



Messe München  
International

Connecting Global Competence

# PRESENTATION PLATFORM FOR PERFORMANCE TEXTILES



**TEXTILE TRENDS  
FALL/WINTER 2016/17**

**ISPO.COM**





## ISPO Textrends

Fibers, fabrics and other component materials play an incredibly important part in the sporting goods industry presenting trends and developments that will not be available to consumers until about two years later.

Despite this, it is hard for designers and product managers to source the latest developments. This is the reason why ISPO MUNICH decided to develop a new area showing the best available component products in a concentration nobody else offers.

A jury of trend experts examines all entered products and selects up to 60 products with the highest degree of innovation. The selected companies will benefit from an exclusive presentation in the very unique ISPO Textrends Forum, the must-see platform for all sportswear, fashion and accessories designers and product managers. And this is only one of several benefits which accompany this opportunity.

ISPO Textrends Forum is the center of component product innovation.

## ISPO's Trend Expert Louisa Smith

Louisa Smith is an international textile trend consultant working with companies as early as three years in advance in all sectors of the textile chain, from fiber through to final garment. Louisa's vision and research, monitoring textile developments through to global affairs has a bearing on delivering the right on-trend directions that connect the industry at all levels.

With over 20 years of international experience in the fashion and textile industry, Louisa works with a range of companies in delivering on-trend information and market intelligence at all stages. Graduating in Fashion and Textile design at Manchester Metropolitan University, her career commenced in the fashion manufacturing and textile hub of Hong Kong, developing connections with China, the USA and Europe.

An avid traveller, Louisa continues to monitor consumer habits, social aspects and retail developments throughout the world, incorporating what she sees and visualizes during her travels into her trend work.

A regular on the international textile trade show circuit, her market and textile research and product development articles combined with published trends are featured internationally in a variety of trade publications.

## Textile Trends Fall/Winter 2016/17



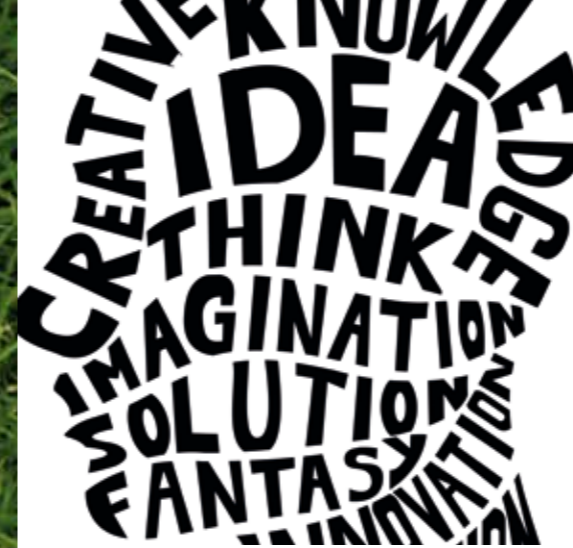
## Visions for the Textile Industry

One goal of ISPO MUNICH is to be a gateway for future trends. In cooperation with trend experts ISPO MUNICH studied various global trends with influence on the textile industry and its products. In combination with the defined trend colors and five more detailed textile trends, these mega trends provide a good vision where the future of textiles will take us.

ISPO MUNICH is very pleased to have the opportunity to share these visions for Fall/Winter 2016/17 with the textile industry and to use these trends as a basic guideline for ISPO Textrends 2015. The mega trends show visions that are not specific to one particular area but will influence the entire textile chain right down to the consumer.

The color cards and the textile trends result from a range of influences, from consumer behavior to the global economy. Film, music, social media, art and many other activities are reflected in these trends. They form a basic guideline how new developments and innovations of ingredient products will be shown, presented and highlighted at ISPO Textrends 2015.

Making the most of what you have is the key to this season's ISPO Textrend delivery as we encourage and push the host of high functioning ingredients available in the activewear sector to new levels and encourage a new lease of life. Creativity is key in compiling new offerings, moving away from the basics and injecting a sense of rejuvenation. This doesn't mean we are void of new and energetic developments, innovations that are set to feature at the higher end of the market. ISPO Textrend's preview of the season should stimulate the senses and deliver fresh and exciting products. Let's get working!



## Mega Trends Autumn/Winter 16/17

### ZEITGEIST

We have the power, we have the technology and the ingredients and it is time for fabric and trim suppliers to push what is available and at hand to its full potential in creating inspiring and intriguing products for the activewear sector. Pushing boundaries and breaking barriers will ensure that those who pursue this achieve new levels of sales.

