The making of HUUB'S NEW AGILIS SWIMSKIN IS THE LATEST APPAREL OF INNOVATION FROM THE SELF-PROCLAIMED PEOPLE'S REPUBLIC OF DERBADOS. 220 HEADS TO THE EAST MIDLANDS TO FIND OUT MORE uub have something of the disruptor about them. Is it down to being based in Derby, the East Midlands industrial city that brought us the Rolls Royce and its first aero engine? Possibly. But more likely it's down to their founder, Dean Jackson, who by his own admission didn't shine at school. In fact, he harboured ambitions of becoming the UK's first qualified male nanny before striding into the sports sector. Jackson doesn't conform. He enjoys doing things differently. And this is why the concept behind their new swimskin, the Agilis, stemmed from the most disruptive period in the world of swimming. "We're talking about Swimsuit Wars," Jackson reflects with a wry smile. "This was around 2008, 2009 and I was working for a different wetsuit manufacturer at the time. Basically, after a raft of world records, FINA [the Federation Internationale de Natation] banned non-permeable swimsuits." Such swimsuits trap air, increasing buoyancy and delivering a speed advantage. Speedo's LZR was the groundbreaker, claiming a staggering 179 pool and open-water world records in 18 months. The rules were tightened but Jackson, ever the innovator, spotted an advantage that was legal. "I got talking to professor Huub Toussaint," Jackson explains. "He explained to me that if you can squash and squeeze your torso, you present a smaller frontal area to the water. You cut drag and turn yourself into a torpedo. It's why that nineyear-old in the next lane can swim faster than you even if their power is less."

"Signing the Brownlees transformed things. It gave us a huge amount of kudos"

SQUASH AND SQUEEZE

That "squash" and "squeeze" (and comfort, Jackson adds) has bore fruit more than a decade later in the Agilis. "Basically, we took the high compression from those suits, especially around the core. We applied a selection of fabrics, which are hydrophobic in nature, that perform by being 'tight' in the right places. This has the effect of shifting the centre of buoyancy. If you're doing that, as well as lowering surface drag and decreasing the cross-section of your body, you swim faster."

To that end, Jackson says that the Agilis is aimed at anyone "doing an event where you're not using a wetsuit and feel you need some extra help in the water" – which probably accounts for all of us. "Like a wetsuit, the gains are more significant the less elite you are. Yes, the elites will gain significant time per 100m, but middle-of-the-pack swimmers will enjoy even greater time savings."

You might think 'That's all well and good, but why don't I just slip into a pool suit?' Jackson explains it's all down to the zipper. "Beyond all the fabric technologies at play, zippers are banned in pool suits, but not triathlon swimskins, meaning you can dramatically increase the compressive element in the areas you want them: the core, thighs and hips."

The suit has been in development for four years, and core to its research and innovation has been what Huub term the MAD system. MAD stands for Measuring Active Drag. "It's a system where you

push off 17 force plates that record force, frequency and time," Jackson explains. "It was a £350-grand investment and is based at the BEST Swim Centre in Mallorca. It's been incredibly useful and resulted in huge hydrodynamic gains. One example? We know that if we stitch a swimskin instead of welding a swimskin, there's a 1% benefit."

BACK TO THE BEGINNINGS

You can see more on the MAD system at youtube. com/watch?v=z1Qq8Vw6o7s, including an appearance by the Dutchman whose technical know-how inspired many of the UK outfit's wetsuits and swimwear. "I launched Huub in 2011," Jackson recently told Chris Cooper on his popular podcast, The Business Elevation Show. "Before launch, I was discussing a name with my daughter. I wanted a relatively generic name in case we looked to expand into other sports. I'm a huge fan of Tron so I was going to call it Flynn, after the main character. But my daughter knew I'd been in conversation with Huub Toussaint and said 'Why don't you call it after him?' We liked it, looked it up, and discovered it's Germanic. It means 'bright mind'.

"I then met Huub at Amsterdam Airport and told him I'd trademarked his name! I said, 'I'd like you to have shares in my company and help me to develop our brand'. He said, 'I have one condition. I'll tell you the scientific benefit and how to make things better. All I ask is that you listen and put it into





practice what I say.' It was like a gift when you had someone of that stature offering their knowledge."

Alongside Toussaint, Jackson utilised the expertise of Paul Newsome and Adam Young of coaching outfit Swim Smooth. He also tapped into his imagination. Huub's office in Derby, as Jackson would readily admit, resembles a man-cave, littered with toys and reminders of his childhood. "There's nothing more exciting than the mind of a child," he says. "We're all kids at heart and it's something I wanted to take into Huub. I remember one day I found myself at Toys R Us and picked up Captain America's Hot Wheels cars. I tipped the box onto its side and it gave me the visual idea for the Aerious II, the suit that's designed to prevent sinking legs. It's why I have all that retro memorabilia."

THE GAMBLE PAYS OFF

When Huub started, Jackson's focus on looks saw him invest \$5,000 in printing when "others might have run a mile. I only had \$25,000 but it paid off. Not only did we change the way suits performed, but they're visually more appealing too." Huub soon hit half-a-million pounds worth of sales, but cranked things up when the wetsuit contract for two certain Olympic stars was reaching its end. "Signing the Brownlees transformed things, doubling our turnover the following year. It gave us a huge amount of kudos."

Huub head honcho Dean Jackson believes that the visual appeal of a swimsuit has great value







That was 2013 and the collaboration continues to this day. In fact, it's expanded. "We got Alistair in the lab and 3D mapped him. From that 3D image, we generated a 3D mannequin of him with all his lumps and bumps. It meant we could apply fabrics and suits to him when he wasn't in Derby for a very personal fit."

It also helped Jackson and his team to better understand active drag through the water – an understanding that's set to grow thanks to a partnership with INCUS Performance. INCUS is a sports analytic company whose mission is "to help athletes train better using data". To that end, one of their projects consists of an analytics tool called Nova, that can be slipped into swimwear to monitor and measure the effectiveness of your swim stroke.

"Feedback like this has never been available before," says Jackson. "We've been working with them for about two years, giving them samples and prototypes to test for swimming in open water and pool. We've come to an agreement that we'll help to design clothing that will integrate the INCUS pod and deliver feedback to improve your stroke."

That's to come. For now, when a sense of normality arrives and you're racing at home or abroad, Huub are confident you'll swim faster in their new Agilis. Their history of Olympic-winning performances and omnipresence at all levels of age-group racing suggests they'll be correct.