HISTORY OF HEALTH AND SAFETY OF TEXTILES INDUSTRY

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Abstract. *This article analyzes the research conducted on the identification of hazardous effects of textile industry products and raw materials on human health, as well as the possibilities of eliminating safety and health risks.*

Keywords: *textile, thread, fabric, dyes, fiber, silk yarn, cotton, synthetic fiber, ecological problems, health and safety.*

Main part: Textiles industry: Term textile industry (Latin texere, to weave for) initially of fibers gasses in knitting applied if it is, now it is knitting, knitting, felting and others such as wide scope another process own into takes It is also natural or synthetic of fibers yarn preparation as well as fabrics finishing and to paint own into takes.

Thread to make: From history previous in periods of animals hair, plants and seeds fibers preparation for used Silk in China from AD appeared in the previous 2600 years has been and from AD in the middle of the 18th century BC the first synthetic fibers created Cellulose or from petrochemicals prepared synthetic fibers, single himself or another synthetic and natural fibers with different in combinations, increasingly more apply started although they are wool, cotton, linen such as natural of fibers prepared fabrics complete holding could not stand and silk

Silk yarn harvest to do for to each other connection possible has been in filaments harvest has been the only one natural is fiber . Other natural fibers first smoothing, combing to parallelize through and after spinning through continuously to the thread weight need The spindle the most ancient spinning is a tool; He is the first times in Europe from AD rotating in the previous 1400s the wheel invention with mechanized. At the end of the 17th century invention done spinning jenny, one of time in itself one how many spindles manage can Then Richard Arkwright's invention because of rotary frame in 1769 and by Samuel Crompton presentation mule, This is one to the worker one of time 1,000 spindles manage enable gave, yarn work release summer from industry to the mill passed.

From fabric to make: Fabric making is the same so to history have was Ancient of times since hand bench main weaving machine being came Mechanic improvement ancient in times development with started hunting, alternative turning threads connected; in the 13th century AD, leg run, one how many collections collection administration current done of the addition of with to the frame installed board, weaving or filler threads own to the place " Mechanized " machine in Europe and whole the world across original hand machines preserved the rest traditional cultures from this exception, superior weaving to the tool turned.

John Kay invention aircraft in 1733 to the weaver the shuttle weaving of the machine width across automatic respectively dispatch enable giver weaving in mechanization the first step it has been. Edmund Cartwright work came out with steam working bench and in 1788 James Watt with In England by steam working the first textile factory built These mills water with working to cars

from addiction get rid of did and them desired in the place to build enable gave, Another one important development was punch card in 1801 in France Joseph Marie Jacquard by work developed system; this patterns automated way knitting enable gave From wood made previous powerful machine tools little by little steel and another of metals made machine tools with replaced. Since then since technological changes them bigger, faster and high level automated to do directed.

Paint and printing for natural paints initially threads and dyeing fabrics for used, but coal in the 19th century with tar of paints discover to be done and synthetic in the 20th century of fibers development with to paint processes more complicated . Press the block release initially fabrics to paint for used (fabrics silk screened pressing release in the mid -1800s work developed), but quickly meanwhile it is rolled print with replaced . Engraved copper rollers the first times in 1785 in England applied, then fast improvements as a result six in color roller printing enable gave Modern roller pressing release 16 or 180 minutes from him more than in color from printed 1 m more than cloth work release can.

Termination: Initial times fabrics brushing or cutting, fabric to fill or measure or glazed effect Create for calendar from the rolls transfer through finished Today's in the day fabrics in advance shortened, mercerized (cotton threads and gasses strength and brightness improve for caustic solutions with processing is given) and different finishing processes with processing given, for example, folds durability, folds holding to stand and to water, to fire and to rot durability increases .

Special procedures work is released highly efficient fiber, unusual strength and very high to the temperature endurance because of so named So to nylon similar fiber Aramid steel stronger and From aramid prepared Kevlar fiber heat and chemical to substances resistant bullet impermeable cloth and clothes preparation for is used . Carbon, boron, silicon, aluminum and other materials with combined another synthetic fiber in planes, space on ships, chemical resistant filters and in membranes, protective sports equipment used light, extreme strong structural materials work release for is used .

Safety and health issues: As machines have gotten bigger, faster, and more complex, they've also introduced new potential hazards. As materials and processes became more complex, they made the workplace a health hazard. And as workers were forced to cope with the demands of mechanization and increased productivity, largely unrecognized or ignored job stress became increasingly detrimental to their well-being. Perhaps the greatest impact of the industrial revolution was on social life, as workers moved from the country to the cities, where they had to contend with all the ills of urbanization. These effects are seen today as textiles and other industries move to developing countries and regions, only the changes are faster. The risks encountered in different segments of the industry are summarized in other articles in this chapter. They emphasize the importance of good housekeeping and proper maintenance of machinery and equipment, effective guards and barriers to avoid contact with moving parts, and the use of local exhaust ventilation (LEV) as a supplement to good general ventilation and temperature control. they emphasize. Providing appropriate personal protective equipment (PPE) and clothing if the hazard cannot be completely controlled or avoided by design and/or substitution of less hazardous materials. Continuous education and training of workers at all levels and effective supervision are constant themes.

Ecological problems: Textiles industry by raised ecological problems two from the source come comes out: textile work release with depends processes and of products use with depends risks.

Textiles work release: Textiles enterprises by created main ecological problems into the atmosphere and waste to the waters coming out poisonous are substances . Potentially poisonous to substances addition unpleasantly smells most of the time problem is especially building and printing press enterprises residential buildings nearby located Ventilation in waste solvents, formaldehyde, hydrocarbons, hydrogen sulfide and metal of compounds vapors to be can Sometimes solvents caught and re use for distilled to be can Particles filtering through take thrown away can Scrubbing methanol such as in the water soluble the pilot compounds for effective, but it is hydrocarbons of waste a lot part organize which pigmented in publication doesn't work Flammable substances turn on to be sent but it is possible relatively expensive However, the final solution is possible as long as emission free has been of materials use Not only that in the printing house used paints, binders and mutually binder to substances, perhaps of fabrics formaldehyde and also applies to the residual monomer content.

Conclusion

Summary: Textiles in the industry work being released fabrics types increase and productivity in raising technological development continue is doing However, the most the important thing is these developments as well as employees health, safety and well-being to increase directed . But that's it despite these developments financial in terms of limited and necessary investments done to increase able didn't happen old in enterprises, as well as new to industries have to be who wants developing in the regions even health and safety at the expense of done increase problem there is workers However, such under the circumstances, they face coming possible has been risks minimize for employees teaching and teaching through a lot to something reach can.

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