The desire from product developers and consumers alike is 'what is new?' There is a greater demand for diversity and a strong impression towards reigniting existing innovations, as the sense of sameness that has previously infiltrated the activewear sector needs to be eliminated. Price isn't the primary question anymore, function, performance and innovation is. Be brave, let this season be the Zeitgeist of the 21st Century in defining a new approach to traditional activewear as we share our knowledge at all levels of the textile chain and generate the next level of fabrics and trims.

### PROGRESSION

Sustainability continues as par for the course in the textile sector, as activewear brands are relied on by their loyal customers to do the right thing. But it isn't all 'au natural' on the eco front, chemicals, synthetic fibers, dyes and finishes continue to move in on the act, guaranteeing an assurance of their clean credentials but also a reassurance to the end consumer.

New clean technology and textile processes come into the fore through energy and water saving innovations, reducing stages in the textile chain and ensuring a more efficient and responsible production. Recycling and environmentally friendly processes are pushed to the hilt without neglecting the powerful performance these fabrics need.

The conscientious consumer is the driving power behind this mega trend, enforcing onto their brands the importance that the sustainable sector still has mileage. New for the season is an array of eco-friendly printing processes teamed with higher efficiency in the garment manufacturing process due to innovative fabrics that can be bonded rather than stitched and have less components, including double sided fabrics that eliminate traditional cut, make and sew processes.

### TECVOLUTION

The constant need to innovate features in Tecvolution, a groundbreaking path creates futuristic ideas into commercial concepts. Lightness is a key component in this mega trend, ensuring the consumer has full protection and performance no matter what the level of activity. Interactive textiles deliver, encouraging a strong wellbeing mood feature, as do fabrics that nourish the wearer. With sports on the increase as consumers aspire to participate in more physical pursuits, this mega trend appeals in attracting a new crowd to the activewear arena.

Micro fine and new concepts feature with feedback from consumer research highlights the need for longevity of desired function. While the activewear sector has a host of high functioning ingredients there is still room for future development, leading to a range of next generation lighter options.

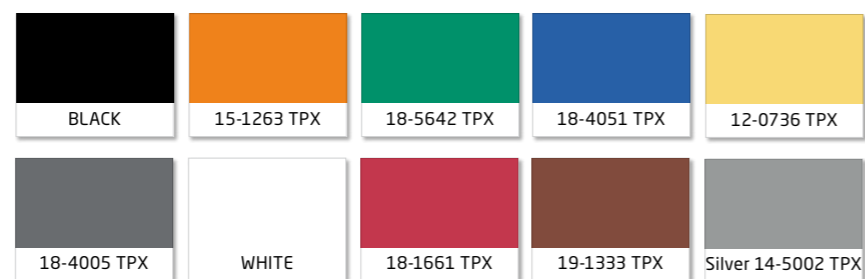
High tech opulence features in futuristic styles with a sense of utopia, there is no shame in treating yourself as consumers gain a sense of self worth and self belief and want to show it. Glamour, refractive shine, holographic appeal, fiber optics and full on function come into play. It's time for something different, it's time to realize new goals and express a strong independent statement in ensuring an exciting future.



## Color Card Fall/Winter 2016/17

### ACTIVE INSTINCT

ISPO Textrend's initial color offering for Fall/Winter 16/17 incorporates Active Instinct as the key bestselling tones complimented by four new satellite palettes to give collections a distinctive look.



### ARTIFICIAL INTELLIGENCE

Sharp and lucid tones influence, working best in high luster fabric surfaces and prints. Clean and intense, there is a modern freshness applied to this palette.



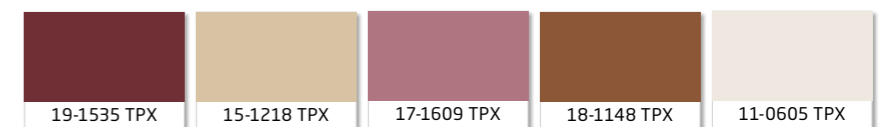
### THE DARK SIDE

Intense dark tones of blacks and grays are highlighted by moonlight accents and oxidized hues. Sleek and sophisticated, this palette holds a unisex appeal and is particularly enhanced by metallic tones.



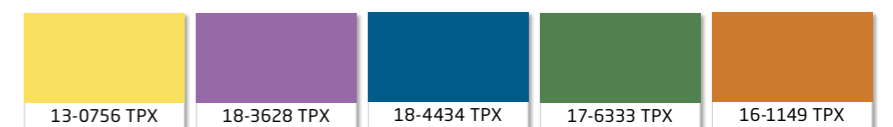
### FROSTED

Inspired by nature, colors take on a frosted and matte aspect perfectly enhanced by brushed surfaces and crystallized yarns.



