



INTERVIEW WITH BORBET DESIGNER

# “The aluminium wheel has a significant impact on the outward appearance of a vehicle”

**Since August 2017, Elena Feldwerth has been working as a rim designer for the wheel manufacturer BORBET. Our editors spoke with the designer about her special job, trends in the wheel industry and current challenges.**

*First of all, a personal question, how did you become a wheel designer?*

After my Fachabitur (entrance qualification for a university of applied sciences) with focus on art and design I did an apprenticeship as a technical product designer with focus on exterior. Thus, I already got in contact with the automobile and its design/ further development during my apprenticeship, but the job of a technical product designer was not creative enough for me, as you mostly make technical drawings and are not really creative. As a consequence, I started with further training and applied at BORBET in order to work in a more creative and independent way.

*What particular interest did you have in BORBET?*

BORBET is an owner-managed family business, which has been growing for decades and is deeply rooted in the area of the Sauerland. It offers an extremely attractive product from a designer’s perspective, and apart from this I grew up in this region and feel deeply connected too. It was a big chance for me to start working here.

Nowadays, we cannot imagine life without cars/vehicles and each of them needs wheels and tyres. The wheel is both a safety-relevant component and at the same time highly attractive from an optical point of view, which means that it contributes to the holistic outward appearance of a vehicle to a high degree. Thus, I was fascinated.

*How does your normal working day look like?*

I prepare design presentations or further develop already existing drafts in consultation with project leaders. I visualize current trends or realize customer inquiries. Apart from form, colour design plays a key role too. In this area the possibilities of individualization via BORBET Exapeel technologies



For about half a year, Elena Feldwerth has been responsible for the design of wheels at BORBET.

offer a big advantage, which many customers have already appreciated.

*What is special concerning the job of a wheel designer?*

The aluminium wheel is an important design element, which has a significant impact on the outward appearance of a vehicle. I am particularly proud when I see “my projects” or projects in which I was deeply involved in everyday life.

*How do you describe the challenges of wheel design?*

The biggest challenge is to be able to think of a new design again and again. It is not possible to reinvent the wheel, but it has to support the characteristics of a vehicle at the same time. This also depends on the requirements that could refer to sportiness, efficiency or aerodynamics. Regardless of

all the euphoria, technical requirements and feasibilities have always to be taken into account.

*The design process is certainly not always easy. Where do your ideas come from?*

Only inspiration enables the possibility of further development. I can merely recommend walking with open eyes through life and taking notice of one’s environment in a conscious way. When waking through the forest, I even pay attention to patterns/surfaces and structures inspiring me. They do not necessarily have to be connected with wheels or automotive vehicles. Thus, there is an indefinite number of sources on offer. Vehicles themselves can of course work as an inspiration too. There can be certain edges and curves, which are already part of the interior or exterior of the vehicle design.

### *Are trends mandatory and where do they come from?*

Trends do definitely not have to be binding. Trends can just start and often it does not matter whether a design refers to or is based on a trend. Good ideas normally find their way to the front, even if the automotive industry generally takes longer to give certain acceptance and market maturity to novelties. It is crucial to get a chance to present one's ideas. BORBET always offers this opportunity, as its own specialized trade is only waiting to get a presentation of new wheel concepts. Every now and then, the brand BORBET launches new wheels in order to test their market potential. I particularly want to mention our last topic at the IAA: aerodynamic light-metal wheels for optimization of the whole aerodynamics of the passenger car. Everyone is talking about aerodynamics and concerning a wheel this means minimizing flow resistance, optimizing air swirls and thus increasing energy efficiency. As a consequence, this creates a foundation for a huge amount of wheel design possibilities.

