

Some knit ideas and concepts

PVA Coated Textiles

- Tests conducted on warp-knitted textiles produced on a *TM 4 EL* in a gauge of E 28 made from 100% polyester and had slightly structured effects
 - The PVA coating coapplied with no problems
 - Semi-rigid textiles were produced having a technical, grainy feel.
 - Finished fabric also provides adequate porosity to permit air and heat exchange, thus offering a high level of comfort.



<https://youtu.be/kZE8rvPYbII>

Weft Knitting
Seamless (WG)
vs.
Warp Knitting
Seamless (WKS).



<https://youtu.be/OnWV8I8PanI>

Feetz Shoes Review

3D Printing Shoes

https://youtu.be/Ta_1ITa55zo



Flexweave

- Utilizes an open figure-8 pattern that can be woven with as many or as little threading needed in certain areas of the foot.
- The more threading that is used the stronger the stability and support the material will provide.

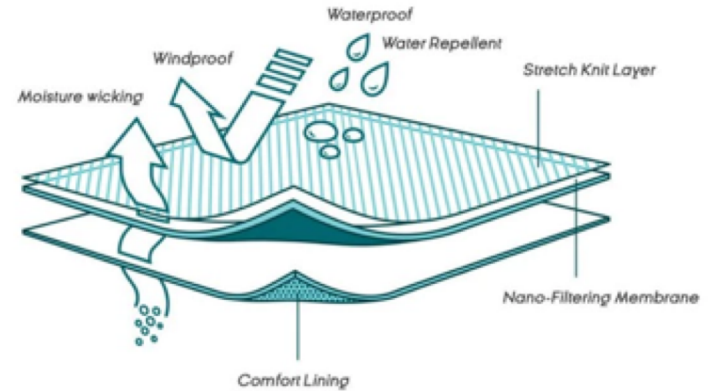


Waterproof Knitted Shoe

- Upper is a one-piece circle knitting manufacturing process. No seams to allow water to come through.
- The Flash Knit Nano-Filtering Membrane: waterproof and moisture-wicking layer that keeps your feet dry (not a coating)
- The Stretch Knit Layer: an elastic yet durable knit that stretches to the shape of your feet.



vessi
FLASH KNIT



Bringing tech to traditional knits

- Knit production technology may soon enable smart sensors all of this straight from the machine, without the secondary process of lamination, resulting in a cheaper, more streamlined product.
- Have incredibly minute control over how a garment is shaped and where sensors and actuators are placed on the body
- Can create electrical components from the actual yarn—sensors that are an integral part of the garment and not tucked in or laminated on top.



Knitted Casual Shoes



Data Collecting Socks

Myant is developing socks that:

- Insulate and protect your feet
- Give targeted compression
- Measure your posture and footfall
- Heat your feet automatically when they get cold
- Stretch, temperature, and humidity sensors and even begin analyzing sweatiness which can convey the stress level of the user



Gore-Tex Knitted Shoe Membrane

W.L. Gore & Associates is introducing 3-D fit footwear, a new waterproof, breathable technology designed to contour to the shape of the foot like a sock.

Technology will enable manufacturers to integrate the innovative elastic insert into a range of lighter-weight athletic and lifestyle shoes.



Giro Bike Shoe

Xnetic™ Knit

A TPU skeletal system provides support where you need it, while the knit offers suppleness for superior sock-like comfort. The porous knit material makes the entire upper breathable, with DWR treatment added.



Smaller, transportable knitting machines

Emerging trend: a smaller machine that companies can deploy to different parts of the world.

With a machine the size of an oven, it uses digital models of the shoes and stocks of material to weave specific patterns



Right now, Flyknit 360 isn't designed to make truly custom shoes on a personal basis. But Bignell suggests that technology is coming.

3D Weave: Natural Fibers

Fiber gets stripped from eucalyptus trees that grow in South Africa and is woven into a yarn using a 3D-knitting machine. The shoes are lightweight, comfy, and silky to the touch.

The 3D-knitting machine uses more yarn around the toe and sides of the shoe to prevent stretching.



Pattern and Color

- As knitting technology is better understood and manipulated, new pattern and color trends emerge from many inspirations.
- Adidas x Pharrell



Corded

- Bold use of draw cords and loose wire framing
- Blend of elasticity with strength



True Bounce

Basketball shoes with:

- Knit materials
- Infused dynamic fibers
- Faster reaction periods to improve performance output



TRUE BOUNCE



The best knit shoe for the money



Thank you!

Questions?

