## BJARKE INGELS

## SURFACE



THE DESIGN ISSUE







Mathieu Lehanneur seeks to make the impossible possible through his genrebending work.

## BY JUDITH GURA PHOTOS BY CÉLINE CLANET

Lehanneur in his Paris studio. (OPPOSITE, CLOSEWISE FROM TOP LETT) Samples from "liquid marble and bronze" works next to energy monitoring devices. "Pocket Ocean" in ceramic. "Inverted Gravity" in glass and marble.

Redesigning a bicycle was not on Mathieu Lehanneur's to-do list. But when two Swiss watch-company executives approached him in 2014 with a prototype of a folding electric bike and invited him to reimagine it-"to create the best e-bike ever," he says, "whatever the final price"-the designer simply couldn't resist the challenge. He'd recently completed a project for Audemars Piguet, and had observed workers in the factory spending hours, days, even weeks on a single part. "So I knew the Swiss had the skill and the technology to make it." He not only accepted the commission but became a partner in the new venture.

"I decided to approach the bike as if it

were a luxury watch," Lehanneur says. This meant designing virtually every element from scratch: some 180 different parts, which were then machined in stainless-steel magnesium or aluminum. Innovative details include a weight-reducing Eiffel structure and a one-second folding system, as well as two engine power-speed-autonomy options and flexible mechanical systems for smooth driving on any road. As with some fine watches, glimpses of the inner workings are visible—through a "window" in the main body, and along a juncture when the bike is folded. The new company, Voltitude, will launch the design next year at an estimated price of between 15,000 and 20,000 curos,









(OPPOISITE) The folding e-bike from Volitude.

positioning it in a class with the luxury products that inspired it. "We have decided not to be marketing-driven," he says. "If you succeed, the market will want it. Haute couture works that way. Haute horlogerie works that way. Haute bikery will work that way.

The 44-year old Frenchman was an obvious choice for the project, having reached start status with a range of designs that defy categorization, but always involve the research-based approach of a scientist. "If you just sat me down and asked me to design something, I wouldn't know where to start," he says." I need an enigma to solve." He credits science as an inspiration, saying, "I want to use science as a tool to understand how human beings work... to address body and mind at the same time.

This attitude informs both his award-winning industrial design including an asthma treatment with a built-in reminder and a series of household objects that reduce energy







consumption—and his elegantly sensual furnishings, such as the museum-worthy "liquid marble and bronze" tables for Carpenters Workshop Gallery, which appear to capture lava in its transitory molten state. In addressing particular challenges, Lehanneur, who originally enrolled in fine art school before changing directions, has consulted and collaborated with biologists, noise technicians, pharmacists, and other specialists in diverse and unexpected areas.

This year, in addition to the folding bike, he and his 10-person Paris studio—founded in 2001 after he completed his studies at ENSCI-Les Areliers, that city's school for industrial design—will introduce solutions to several daunting problems. One is a bracelet-like device that measures every atmospheric element (temperature, humidity, UV

intensity, pollution) and advises its weare on the protection needed. The data is then transmitted to scientists and tabulated for statistical research. Another project brings the "DNA of Paris [to] the middle of an airport," when his design for the bar in the business-class Air France VIP lounge at Charles de Gaulle opens this June. A third, planned for 2019, is a product that adapts hospital technology for treating burn victims into a cosmetic appliance that uses light to help creams and lotions penetrate deeper into the skin.

There is one enigma that remains at the top of his list: creating a school environment that would make every student's day rich and inspirational. He thinks design can do that. Given his track record, Lehanneur seems a likely candidate to take on the challenge.

The Nano Controller, designed for Schneider Electric, to help users manage their home's energy consumption.