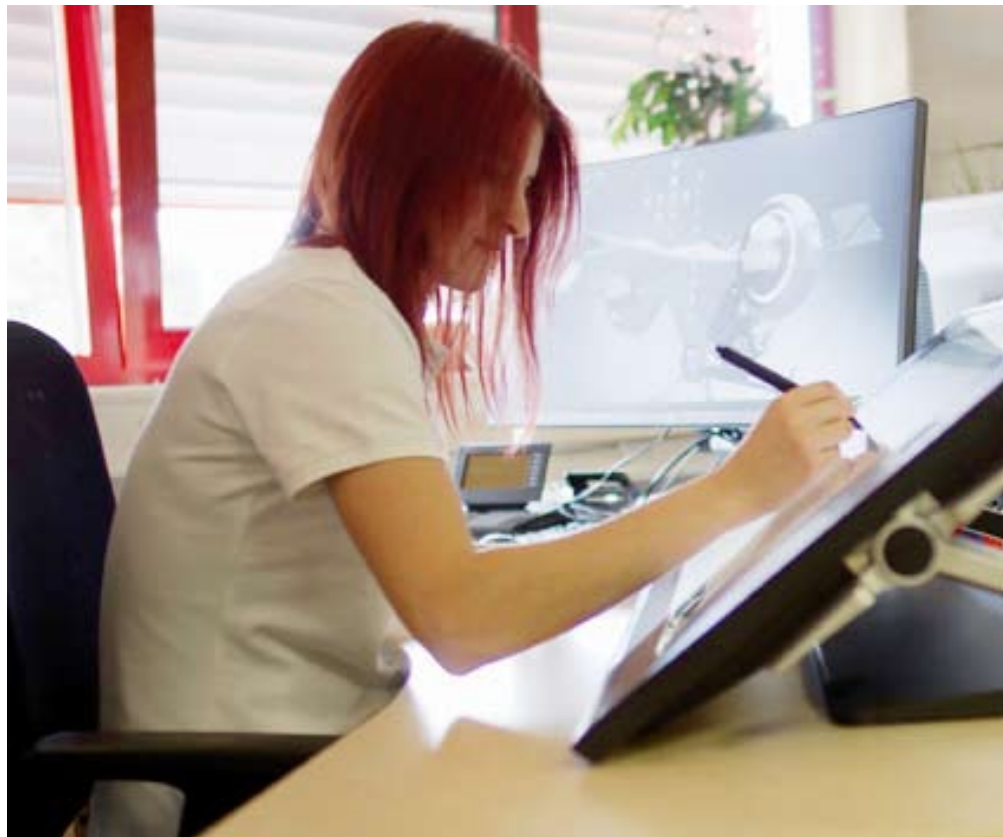
### *How do you succeed in developing wheel designs, which follow certain trends or one's own handwriting and which are, however, recognizable as "BORBET" at the same time.*

When looking at how a trend develops, I realize my own interpretation of this. Thus, there is the "typical BORBET wheel" as result. My unique handwriting is automatically included in the wheel.

### *How 'independent' are you when designing wheels? What certain aspects have to be considered e.g. concerning production procedure or material?*

The playing field for the design of an aluminium wheel is limited by technical requirements (like wheel diameter, rim width, offset, braking shape, kerbstone measurement, body protrusion, screwing boreholes, centre bores, and wheel load), but also construction specifications, which result from FEM calculation and casting simulations, have to be considered.

Designers have a wide scope concerning BORBET's brand products. Moreover, we get a briefing from our colleagues at BORBET Vertriebs GmbH with a package of requirements and applications or even tips and trends and off we go. It is extremely important for the brand that the wheel design triggers desires; otherwise we are actually free to experiment.



Elena Feldewerth can make use of her creativity at BORBET.

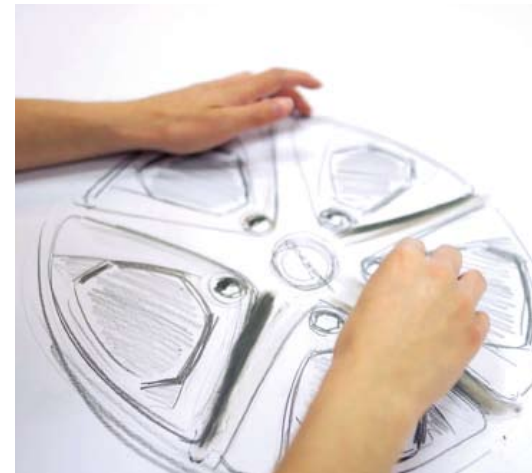
### *Do current topics like e-mobility or autonomous driving have an impact on wheel design?*

Yes, of course. Changes in the exhaust regulations (WLTP - Worldwide harmonized Light vehicles Test Procedure) demand a different way of thinking. Modern wheels do not only have to be "beautiful", but also aerodynamic and noise-reduced!

### *How long does it take to get from drafts to decisions about design and then finally to production?*

With regard to BORBET brand products, a design in a specific wheel dimension could already be launched with all the releases (TÜV) and approvals (KBA) within 4 to 6 months. This is possible at BORBET because of short coordination and decision-making processes. Our customers in original equipment take much longer, sometimes even up to a year.

