Wizwedge took a fresh approach when developing its first football boot. With the market already heavily crowded, the company opted to design a product with one key aim in mind: reducing the risk of injury to those who wear it.

There are more options than ever when buying a new pair of boots. Despite the plethora of choice available, Wizwedge started its venture behind the assertion that little has changed when it comes to how they protect the wearer.

The most significant advances came in the second half of the 20th century. First there was the Puma King in 1968, most notably worn by Pele in the 1970 World Cup, followed by the adidas Copa Mundial in 1979, a design which is still lauded by aficionados more than 30 years on. These models represented the first true revolution in football boot manufacturing.

The release of the adidas Predator in 1994 was the real turning point. Invented by former footballer Craig Johnston, who counts a European Cup win with Liverpool among his achievements on the field, the key feature was the addition of rubber ridges on the upper of the shoe to increase the control a player had over the ball. It went through many rebrands and reincarnations before being discontinued in 2015 but the design continues to define the basic principles of boot manufacturing.

Since 1994, sportswear brands have continually tweaked their designs, with the weight of the sole and the moulding of the studs two of the areas in which some progress has been made. The number of colours available has also rocketed.

Keeping pace

From the armchair fan to the scientific expert, there is no argument that the intensity and pace of football has increased rapidly over recent decades. Players run longer distances, more often and at greater speeds yet, according to Wizwedge, their most important equipment has evolved relatively little. It was from this starting point that it launched its project with the goal of creating a boot that offered greater support to players faced with contests of ever-increasing intensity.

Working alongside French research and testing agency CTC Groupe, the company began designing a boot featuring elements that targeted a reduction in injury risk, at a time when they seem to be at an all-time high.

CTC has over 100 years of experience testing a wide range of products including leather, textiles and footwear and has worked alongside established sports brands such as adidas, racket sport supplier Babolat and sports retailer Decathlon.

The team at CTC was involved from the start of the project, offering important input during the design process and helping to build the first prototype. It also carried out comprehensive testing to ensure that the boots fitted correctly and were comfortable. The testing organisation was also responsible for ensuring that they offered high levels of performance and were durable enough to meet the demands of the modern game.

From the armchair fan to the scientific expert, there is no argument that the intensity and pace of football has increased rapidly over recent decades. Players run longer distances, more often and at greater speeds yet, according to Wizwedge, their most important equipment has evolved relatively little. It was from this starting point that it launched its project with the goal of creating a boot that offered greater support to players faced with contests of ever-increasing intensity.

Working alongside French research and testing agency CTC Groupe, the company began designing a boot featuring elements that targeted a reduction in injury risk, at a time when they seem to be at an all-time high.

CTC has over 100 years of experience testing a wide range of products including leather, textiles and footwear and has worked alongside established sports brands such as adidas, racket sport supplier Babolat and sports retailer Decathlon.

The team at CTC was involved from the start of the project, offering important input during the design process and helping to build the first prototype. It also carried out comprehensive testing to ensure that the boots fitted correctly and were comfortable. The testing organisation was also responsible for ensuring that they offered high levels of performance and were durable enough to meet the demands of the modern game.

Having an experienced testing partner was essential as Wizwedge started its project from a blank page, attempting to create an innovative design away from the industry norm. The company brought together experts from a variety
of fields to ensure the quality of the product. Engineers were consulted as well as medical professionals with expertise in the biomechanics of sport and common athletic injuries.

Studies show that injuries to the lower extremities far outnumber other injuries commonly suffered by footballers. Some have placed the proportion of injuries to the feet and legs as high as 80%. That might be somewhat of an exaggeration but the majority of studies agree that at least half of football-related injuries are to the lower body, hardly surprising given the nature of the sport. Calf strains and ankle injuries are among the most widespread problems whilst damage to the Achilles tendon or anterior crucial ligament of the knee can be especially devastating.

Wizwedge felt that not enough was being done to address the increase in injuries. The key aspect of its design is the presence of a removable and customisable wedge that can be inserted into a box, built into the boot’s heel. The company has patented this WedgeBox concept which is described as an “innovative technological space”. This cushioned material acts as a shock absorber, limiting the strain placed on the leg and improving postural balance. Emphasis was placed on protecting the posterior muscle chain, which includes the plantaris muscle (part of the calf), hamstring, gluteal muscles, and lumbar muscles.

The wedge can be customised to the needs of the individual with three different options available. Which one is suitable depends on the body type of the wearer, the conditions they play in, their injury history and the boot’s primary use. The three different options are: cushion, medium and dynamic.

The ‘cushion’ wedge offers more padding and higher levels of shock absorption, giving added support to players with a history of muscle, tendon or joint injuries. It is also suitable for playing on ground that is especially hard or for players who are overweight.

At the other end of the scale, the ‘dynamic’ wedge provides the maximum amount of energy return to the heel, allowing the wearer to get a more responsive reaction when pushing off from the ground. This option is more suited to players with a less extensive injury history and who don’t regularly experience lower leg pain during exercise. The ‘medium’ wedge offers a compromise between the ‘cushion’ and ‘dynamic’ options.

The Wizwedge boots aim to reduce the risk of a player suffering an injury by giving more support beneath the heel and encouraging better balance.
The boot also contains a lightweight plantar arch support to assist with posture, a feature which Wizwedge believes can help reduce muscle fatigue and reduce recovery time for a player returning from injury. Improved posture and balance mean a more efficient running style and so less energy is wasted, resulting in a more optimised performance.

The studs are positioned to distribute weight more evenly across the sole of the foot and avoid any excess strain. It is ergonomically designed for comfort and an anatomical insole sock adds even more support to reduce the potentially damaging effects of repeated impact with the ground.

**Breaking through**

Benoît Cheyrou, who plays for Toronto FC in Major League Soccer (MLS) is the company’s brand ambassador and so far the most high-profile player to have worn the boots in a competitive match. He was part of the Olympique de Marseille side that won the French top division, Ligue 1, in 2010. Founder and CEO Jean-Luc Guer is a consultant in foot health at the club and as a result Marseille players formed the basis of the test group when the prototype was launched.

Current Marseille player Abou Diaby, whose career has been blighted by a long list of injuries, was pictured wearing the boots in training following a recent return to fitness. The new design could reduce his recovery time due to the improved postural balance that it encourages.

Wizwedge plans to capitalise on the interest around the upcoming European Championship in France to launch the range. An e-commerce site will go live during the tournament and it will try to take advantage of the media coverage and buzz generated during the month-long event in order to hit the ground running.

It may seem impossible to imagine an untried start-up making any sort of impact on a market dominated by the giants such as adidas, Nike and Puma. The company accepts that this will be a difficult task but has high hopes of success because of the product’s unique design purpose.

Whilst certain developments from well-known manufacturers have been of questionable benefit to players, boots which help lower the risk of injury have the potential to make a significant impact on the market. The amount of money that football clubs now invest in players and the rewards that these players can expect from success make avoiding injuries a fundamental part of the sport. Any opportunity to reduce the likelihood of suffering an injury is likely to be welcomed by all concerned, especially in the context of major tournaments or important finals.

The key to the growth of any sports brand is getting well-known names to endorse your product. World-renowned players with a strong media presence (especially social media) can transport a brand’s reputation into the stratosphere. Wizwedge’s job is to convince top-level footballers to shun the offer of a multi-million pound sponsorship deal and take a chance on their new concept.

It is too early to say what the future holds but the ambition is clear. There are already plans to extend the range into running, rugby, golf and American football, as their patented technology can be easily transferred on to other sports shoes. As for the build-up to this summer’s tournament, players, managers and fans will just have to cross their fingers.