### SYNTHESIZED

Nature and synthetic tones collide in creating new and interesting nuances that take the limelight. From muted mauves to autumnal orange, this palette is uplifted through equal natural/synthetic blends, the inherent aspects of each accelerating the tones on offer.





## Textile Trend 1

### ACTIVATION

The connection between the body and fabric combined with the motion and friction of the sports activity acts as a three-way catalyst. ACTIVATION ignites the latest functional factors that enhance performance and wellbeing.

From the basics of moisture management and thermal regulation to the more direct contact of increased circulation through FIR fabrics and finishes, there is a sense of enhanced performance and fulfillment delivered, and more importantly offered in lighter and comfortable qualities. Fabrics are fuelled from different levels of exertion, reacting to the personal body climate, whether it is through warm or cold conditions, low level or high impact activity. The power packed ingredients, that react rapidly, pull from both a natural and synthetic source, which when worn a frisson effect is created, ensuring the wearer has the highest level of comfort. Accelerating and enhancing the wearer's performance feature strongly as high compression qualities, embracing the muscular structure of the body come into play alongside natural insulating aspects for outershells. Structures range from multi functional lightweight outer shells for climatic protection through to second skin base layers and textured knits that create zoned high level function when incorporated into body mapping designs. This is a lightweight mood but incredibly focused in delivering high levels of performance and protection. Wake up, once the body moves these fabrics react to all conditions: feel the roar!

#### FOCUS ON

- Thermal regulation
- Insulation
- Moisture management
- High compression muscular support
- Increased circulation & rapid recovery
- Nourishing applications

#### FIBERS, YARNS & FINISHES

- Hollow synthetic yarns for thermal applications in lighter weight knits and wovens
- Lightweight non-woven insulation with antibacterial benefits
- Traditional feather down with added function
- Natural ingredient microcapsules embedded into synthetic yarns for feel good and warmth aspects
- FIR yarns that energize the wearer and reduce muscle fatigue
- Spandex for core stability in aiding the delivery of high performance activating yarns
- Functional membranes

#### BASE LAYER FABRIC DIRECTION

- Climatic single knit base layers - natural to touch
- Compact high compression warp and circular knits for base layers embrace the body and have a direct connection between the wearer and the fabric to generate the final function
- Featherweight thermal regulating single knits for comfort fit with or without spandex
- Rapid reaction quick drying moisture management systems for high impact activity in single knit matte/glossy jersey
- High density FIR fabrics that connect directly with the body's system in second skin knits
- Textured knits or silicone printed on the technical side for massaging effect

#### SECOND LAYER FABRIC DIRECTION

- Thermal regulating fleece and jersey - micro structures, incredibly light and the addition of a water repellant finish adds value
- Jersey piqué and waffle structures feature in thermal regulating jersey
- Double-sided laminated fabrics - multifunctional - moisture management system on the technical side and water-proof, breathable and windproof on the face
- Stretch laminates create more flexible bi-component fabrics for a streamlined fit
- Functional micro woven fabrics bonded with knit for textural contrast and enhanced performance
- Warm and water resistant softshells with brushed technical side

#### OUTER LAYER FABRIC DIRECTION

- Down proof wovens
- Stretch down proof wovens with high performance finish to accommodate new streamlined puffa silhouettes
- Multi functional rip stops
- High performance hardshells

#### TAPES & TRIMS

- Sealed tapes to prevent heat loss on outer layers - consider matte and bright options for design detail
- Heat sealed zipper tapes eliminate stitching and prevent warmth escaping

#### SOFT EQUIPMENT

- Spacer fabrics for sport shoe uppers
- Laminated multi functional fabrics for warmth and protection in footwear
- Micro light thermal outer layer rip stop for sleeping bags
- Hollow fiber brushed jersey for sleeping bag liners

#### TARGET MARKETS

- Running
- Marathon
- Cycling
- Climbing
- Pro-sport base layers
- Skiing
- High impact sports
- Sport footwear

#### IMAGINE

COMPRESSION - SUPPORT - RAPID REACTION - BODY MAPPING - VERSATILITY



## Textile Trend 2

### DUALITY

The deep-rooted desire of natural content and touch continues as nature's ingenious appearance and performance pushes to a higher level of interpretation. It isn't just the proposed inspiration that fuels this trend; the growing understanding of more responsible production is key as eco friendly processes combine with sustainable production.

