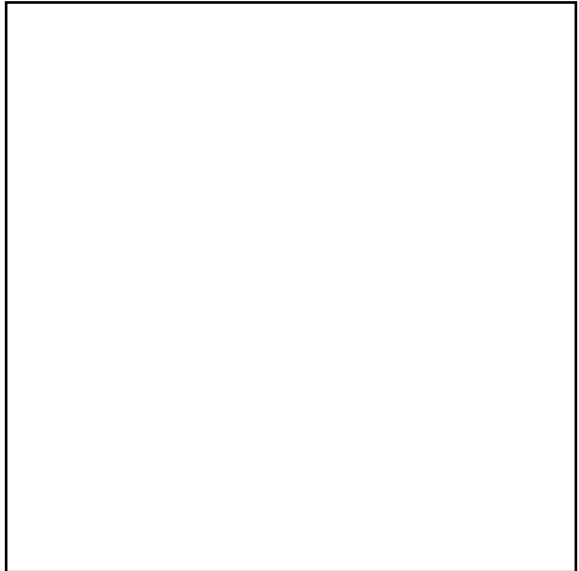


SLINGSHOT

KEY BENEFITS:
ZONAL STRETCH, 3D CONCEPT

	TYPE Flat Knit
	PATENT LANDSCAPE Crowded: Must consult legal <i>(patent team)</i> when developing to review product features

DESIGN

OPPORTUNITY	Opportunity for yarn, knit structure & shape development
COLOR	6-8 Colors Max
ZONAL FIT	YES, Highly Customizable
DETAIL	High Visual Detail
SHAPE TO LAST	Pre-shape, good fit after steaming, opportunity to explore steaming on last, finished knit components

MATERIALS

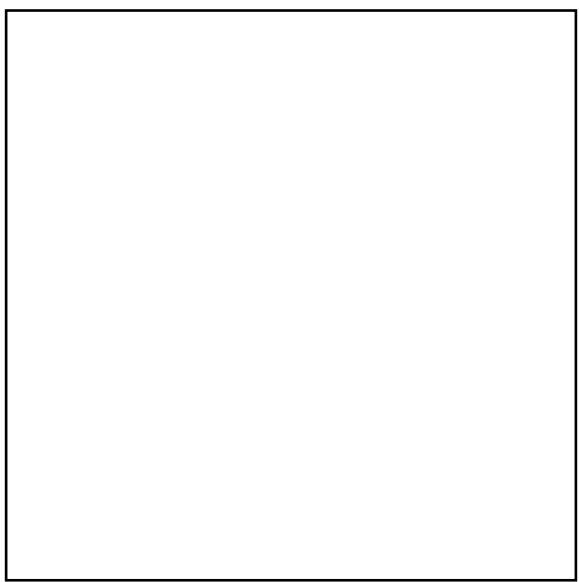
YARN TYPE	2/150/144 double covered 280D elastane, 70/10 Nylon hot melt, 440D Dyneema
DYE TYPE	Yarn Dyed
YARN LEAD TIME	Depends On The Availability. Dyneema - 120 Days Delivery Sample Cover Yarn Poly Or Nylon - 25 Days Production Cover Yarn Poly Or Nylon - 60 Days

BUSINESS/SOURCING

PARTNER	Chemtax
LOCATION	Hong Kong
UPPER COST PER PR	\$5 - \$13 (design dependant)
PRODUCTION LEAD TIME	90 - 120 Days
SAMPLE LEAD TIME	7 days for an accurate sample. A sample to show an idea will take only 2-3 days.
DESIGN LEAD TIME	2-3 Days
ITERATION LEAD TIME	2-3 Days
ISSUES TO BE AWARE	High level of complexity based on pattern and yarn selection

SMARTWEAVE

KEY BENEFITS:
REFINED DETAIL, DURABILITY

	TYPE Woven Jacquard
	PATENT LANDSCAPE Low Risk (evaluation ongoing as footwear developed)

DESIGN

OPPORTUNITY	Zonal design, highly detailed graphic creating both an intuitive fit story and dynamic visual.
COLOR	3 or 4 colors. Piece dying is not an option.
ZONAL FIT	Yes, Highly Customizable
DETAIL	High Visual Detail
SHAPE TO LAST	Flat Patterened, Die Cut Upper

