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DYEING AND FINISHING OF HOSIERY: List of References

This letter circular has been prepared to answer inquiries about sources of information on the dyeing and finishing of hosiery and related subjects. Most of the books and articles listed can be consulted in the large libraries. References to current literature can be obtained by consulting the literature guides, such as "Chemical Abstracts," which are available in libraries.

The publishers of the journals referred to in this letter circular are as follows:

American Dyestuff Reporter - Howes Publishing Co.,
440 Fourth Avenue,
New York, New York.

Journal of the Textile Institute - The Textile Institute,
St. Mary's Parsonage,
Manchester, England.

Rayon Textile Monthly - Rayon Publishing Corp.,
303 Fifth Avenue,
New York, New York.

Textile Mercury and Argus - 146 Fleet Street,
London E.C.4, England.

Textile Manufacturer - Emmott & Co., Ltd.,
31 King St., W.,
Manchester, England.

Textile Weekly - 49 Deansgate,
Manchester 3, England.

Textile World - McGraw-Hill Publishing Co.,
330 West 42nd Street,
New York, New York.

The Underwear and Hosiery Review - 185 Madison Avenue,
New York, New York.

Surface active agents in the degumming of silk hosiery. O. M. Morgan and H. Seyferth. American Dyestuff Reporter, vol. 29, No. 23, pp. 616-622; November 11, 1940.

Reports the results of degumming experiments, comparing soap and alkali, Nacconol and alkali, and a commercial degumming oil.

Applying synthetic resins on full-fashioned hose. Anonymous. The Underwear and Hosiery Review, vol. 23, No. 6, p. 112; June 1940.

Gives methods of applying resins to both silk and nylon full-fashioned hose. The ideal hosiery finish for the past several years has been a delustered, splash-proof one, soft yet with enough body for the hose to retain its shape in the retail box. Industry has turned to the resins in the hope that they will increase the snag resistance. The resins used alone give a shiny appearance and lack "fullness of hand." With splash-proofing in combination, however, the appearance and hand are much improved. This type of finishing is just coming into use and each mill will have to set up its own formula through experimentation.

Two different resin finishes on nylon are described. One is applied alone and the other is applied with a delustrant, a water repellent, and a softener. As with silk, each mill will have to work out its own formula by experimentation.

Finishing treatments applied to cotton hose. M. S. Furry and L. E. Weidenhammer. American Dyestuff Reporter, vol. 29, No. 8, pp. 203-205; April 15, 1940; No. 9, pp. 229-234; April 29, 1940.

Cotton hose treated with ten different finishes were tested for elastic properties, bursting strength, and weight per unit area. Tests were made on both treated and untreated hose that had been laundered one, five, or ten times. The data were analyzed statistically. The finishes used included wax and aluminum salt emulsions; insoluble soaps of chromium, aluminum, and cadmium; synthetic resins; and a chemical compound that reacts with cellulose. The data indicate that the finished hose possessed greater elasticity and therefore would be expected to fit more snugly than similar untreated hose. The finish produced by the chemical compound had the greatest effect on elasticity and was at the same time much more fast to washing than any of the others, most of which washed out completely after five or ten launderings.

Pre-boarding nylon hosiery. Thomas D. Schermerhorn. Rayon Textile Monthly, vol. 21, No. 4, pp. 59(217)-60(218); April 1940.

Due to physical characteristics, it is necessary to "set" the shape of the stocking before it is dyed; if this is not done, the finished hosiery retains those creases acquired in the dyebath.

New finishes for silk hosiery. William T. Leggis. Textile World, vol. 90, No. 4, p. 78; April 1940.

Gives general methods for replacing sizing agents with synthetic resins in hosiery finishing mixes. Cites tests made on Frazier machine to show that resin alone does not help the properties tested with it, but that in combination with splash-proofing and oil, these properties are greatly helped. Recommends experimentation by each mill before adoption.

Development of synthetic resins for hosiery finishes. A. Kempton Haynes. American Dyestuff Reporter, vol. 29, No. 8, pp. P186-P189; April 15, 1940.

Paper presented at meeting of the South Central Section of the American Association of Textile Chemists and Colorists. Numerous reasons for the use of resins were discussed, as well as procedure for determining mill application for different fibers.

Rayon hose: finishing. Textile Mercury and Argus, vol. 102, p. 180; 1940. Also American Dyestuff Reporter, vol. 29, No. 8, pp. 207-208; April 15, 1940.

States that usual hot press method of finishing hosiery puts an undesirable luster on rayon. Recommends placing on forms, spraying, smoothing through rollers, drying with hot air, conditioning still on forms.

New hosiery finishes. Textile World, vol. 89, No. 13, p. 62; December 1939.

Gives results of tests made on Frazier machine on a variety of hosiery bought at retail, some untreated and others having special finishes. It is stated that judicious application of the new finishes will undoubtedly help improve the product.

Silk: chemistry and processing. W. M. Scott. American Dyestuff Reporter, vol. 28, No. 18, pp. 501-502; 546-550; September 4, 1939.

Discusses recent developments in all phases of wet finishing of silk fabrics and silk hosiery.