Duality sees the best of both worlds as natural and manmade fibers combine and compliment. Wool, cotton and cellulosic fibers create a strong partnership with recycled synthetics and bio fibers. Key to this direction is the elimination of certain water and energy heavy processes through the textile chain, complimented by eco friendly dyes and functional finishes including nano-technology. The innate action that natural fibers bring to the activewear arena is a direct connection to the association of the great outdoors combined with the unparalleled performance that next generation recycled synthetics can add. This season will see a lot more blending, a mutual respect for the different sectors merging to create a renewed harmony. There is a sense of mimicry as wool and cotton up the performance on par with high-level synthetics, which in turn mimic the touch of the natural fibers. Brushed surfaces and organic structures feature in knits alongside crisp lightweight wovens. Delve into the delights of nature and marvel at the key inspiration. Look to the rich unrivalled natural hues and the intricate organic structures that it brings. Without nature we are nothing, and to protect natural resources and the environment we must act as one. Feel the sun and see the landscape and breath - enjoy, respect and cherish our habitat.

#### FOCUS ON

- Natural touch and texture from both natural and synthetic sources
- Recycled fibers
- Eco-friendly chemicals
- Eliminating certain processes within the textile chain in saving water and energy
- Interpreting the profusion of unique natural textures and colors

#### FIBERS, YARNS & FINISHES

- Cotton - conventional and mercerized and BCI
- Pima cotton for the ultimate in luxury touch
- Wool
- Lyocell and modal
- Recycled nylon and polyester
- Specialty synthetics that reduce water consumption and energy by reducing the stages of the dyeing process
- Bio fibers
- Natural touch textured synthetic yarns
- Dope dyed synthetics - reduce water and energy
- Spandex with an eco aspect - low heat set
- Eco friendly membranes including PFOA- free DWR
- Nano technology finishes
- Recycled insulation
- Natural ingredients for microencapsulation - caffeine, aloe vera, vitamin D, seaweed, eucalyptus
- Digital prints - eco friendly
- Silver - embedded into a synthetic yarn or permanently fixed as a finish for antimicrobial function
- Organic inspired coatings and prints

#### BASE LAYER FABRIC DIRECTION

- Merino wool single jersey blended with high performance recycled synthetics for next-to-skin comfort
- Mélange jersey creates a natural look especially when using cotton-touch synthetics - add textured synthetic yarns for a grainy touch
- Nourishing micro-encapsulated synthetic knits with a natural touch
- Mercerized cotton in circular and warp knit for a synthetic lustered look
- High compression blends with spandex for core stability
- Brushed technical side on knits for super soft finish against the skin
- Textured cotton bases inspired by natural honeycomb and micro organic structures in pure and blended qualities

#### SECOND LAYER FABRIC DIRECTION

- Bi-component merino wool/performance synthetic fabrics for double faced effect in knits
- Laminated knits and wovens for contrast with the natural fibers mimicking the synthetics and vice versa
- Marbled and striated yarn dyed jersey
- Flatbed knits with a functional finish
- Brushed jersey for thermal regulating linings
- Jacquard knits with organic-inspired relief - working textured and flat, bright and matte yarns for optical 3D effect
- Warp knits with core compression plus the advantages of moisture management, breathability
- Machine washable wool sweaters - single layer or bonded
- Brushed yarn dyed and printed performance shirt wovens

#### OUTER LAYER FABRIC DIRECTION

- Classic mono and bi stretch wovens overprinted with eco processes including digital print
- Yarn dyed classics are reworked through surface effect in the form of brilliant membrane finishing with full functional attributes
- Faux fur with water repellency
- Double faced lightweight shells combine the best of the nature with synthetics
- Natural touch outer layers with eco friendly membrane finish
- Corduroy - stretch and rigid
- Classic canvas structures are updated through new finishing processes including prints
- Muted deluster membranes and print effects on naturally bright woven bases
- Wovens are predominantly lighter weight but natural to touch through the blend of natural fibers with synthetics
- Flannel with membrane finishes - opt for unusual natural hues and relief on the membrane front for added detail in coatings

#### TAPES & TRIMS

- Recycled plastic for buttons and pulls
- Recycled metal snappers and clasps
- Printed and textured zipper tapes

#### SOFT EQUIPMENT

- Perfect for the back pack market in offering a natural look but with the added benefit of strength that recycled synthetics bring

#### TARGET MARKETS

- Outdoor leisurewear
- Yoga and soft sports
- Walking and hiking
- Skiing
- Snowboarding
- Urban activewear

#### IMAGINE

NATURAL PERFORMANCE - BRUSHED TOUCH - HYBRID BLENDS - MIMICRY



## Textile Trend 3 HARDCORE

Achieving a goal and gaining that exhilarating adrenalin rush inspires HARD CORE. This trend takes on a tough appearance and content through innovative fiber and fabric compositions. The need for personal protection in the activewear sector is increasing combined with the softer touch these durable and protective fabrics deliver.

