ISSN: 0379-5462

IPPTA: Quarterly Journal of Indian Pulp and Paper Technical Association

Vol. 33, E2, 2021, p. 70-71

Paper and its Significance



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Abstract: The role of paper in human society is very important. Who would have thought that paper could be made from a piece of wood? Although it was invented more than 2,000 years ago, it is an integral part of life, from the past talipot palm writing to the present white paper. In today's world, paper is not only for writing or reading, but it has become an alternative to plastic. This is because plastic objects are harmful to the environment and non bio degradable. Paper makers have accepted the government's call for "single use plastic ban by 2022" and are working on building more bio-degradable products, which will be an alternative to plastic in the future.

Introduction

Paper is a vital part of everyday life. The product, in which we would print, read or write, which is made mainly from wood fiber processed into a sheet can be called as paper. Most fibers come from wood, in earlier times; the source was cloths of linen or cotton. The source material

is reduced to slurry of fibers/pulp that floats freely in water. When the water is removed by dryers, the fibers form a thin layer that becomes paper.



[Fig.1]

The making-

Main raw materials used in paper making may be eucalyptus, casuarina or subabulespecially in southern parts of India. After the debarked wood blocks are collected in the wood yard, they are processed to make wood chips of desired sizes. Wood chips are the main inputs for digester. During the pulping process, the chips are cooked with white liquor under some temperature and pressure. After stage wise screening and washing, required bright pulp is obtained. The pulp then goes through the refiners for fibrillation and to improve its water holding capacity. Then dyes, fillers & chemicals additives are added to the stock and then passed under centrifugal force to eliminate foreign particles from it.

After stock regulation, the pulp slurry is ready to enter the paper machine. The main aim of the machine is to remove water from the stock gradually without losing much fillers. Paper machine starts with the head box till paper reel is formed.

In the head box section, consistency of stock is maintained around 1% and it is present to create turbulence and deliver the stock in to the forming section uniformly. The forming section is also called wire part in which water is removed by pressure difference developed by the table rolls, foils or suction equipment and the drilled couch roll. Now in press part some extra water is removed to get the consistency 35-55 %. Finally the sheet is dried with steam heating in the Pre-drying section. The purpose of size press is to give starch coating to the paper surface for better surface strength. After that, sheet is further dried in Post drying section. Calendars are present to press the sheet to get smooth surface. Now the paper reel is finally ready to cut in to required reel or sheet sizes.

Advantages-

The main advantage of paper is that it can be easily decomposed than plastic products. Paper products can be recycled, which favours the environment. The paper industry also creates lots of job opportunities for peoples around the world, which is really appreciable towards employment worldwide. We can get news with the help of paper that is newspaper. Many hand crafts can be done with the help of paper. It is used to pack our food, beverages etc. It is used in our

educational life also, that is reading in text book. Even paper makes a prominent role in our household works like a tissue. Even in the medical products also paper do a prominent role that is bandages, paper plasters, dressing etc. With the help of paper we can communicate with each other.

Uses-

Paper plays a prominent role in every generation. It is mainly used as writing printing or copier grades but paper also used for hundreds of other purposes, including packaging, wrapping, insulating, etc.ln ancient days paper is used to write the scripts (Now Divine printing paper in lower GSM). For artists paper is used as drawing sheets; they are used in banks, collages, schools, offices, etc. The paper is mainly used to write and read. Indirectly paper gives the knowledge; it acts as a mediator between the writer and the reader. In this generation, there are computers/laptops/tabs/mobiles but in the older days there were only papers in which the work was done. Without the paper there was nothing in this world.

Some applications of paper are,

General Applications	Special Applications	Special Applications
Wall calender	Blotting paper	Cup stock
Currency	Litmus paper	Paper straw
Voucher	Sandpaper	Match stick
Packaging paper	Insulation paper	Pharma print
Text book	Handkerchiefs	OGR (food packaging)
Notebook	Toilet paper	Divine printing
Drawing sheets	Filter paper	Sublimation printing
Newspaper	Paper bag	Paper Bed
Playing cards		
Bond paper		



Students are benefited from paper each day from classroom drawings and notebook paper to text books. At work, papers help tocommunicate. In this digital age, there is a talk about the "paperless office," papers are essential forphoto copies, laser printers, notepads, and other uses. And since digital documents can be deleted, there's nothing like having a back-up on paper. Wherever we go, paper is there to make our lives easier. It's the bags that hold our purchases. It's the cards, letters and packages, the cup that holds tea/coffee, and the album that holds our memories.

Conclusion

Paper is a great thing for a human being, paper may have little limitations towards the environment while manufacturing but using the paper in cons gives very good results. Paper has a feel, anodor, a look that brings a response in people. Paper is atrusted friend, who is sensitive and adaptable. Paper is a trusted companion that will remain with the mankind for lifetime. we can say it is the most powerful element of life.



References

Some photographs from Google images,

- Fig.1: https://multiaccessoffice.com/copy-print/148-xerox-vitality-inkjet-print-copy-multipurpose-paper-8-12-x-14-ream.html
- Fig.2: https://m.indiamart.com/proddetail/paper-carry-bags-21006703497.html
- Fig.3: https://www.tradeindia.com/products/plain-white-paper-straw-c5419852.html
- Fig.4: https://en.m.wikipedia.org/wiki/Playing_card
- Fig.5: https://shopee.ph/Paper-cups-Plain-50pcs-pack-i.54897104.2103011527
- Fig.6: https://www.zestpics.com/products/customised-diary-with-pen
- Fig.7: https://www.tradeindia.com/products/drawing-sheet-c5760514.html
- Fig.8: https://m.indiamart.com/proddetail/toilet-paper-roll-16810601797.html
- Fig.9: https://m.indiamart.com/proddetail/white-paper-envelope-13638311891.html

Few articles on uses and advantages of paper from Google search like: https://www.greenandhappymom.com/post/pros-and-cons-of-paper