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INFLUENCE OF FINISHING ON THE COLOR OF KNITTED FABRIC

Purpose. Determine the effect of finishing on the color of the knitted fabric.

Key words: color, finishing, knitted fabric.

Objectives. In traditional modern processing, the knitted fabric is conditioned with various softeners to provide more effective performance and quality. Thanks to the processing, the knitted fabrics have excellent hydrophilicity, which, together with an excellent neck, is usually associated with high-quality silicone softeners. Modern softeners are mainly a nonionic macro-emulsion of self-dispersing polyester-amino-functional silicone. But even the highest quality softeners have a significant drawback - a negative effect on the color of the textile material. Proceeding from this, the task of the study was to study the influence of innovative softeners presented on the Ukrainian market by DC «Khimteks», Kherson.

Methodology. The dyeing of the knitted fabric samples was performed periodically on a laboratory installation with the following dyes: Reakol yellow 3KVT, Reakol red 3SVT, Reakol blue SVT, Reakol yellow M, Reakol red M, Reakol blue M. Painted samples were treated with softeners Kolosyl, Kolosyl macro, Kolosyl M by the method of plus. Spectrophotometric analysis of stained and softened samples was performed using a "Premier Colorscan" spectrophotometer.

Research results. The results of determining the total color difference of the samples treated with softeners Colosyl, Colosyl macro, Colosyl M by the method of plus (concentration of the working solution 20 g / l and 40g / l) are presented in Fig.1-3.

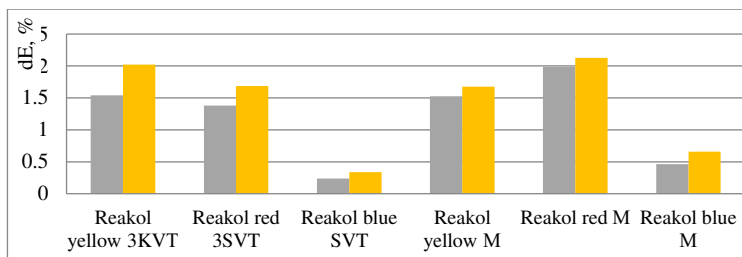


Fig. 1 dE value of samples treated with softener Kolosyl

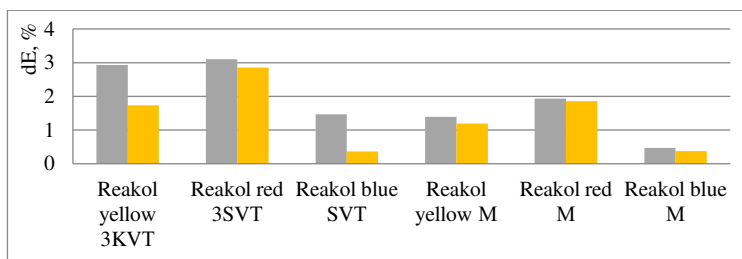


Fig. 2 dE value of samples treated with softener Kolosyl macro

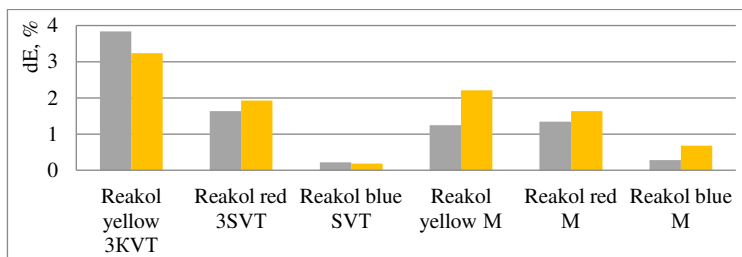


Fig. 3 dE value of samples treated with softener Kolosyl M

Conclusion. The results obtained show that the sample treated with the Kolosyl macro silicone softener by the method of padding with a working solution concentration of 40 g / l has the smallest change in the value of the total color difference, that is, this softener is preferable for strict requirements for matching the colors under reference.