High impact fabrics react in the most arduous of situations, protecting the wearer to the extreme from anti-abrasive fabrics to intelligent shock resistant fabrics that protect and lock on impact. It isn't just outer shell protection that is key; the base layer protection of the body is also a proprietary factor. For extreme sports the protective aspect is crucial, but it also has to be comfortable and flexible when worn. Through innovative spinning and finishing technology, traditional high tenacity yarns and finishes are becoming incredibly soft and malleable without losing their tough and protective appeal. As well as the protection to the wearer this trend delivers it is also the durability of the products that will appeal adding value for money. HARD CORE also inspires a strong fashion direction for active sportswear as grungy aspects comes into play. It's tough and rugged but deceptive as fabrics are comfort fit and lighter, enhancing the wearer's performance, packed full of traditional performance traits. Moisture management, thermal regulation and bi-stretch can be found in compact and innovative new textural structures. Intensive and extreme sports benefit as these fabrics not only perform but also are robust and tough, offering the consumer enhanced performance and protection.

### FOCUS ON

- Tough fabrics that are incredibly light and comfortable
- Lighter and flexible applications
- Abrasion resistance
- Shock resistant flexible smart fabrics that harden on impact for enhanced protection
- Cut resistance
- High performance membranes
- Incorporating new tones and finishes - these fabrics do not have to be dominated by black

### FIBERS, YARNS & FINISHES

- High tenacity polyester and nylon - enhance abrasion and snagging resistance - rigid and stretch qualities feature
- Silicon based polymers for high impact reaction
- Micro fine high tenacity yarns for lightweight finishes
- High compression base layers for enhanced performance & recovery
- Hollow synthetic yarns in blends take tough fabrics to a new lighter level
- High power spandex/elastane
- Colored membranes and coatings deliver a new look to tough fabrics

### BASE LAYER FABRIC DIRECTION

- Featherweight high compression circular knits that have the power and are incredibly lightweight
- High compression base layers for enhanced performance and recovery - warp knits for clean cut and
- Zoned support in key body points in seamless and variable modulus fabrics
- Compact stretch fabrics with a matte coated aspects that acts like a protective shell against the body's anatomical structure

- Stretch circular knits with compact surface for
- High abrasive warp knits for climbing tights and tops - team with a multi functional finish for enhanced performance

### SECOND LAYER FABRIC DIRECTION

- Protective vests - shock resistant fabrics
- Abrasive resistant lightweight fleece
- Double faced knits
- Bonded tough outer shell wovens with soft fleece face
- Softshell laminated knit and wovens for enhanced durability and contrast
- Classic robust wovens including chambray are lighter and tough
- Raised rib textures
- Denim knits
- Delustered interlock - aged and worn stained effects

### OUTER LAYER FABRIC DIRECTION

- Flexible high tenacity woven fabrics offer high abrasion function combined with the comfort of motion through the inclusion of spandex
- Update with flexible resin prints for detail
- Super tough micro rip stops
- Hardshell with high durability plus the benefits of multi functional
- Rip resistant fabrics in super lightweight qualities complete with multiple function
- Denim blends get tough - high tenacity qualities are much softer than previously
- Low weight/high strength ratio functional hardshells
- Anti rip outer layers - breathable micro rip stops for running
- Bonded woven/jersey outer shells

### TAPES & TRIMS

- Galvanized metal trims
- Distressed and damaged heat transfers
- Dull and bright metallic trims for snappers, zipper pulls and buckles
- Robust lighter weight zippers