MATERIALS

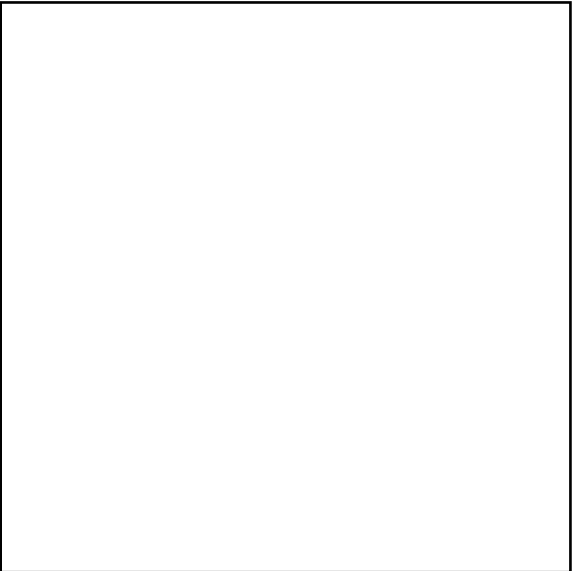
YARN TYPE	The warp yarn is fixed to 150D polyester and there are two colors in black warp beam for dark color and two colors in a white warp beam for light color. The weft yarn is mixed 300D and 600D polyester / TPU. They currently have polyester options in bright and mélange as well.
DYE TYPE	Yarn Dyed
YARN LEAD TIME	Polyester, 2 weeks ; TPU, 3 weeks

BUSINESS/SOURCING

PARTNER	Dong-A TEC
LOCATION	Korea
UPPER COST PER PR	\$26/ YD 60" or \$30/YD 60" TPU% dependant
PRODUCTION LEAD TIME	3-4 Weeks
SAMPLE LEAD TIME	3 Weeks
DESIGN LEAD TIME	2-3 Days
ITERATION LEAD TIME	1-2 Days
ISSUES TO BE AWARE	Fraying, Seam Slippage

SPEEDKNIT

KEY BENEFITS:
MOBILITY, EFFICIENCY

	TYPE Circular Knit Jacquard
	PATENT LANDSCAPE Crowded: Must consult legal <i>(patent team)</i> when developing to review product features

DESIGN

OPPORTUNITY	Use yarn plaiting for twist looks, knit constructions, structures and textures. Zonal design application.
COLOR	4 Colors Max
ZONAL FIT	YES
DETAIL	High Visual Detail
SHAPE TO LAST	Flat Patterened, Die Cut Upper

MATERIALS

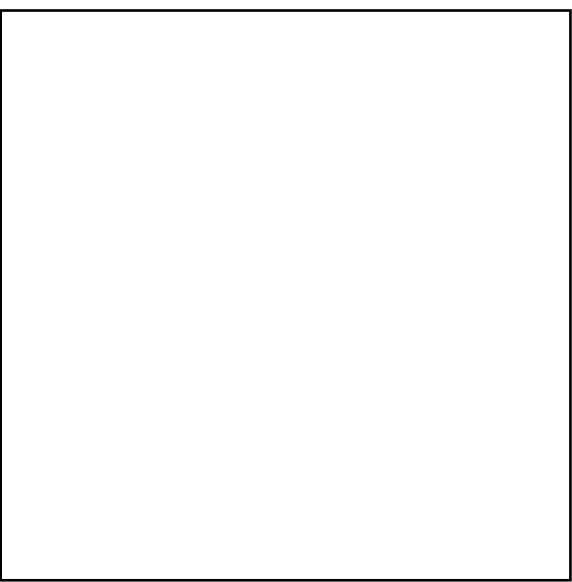
YARN TYPE	Up to 450 D (18gg machines)
DYE TYPE	Yarn or Piece Dyed
YARN LEAD TIME	7-21 Days

BUSINESS/SOURCING

PARTNER	Tong Siang / You Young / DongJin
LOCATION	Thailand / Korea
UPPER COST PER PR	\$2-6.00 (design dependant)
PRODUCTION LEAD TIME	60 Days
SAMPLE LEAD TIME	35 Days
DESIGN LEAD TIME	7 Days
ITERATION LEAD TIME	7 Days
ISSUES TO BE AWARE	Fraying, Seam Slippage

PARACORD

KEY BENEFITS:
STABILITY, STRENGTH

	TYPE Stitchbonding
	PATENT LANDSCAPE Low Risk (evaluation ongoing as footwear developed)

DESIGN

OPPORTUNITY	Design is locked. Maximum width 40cm.
COLOR	1-17 colors w/ high MOQ <i>(No MOQ for Silver or Black)</i>
ZONAL FIT	NO
DETAIL	Subtle Visual Detail
SHAPE TO LAST	Flat Patterened, Die Cut Upper

MATERIALS

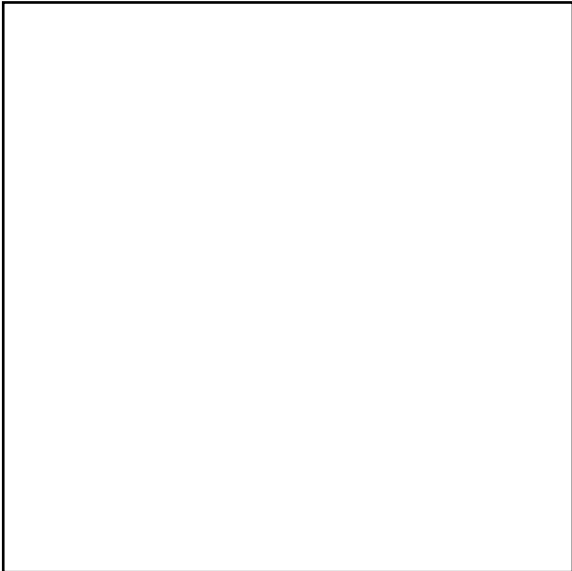
YARN TYPE	Braided Cords
DYE TYPE	Yarn Dyed
YARN LEAD TIME	10 days to yarn dye + 15-17 days to produce cording

