

Trumped-Up Story of Dhoties in Five Weft Combos of Yarn

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ABSTRACT

Woven fabrics are made by using two or more sets of yarn interlaced at right angles to each other. Much variety is produced by weaving. Woven fabrics are generally more durable. They can be easily cut into different shapes and are excellent for producing styles in garments. However the raw edges ravel or fray easily and need to be protected. Fabrics having more fabric count (number of warp and weft yarns present) keep the shape well. Low count fabrics are less durable and may snag or stretch. Woven fabrics are manufactured in different widths depending on the end use. The fabrics used for apparels usually contain 90 cms width. The Sheeting materials are generally made having a width of 160 cm/140cms and 150cms/180 cms. This project is to produce the dhoties of same warp yarn but the weft yarns are varied in five different combos. The weft yarns are Open End yarns, Ring Frame, Air Spinning, Polyester yarn and the Hosiery yarns. The variations are done to study the trumped-up story of dhoties in five weft combos of yarn in the different feel and surface effects.

Keywords : Woven fabrics, Dhoties, Warp yarns, Weft yarns(Open End yarns, Ring Frame, Air Spinning, Polyester yarn and the Hosiery yarns),study of the feel and surface effects.

I. INTRODUCTION

1.1Weaving:

Weaving process is a method of fabric production in which two distinct sets of yarns or threads are interlaced at right angles to form a fabric or cloth. The other methods are knitting, lace making, felting, and braiding or plaiting. The longitudinal threads are called the warp and the lateral threads are the weft or filling. (Weft or woof is an old English word meaning "that which is woven".) The method in which these threads are interlaced affects the characteristics of the cloth.

1.2Objective:

- ✓ To produce a dhoti with hosiery yarns as weft
- ✓ To produce a dhoti with open end (OE) yarn as weft

- ✓ To produce a dhoti with ring frame yarn as weft
- ✓ To produce a dhoti with air spinning yarn as weft
- ✓ To produce a dhoti with polyester yarn as weft
- ✓ All the above weft yarns are used in same yarn count
- ✓ To create new texture and look in dhoti
- ✓ To impact more strength in the above mention 5 dhoti
- ✓ To make a survey of the five model dhoties among the men's.

II. REVIEW OF LITERATURE

Cloth is usually woven on a *loom*, a device that holds the warp threads in place while filling threads are

woven through them. A fabric band which meets this definition of cloth (warp threads with a weft thread winding between) can also be made using other methods, including tablet weaving, back-strap, or other techniques without looms. The way the warp and filling threads interlace with each other is called the weave. The majority of woven products are created with one of three basic weaves: plain weave, satin weave, or twill. Woven cloth can be plain (in one color or a simple pattern), or can be woven in decorative or artistic designs.

2.1 Plain weave

Plain weave also called tabby weave, linen weave or taffeta weave) is the most basic of three fundamental types of textile weaves. It is strong and hard-wearing, used for fashion and furnishing fabrics. In plain weave, the warp and weft are aligned so they form a simple criss-cross pattern. Each weft thread crosses the warp threads by going over one, then under the next, and so on. The next weft thread goes under the warp threads that its neighbor went over, and vice versa.

- Basketweave is a variation of plain weave in which two or more threads are bundled and then woven as one in the warp or weft, or both.
- Balanced plain weaves are fabrics in which the warp and weft are made of threads of the same weight (size) and the same number of ends per inch as picks per inch.

A balanced plain weave can be identified by its checkerboard-like appearance. It is also known as one-up-one-down weave or over and under pattern. Some examples of fabric with plain weave are chiffon, organza, and taffeta.

2.2 Satin Weave

The satin weave is distinguished by its lustrous, or 'silky', appearance. Satin describes the way the threads are combined, and the yarn used may be silk or polyester, among others, giving different fabrics. The satin weave is characterized by four or more cool fill

or weft yarns floating over a warp yarn or vice versa, four warp yarns floating over a single weft yarn. This explains the even sheen, as unlike in other weaves, the light reflecting is not scattered as much by the fibers, which have fewer tucks.