Longer coordination and decision-making processes concerning vehicle design are crucial reasons for this situation, which is quite understandable. A new wheel design has to fit a 100 per cent to the new or face-lifted vehicle model. Our own brand wheels are usually produced in a wheel design for more than one vehicle type and the end-consumers have the possibility to choose 'their wheel' from our wide range of products according to their taste.



The biggest challenge for the designer is to be able to think of a new design again and again.

Automotive manufacturers place development processes of passenger cars at a higher level and thus, the whole development window will just take longer. The design process, and as well the one of light-metal wheels, happens in case of a new vehicle model far ahead. As a consequence, our tasks are really important and thrilling, as we are allowed to develop in secrecy. We, as the designers, and our colleagues working in construction have to maintain silence on the whole design and development process, which adds a lot of responsibility to our jobs. **(aki)**



FROM NORTH CAPE TO LOFOTEN

# Winter tyre test of a different type

**Dieter Röscheisen drove with a Porsche 944 from the North Cape to the Lofoten. The former Porsche test technician carried out the winter test with support from the tyre manufacturer Pirelli.**

When about 31 years ago, the Austrian Gerhard Plattner went with the globetrotter Porsche 944 once around the world, wintry roads in the high north in Scandinavia were a special challenge. Nonetheless, the Pirelli Winter Sottozero supported Dieter Röscheisen to withstand without any damage his tour from the North Cape to the Lofoten. In the 1980s, the slogan for winter tyres was “the smallest possible form and rough tread pattern”. Nowadays, the specification sheet of tyre manufacturers is certainly more complex. In former times, car drivers accepted that winter tyres were nosier than summer tyres, but today a high rolling noise is a knock out criterion. Thus, a high degree of development work focuses on acoustics. When considering the expansion of electro mobility, this aspect will even be more important in the future.

Nowadays, construction and functionality of tyres are completely different. In

the meantime, there has been a preference for broad tyres in this vehicle category. Furthermore, rolling resistance is of course expected to be as low as possible, and achieving this goal does not make it easier to deal with grip. Nevertheless, tyre developers have more than one conflict of objectives in their equation of driving dynamics. Today as well as 30 years ago, the mixing ratio, which means changes between snow-covered roads, ice and asphalt stand for the biggest challenge. Two tyres on ice, two on asphalt. Anybody could do without such an exciting idea, but it often turns to be reality not only once, and it was the reason why two 959 were sent on their debut tour to the North Cape thirty years ago.

“At that time, the Swedes considered us to be totally crazy”, Dieter Röscheisen says. Within two days, the two sports cars covered 2,306 kilometres – the slightly raised version, which was functioning as snowplough, was followed by the deeper version.

The developers had sleeping bags, provisions, a flare pistol and wood for fire in the car. The tour was successful and the control systems of the four-wheel drive could be applied to and optimized for

many different road conditions. In former times, the test drivers’ feelings were the most important measuring figure. Nothing has changed until today, although computer simulations can already carry out much of the foundation work, and the Peiseler wheel, which was mounted on each vehicle, is no longer used. The quality of a winter tyre, however, is demonstrated on the handling tracks of frozen lakes in northern Sweden, where engineers have set up their winter camps for more than 30 years.

Pirelli equipped the 944 with tyres, which prove the top-quality of the development activities carried out together with Porsche. For many older models like e.g. Porsche Turbo, modern tyres with classic tread outfit were chosen, which is a basic pre-condition for vehicle models of those times, as they are not equipped with any control systems. The tyres for the Porsche Super sports car classics are part of the so-called Pirelli Collezione. Pirelli reacts with this portfolio to the growing demand of owners of prestigious historic and classic cars for modern tyres with classic look. According to responsible people, these tailor-made tyres combine special aesthetic aspects of the past decades with the latest technology and current experience gained in motorsports. They managed the journey from the North Cape to the Lofoten with excellence.

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Once again, Porsche was looking for challenges related to driving dynamics on wintry tracks in Norway.

The North Cape: Starting point for Dieter Röscheisen’s “winter tyre test“.



