

## PRESS RELEASE by Kalle Nicolai

**NICOLAI** has been building mountain bikes for over 20 years, and for over 10 years electric assisted 'eMTB'. The question „Who needs that?“ or the quote „I am still too fit for that,“ is rarely heard today. Why? Because people who are interested in e-bikes quickly learn that riding an eMTB is still sport. The advantages are obvious: differences in fitness between friends are levelled, the range is increased and ultimately, you can have longer riding time and pleasure.

For this year, Nicolai's eMTB called the EBOXX-2019 is developed and produced precisely for this riding experience. This is a special product because Nicolai is one of the few remaining companies to produce bicycle frames in Germany. In our own factory, all components are CNC-milled from high-quality aircraft aluminium and precisely welded together. The high-quality welding beads have established themselves as a trademark in the industry. A Nicolai bike can therefore also be recognised without a logo.

What will the eMTB of the future look like? The EBOXX E14 is our answer to this simple question. All our experience from 23-years has been collated here. Here, historically grown roots are cut. The derailleur and chain-driven gear system gives way to the durable Gates belt drive in combination with the almost indestructible Rohloff hub, which can even be electrically shifted under load in this bike.

Kalle Nicolai says: „It goes without saying that Nicolai only selects very high quality components for the complete bike. Exactly the ones we have tested and also continue to use ourselves. In other areas of performance, we continue today with our so-called Geolution geometry for increased safety, traction, and speed, in all riding situations.



All in all, the bike has unrivalled and incomparable riding performance. The reason lies in the sum of all the (big) little things, which we would like to explain now:

## BOSCH CX with KIOX

NICOLAI reflects on a long and close cooperation with the technology company Bosch. Therefore we continue to use the strong Bosch CX motor with specially-tuned mountain bike software in the EBOXX bike. New for 2019 is the KIOX on-board computer with all the functions a real rider needs. The small, scratch-resistant color-display is controlled by the operating unit with improved ergonomics at the left grip. It provides data on riding speed, power, heart rate, battery charge and much more. The magnetic holder makes it easy to remove and attach the on-board computer while keeping it firmly in place.

The 500 Wh battery is fully integrated into the down tube and can be charged on or off the bike.



## GATES CARBON DRIVE

Forget the days of oil-smearred chains and join the Gates Carbon Drive Revolution. Clean, smooth, robust and light. These are the advantages of the Gates Carbon Drive™ system. The carbon reinforced belts are as stiff as a chain, have a longer life, run dry without lubrication and are virtually maintenance free. With an Ebike, the motor power and human power must be transmitted together to the rear wheel. Derailleur gears therefore wear relatively quickly in this application. We wanted to change this and developed the Nicolai EBOXX E14, the world's first E-MTB equipped with a GATES belt drive. Designed and optimized for all off-road riders.



## 5 FRAME SIZES

The manufacturing of Nicolai products in Germany gives Nicolai the necessary flexibility to adapt its products to the special needs of its customers. A correct posture on the bike can only be achieved by selecting the right frame size. The 5 frame sizes S,M,L,XL and XXL offer the right product for every customer between 1.55 and 2.10 meters tall.



Fig. shows the **EBOXX 2019** frame in size S

## ROHLOFF

The new Rohloff E-14 transmission sets standards for shifting e-bikes – shifting has never been more comfortable. Combined with the Bosch motor, the unique fast shifting performance and easy operation is a pleasure to use. One push on the button, and the drive removes load from the system, and the Rohloff hub switches electrically. Hold down the button and the E-14 shifts all 14 gears in a fast 3-speed sequence. And when the trail forces you to stop, it automatically returns to the starting gear. For 2019, we now have improved the position of the electronic trigger to achieve the best intuitive operation with the thumb.





## SUSPENSION

The rear end of a mountain bike chassis is not a structural rigid component. It is exposed to extreme loads during off-road driving. That's why we only use the best suspension components from the US specialist Fox. Typical critical points are also the ball bearings, which ensure low breakaway torque and optimum response in the joints. In order to keep the maintenance intervals long, we only use full complement, double-sealed ball bearings which are built into the CNC milled aluminium structure. For 2019, we have further optimized the structure so that we can allow a payload of up to 150 kg.



## GEOLUTION

“We don't care about trends! All that matters is lap times, riding pleasure, safety and the physical facts.” This quote is our approach to the development of new mountain bikes. This mission statement has made us one of the most innovative bicycle companies in terms of chassis performance, steering dynamics and geometry.

GeoMetron is the geometry concept on which all current Nicolai models are based. The concept is based on the realization that a longer wheelbase, a slacker steering angle and a steeper seat angle make the bike faster, smoother, easier to climb and safer.

The geometric relationship between wheels, steering angle, and weight distribution are the decisive factors for good handling. The relationship between saddle, crank and rear wheel axle are the decisive factors for the climbing behaviour of a bike. The GeoMetron concept combines



perfect handling with optimum climbing behaviour. The rider is integrated into the bike through the long reach, the steep seat angle and the long wheelbase, so that the centre of gravity lies optimally between front and rear wheel axle.



All GeoMetron models are built with short stems, so that the rider has a relaxed and comfortable seated position despite the long top tube.

The very complex topic can be simplified down to four advantages which offers both professionals and beginners a clear added value:

- **Great climbing ability (prevents the front wheel from rising or wandering)**
- **No more „over the bar“ riding accidents**
- **The rider is integrated in between the wheels, sitting or standing (more control)**
- **Higher cornering speed (more grip on the front wheel)**

These advantages are clearly noticeable not only for the professional, but also for the beginner. We build our bikes because we want to ride them the same way.