2.3 Twill:

Twill is done by passing the weft thread over one or more warp threads and then under two or more warp threads and so on, with a "step" or offset between rows to create the characteristic diagonal pattern. Because of this structure, twills generally drape well. Examples of twill fabric are chino, drill, denim, gabardine, tweed and serge.

2.4 Dhoties:

The dhoties are in plain weave, the warp and weft are aligned so they form a simple criss-cross pattern. Each weft thread crosses the warp threads by going over one, then under the next, and so on. The next weft thread goes under the warp threads that its neighbor went over, and vice versa. Dhoties weaves are fabrics in which the warp and weft are made of threads of the same weight (size) and the same number of ends per inch as picks per inch.

2.5 Dhoti Manufacture

Dhoti is the Plain Weave is one of the most fundamental fabric weaves available. Most other types of weave are just variations of the plain weave. Plain weave is created using warp threads and a weft thread. The warp threads are spaced out evenly and held down at either end by a loom. The weft yarn is then interwoven between these warp yarns. The weave pattern for plain weave is 'One under one over.' This means that the weft goes over one warp yarn and under the next. This repeats until the whole fabric is done. Plain weave can be recognized by its checkerboard effect. This is usually a balanced weave which means that yarns of the same weight, not necessarily the same yarns are used for both the warp and weft, creating a fabric with a uniform appearance

and the same properties in the warp and weft yarns. Plain weave can be woven with different colors to create color woven fabrics, such as striped fabrics and they can be printed or have other finishes applied to them. The dhoties are of Plain weave fabrics can be anything form heavyweight to sheer, depending on the types of yarns used and the tightness of the weave. Examples of fabrics made using a plain weave a Taffeta, Organza, Chiffon, Canvas, Tweed and Muslim. All of these fabrics are very different in terms of weight and appearance but are all made using the same weave.

2.6 Properties of Dhoties

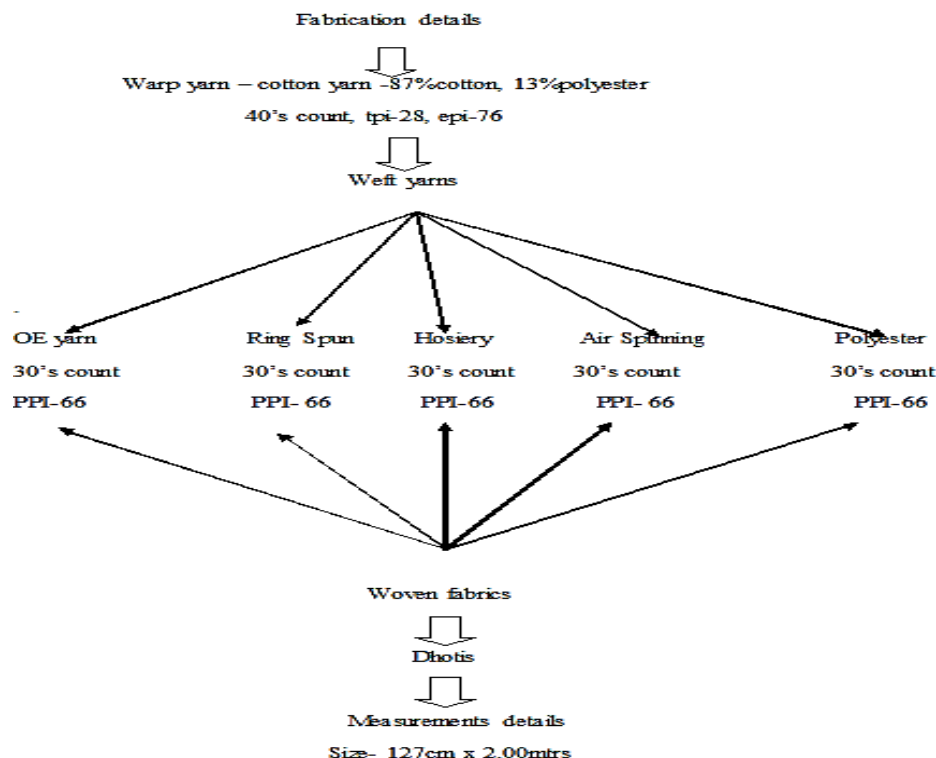
- ✓ No right or wrong side
- ✓ No lengthwise or crosswise stretch, only stretch is on the bias
- ✓ Doesn't fray as easily as other weaves
- ✓ Creases easily
- ✓ Less absorbent than other weaves
- ✓ Fabrics range in weight from sheer to heavy, depending on the yarns used