# Lured out of their comfort zone

**Participants were pushed to their limits at the Mercedes-Benz Onroad Winter Training in Saalfelden (Austria). Bridgestone equipped the training vehicles with winter tyres of the series Blizzak. Since 2012, the tyre manufacturer has been the official cooperation partner of the Mercedes-Benz Driving Events.**

Fifteen journalists from all over Europe followed the Bridgestone invitation in order to prove their driving skills in different Mercedes-Benz models on an ice arena of 120,000 square metres. They carried out driving manoeuvres on ice and snow with the Blizzak LM001, Blizzak LM-32 and Blizzak LM-80 Evo in front of the dreamlike scenery of the Alps. “The aim of our Mercedes-Benz Driving Events is to lure participants out of their comfort zone, to push them to their limits and to finally turn them into more considerate drivers. Our different types of training clearly demonstrate that Bridgestone’s premium tyres make a difference – above all in challenging situations”, explains Wolfgang Müller, three-time participant of the Rallye Dakar and head instructor at Mercedes-Benz Driving Events.

“As the tyre is the only contact area with the road, an adequate tyre type is the most important aspect of vehicle safety and enables maximum control under predominating road conditions in winter”, says Christian Mathes, spokesperson at Bridgestone. “Bridgestone Blizzak winter tyres consist of a special rubber compound, which remains flexible at low temperatures, and offers improved traction on snow-covered, icy, and slushy roads.” Celebrity support was also available: Fabian Hambüchen, Olympic champion and ambassador of the Bridgestone campaign Chase your dream – no matter what, was also behind the steering wheel.

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Not as brilliant in the car as on the gymnastic rings.

When pushed to the limit, you discover the quality of tyres.



COOPERATIONS & CONCEPTS

# Concentration processes still growing

**German tyre trade offers a huge variety of different distribution channels and at least as many strategies how to deal with them. Thus, the question arises, whether there will still be room for independent tyre dealers and how they are supposed to present themselves in the future?**

In the past months, several take-overs and new foundations caused a lot of movement in the European and German tyre trade. Some tyre manufacturers and several wholesale players boosted this development. The fact that the tyre manufacturer Apollo Vredestein bought Reifen.com had nearly been forgotten.

### Pushing industry

At the moment, Michelin is drawing attention once again. This time not because of all-season tyres and the so-called Long Lasting Performance of tyres, but concerning a focus on securing different distribution channels in Europe and Germany. Michelin has always been on the road with its tyre chain Euromaster. Losses generated there are normally compensated by the parent company at the end of the year. Thus, Euromaster has always been able to start the new season with a 'balanced account' each year.

The tyre chain Euromaster was combined with the tyre business of Meyer-Lissendorf and Ihle Baden-Baden. Moreover, Euromaster and the cooperation EFR (Einkaufsgesellschaft Freier Reifenfachhändler – purchasing network of independent retailers) founded the joined purchasing network Advantico, which is based in Mannheim, in 2015. According to company information, more than 700 retailers of specialized tyre trade and motor vehicle services in Germany and Austria benefit from this. Nonetheless, that is not the end of the story. Michelin announced a share of 20% in the specialized retailer concept of A.T.U. As a consequence, the tyre manufacturer has guaranteed access to nearly any type of distribution channel.

### Pushing wholesale

Nevertheless, there are also growing concentration tendencies in tyre wholesale. The London based European Tyres Distribution Limited agreed with REIFF, a family business in Reutlingen, on a binding take-over of the business area 'tyres and automotive technology'. The holding company, European Tyres Distribution Limited, a so-called "platform company", is already parent company of the leading Italian tyre wholesaler Fintyre.

The company is active throughout the whole value-added chain of tyre trade, from wholesale to retail and online trade and disposes of four delivery warehouses and 46 retail outlets. In the business year 2016, the company achieved a turnover of about 340 million euros with more than 285,000 customers. The company offers service to both the retail trade and the discount area, and also has a strong position in the wholesale area by offering the well-known brands Reiff brands like e.g. Reiff Reifen- und Autotechnik, A/B/S Autoservice, NETTO Reifen-Räder-Discount, tyre1 and reifendiscount.de. According to experts, only Reiff and Fintyre alone could dispose of a tyre volume of about 14 million. The joined turnover of Fintyre and Reiff Reifen und Autotechnik is supposed to achieve more than 750 million euros. In the next years, European Tyres Distribution Limited is said to become the leading independent tyre dealer based on further acquisitions and organic growth.