### SOFT EQUIPMENT

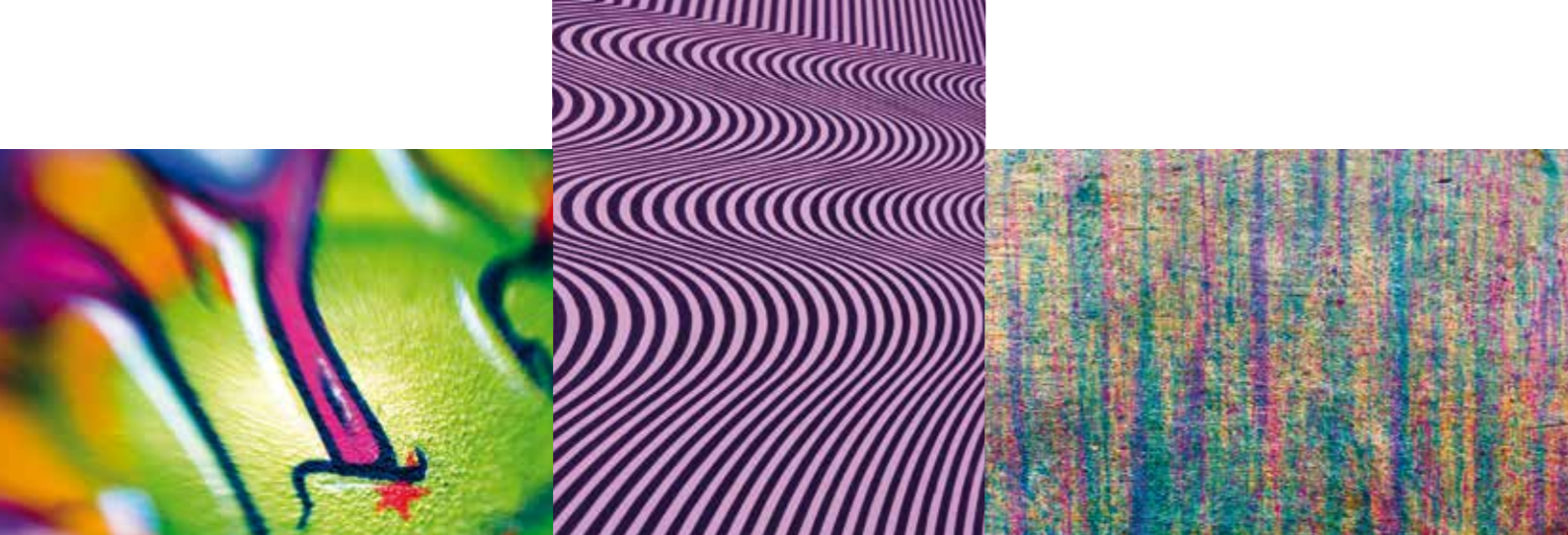
- Durable spacer fabrics with functional membrane finish for sports shoe uppers
- Impact resistant foams - zoned into core areas including knees and elbows
- Backpacks get lighter but maintain durability
- Tents - high tenacity fabrics with water proof and windproof membrane
- Micro light sleeping bag shells

### TARGET MARKETS

- Cross training
- Triathletes
- Free skiing & Snowboarding
- Mountain biking
- Motocross racing
- Mountaineering
- Urban activewear
- Soft equipment - shoes, backpacks

### IMAGINE

DURABLE - TOUGH - ROBUST - TEXTURAL - ARMOR



## Textile Trend 4

### DEXTERITY

The connection with optically stimulating the consumer through color and prints is crucial in moving the market forward. It's time to be creative and trigger the senses without neglecting the desired performance and protection of the fibers, fabrics and finishes. Work it subtly or push it to the extreme and energize bestselling ranges.

Through Dexterity we are looking to the motion and nimbleness of surface structures complimented by the active function they deliver. It's time to push the imagination and get creative in updating classic performance fabrics and delivering a revived and refreshed result, especially on compact substrates that dominate the market. Fabrics must move, have motion but at the same time have a comfort fit at all levels. Prints are crucial in updating basic bestsellers, looking to multi colored bright abstract formations through to hyper realistic and 3D digital printing to subtle tone-on-tone effects. This trend is about reawakening activewear, bridging the divide between fashion and function and making the most of the multi functional fabrics, taking them further through appearance. This season's color palette takes on an intensity, a depth and brilliance than previously seen, further enhanced by the luminance of innovatively structured cross section synthetic fibers and high gloss finishes.

#### FOCUS ON

- Intense 3D optically textured and illusive prints
- Bi and multi colored graphics from abstract to geometric graphics
- High luster transparent and colored membranes
- Updating traditional multi functional bases through graphic detail
- Prints - from sublimation to hyper realistic transfer prints
- Low energy processes in the dye and print sector

#### FIBERS, YARNS & FINISHES

- Bright tri-lobal synthetic yarns for intense gleam
- Cotton-touch polyester
- Textured bright synthetic yarns for grainy finish
- Traditional functional fibers including moisture management, thermo regulating, cool touch, breathable, waterproof
- Solution dyed synthetic yarns
- Colored membranes
- Brilliant cello aspect coatings
- Breathable membranes
- Iridescent coatings
- Digital prints
- Sublimation prints
- Optically illusive print graphics
- Hyper realistic cool transfer prints
- Pigment prints - eco friendly processing
- Stretch laminates

