

IEE sensors make the perfect saddle fitting for gebioMized

Isn't a bike saddle just a saddle? Not if you are a professional biker competing at top level and not if the saddle is a gebioMized one.

Because every biker is unique and so is their posture, GeBioM and IEE help every one of them get a step closer to victory by focusing on their individual profiles, supporting them in making the most of their potential. In short, a collaboration who has been helping leading athletes reach their goals for years now.



GeBioM, the mother company of the SnM gebioMized GmbH saddle fitting, has been

developing their own specific way to calibrate on industrial hydraulic press. The bike fitting that they are perfecting is a process in which an initial measurement is compared to a control measurement. Optimizing the pressure and how the force is dispersed on three contact points (saddle, pedals, and handlebars) is at the core of the fitting. To deliver this assessment, exceptionally accurate and light sensors are needed.

GeBioM is one of the oldest IEE customers, having gone through various stages of



a 27-year long collaboration which involves running research studies for IEE in the early days to going into mass production and in-between COdeveloping pressure measuring solutions for various applications for selected customers and projects. The bike fitting saddle is one of them, and we can also count in their go-tech custom-made insole solutions for sports or orthopaedic shoemakers and technicians.



A matter of fine balance

Anyone with a solid biking experience knows that, in the hunt for the next course record, defining the most adapted position by 1 mm to the front or to the back makes the whole difference. This is a fine adjustment, into which a precise, well-build and thoroughly studied pressure map is nothing short than essential. Even more so since the shape of the saddle itself is not the easiest one to integrate sensors into. This is a very specific surface which bends in various directions and curves, and the sensors must be flexible enough to follow the shape without disturbing the saddle signal. To measure and thus estimate the best riding position for some of the finest cyclists on the planet, sensors of undeniable quality as well as a willingness to test the product until proven exceptional are needed.

"The downsize of not getting it right is huge: The malposition can cause pain during sustained effort and limit performance reducing by the stability muscular at the most important point of contact: the saddle," Wolfgang says Domenghino, CEO and member of company at GeBioM.



The saddle pressure mapping provides the most meaningful data: How stable is the rider on the bike and where exactly does he/she sit? Also, how can the ride be made more performant and more comfortable? What equipment fits best? The data is immediately evaluated visually, and the fitting process can start. It is this very data which also decides how the required components must be customized, for the saddle, but also insoles.



"Finding the right components and respecting the special physiology of the rider is united in all fit processes. What we always appreciated with IEE right from the very beginning is their openness to ideas. Then, the IEE team takes the time to put it in practice and we communicate back and forth, studying the final product in very minute details until we are completely satisfied with it. Then we can confidently bring it forward to our customers," says Domenghino.



Joining hands to push the cycling technology further

There is little doubt that the gebioMized pressure systems have added tremendous value to sports scientists worldwide and allowed GeBioM as a company to establish an accurate cycling analysis protocol.



"We have tried various sensors and technologies throughout the years, but we always got back to our long-date partner, IEE, for the undeniable quality of their their extended sensors. experience in the field and our excellent collaboration," says Domenghino. "It is also thanks to these that we are capable to date to provide experts with the best adapted tools that make cyclists

more effective from a biomechanical standpoint. With reliable sensors, we can provide not only insights into equipment selection, but also into how position affects comfort and performance and how to optimize them. Our customers appreciate that we give them evidence-based fitting solutions, not just observations and feedback."

"From an IEE perspective, this collaboration is something we take pride of at many levels," says Fabio Boenigk, Key Account Manager at IEE. "To begin with, it started some 27 years ago, and that alone is saying something. Many ideas have been exchanged ever since and many now have a prosperous future. The gebioMized saddle and foot pressure sensors have been a game changer for bike fits and cycling analysis. GeBioM does not simply guess how a customer's body responds to a fit, but accurately monitors many crucial parameters, which means increased

confidence in the professional suggestions for fit changes. One of their core business strengths is giving instant feedback on how the body interacts with changes in the bike fit until reaching ideal match, and our sensors are enabling this. GebioMized is such a journey and we are happy to participate in it and use our sensors for modernizing bike fitting further," says Boenigk.



Its taste for excellence has driven gebioMized to become an official bike fitting partner for one of the teams participating in Tour de France. With over 10 years of experience in biomechanical cycling, the company has taken another leap and started to develop their own optimum-fitting saddles. At IEE, we follow this beautiful evolution closely and are confident to remain partner of choice for years to come.