

THE STUDY OF THE PARTICULARITIES OF DESIGNING FUNCTIONAL APPAREL PRODUCTS FOR PREMATURE BABIES

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This work presents the results of a survey focused on identifying the constructive particularities of the apparel products designed for a special target group of wearers – premature babies or newborns with low body mass. The industrial production systems are exclusively oriented towards the development of products for newborns with a body length of 50 cm. It has been recently noticed that a big number of newborn children have the body length less than 50 cm (they are called premature children) and for this reason, it is important to analyse the physiological, morphological and functional characteristics of these products, as well as their influence on the designing and manufacturing process of such products. The condition of the premature children, shown by the physical stage and the development level of the thermoregulation system, is influenced by the hygienic properties of the clothes they are wearing. Sometimes, this category of children needs special care (for example resuscitation) and for this reason, those clothes must be functional, in order to allow special treatments. For this category of children, a wide range of products from national and abroad markets has been analysed, and it has been identified what types of apparel products are suitable for them. It has also been established which category of initial data is necessary to be used in the design process of comfortable and functional clothes for prematurely born children with reduced body-mass. This paper proposes constructive solutions (wrap solutions) for designing clothes for premature children, which allow comfort during the wearing time as well as permitting medical actions. The outcomes of this study consist in designing new products with special wrapping systems suitable for premature children who must stay in incubators. The functional clothes presented in this paper have been tested under clinical conditions, being very well appreciated by the medical personnel and by the parents.

Keywords: *preterm babies, functional apparel products.*

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