#### BASE LAYER FABRIC DIRECTION

- Make the most of intense toned, high dye uptake synthetics in circular and warp knit applications incorporating multiple performance
- Perfect structures from the lightest of qualities deliver a coated, unbroken surface in solids and prints
- Micro fine featherweight circular knits with an intense gleaming finish and silky touch to the skin
- Fancy openwork power mesh with active ingredients for zoned applications
- Seamless base layers in high gloss finishes
- Double layered power mesh in contrasting tones
- Jacquard spacer fabrics for sports bra cups
- Multicolored mélange effects update circular knits
- Space dyed finishes through yarn or prints on lightweight circular knits
- Technical base layers go intense in color and prints

#### SECOND LAYER FABRIC DIRECTION

- Play with color and prints - combine double-sided knits in contrasting aspects
- Bond woven with knit in contrasting textures and tones
- Hyper bright micro fleece with membrane finish
- Thermal regulating interlock and fleece
- Consider PU printing in uplifting luster on bright knit bases
- Optically illusive yarn combinations in high compression flat rib and jacquard knits
- Stretch transfer prints

#### OUTER LAYER FABRIC DIRECTION

- Classic hardshells get a new lease of life
- Discharge print rip stops
- Brilliantly gleaming rip stops
- Classic woven structures including twill are taken to new levels with brilliant coatings
- Slub woven surfaces for textural break effect - overprint to get the true look
- Incorporate hyper realistic prints onto perfect woven surfaces
- Flexible laminated hardshells with super bright and soft knits

#### TAPES & TRIMS

- Transfers - multicolored and bright, reactive inks and dyestuff for a changeant effect
- Elastic narrows with decorative jacquard detail
- Zipper tapes are glossy and light and super bright tones
- Hyper bright sewing threads for stitching detail

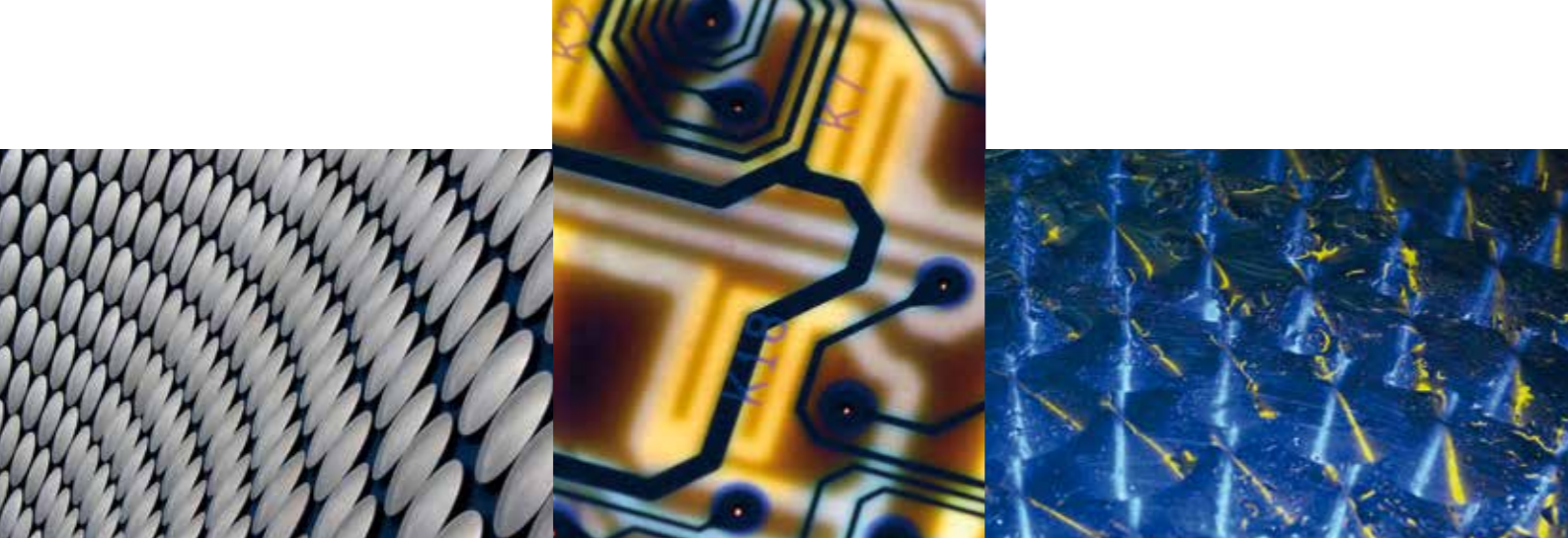
#### TARGET MARKETS

- Skiing
- Snowboarding
- Hiking
- High performance aerobics
- Zumba
- Running
- Yoga & Pilates

#### IMAGINE

COLOR - HYPER REALITY - GRAPHICS - DECORATIVE - INTENSE





## Textile Trend 5 CIRCUIT

As smart technology continues its inescapable connectedness within consumers' lives, it is time to take a look at the hyper-connectivity mood. It's not just smart phones and tablets that dominate, but the connection and benefits that next generation fabrics can bring.