3.1 Fabrication Methods:

- ✓ Versatile
- ✓ Flexible
- ✓ Tightest weave structure
- ✓ Strong
- ✓ Hard-wearing
- ✓ Durable

III. METHODOLOGIES

The methodology of the project is to find the strength of the dhoti by feeding five different types of weft yarns. All the weft yarns are in the same count sourced from the different spinning technique. The strength of the weft yarns differ from one another . all the warp yarns are similar to each other. There is no change of warp yarn from one another. The above mentioned samples are weaved in same EPI and PPI. Strength of the sample differs according to the insertion process. All the above samples are weaved in power loom. The above mentioned samples are produced in same measurement.



3.2 Product Sample:



3.3 End Uses of Plain Weave Fabrics:

- ✓ Shirting
- ✓ Suiting
- ✓ Outer garments
- ✓ Toils in the case of Calico fabric
- ✓ Sheer fabrics
- ✓ Blouses
- ✓ Dresses
- ✓ Garments that do not require much stretch

IV. RESULTS AND DISCUSSION

With regard to consumers 100% (n=336) of them visiting the Government Khadi Bhandars expressed Swadeshi feeling towards wearing dhoties fabrics. The Handloom industry doesn't have employment generation schemes. Therefore, weavers were decentralized and majority find work with master weavers. There was lucrative market for Handlooms in private sector which was not observed in the Government sector. Thus, Government sector should explore the new markets on par with the private sector following certain measures and modifications in their marketing strategies like visual merchandising, publicity etc. Consumers were well aware of the hand woven fabrics and preferred to wear Khadi and Handloom Traditional dresses like Saree, Dhoti, Angavastram during special occasions.

NULL HYPOTHESES: H_0 is not true the study was carried out with the null hypotheses in mind. The null hypotheses were rejected as $H_0 \neq H_i$ as there were significant differences in the statistical analysis of the quantitative data. 176 5.4 Implications of the study: The study of Khadi and Handloom industry of Andhra

Pradesh - focus on marketing strategies and consumerism provides information that can be useful to the study gave insight into the connecting linkages between the weavers wholesalers/retailers-consumers. The feed back from the consumers and marketing team should be communicated to the weaver artisans to develop innovative products and designs. Modernization of dhotie and Handloom retail outlets to give a wonderful shopping experience keeping Consumer psychology of shopping in mind is the need of the day. The study can be helpful to policy makers to revise the existing policies and framing new policies for overcoming certain problems of the Khadi and Handloom industry of Andhra Pradesh. Some of the suggestions are Exclusive Khadi and Handloom product lines should be developed incorporating the functional finishes like crease resistant finish either on fabric or garment finishing like Shirts, Kurtas etc. in order to improve ease of maintenance without affecting their inherent qualities. • The internet portals of KVIC, HEPC and APCO may be exploited towards potential marketing of the Khadi and Handloom products assuring the special qualities (traditional brands) of the fabrics on par with multinational branded textile companies. The return policies must be included to gain consumer's faith. 5.5 Recommendation: A holistic approach to deal with the problem from all angles is suggested, a multidimensional micro level study can be conducted in other states of India with a drive to promote the market for traditional handspun, hand-woven textiles or freedom fabrics of India.

V. CONCLUSIONS

The Simplest end of this project trumped-up story of dhoties in five weft combos of yarn with different colour effects show the good feel and surface effects. The simplest of all weaving process of the changing the weft yarns such as Open End yarns, Hosiery Yarns, Ring Spun yarns, Compact Yarns and Air Jet Spun yarns. These weft yarns is an odd one throughout the fabric run and so the effect is different .This was a new study on trumped-up story of dhoties in five weft combos of yarn with different colour effects.

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