Progress of Car Seat Covers With Jadamanji Finish

Mrs.D.Anita Rachel [1], Ms.Surya [2]
[1]Assistant Professor Dept of Apparel Manufacturing and Merchandising
[2]Dept of Apparel Manufacturing and Merchandising
[1, 2] NIFT – TEA COLLEGE OF KNITWEAR FASHION, Tirupur – 641 606

Abstract- *The abstract or idea of this project is to produce a Car Seat Covers on FABRIC by using both Cotton fiber with the finish of Jadamanji. This fabric will be highly Anti-Microbial; will be having the cooling property and fragrance. More over this product has also got UV- protective nature and medical usage. My application of this material will be in car seats, beds, pillows and cushions etc. Combination of textile technology and medical sciences has resulted into a new field called medical textiles. Here we are combining Home textiles with Medical Textiles in a Car Seat Cover with the Jadmanji Finish."The diversity of applications encountered in Medical and health care products are quite remarkable, e.g., simple bandages biocompatible implants and tissues, anti bacterial wound treatment material, prosthetics and intelligent textiles."Medical textiles are one of the most rapidly expanding sectors in the technical textiles market, according to reports, and hosiery products with medical industry applications are among a long list of textile products being consumed in that market. Toweling fabrics, tablecloth fabrics, upholstery fabrics on sofa and chairs, curtain fabrics, bedding, bed linens, rugs, clothing fabrics and knitting wools are some home textiles. In this project work, a successful attempt had been made to develope an eco-friendly fabric made of cotton fiber and Jadamanji , which is a new approach of manufacturing a CAR SEAT. It has got a high Anti-Microbial property in nature and a new product in the area of Automobile Textile and also acts as SMART TEXTILE.*

Keywords- Car Seat Covers, Cotton Fiber, Jadamanji, Anti microbial Property,Survey.

I. INTRODUCTION

Combination of textile technology and medical sciences has resulted into a field called medical textiles. Medical textiles are one of the most rapidly expanding sectors in the technical textile market, according to reports, and hosiery products with medical industry applications are among a long list of textile products being consumed in that market. Combing cotton fiber and Jadamanji to produce a CAR SEAT of New areas applications for medical textiles, Smart textile, Home textile and Automobile textile have been identified with the development of new fibers manufacturing technologies for yarns and fabrics. Development in the field of textiles, either natural or manmade textiles, normally aimed at how they enhance the comfort to the users. Development of medical textiles can be considered as one such development, which is really meant for converting the painful days of patients to comfortable days.Home Textiles are a flexible material consisting of a network of natural or artificial fibers often referred to as thread or yarn. Spinning raw wool fibers, linen, cotton, or other material on a spinning wheel to produce long strands produces yarn. Home textiles are formed by weaving, knitting, crocheting, knotting, or pressing fibers together.

II. AUTOMOBILE TEXTILE

Automotive textile is that part of textile which is used in accordance with the vehicles i. e. it is widely used in automotive industry right from lightweight vehicles to a heavy truck or duty vehicles.

Automotive textile is an integral aspect of technical textile. Since it cannot be classified in apparel textile, it is more of a techno mechanical application of textile. Industrial textiles are widely used in transportation vehicles and systems including cars, trains, buses, airplanes and marine vehicles. Approximately 50 square yards of textile material is used in an average car for interior trim (seating areas headliners, side panels, carpets and trunk, lining, tires, filters, belts hoses, Airbags etc.

Automobile textiles, which are non-apparel textiles, are widely used in vehicles like cars, trains, buses, aircrafts and marine vehicles. Hence, the term automobile textile means all type of textile components e.g. fibers, filaments, yarns and the fabric used in automobiles. Nearly two third of the automobile textiles are for interior trim, i.e. seat cover, carpets and roof and door liners. The rest is utilized to reinforce tyres, hoses, safety belts, air bags, etc. It is projected that nearly 45 square meters of textile material is utilized in a car for interior trim (seating area, headlines, side panel, carpet and trunk). According to a survey, the percentage of textile in a motorcar amounts to 2 per cent of the overall weight of a car. Apart from this, visible textile components, eliminating hidden components such as in tyres and composites, hoses and filters; amount to 10-11 kg per vehicle in absolute terms. Industrial textiles are largely utilized

in vehicles and systems including cars, buses, trains, aircrafts and marine vehicles.

A **car seat** is the chair used in automobiles. Most **car seats** are made from inexpensive but durable material in order to withstand as much use as possible **Seats**

The seat is probably the most important item in the car interior. It is the first thing the customer seed when the car door is opened and he or she will probably instinctively touch it. Textiles have become by for the most widely used material in seat coverings and are beginning to be used in other areas of the seat in place of polyurethane foam. They are also used in a number of specialist cases in place of metal springs and actual seat pan and seat back. Now a days polyester is very popular material for making seats, like polyester in the face fabric, Polyester non-woven in the cover laminate and polyester non-woven also in the seat squab and Cashion.

