

Project MULTILAYER

Development of new types of multilayer yarns made of different fibres and development of a new spinning production process

Coordinator -

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Partners-

Caipo Automazione Industriale Srl Famas Srl Tessitura Pertile Snc

Project objectives -

Development of an innovative yarn, in which each fibre layer has its own structure (different quality and chemical-physical characteristics), in order to obtain yarns/fabrics with different characteristics. This process could be used in all the textile sectors in any type of spinning process.

Abstract

A new spinning multilayer process was developed. It allows to design the structure of yarns, with different fibres, specifically positioned, by using a one-step production process. Core and surface are based on spun fibre (not filament).

The main activities performed are:

- design and realisation of an innovative multilayer coaxial SPINNING MACHINERY
- realisation of YARNS for technical sector (Para Aramidic core and Meta Aramidic surface; Para Aramidic core and Cotton/Viscose surface) and for fashion sector (Polyester core and Wool surface; Poliester core and Tencel/Trilobal Nylon surface; Was core and Tencel/Trilobal Nylon surface; Wool core and Nylon/Viscose surface; Dynema core and Wool/Acrylic surface)
- realization of several types of FABRICS, that could be used in technical and fashion sectors

The fabrics realized with this technology can be used in several sectors: clothing, furnishing, protective garment and sportswear, medical, automotive...







Project for the development of cooperative innovation

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