 hp
Capacity	1,993 cm³	Capacity	2,500 cm ³
Weight	1,200 kg	Weight	1,788 kg

REYNARD-VOLKSWAGEN 883

Formula 3 is known for separating the men from the boys, since not everyone can prove that they have what it takes to be successful in motorsports. LuK supports talents such as Michael Bartels, who has become a Formula 1 driver and won the GT World Championship several times.

CARRERA CUP

Roland Asch is a tough component to beat and has made a name for himself in the Porsche 944 Turbo Cup as well as the Carrera Cup, which started in 1990. His 911 in LuK yellow is frequently seen at the front of the pack.





Engine	In-line 4-cylinder	Engine	6-cylinder boxer
Output	125 kW/170 hp	Output	191 kW/260 hp
Capacity	1,998 cm ³	Capacity	3,598 cm ³
Weight	455 kg	Weight	1,220 kg

GT3 RS

The rear-engine sports car proved it was a strong performer off road as well, and the rally tradition of the 911 dates back to the success gained at the Monte Carlo Rally in the mid-1960s. Driver Olaf Dobberkau and co-driver Alexandra König bring color to the German Rally Championship with their bright red GT3 from 2007.

AUDI COUPÉ QUATTRO

Now that the "wild days" with the extremely powerful Group B cars are over, the Audi quattro celebrates a comeback in Group A by flaunting its new sleek coupé body. The SMS team collaborates with the manufacturer and wins the DRM title in 1987 together with Armin Schwarz. The yellow-and-green color scheme also offers undeniable proof of sponsors LuK and INA.



Engine	6-cylinder boxer	Engine	In-line 5-cylinder
Output	280 kW/381 hp	Output	145 kW/197 hp
Capacity	3,598 cm ³	Capacity	2,226 cm ³
Weight	1,370 kg	Weight	1,080 kg

320 SI

BMW pilot Andy Priaulx wins the World Touring Car Championship three times in a row, from 2005 to 2007. Although next year's title goes to Seat and Chevrolet, LuK continues to side with a winning team. In 2010, for example, Priaulx beats the competition in six races.

MW GT2

LuK sponsors BMW in the endurance races it enters in 2010 in addition to being involved in the World Touring Car Championship (WTCC). These races include the 24 Hours of Le Mans, the Spa-Francorchamps, and Nürburgring events. In the Eifel race, the GT-compliant M3 is declared the overall winner.





Engine	In-line 4-cylinder	Engine	V8
Output	206 kW/280 hp	Output	367 kW/500 hp
Capacity	1,999 cm ³	Capacity	3,999 cm ³
Weight	1,155 kg	Weight	1,245 kg

DXI 13

Motorsports and trucks are a combination that the public has loved for decades. The Truck Grand Prix, for example, which takes place on the Nürburgring, is one of the most popular races in all of Germany and sees trucks with highcapacity engines specially designed for racing achieve speeds of up to 160 km/h.

AUDI A4

The A4 DTM looks very similar to the production A4 apart from having pronounced spoilers and fender flares. Among its drivers is Mattias Ekström, who sits safely in the center rear position of the car, directly in front of the rear axle.





Engi	ne V6	Engine	V8
Outp	ut 839 kW/1,140 hp	Output	338 kW/460 hp
Capa	city 12,796 cm ³	Capacity	4,000 cm ³
Weig	ht 4,800 kg	Weight	1,070 kg

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CONTEMPLATIVE MOMENTS

Individual preparation and time alone at the rear corner of the pit area to collect one's thoughts: All racers have their own way of getting ready for a race – with closed eyes or by gazing into the distance. Timo Scheider is no different.

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$_+$ LIFTOFF

A legend with the power to captivate: You have to look hard to find another race track that is as well known around the world as the Nordschleife. BMW surprises with its M3 GT2 and wins the 24-hour race in 2010.

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Bonk motorsport

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premio

REVVED UP FOR "GREEN HELL"

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S. CHUN TURN

astitekhtmetatte

Petroto

DUNLOP

Castrol

PZ Münster

4

"Grass roots" over top-class racing: Schaeffler's green and yellow colors are on prominent display not only in the DTM, but also in the enduring racing championship on the Nürburgring Nordschleife – with Team Bonk Motorsport.



+ PIONEERING ROLES

The Dakar Rally is the toughest challenge in international motorsports. In 1980, the event is pure adventure, and Freddy Graf Kottulinsky and Gerd Löffelmann dominate and win in the Volkswagen Iltis. Their success is attributed in part to specially sealed bearings that are supplied by the Schaeffler Group and eventually make their way into volumeproduction vehicles.



Tomczyk

CHAE

New OTHE IV

ENERGIZED

A boy's dream and hobby for "children" over 30: The slot-car track makes hearts beat faster using pure electricity. Up front and at center stage is the one-of-a-kind Schaeffler Audi A4 DTM in 1:24 scale.

2.6

+





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JÖRG WALZ is the author of numerous automotive and motorsports books. A journalist and communicator, he has provided firsthand reports on international races for the past 25 years – from the DTM, to the GT and rally scene, through to Formula 1 – and written the first official yearbooks for the DTM and ITC.

HELGE GERDES has worked as an editor and author for Speedpool for the last twelve years to provide frontline coverage of the DTM and the last three Dakar rallies. He is known as an expert of the motorsports scene and wrote the annual "Tourenwagen Story" from 2005 to 2010.

Martin Tomczyk wins the 2011 DTM, a sensational achievement that also showcases the 2008 Phoenix DTM Audi. Decorated in Schaeffler colors, this car allows Tomczyk to earn his first DTM title and underscores the automotive supplier's commitment to motorsports, which comes full circle after spanning two and a half decades of sponsoring with the LuK, FAG, and INA Group logos. In "In Pole Position", authors Jörg Walz and Helge Gerdes take a closer look at Schaeffler's racing connection, which began with rally expert Armin Schwarz and developed to include programs for the legendary Dakar Rally and Formula and truck racing.