III. CAUSES OF BACK PAIN

The human back is composed of a complex structure of muscles, ligaments, tendons, disks and bones - the segments of our spine are cushioned with cartilage-like pads. Problems with any of these components can lead to back pain. In some cases of back pain, its cause is never found.

DEVELOPMENT

To benefit from the consumer demand for antimicrobial/antibacterial products and for the antibacterial and antifungal performance needs of the textile world, manufacturers have a choice.

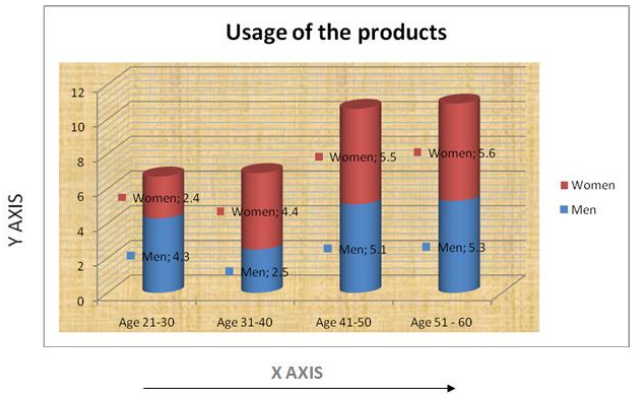
In choosing, they should utilize a treatment that provides for an odor reduction/antibacterial claim and an antimicrobial finish for their textile products consistent with their claims and the needs of their target consumers. This selection should be done by considering:

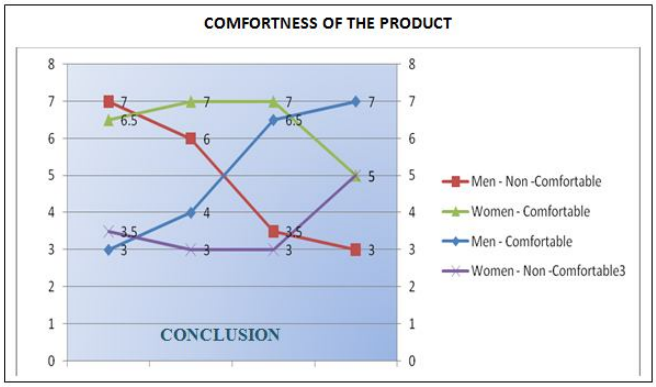
- Adopting an antimicrobial technology with a proven history of use. This will help shorten the timelines in bringing products with an antibacterial/antifungal/odor-reducing, antimicrobial feature to market.
- Adopting a non-leaching antimicrobial that doesn't pose the risk of crossing the skin barrier. If it creates a "zone of inhibition" it leaches or moves and has the potential to cause problems.
- Adopting a non-leaching antimicrobial that doesn't pose the risk of creating adaptative resistant microorganisms.
- Adopting an antimicrobial technology that can have its proper application tested for at the mill or at the retailers. A verifiable quality assurance program should be a key component of any application process.
- Adopting an antimicrobial technology that has technical and marketing support.

8.1 TABLE:

Table:3

	Men - willingness	Men - Un willingness	Women - willingness	Women - Unwillingness
Age 21-30	5	5	5	5
Age 31 - 40	6	4	6	4
Age 41 - 50	4	6	4	6
Age 51 - 60	7	3	7	3





IV. CONCLUSION

The new product which is produced by the bamboo fiber and vetivert is having the properties of both. This is the highlight of this non woven product. Medical textiles and home textiles are combined together to make the final product. The most important properties which have to be noticed is that it's Anti- microbial and Anti- Fungal property as well as its fragrance. Our buy products for this project are blanket, pillow and seat covers for cars.

Our ultimate aim was to develop a home textile product which has got medicinal values. From the above observations, we can conclude that the non woven needle punched material have the medicinal properties of both bamboo and vetivert. Hence there is no usage of chemicals for the development of this product it is said to be an eco- friendly too.

Textile materials are used in automobiles for interior trim and for ensuring comfort (e.g. seat covers, carpets, roof liners, and door liners) as well as for reinforcement (e.g. tyre) and filters. Textiles also offer weight reduction which in turn results in fuel economy.

Airbags help to save lives, but at times they can also be a source of serious injury. The search for a uniform smart airbag, which can perceive the size of the passenger or whether the seat is empty and react in that manner, is in progress. Such a 'smart' airbag will incorporate sensors to judge the weight, size and location of the car passengers and hence deploy more appropriately.

In addition, incorporated safety devices associated with the seat belt along with other safety items, particularly for child passengers, are under development. The trend towards uncoated fabrics is anticipated to continue and so is the improved trend towards more airbags per car and full-size bags. There is also a technical challenge of producing the bag by using more rational techniques and related specifications made by the automotive industry.

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