A futuristic dream or a modern day reality? CIRCUIT incorporates a host of performance benefits from essential reflective function to the more innovative of solar powered panels and sensor embedded activewear garments hooked up to Apps. Textiles are smart and emotional, as e-textiles become a more dominant factor with wearable technology that monitors wellbeing and performance embedded into apparel and not just worn as an accessory. But it isn't just the super smart sector that dominates this trend, there is a distinctive mood to reactive fibers and finishes that will empower and protect performance at all levels of activity. Matte and bright yarns feature in this group as a greater connectivity delivers a more futuristic flavor. Reflective and phosphorescent yarns and finishes also bring a dual performance in the form of safety combined with an über modern look, as micro count fibers deliver the ultimate in lightness without neglecting the desired function. Aluminum laminates and membranes for thermal attributes feature alongside embedded touch sensor technology that connects to electronic devices or even stores information of performance to be downloaded later. In keeping with the modern influence, there is potency to these fabrics, not just through appearance but through the way they react and engage with the body. It sounds futuristic, but it isn't, the technology is here and as consumers become more concerned about their wellbeing and improving their performance, they won't be able to resist what is on offer.

### FOCUS ON

- Safety
- Connectivity
- High tech second skin comfort
- Lightweight performance in all sectors
- Crisp and modern touch to wovens
- Gleaming modernity

### FIBERS, YARNS & FINISHES

- Conductive yarns and coatings
- High performance bright tri-lobal nylon yarns
- Polypropylene - incredibly lightweight, high strength and high abrasion with moisture management built in
- Micro fine matte and bright synthetic yarns feature
- Micro fine synthetics with opacity - especially important for white
- Reflective yarns and finishes
- Retro reflective yarns, prints, membranes and finishes
- Iridescent coatings
- Functional membranes- high performance and visual aspects
- Phosphorescent fibers
- FIR yarns
- Stretch is key from the inclusion of spandex/elastane
- Reactive yarns - phosphorescent fibers that absorb light through to
- Calendared finish for high luster, glossy aspect and moiré effects
- Wearable sensors

### BASE LAYER FABRIC DIRECTION

- Consider graduated compression in warp knits in running tights for zoned protection complete with retro reflective finish
- Dreamlike featherweight circular knits that are vaporous but support
- Modern and sharp mesh structures - rigid or stretch for zoned performance within a garment
- Lightweight and gleaming base layers with thermal function
- Seamless base layers with engineered compression and contrasting use of matte/bright yarns plus strategically zoned function

### SECOND LAYER FABRIC DIRECTION

- Glossy and matte warp knits with laser cutting potential for bonded fabrics
- Blistered fabrics for surface effect
- Embossed super light membrane finished fleece for surface texture
- Openwork and networked mesh for linings and inserts
- Super light three-layer laminates
- Circuit-inspired lacquered prints update compact second layer knits

### OUTER LAYER FABRIC DIRECTION

- Heat reflective coatings on the technical side of functional wovens for self-generated warmth combined with breathability
- Fantasy high functional membranes for iridescent and high gloss finish
- Calendared surface effects that react to light
- Retro reflective finishes and prints on multi functional hard shells
- Solar cell fabrics
- Reflective printed rip stops for lightweight running tops

### TAPES & TRIMS

- Elasticized cords with reflective coatings or yarns
- Retro reflective and reflective heat transfers
- Holographic trims - badges and heat transfer labeling
- Solar powered heat change transfers
- Silicon coated trims
- Clear polyurethane labels
- Elastic narrows with jacquard and
- Reflective rigid and stretch piping
- Laser cut bonded tape for circuit channels
- Reflective sewing thread

### SOFT EQUIPMENT

- Flexible sports shoe uppers are revived through iridescent and reflective printing effects and yarns
- Flexible lamination features for footwear
- Flexible fabric solar panels incorporated into back packs

### TARGET MARKETS

- Running
- Road cycling
- High compression base layers for team sports
- Safety reflective garments
- High fashion skiwear

### IMAGINE

IRIDESCENT - SAFETY - GLEAMING - SMART - EMOTIONAL - ANATOMICAL