The effect of the properties of Artificial Leather used in the production of school bags on the quality of sewing performance

Mennat Allah Nabil Abdo Ali Rifai
Assistant Lecturer, Department of Leather Industries, Faculty of Home Economics, Helwan University, mennatallah.nabil@heco.helwan.edu.eg

Nadia Mahmoud Mohamed Khalil
Professor and head of the Department of Leather Industries formerly Faculty of Home Economics- Helwan University, dr_nadiakhalil@yahoo.com

Sahar Harbi Mohamed Harbi
Professor of Leather Goods and Head of the Department of Leather Industries - Faculty of Home Economics - Helwan University, Sahar_harby@heco.helwan.edu.eg

Abstract:
Improving and raising the level of quality is the main key to solving the economic problems faced by most developing countries, as improving the quality of local products leads to customer satisfaction, thus eliminating the need for imports from abroad. This, in turn, ultimately leads to great competition between companies and achieving high quality and distinguished production.

The school bag is the preserver for the school child’s things and needs and allows them to place all the tools, textbooks, food, drinks, and accessories they need, such as the water bag, the food bag, and supplies for various activities, all in their designated place inside or outside the bag as external pockets, according to correct scientific foundations that are compatible with the composition. The anatomy of the child’s body serves the aesthetic and functional aspects. (Abdo, Mennat Allah Nabil - 2019 - 15)

The study of materials and leather is considered one of the most important factors that determine the efficiency of use for school bags, which requires the presence of special specifications in the artificial leather materials used to suit the characteristics of children, their attributes, and functional requirements, which in turn achieves efficient performance.

The characteristics of the material used, sewing type, the number of sewing needles, and the number of threads used in the production of leather goods in general and school bags in particular affect the functional performance of the final product. Therefore, it must achieve its functional aspect and performance requirements to produce a product in which the functional requirements are met with the highest degree of efficiency required.

Therefore, when sewing school bag materials, the correct setting of the sewing parameters must be considered to obtain good, durable sewing without problems. It is necessary to achieve high efficiency in weaving in terms of durability and safety of the school bag, as the basic material of the bag is the main part of the product, inside which the children’s belongings and their personal and school belongings are kept.

This is what prompted the researcher to address the current research point, as there are some technical problems related to the efficiency of sewing artificial leather materials used in the production of school bags and their accessories, and this is related to some different operating factors, such as the type of artificial leather materials. The researcher chose the most common types of artificial leather in the bag industry. The type of sewing thread, the number of sewing needles, the number of sewing (stitches per centimeter), and the type of sewing used, which affects the efficiency of sewing performance. This requires setting standards for the efficiency of sewing performance of artificial leather materials used in the production of the school bag to achieve durable sewing suitable for the material, considering the natural and mechanical properties of these materials with the aim of raising the level of quality of the final product.

Keywords:
Artificial Leather- School Bag- Seam - Quality sewing performance- Sewing Tensile Strength.

References:
1- Abdel Aal, Rania Mustafa, Salem, Shadia Salah: April (2013), The effect of different natural properties of jeans fabrics on the appearance of some Sewing joints used in the production of children’s clothing, research published in the Journal of Specific Education Research, Mansoura University, Faculty of Specific Education, No. 30.


20. Mohamed, Sahar Harbi : (2013), The Impact of Different Tanning Methods of Natural Leather on Sewing ability, research published at the First International Conference on Home Economics entitled Applied Human Sciences and Technology in the Third Millennium, Faculty of Home Economics, Helwan University.


