

FINA changes the rules

It goes without saying that swimwear has changed a great deal over the last century, in terms of fit, style and technology, and these changes are never more pronounced than in the competitive swimwear arena. The launch of Lycra has made a tremendous difference to the world's top swimmers since the 1960s and many other developments have helped competitors move more freely and are believed to have boosted performance levels.

However, the most controversial developments appear to have come during the last five to ten years. As a result, international swimming federation FINA has really had its work cut out for it. Things came to a head when it announced last summer that a number of existing competitive suits were to be banned. The news sparked fury from some and drew praise from others who had long believed modern suits were giving some swimmers an unfair advantage.

The world's fastest suits

During the build-up to the Beijing Olympics, one of the swimsuits that attracted the most attention—both good and bad—was Speedo's LZR Racer suit, described by the company as "the world's fastest swimsuit". The suit was said to promote better oxygen flow to the muscles, and to hold the body in a more

International swimming federation FINA has banned a number of high-tech swimsuits as of January 1.

Speedo

hydrodynamic position, while also repelling water. The seams of the suit were ultra-sonically welded to reduce drag.

The high-tech suit was worn by a number of top swimmers in Beijing including Michael Phelps, who won the most gold medals in a single Olympics ever at the event, adding eight to his name. Statistics show that an incredible 94% of all swimming races were won by competitors that were wearing the suit. In total 23 of the 25 world records broken were achieved by swimmers competing in the LZR.

While this pleased Speedo and its sponsored athletes, it angered others, who saw the suit as a mobility aid. Following the Olympics, president of USA Swimming, Jim Wood, spoke out against suits that he felt gave competitors an unfair advantage. Although he did not specifically mention the LZR, one of the comments he made was that suits should not be permitted to "cover the neck, extend past the shoulder, nor past the knee". He appealed to FINA to re-evaluate the existing rules, and many others did the same.

Since then, other high-tech suits have been launched and have attracted a similar level of controversy. Adidas unveiled its Hydrofoil swimsuit after the Olympics which, like the LZR, was initially approved by FINA. Made from a new ultra-lightweight and paper-thin woven fabric, which features a fully laminated PU foil, the suit was worn by swimmers at the World Championships in Rome last July. Britta Steffen had already set two world records wearing the suit at the German Championships by the end of June. She controversially said at the time: "I felt like a speedboat in water and never in my life would I have believed that a human could glide like that. You don't die in the last metres and you feel no pain. Under normal circumstances, this suit should be forbidden, and I expect that by 2010 it will be."



Britta Steffen said the adidas Hydrofoil suit made her feel like a "speedboat" in the water.

adidas

The review

And Steffen was right. FINA and a group of swimming coaches from 18 countries held a series of discussions in May last year and, after testing the material and buoyancy of 348 suits made by 21 different manufacturers, it approved 202 models of suits and rejected 10 outright. The federation said that 136 other suits needed to be modified and that manufacturers had 30 days to make the changes. Its main concern appeared to be suits that were completely covered with polyurethane in order to improve buoyancy.

The move called into question the validity of world records set in April during the French championships. Alain Bernard wore Arena's X-Glide and Frédérick Bousquet wore the Jaked 01 swimsuit during the competition and both set world records at the event. However, neither suit was on the approved FINA list. It was eventually decided that Bousquet's record would stand, while Bernard's was declared invalid.

And there were more changes to come from FINA. On July 24 it decided only waist-to-knee suits, known as "jammers" for men, and shoulder-to-knee suits for women would be allowed. It seemed USA Swimming's Jim Wood had finally got his wish. FINA also stated that the suits must be "textile", although it did not go into any detail about this. After some debate it was decided that medals won and records set by people like Phelps wearing the full-body suits would stand.

Nevertheless, Speedo was furious about the July decision. It said on hearing the news: "As a forward-thinking company that has invested millions [in research and development], we

COPYRIGHT



Michael Phelps won eight gold medals at the Beijing Olympics wearing Speedo's LZR racer suit.

Speedo

believe that technology—properly monitored and adhering to guidelines—does have a place in all sport." It went on to say: "Any move which seems to take the sport back two decades—such as a possible return to the traditional female swimsuit and male jammer—is a retrograde step that could be detrimental to the future of swimming." It also pointed out that the full-body LZR suit was developed in "strict accordance with FINA rules and regulations and fully approved by FINA in 2007" and that it had "had an unprecedented positive impact on the sport of swimming since its launch".

After all the modifications had been made, a number of controversial suits were banned from competition with effect from January 1. While 10 LZR models made the 2010 list, adidas' Hydrofoil suits were forbidden. The Jaked 01 and Arena X-Glide were also removed from the list. And, while some feel the swimwear sector has taken a major step back in terms of technology, others believe the decision has levelled the playing field once again.

COPYRIGHT

The aftermath

The issue could be debated over and over and the two sides would probably never agree, so the main concern now is how the changes will affect the swimmers themselves. If a swimmer's times are slower in 2010 than they were in 2009, what effect could this have on their confidence and motivation? Dr. Chris Harwood, senior lecturer in Sport Psychology at the UK's Loughborough University and Vice-President of the European Federation of Sport Psychology (FEPSAC) has some ideas.

He says: "This is an interesting issue given that few are sure of how much the effect on performance was technology-related (through physiological assistance) versus the psychological belief (confidence in the technology) that they would swim faster serving as basically a placebo in assisting them to swim faster." The example he gives is the four-minute mile barrier being broken by one athlete, and then many more going on to break it. He believes it is a combination of the two factors. An additional uncontrollable element is the nature of the stroke: could the suits have offered greater benefit for some events compared with others?

The ultimate answer, Dr Harwood believes, is that swimmers need to rationalise their expectations and goals carefully and monitor their performances over an extended period of time as opposed to making "rash self-judgements" early on in the year. Coaches will need to do the same, he adds. "Some sort of personal baseline should be re-established and assessed, without panic, in conjunction with a cast-iron personal belief in the one thing that swimmers have control over: their quality of training and preparation processes," Dr Harwood suggests.

He says that whatever times they post, swimmers need to race "knowing they have left nothing in the training pool and no stone unturned in a race". "Provided they believe in this process, derive a sense of achievement from it, and obviously have trained to their optimum—a race is a great lie detector for poor preparation—then they should be able to harness the psychological resilience and self-belief to deal with the times they post and the baseline that they redevelop in 2010," he claims.

The regulations will test skill levels but, according to Dr Harwood, swimmers are usually very good at establishing clear goals and focusing on process over outcome. "When you strip it all down, the playing field will be more level and confidence and motivation are going to be built from a position of knowing that you've worked harder than the guy or girl next to you," he says. He adds that a PhD student of his, Julie Douglas, who is an ex-Commonwealth Games swimmer, suggested that a number of swimmers didn't like the full-body suits and wore them because they felt they should or that they might be at a disadvantage if they didn't. So for every swimmer who may be sorry to see the suits go there is likely another who is pleased to be back to what they're most comfortable in, explains Dr Harwood.

He concludes: "Most elites are resilient and I gather they will adapt to the 2010 suits and times as quickly as they did to the 08-09 suits and with clear guidance from their coaches, if they take the above into consideration. In this respect, their confidence levels and certainly their motivation may be less affected, in fact, motivation to achieve 08-09 times in 2010 suits may be higher and so have a positive effect on motivation levels."

COPYRIGHT