

- Silk fibre characteristics:
 - ❖ Continues filament fibre thus relatively strong
 - ❖ Triangular cross-section results in light reflective quality therefore lustrous
 - ❖ More resilient than cotton, less resilient than wool
 - ❖ Abrasion – resistant and absorbent
 - ❖ Dimensional stability therefore will not shrink or stretch
 - ❖ Non-elastic therefore creases easily
 - ❖ Damaged by bleach and sunlight(Photosensitive)
 - ❖ Easily stained by perspiration (requires hand-laundering)
 - ❖ Excellent dye-affinity(can be dyed in deep/bright shades)
 - ❖ Resistant to mould and fungi
 - ❖ Soft and smooth handle
- Uses and Care of Silk Fabric:
 - ❖ Excellent draping and movement
 - ❖ Treated fabrics with salts produce fabrics with firmer drape and more body
 - ❖ Dresses and suiting
 - ❖ Ceremonial dress
 - ❖ Evening wear
 - ❖ Lingerie
- ❖ Shouldn't be worn when perspiring (damages fibre)
 - ❖ Strong bleaches deteriorate silk
 - ❖ Iron under low to medium heats
 - ❖ Weakens with too much exposure to air, grease, dust, dirt and light (should be worn in the evening and stored in a dark environment)
 - ❖ Concentrated mineral acidic silk
- Silk Markets:
 - ❖ China, Japan, India, Thailand, Italy, Spain and France produce the highest quality silks.
 - ❖ China is the world's largest producer of silk with over 50% of global production
 - ❖ India produces approximately 15% and Japan produces over 10% of world's silk
 - ❖ Countries that produce silk in Africa are Kenya, Nigeria, Uganda, Zambia, and Zimbabwe
 - ❖ There are several raw silk producers in South Africa in the Graskop area

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Lecture 9 - Textile Construction

14 April 2015
09:57 AM

Types of Construction

Intro to construction types = pg. 78 in Textbook

- Fabric can be constructed from : Yarns, Fibres, Solutions
- Or, a combination of the above: Multi-components, composites
- Or, a combination of the above: Mu

Crochet and Macrome
pg 94,95

Fabrics made from fibres :

- Non-wovens : felting and Bonding pg 96

Fabrics Made from solutions

- PVC films(supported or unsupported)
- Polyurethane foams

Multi-component Fabrics

- Quilting
- Laminating (fabric-to-fabric or fabric-to-foam)

Composite Fabrics (Non-Separable)

- Chintz is a example
- Tufted
- Coated
- Flocked

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Lecture 17 (Part 1) - Exam Feedback

14 July 2015

10:01 AM

Interlock

- Construction - Double weft knit
- Composition -
- Weight - Medium 196gm squared
- Gauge - 20
- Yarn type - Spun Carded
- Properties - More stretch than single jersey. Wales are visible on both face and reverse sides due to the double bed construction (double faced). Firm & smooth with smooth but low recovery

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Lecture 22 - Mechanical Finishing

11 August 2015

10:22 AM

Finishing

- Any processes or treatments applied to a loomstate fabric to improve aesthetic & performance qualities.
- These could be wet or dry processes; either mechanical or chemical in nature
- Suede cloth , napping , mechanical finish
- Loomstate = It hasn't been processed , unstabilised fabric

Mechanical (dry) Finishing

- Any FINISH applied to a loomstate textile using machinery or dry systems to improve the quality, handle and appearance of the cloth
- Finishes are applied for fabric function or aesthetics, or both (pages. 64 - 67 ; 89 - 109)
- These incl. embossing, embellishments, pleating and air/heat systems.
- Any finish applied which will improve the fabric's performance for a specific function or application
 - For example, if a fabric , winter apparel , then the chosen fabric should have good insulating properties. One method of improving a fabric's ability to insulate the wearer by increasing the amount of protruding fibres on the fabric surface. These fibres trap air - air is poor conductor of heat - which creates a thermal barrier between the wearer and the garment.
 - Brushing , sueding , texturing , Singeing & shearing, Stentering - Finishes applied for fabric function
- Finishes applied for fabric aesthetics
 - Any finish applied which will improve the fabrics appearance to correlate to a specific trend
 - Laser treatment, heat-setting , sandblasting, sueding & brushing , surface embellishment

Embossed & Brushed knit

Construction : Single Jersey Knit

Composition: 100% Synthetic

Finish: Embossed face ; brushed reverse

Properties : Brushing & embossing pull the yarns in knit making it difficult to unravel. Embossing creates a "melted" section which appears shiny due to composition. Brushing creates dimension and stability (makes knit slightly thicker & warmer to the touch)

Heat set textures;

- Permanent zig-zag pleats at Alexander McQueen
- large-scale waffle & permanent pleats

HeatSet Texture (Taffeta)

Construction :

Composition : 100% Acrylic

Finish: Pleat/ crinkle effect

Properties:

Taffeta (usually stiff) becomes slightly drapery and has more give (not stretch) due to the addition of pleating. The effect is permanent due to synthetic fibres being re-set into new form with the application of heat. This effect is seen in many variations: pleating, crinkle, plisse effect, moiré, and other texturing.

High Lazer Flux , cut through fabric for aesthetic effect , low lazer flux to brush or create an effect on the fabric (Velvet , Velour)

Surface Embellishment

- Bead work
- Sequin motifs
- Applique - stitching one fabric onto another(base cloth)

Printing Terminology

- Figure/ Motif - The prominent part of the pattern (the design).
- Ground - The background part of the design in the printed fabric.
- Repeat - the distance covered by a single unit of pattern this duplicated over and over along the length of the fabric.
- Colourways - The number of colours in which fabric can be purchase. For apparel a minimum of four colourways are usually designed.

Hand-Block Printing - Negative Patterns cut into wooden blocks and they then press it into the fabric.

- Small inaccuracies - which machine-prints do not have. However this hand-made effect is highly prized.
- Darker and lighter areas are common.
- Smudges or spots of access colour may occur
- Pin marks - the small dots guide a printer at irregular intervals

Vlisco - Dutch wax resist

- Resist dyeing - A resist substance as wax is printed onto the fabric, which is then dyed. The waxed areas will not take the dye, leaving uncoloured patterns against a coloured ground.
- Cold water based dyes

Silk Screen Printing - Is based on stencilling. A fine woven mesh is stretched across a wooden frame and an impermeable stencil applied to it. The surface to be printed is then placed underneath and ink or dye is drawn across it - forcing it through the areas of open mesh. A series of such screens may be used for multiple colour layers on one surface.

Pigment Printing - Metallic, pearlescent & tone-changing colours.

- The colour paste is made up of pigment and binder rather than a dyestuff
- With a slightly thicker consistency than dyestuff, pigments tend to sit on the fabric surface rather than being absorbed.

DISCHARGE PRINTING

A bleaching, pigment or acid solution is printed onto pre-dyed fabric to remove selected areas of colour.

PIGMENT PRINT (Polka Dot)

Finish : Pigment Printing

Properties : Pigment prints are opaque colours which can slightly alter the fabric surface due to the way they "sit" on the fabric surface without being absorbed.

The reverse of the fabric does not show very much colour as a result.

BATIK (Jungle)

Construction:

Composition : 100% Rayon

Weight :

Yarn:

Finish: starch resist dye

Properties :

Resist paste (usually starch paste) is painted or printed onto fabric, cured , and the fabric is over dyed or tie-dyed. Resist paste is then removed by washing to reveal the design.