

## APPLICATION OF CoC SYSTEM FOR GARMENT SUSTAINABLE CONCEPTION

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Chain of custody systems have become an indispensable element of many different applications, such as certification schemes especially for textiles and garment. They enable information associated with a product and/or production characteristics to be shared among various organizations active in the chain of custody such as material and ingredient suppliers, processors, contractors, scheme owners, companies active in refurbishing and recycling, governmental organizations, end customers, and consumers or other end users. CoC standard defines a framework for chain of custody by providing a consistent generic approach to the design, implementation and management of chains of custody models. Chain of custody is a process by which inputs, outputs, and associated information are transferring, monitoring and controlling as they move through each step in the relevant supply chain. Mass balance



model is the most valuable. Its chain of custody model in which materials or products with a set of specified characteristics are mixed according to defined criteria with materials or products without that set of characteristics. The mass balance model is a chain of custody model in which materials or products with specified characteristics are mixed with materials or products without some or all of these characteristics, resulting in a claim on a part of the output, proportional to the input. The mass balance model is carrying out by two parallel methods: rolling average percentage method and credit method. The credit method is applicable when two or more types of input are used in a material or product. The recorded output amount of each type shall be equivalent to the physical input, taking into account the conversion factor. The conversion factor shall be defined within each material or product at each site and it shall be applied to define the amount of credit to enter the credit account, when using the output as the basis for calculation, or to withdraw the credit when using the input as the basis for calculation. The ingredients and common garment weight shall be balanced. The garment conception shall ensure a zero or positive balance for any project. The designer shall provide evidence that volumes of input materials or auxiliaries with specified characteristics implemented to the sewing product are balancing in the common disposal materials with the volumes bought for the collection in development. The subject of the article is the reproduction of the credit method of mass balance in the technology of sewing production. The purpose of the development is to compile an algorithm and a small application for implementation in activities in sustainable clothing design.

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