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MANUAL OPERATIONS CLASSIFICATION IN PRIMARY TEXTILE AND SEWING TECHNIQUES

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Since the inception of industrial textiles two and a half centuries ago, human participation in the production process has been steadily decreasing. Now, like an impregnable fortress, there remain those operations that represent a direct link between primary techniques and manual actions. In the overall sequence of multiple operations for producing yarn, the critical transition from twisting fibrous sheaf to spun thread inevitably requires delicate human intervention. A similar need is observed in maintaining the order of crossing the weaving threads. Analog connections of direct need for human intervention in technological processes are established in all textile and clothing techniques. The attention to manipulations in textile production is caused by the objective reduction of labour resources in the industry and the need for effective training and professional preparation of machine technicians and operators. The subject of the article is the orderly description of the indispensable manual influences in textile and clothing techniques. Five factors distinguish the groups in the classification:



- Type of technique: spinning, weaving, finishing and sewing;
- Depth of contact: observation, impact on working organs, contact with fibrous material;
- Use of human organs: vision, legs, hands;
- Application of additional devices: threading or sewing hooks, scissors, magnifying glasses;
- Impact of the process: loading, recovery and grading.

The resulting classification allows for the assessment of jobs in the textile industry, the reduction of manual labour, and the development of up-to-date teaching aids in the field of vocational education and training.

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