Water-, splash-, and ladder-proof hosiery: production. A. F. Burgess (Institute of Paper Chemistry). British Patent 498,771 of 12/1/38. (Abstract in Journal of the Textile Institute, vol. 30, No. 5, pp. A330-A331; May 1939.

Describes a process for proofing hosiery by treatment with an emulsion containing soya bean casein; an alkali such as caustic soda; an emulsifier such as ammonium oleate, sulfonated oil, or triethanolamine; and a material such as paraffin wax which is liquid either at room temperature or below 170° F. Excess is removed and the hose are treated with a dilute solution of alum or aluminum sulfate.

Hosiery dye tests. William T. Leggis. Textile World, vol. 89, No. 5, p. 90; April 1939.

Cites examples to show sources of consumer complaints concerning dyeing and finishing. Thorough tests should be made before a new product or process is adopted.

Cellulose acetate rayon hosiery: scouring, dyeing, and finishing. Textile Manufacturer, vol. 65, p. 268; 1939.

A discussion of processing difficulties and methods of overcoming them.

Hosiery dyeing and finishing. Onyx Oil and Chemical Co., Jersey City, New Jersey. 128 pages. 1939.

This book covers all types of hosiery; discusses pH control; terms used in hosiery industry; reference tables of weights; chemical equations; and other useful technical information.

Iridescent silk hosiery: dyeing. H. Dixon. American Dyestuff Reporter, vol. 27, pp. 520-522; 1938.

Colors are difficult to match, sensitivity of violet to heat being chief trouble. There is need for improved fastness.

Rayon hosiery: dyeing and finishing. R. M. Stribling. American Dyestuff Reporter, vol. 27, pp. 489-496; 1938.

A general review, with practical hints, of the processes and difficulties of hosiery dyeing and finishing.

Hosiery dyeing and finishing machines. C. W. Myers. American Dyestuff Reporter, vol. 27, pp. 201-204; 227-228; 1938.

An illustrated account of developments in scouring, dyeing, pressing, and steaming hosiery machinery.

Redyeing silk hosiery. William T. Leggis. Textile World, vol. 88, No. 5, p. 94; April 1938.

Gives methods for removal of transfers, for stripping colors, and for removal of finishing materials. Recommends careful laboratory tests beforehand.

Silk and rayon stockings: delustring. British Schuster Bates Machine Co., Ltd., Leicester. British Patent 478,677 of 7/24/36: 1/24/38. (Abstract in Journal of the Textile Institute, vol. 29, p. A228; 1938.)

Describes a continuous method of delustering hosiery by precipitation of a dulling compound. The hose are mounted on forms and impregnated with either the dulling compound or the precipitating agent, the excess is squeezed out, then the hose are impregnated with the agent not used in the first step, the excess is squeezed out, and the hose are then suitably finished and dried.

Silk and rayon stockings; filling and softening. British Schuster Bates Machine Co., Ltd. British Patent 478,686 of 1/30/36: 1/24/38. (Abstract in Journal of the Textile Institute, vol. 29, p. A228; 1938.)

Describes a continuous method of filling and softening hosiery. The hose are mounted on forms, impregnated with a suitable compound, the excess is squeezed out, then the hose are sent through finishing apparatus.

Silk hose: delustring. Textile Mercury and Argus, vol. 99, p. 262; 1938.

A general article on delustering. Recommends barium hydroxide instead of the chloride. Precipitating agent is glauber salt.

Silk hosiery: dyeing. L. O. Koons. American Dyestuff Reporter, vol. 26, pp. 567-568; 582-584; 1937.

Sources of damage in dyeing and degumming are shown by tests on Frazier machine. Silk can be improved by a repellent finish if it lubricates the yarn.

Silk hosiery: dyeing and finishing. J. R. McAteer. American Dyestuff Reporter, vol. 26, pp. 361-365; 1937.

Gives practical details and recipes for dyeing silk hosiery having cotton seams.

"Cuprammonium rayon stockings and knitted goods: dyeing and finishing." O. Muller. Textilberichte, vol. 18, pp. 84-85; 1937. (Abstract in the Journal of the Textile Institute, vol. 28, pp. A263; 1937.)

A general account of preliminary treatments, bleaching, dyeing, and finishing of knitted fabrics of cuprammonium rayon. Suitable dyes are mentioned.

Delustered silk hose: action of perspiration. Textile Weekly, vol. 20, pp. 731, 735; 1937.

Cites examples of troubles arising from use of improper dulling agents. Offensive smells and skin troubles are mentioned.

Hosiery: dyeing and finishing. G. F. Hardcastle and W. A. Edwards. Textile Manufacturer, vol. 62, pp. 398-400; 1936. (Abstract in Journal of the Textile Institute, vol. 28, p. A21; 1937.)

Processes in dyeing and finishing all types of hose are reviewed. New methods of finishing are outlined.

Spot proofing and repellent finishes on hosiery. L. O. Koons. American Dyestuff Reporter, vol. 25, pp. P213-P214; 1936.

Describes treatments and reports that tests show their effectiveness in improving service.

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