

FOOTWEAR TECHNOLOGY: PUMA



Puma claims its new performance running shoe, called Faas, is the best running shoe on the market. And the German brand took a different approach when it came to designing the Jamaican-inspired footwear.

Running against the trend

According to Philipp Hahm, team head of running for international footwear at German sportswear brand Puma, running shoes have for many years been designed to include as much technology as possible, creating a functional shoe which appealed to the serious athlete but not so much to the casual jogger. With this in mind, Puma,

decided to take a different approach. It believes that by stripping back the product, by only including the absolutely necessary technologies to assist the wearer, it will create a more stylish and most importantly, functional shoe.

Welcome to the Faas collection, a line of performance running shoes launched by Puma for the spring-summer 2011 season. Taking its name from the Jamaican word for fast, the Faas

Puma-sponsored sprinter Usain Bolt prefers a flexible shoe which does not have restrictions and influenced the design of the Faas collection.

 Puma



collection is designed for speed and performance. It is also designed to appeal to the Usain Bolts of the world as much as to the early morning jogger, thereby combining Puma's aims of function and style. To achieve performance, the shoe features a biomechanical design technology exclusive to Puma called BioRide, which the company claims "provides a naturally responsive ride – helping runners get into their own rhythm for increased speed and performance". To develop this technology, Puma says it took a look at some of the fastest athletes affiliated with the brand and studied their movement, foot placement and overall running skills. There were three proven and consistent skills that were identified as critical to top performance. The company translated these elements into three categories: 'rocker', 'flex' and 'groove', which became the cornerstones of the BioRide technology used in the Faas shoes. A 'rocker' shaped outsole, according to Puma, provides "smooth touchdown and effortless transition, providing runners with a natural ride and less time on the ground". A number of 360 degree 'flex' grooves are placed in key areas throughout the Faas shoes. Puma claims these flex grooves respond specifically to how the runner's foot moves, providing a unique and responsive ride. Finally, the Faas shoes have a horizontal 'groove' that runs on the lateral side of the shoe. Puma says that, regardless of how a runner's foot hits the ground, this groove will provide them with natural stability.

Combining style and functionality

Mr Hahm believes that Puma is leading the way in combining style with performance. "We see ourselves as a very integrated brand and we're the first brand to combine sport and lifestyle, specifically here in running. We're trying to do it in a very useful, playful and colourful way, really to differentiate ourselves from what's

going on in the market. I think Puma has a long history of really spearheading the kind of lightweight concept in running.

"We've been working for a long time now really to establish Puma as a credible running brand within the running market and really carving out this fashion-unique approach."

One of the main concepts behind the Faas collection is minimalism; the more stripped down the shoe is, and the less technology used, the better. For a number of years, running shoes have been built in a formulaic way, says Mr Hahm. "And the approach was always to add on more stuff and it was very much about, the more the better."

A small team was put together at Puma, with the aim of creating a new kind of running shoe. They looked at other, technology-filled products in the running shoe market, and decided on a different approach. "We said to ourselves, how can we build the best possible performance running shoe but take a different road? And we've been inspired by people like Peter Ross, a German designer who for a long period of time has really been taking the approach of less is more."

In tune with Puma's sustainability agenda, the idea for the Faas collection became to create a performance running shoe using as few materials as possible. In terms of performance technology, efficiency was key, but when it came to fashion, Puma wanted to have a Jamaican-influenced design that would fit in with its 'out of hours athlete' lifestyle campaign. In other words, the company aimed to create a shoe that Usain Bolt could wear on the track, while a fashion-conscious young person went for a run in a shoe from the same collection. The solution was a number system, whereby Puma assigned each style in the Faas collection a number, ranging from 100 to 1000. The lower number models, such as the Faas 300, have less cushioning and less structure, providing a lightweight trainer

The Faas 300 (left) and 500 models (right), come in a number of different colour ways.

 Puma



(better suited to the serious athlete). As the number gets higher, additional cushioning and structure is added to the shoe. The higher numbers, such as the Faas 500, are more suited to everyday use (for example, the fashion-conscious daily runner).

Tried and tested

According to Mr Hahm, the Faas shoes have been tested and proven to high standards by specialty running stores, while at the same time showing that Puma is “basically not taking itself too seriously as a brand”. Mr Hahm insists that the target market comprises people who are looking for a light-hearted, colourful approach which is young and which “doesn’t make the shoe look like it’s one of your ordinary technical running shoes”.

The simplified construction of the Faas shoes features a component which Mr Hahm says was specifically developed for the running shoes; a combination of rubber and EVA material that creates a “perfect mix of cushioning, flexibility and durability”.

“So rocker, flex and groove are the terms that we use to describe the basics and the fundamentals to basically build a really good running shoe,” says Mr Hahm. “The first thing is that the whole midsole has a rocker shape which you might have heard already from the outdoor and skiing industries. And it’s also a more modern way of building a running shoe because it’s rocking the outsoles from heel to toe. So you have more or less like a continuous radius.

“So you have a very rounded heel. There’s no flat spot in the mid-foot section so the shoe is kind of rolling through and you have a very high toe spring. All of this combined really lets your foot just roll compared to traditional running shoes.

“The second thing is the flex grooves that are built around the tooling. So the shoes are cut in on the outsole, on the sidewalls and on the top of the tooling which obviously you can’t see, but it’s going all the way through.

“So without using or adding any plastic materials to the footwear, we’re ensuring that the shoe is flexing specifically in those areas where biomechanically it makes sense and it’s enhancing the running feeling of this footwear.

“In some other products we add plastic materials to stiffen up, for example, the shoe in the mid-foot section, but on this kind of footwear we don’t need this special feature because it was intelligently designed in a way that’s really offering the flexibility in those areas where you need it.

“And the third feature on the shoe is what we call the lateral groove. It’s really emphasised and a standout feature on the lateral side that is allowing the tooling to collapse from the heel all



Philipp Hahm, team head of running for international footwear at Puma.

 Puma

the way to the medial side to the forefoot. What this does is really allow the material to collapse but just on the lateral side, so it allows for a very harmonic heel to toe transitioning. And it’s kind of in a way stabilising the whole shoe. You don’t need any plastic features on the medial side to give the shoe stability for people who need more support on the medial side. It’s just done by an intelligent design, just using the material and giving it a geometry that really is stabilising the footwear.”

All this BioRide technology combines to create what Mr Hahm describes as “an enhanced motion efficiency”. “You have reduced fatigue or stress on your ligaments and on your muscles so overall what you experience running in these shoes is that it feels a little bit different to standard shoes,” he says. “But overall people who try the shoes out find that the more they use these shoes, the more they just want to run with this kind of footwear. And they’ve transitioned from the traditional footwear over to the new approach.”

Going the other way

What sets the Faas collection apart from other running shoes in the market, according to Mr Hahm, is its simplified design. “I think a lot of companies have been claiming for the last few years how much better their footwear is by talking about materials, and it was almost like the more complex the technology was the better, without saying any names. But I think it’s all about the specific mix that we’re using. We spent over a year really testing and mixing in different parameters. And I think this is where you come to the topic, what is so special about the way we approached this? And that’s where we feel we’re really ahead of the curve in the market – in that we just took it in a very unrestricted way. We just wanted to create the best possible running shoe.” 