BUSINESS/SOURCING

PARTNER	Kaesheng
LOCATION	Taiwan
UPPER COST PER PR	\$7.16/Yx35cm
PRODUCTION LEAD TIME	45 Days
SAMPLE LEAD TIME	21 Days
DESIGN LEAD TIME	Set Design
ITERATION LEAD TIME	2 Weeks
ISSUES TO BE AWARE	Pattern engineer should designate the width for the best yield per component pattern

WARPSPEED

KEY BENEFITS:
CUSTOMIZED VISUAL, BREATHABILITY

	TYPE Engineered Warp Knit
	PATENT LANDSCAPE Low Risk (evaluation ongoing as footwear developed)

DESIGN

OPPORTUNITY	Zonal structure placement, vendors have stucture inspiration tools
COLOR	2 Color. Heathe looks available.
ZONAL FIT	YES
DETAIL	Subtle Visual Detail
SHAPE TO LAST	Flat Patterened, Die Cut Upper

MATERIALS

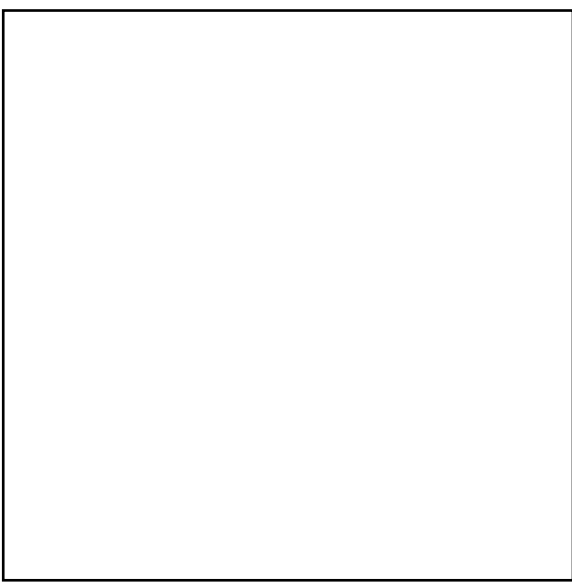
YARN TYPE	Yarn type depends on the color combination and stretchability , for stretchable materials contains spandex. For two tone materials, it is a poly + nylon composition . They also have a collection that is heavier denier heathered called 'rough knitting'
DYE TYPE	Piece Dyed
YARN LEAD TIME	15-20 Days

BUSINESS/SOURCING

PARTNER	Hua Feng
LOCATION	China
UPPER COST PER PR	\$4-5
PRODUCTION LEAD TIME	30-45 days , Needs to have forecast 25 days prior to actual PO
SAMPLE LEAD TIME	18 Days
DESIGN LEAD TIME	2 Days
ITERATION LEAD TIME	2 Weeks
ISSUES TO BE AWARE	Matching position variation (tolerance is +/-3mm) , There will be thickness difference between N-P version and P-N version, For two tone color or fluo colors , cannot reach the shiny color yet maintain the physical property

THREADBORNE

KEY BENEFITS:
LIGHTWEIGHT, PRECISION

	TYPE Embroidered
	PATENT LANDSCAPE Low Risk (evaluation ongoing as footwear developed)

DESIGN

OPPORTUNITY	Embroider in any direction, Inclusion of structures and parts, Open and closed structures possible
COLOR	12 colors on Tajima machine
ZONAL FIT	Opportunity to explore stretch thread
DETAIL	High Functional Visual Detail
SHAPE TO LAST	Flat patterened not shaped, potential to use TPU and PU thread to allow post process shaping or traditional manufacturing techniques

MATERIALS

YARN TYPE	Many thread types - limited by needle size
DYE TYPE	Yarn Dyed
YARN LEAD TIME	14 days for basic yarn - 24 to 30 days for novelty

BUSINESS/SOURCING

PARTNER	Coats / ASI / YY
LOCATION	China
UPPER COST PER PR	\$6 (extremely design dependant)
PRODUCTION LEAD TIME	Design dependant and quatlity dependant, a 55k stitches upper, the cycle time is120 minutes for 10 pairs
SAMPLE LEAD TIME	2 Weeks
DESIGN LEAD TIME	1 week to digitize the program
ITERATION LEAD TIME	Quality dependant, will be within a week
ISSUES TO BE AWARE	Capacity concerns. Each iteration demands physical property testing