## 7020-T6 Aluminium

Aluminium is not Aluminium! We at Nicolai exclusively use the alloy 7020-T6 (AlZn4,5Mg1) for our frames. Compared to our competitors, who mostly use aluminium 6061-T6, this grade has much better strength values. Here is a table for all Tech-Nerds:

<b>Designation:</b>	<b>Tensile strength (RM; N/mm<sup>2</sup>)</b>	<b>Elastic limit (Rp0,2; N/mm<sup>2</sup>)</b>	<b>Ultimate elongation (%)</b>
Aluminium 7020 T6	> 350	> 280	> 10
Aluminium 6061 T6	> 260	> 240	> 10

The tensile strength of 7020 compared to 6061 aluminium is about one third higher. The elasticity is about one fifth higher. These properties, coupled with high quality welding, result in a bicycle frame that is far superior to the average in terms of durability. In comparison to carbon, aluminium is much more robust and tough, so that bottom contact, falls or stone impacts cannot harm the structure.



## COMPLETE BIKE CONFIGURATOR

On the homepage ([www.nicolai-bicycles.com](http://www.nicolai-bicycles.com)) you can now order the EBOXX Bike as a complete bike. Carefully considered components offer the following two models. On one side a bike with classic derailleur gears and on the other side the so-called EBOXX E14 with Gates Carbon Drive.

1. BIKESPEC	EBOXX QLFLINE - 7499,00€
Gabel / fork	FOX RACING SHOX 36 Float 160 FIT4 Factory BOOST, 27,5" 2019
Dämpfer / rear shock	FOX RACING SHOX Float X2, Comp-Lever, Factory 2019
Steuersatz / headset	ACROS Block Lock
Vorbau / stem	HOPE AM 35mm
Lenker / handlebar	SQLab 3OX Alu med 780x30 12°
Bremse / brake	MAGURA MT7, HC Bremshebel 203mm
Griffe / grips	SQLab 711 Tech Trail - SIZE M
Reifen / tyres	CONTINENTAL Der Baron Projekt ProTecton Apex 27.5x2,6"
Sattel / saddle	SQLab 611 Ergowave active - 140mm
Sattelstütze / seatpost	MAGURA VYRON eLECT 150 30,9mm
Kurbel / cranks	Miranda 165mm
Laufräder / wheelset	HOPE TECH 35 W Pro 4 BOOST - 9-spline - black - SET
Kettenblatt / sprocket	SRAM X-Sync 14T Kettenblatt für Bosch
Motor / engine	BOSCH CX Performance Line
Akku / batterie	BOSCH Power Tube 500 Vertical Black
Display / display	BOSCH KIOX
Schalthebel / shifter	SRAM GX 11-fach Schalthebel
Schaltwerk / derailleur	SRAM GX Type2.1, 11-fach
Kassette / cassette	SRAM NX PG-1130 10-42t, 11- fach
Kette / chain	SRAM Kette CN-PC1130
Chainguide	UNIVERSAL TRANSMISSION CB1
Pedal	OneUp Components Comp Pedal - black

**TECH-SHEET:** <https://goo.gl/vHiZVK>

<b>2. BIKESPEC</b>	<b>EBOXX E14 - 8999,00€</b>
Gabel / fork	FOX RACING SHOX 36 Float 160 FIT4 Factory BOOST, 27,5" 2019
Dämpfer / rear shock	FOX RACING SHOX Float X2, Comp-Lever, Factory 2019
Steuersatz/ headset	ACROS Block Lock
Vorbau / stem	HOPE AM 35mm
Lenker / handlebar	SQLab 3OX Alu med 780x30 12°
Bremse / brake	MAGURA MT7, HC Bremshebel 203mm
Griffe / grips	SQLab 711 Tech Trail - SIZE M
Reifen / tyres	CONTINENTAL Der Baron Projekt ProTaction Apex 27.5x2,6"
Sattel / saddle	SQLab 611 Ergowave active - 140mm
Sattelstütze / seatpost	MAGURA VYRON eLECT 150 30,9mm
Kurbel / cranks	Miranda 165mm
Laufräder/ wheelset	HOPE Tech 35 W 27,5" Felge / Rohloff Speedhub, 14- Gang
Kettenblatt / sprocket	GATES Riemenscheibe 22T
Motor / engine	BOSCH CX Performance Line
Akku / batterie	BOSCH Power Tube 500 Vertical Black
Display / display	BOSCH KIOX
Schalthebel / shifter	ROHLOFF Speedhub, 14- Gang
Schaltwerk / derailleur	ROHLOFF Speedhub, 14- Gang
Kassette / cassette	GATES Riemenscheibe 22T
Kette / chain	GATES Riemen CDX 111T
Pedal	OneUp Components Comp Pedal - black

**TECH-SHEET:** <https://goo.gl/SxBrgY>

## CLOSING REMARK

We could also bombard you even more about our production facilities and techniques, the racing activities, our manufacturing quality „Made in Germany“, the 5 year warranty, the possibility of individual color selection or about the 10 years of spare part availability, but that would go beyond the scope here. Anybody who has questions, should simply contact us.

## NICOLAI GMBH

### Technology :

Philipp Hildebrand  
philipp.hildebrand@nicolaibike.de  
Tel.: (49) 05068 72699 610

### Testrides:

Vincent Stoyhe  
vincent.stoyhe@nicolaibike.de  
Tel.: (49) 0151 650 72668

### Pictures and graphics:

Niko Grobe  
niko.grobe@nicolaibike.de  
Tel.: (49) 015151425876

**NICOLAI** Gesellschaft für Zweirad- und  
Maschinenbau mbH  
Altenbekener Str. 2a  
31008 Elze / Mehle  
Germany