

Descriptive Study on Technical Textile in Present Time



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Abstract

The main aim of this study was descriptive analysis on technical textile in present time. With a flow of time a lot of changes have been observed in modern time. More people know about technical textile. Technical textile is a high technology sunrise sector which is steadily gaining ground in India. Technical textile are functional fabrics that have applications across various industries including automobiles, civil engineering and construction, agriculture, healthcare, industrial safety, personal protection etc.

The present study evaluates descriptive analysis on technical textile in present time in order to find out the most respondents know about technical textile and some are not. In this study percentage score calculated for find the true result. According to 56% respondents we found that geo textile is use for a long time because in railway line, bridge construction, road construction geo textile is use from a long time.

Keywords: Technical Textiles, Descriptive Study

Introduction

Technical textiles are primary function based standard products for non aesthetic purpose. This market finds wide end-use in areas such as- Geo Textile, Protective clothing etc. this industry is growing rapidly and complements growth to other industries. Technical textile is a high technology sunrise sector which is steadily gaining ground in India. Technical textile are functional fabrics that have applications across various industries including automobiles, civil engineering and construction, agriculture, healthcare, industrial safety, personal protection etc.

Technical textile products derive their demand from development and industrialization in a country. Given the large scale which emerging nations are industrializing, the market for technical textiles can only be expected to grow in tandem with industrial growth in different parts of the world. Technical textiles are defined as textile materials and products used primarily for their technical performance of the functional properties, sometimes as a component or part of another product to improve the performance of the product. The global demand for a variety of such textiles has continuously increased as a result of their rising base of applications in end use industries. Technical textile can be divided into many categories, depending on their end-use.

- Agro Textile
- Build Textile
- Cloth Textile
- Geo Textile
- Home Textile
- Industrial Textile
- Medical Textile
- Mobile Textile
- Oeko Textile
- Pack Textile
- Pro Textile
- Sport Textile

Agro Textile

Textiles used in agriculture are termed as agro textiles. they are used for crop protection, fertilization. The essential properties required are strength, elongation, stiffness, and bio- degradation, resistance to sunlight and resistance to toxic environment. All these properties help with the growth and harvesting of crops and other foodstuffs.

Build Textile

Textiles used in construction concrete, reinforcement, façade foundation, proofing, conditioning, noise prevention, visual protection, protection against the sun.

Cloth Textile

Technical textile for clothing applications especially in the finishing process where fabric is treated under pressure and high temperature. The technical textile supports the fabric for smooth processing. This is usually the blend of polyester, modal, viscose, nylon etc.

Geo Textile

These are used in reinforcement of embankments or in constructional work. The fabrics in geo textiles are permeable fabrics and are used with soils having ability to separate, filter, protect or drain.

Home Textile

Textiles used in a domestic environment interior decoration and furniture, carpeting, protection against the sun, cushion material, and fire proofing, floor and wall coverings.

Indu Textile

Textiles used for chemical and electrical applications and textiles related to mechanical engineering. Silk screen printing, filtration, plasma screens, sound proofing elements, roller covers.

Lifting Textile

Technical textile for lifting applications used in process of lifting heavy goods. The textile produced is strongly woven with high tenacity yarns and the fabric is treated with heat and high temperature controlling its elongations. This is usually made of polyester and nylon.

Mobile Textile

These textiles are used in the construction of automobiles, railways, ships, aircraft examples are truck covers, car trunk coverings, lashing belts, air filterations, air bags, air balloons. This is usually made of nylon and polyester.

Oeko Textile

New applications for textiles in environmental protection applications, floor sealing, erosion protection, air cleaning, prevention of water pollution, water cleaning, waste treatment.

Pack Textile

Packaging, silos, containers, bags, lashing straps, canvas covers, tents.

Pro Textile

The main target of the technical protective fabrics is to improve people safety in their work place. A technical protective fabric can save a workers life, that's why, most of them are mainly used to manufacture personal protective equipment.

Sport Textile

Shoes, sports equipment, flying and sailing sports, climbing, angling, cycling, winter and summer sports, indoor sports it can vary from anything including sports bags.

Horrocks and Anand, (2000) in their book entitled. "Hand book of Technical textiles" endeavored to show the production technologies of various Technical textile, raw materials and end use products. The book also gives a general ideas of global technical textile market covering its scope, milestone in its development, textile process, application globalization and future of the industry.

In modern times, application of nonwovens play important role in the medical sector. A range of products are manufactured from nonwovens textile such as surgical gowns maps, surgical drapes, pads droving materials and textiles used for implantation in the body. More ever the products that are used outside the body are mostly disposable ones.

Chaudhary Dr. Asiya and Shahid Ms. Nazneen written a paper and she find his paper examines the growth and development of technical textile industry in India covering a decade from 2002 to 2012. Further, the researchers compare the eleventh five year plan period performance of the Indian technical textile industry with tenth five year plan period performance in order to know the progress over the year. The main objective of this study is- To study the technical textile in modern time.

Research Methodology

Methodology simple refers to the methods used in the conduct of an inquiry.

A survey method was adopted for the present study. In the questionnaire, respondents explained the meaning of different technical textiles, use of technical textile in present time.

In order to analyze the result in terms of different ages between 18-50 years. Afterward 25 people were randomly selected.

Percentage score was choosing for the analysis of the data and table was shown for result and discussion.

S. No.	Questions related technical textile	Responses	No. of Respondents	Percentage
1.	To know about technical textile	Yes	20	80%
		No	5	20%
2.	To introduce about technical textile	Yes	21	84%
		No	4	16%
3.	bandage, mask, diaper, belt under in which textile	Geo textile	1	4%
		Medical textile	24	96%
4.	use of medical textile	Yes	7	28%
		No	18	72%
5.	To know about artificial lungs or kidney made from medical textile	Yes	7	28%
		No	18	72%
6.	In future if you need then you accept the technical	Yes	25	100%

	textile	No	0	0%
7.	What is the use of medical textile	High	20	80%
		Low	5	20%
8.	To know about geo textile	Yes	8	32%
		no	17	68%
9.	To know the use of geo textile	Yes	22	88%
		No	3	12%
10.	In railway line and bridge construction which technical textile is used	Geo textile	24	96%
		Medical textile	1	4%
11.	Which textile is used for a long time	Medical textile	11	44%
		Geo textile	14	56%
12.	In present time which technical textile is too much used	Geo textile	2	8%
		Medical textile	23	92%

This table shows that most of respondents (80%) are know about technical textile because they introduce about medical textile and geo textile. 96%respondents know the bandage, mask, diaper, belt under the medical textile but some respondents don't know the artificial kidney or lungs made from which textile. 80% respondents the use of geo textile.

Conclusion

The present study evaluates descriptive analysis on technical textile in present time in order to find out the most respondents know about technical textile and some are not. In this study percentage score calculated for find the true result. According to 56% respondents we found that geo textile is use for a long time because in railway line, bridge construction, road construction geo textile is use from a long time.

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