There are certainly also smaller volumes around. Only recently, the cooperation Point S was able to win over Fastfitter pitstop as a silent partner. Thus, all of a sudden the former 466 Point S outlets turned into 766 outlets. This will definitely be a good basis for negotiations concerning purchasing.

### Future prospects

All the take-overs and acquisitions are characterized by joining quantities of tyres, turnover and market power. Nonetheless, there are still independent tyre dealers, partly organized and partly still acting on their own. The number of independent tyre dealers is changing, but it is said to be around 500 dealers.

Taking part in a cooperation, or a concept, has to be carefully decided depending on individual requirements. Some concepts expect more participation and commitment, while others offer a lot of freedom.

At the end of the day, the individual commitment of the respective entrepreneur will play a key role. No concept will be able to take over work in the tyre and motor vehicle service. Dealing with customers, and organizational processes in the shop and the workshop will have to be planned and carried out according to specific circumstances. While each concept offers support, the future-oriented development will depend on the entrepreneurs and their employees. Whoever is able to internalize this, will be able to perform well in the market.

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# Seizing opportunities, accepting challenges

**Tyre trade is an accepted point of sale, if tyre service is involved. The high seasonal dependence of tyres is to be compensated with additional offers. Thus, an entrepreneur needs guaranteed key figures as basis in order to monitor companies based on optimized business administration and to get prepared in a future-oriented way.**

In the past seven years, tyre sales at the point of sale are said to have decreased from about 5,230 units in 2011 to scarcely 4,100 units in 2016. The BRV discovered in a comparison of companies that on average about 5,000 passenger car tyres and 900 truck tyres are sold per year. Nonetheless, it was noticed that the number of units developed among the companies in totally different ways. The total average of tyre units dropped by two per cent year on year. Individual companies, however, were able to keep or even increase the number of summer tyres. Altogether, an average outlet achieved a total turnover of 535.13 K€ accumulated in December 2016. Gross profit reached 41.1 per cent of total turnover on average. These average figures can only work as an indicator and always have to be compared with one's own company figures.

There are several reasons, why the one or the other company achieved better or worse results. It is always important to take control of costs and to increase turnover of tyres and services. Moreover, customer expectations have increased in general, and demands are higher. Today, customers expect an individual approach with tailor-made offers for their personal needs. Because of the topic of digitalization, customers expect to be addressed via all the channels with customized sales and service environments. That includes both digital appointment booking and an individual offer. At the end of the day, the customer expects the most comfortable purchasing possibility related to the whole topic of tyres.

## Complex tyre technology

Tyre technology has become more and more complex, boosted by numerous new vehicle models and existing tyre pressure monitoring systems (TPMS). Moreover, a further topic is the discussion about the use of all-season tyres compared to summer and winter tyres. Thus, the individual



consultation competence of the specialized tyre dealer will pay off. There will be further business possibilities in combination with a new set of rims, which will also be able to increase turnover and yield.

Customers changing their tyres are to be informed, e.g. when the mechanic notices damaged axle boots, when windscreen wiper blades are to be exchanged, or the last oil change happened a longer time ago. Most car drivers are thankful to get this type of information. When supported by a respective offer, the repairs will probably be carried out immediately or they will make an appointment to remedy the defects.

## Competent motor vehicle service

Specialized tyre trade will have to deal with the image that customers consider it as an expert for tyre service first of all, whereas it is supposed to have a limited competence concerning motor vehicle service. This statement that was the result of several surveys is to be regarded as signal for more commitment of the tyre dealer offering motor vehicle service too. Get over your customers' mental block and inform them actively by using your existing custo-

mer and vehicle data. Try to increase your customers' revisiting rate by sending flyers via post or interestingly designed mailings. Should there be any possibility of booking billboards in your region, you could make use of them too.

When positioning motor vehicle service in specialized tyre trade, it is extremely important to know the current registered vehicle brands and the age of the vehicle owners in your region. Moreover, data concerning driving behaviour like drivers with low or high mileage play a key role too. After analysing this type of data in comparison with your own customer data you will soon discover whether and how motor vehicle service will pay off.

According to DAT, the frequency of repairs achieved 31 per cent on average in 2017 and it increased up to an age of 10 years to even 47 per cent. Repair costs per passenger car were at 167 euros per year, whereas vehicles at the age of 10 years or even older had repair costs of 317 euros per year. Any entrepreneur will be able to determine the potential in the respective sales area based on these figures.

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