## POLYTECHNIC OF TORINO FACULTY OF ARCHITECTURE 1 Degree in Architecture <u>Honors theses</u>

## Technical Textiles: analysis and development of new application fields. Design of a wash-basin for small spaces by Myriam Giubellino

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The textiles with technical implications (T.I.T.) are the real protagonists of the evolutive process that has run over the textile field in these last years. They are material textiles that meet hight techno-qualitative requirements (like as mechanical, chimical, physical performances), born to work out specifical functions.

Those peculiarity send the technical textiles away from those sectors where the appearence and the stylistic trends will restrict the application to transitory fashions. Vice versa they are joined in an indissoluble way to the application for which they have been created, limiting, in such way, their approach to the market.

The research of new possible applications has been at the basis of my designing way in the field of coated textiles. It's a textile tipology that now concerns various fields, but that can enlarge further on his range of action.

A first analysis of the textile keep out the added values of the textile among the others, the complete waterproof turned me to the bathroom's accessories field, the possibility of good pliability (a prerogative common to almost all the textiles) turned me to the field of small spaces.

Here the imput for a project of a component that could be able to assure a good dimensional flexibility in relation of use/not use, engaged/not engaged space The choice of the applicational filed coincided whit the start of the planning way and brought me to the definition of two different proposals: one for small spaces in mobility conditions, the other for small places into flats.

First step, material's deep knowledge, gave me a complete outline of coated's tipologies between I choose a Polyester textile, coated PVC, medium weight 500-650 gr/m<sup>2</sup>.

The analysis of holiday camper's life and of the tecnical solution for economizing spaces, helped me integrating the project and discarding projectual solution incompatible with the application field.

Last not least, an overview on past's realizations, helped me showing how, other designers solved the problems in the design of single sanitary components and their integration into small spaces.

At the same time ergonomic's studies of basics bathroom's activities helped me in relationing the design to the user, also radically changing consolidated shapes: the traditional wash-basin loose the capacity of water (now useless with the presence of running water) and becomes a simple length of tissue, a type of curtain which convey water and parts from water.



Used as a wash-basin the tissue carries water to the drain-pipe, transformed into shower's curtain it parts wet space from the dry one; this is possible also thanks to the high watertight of the termoformed monobody which camper's bathroom are made of.



For what concerns small spaces in houses and flats, the project it's a simple washstand, personalizable in dimensions and colors, that sweat tissue's flexibility for not to be of obstacle; infact the structure isn't rigid but soft and in case of bump make the washbasin to flex and after get its previous shape back.

Many are the applications: from small service bathrooms to children's bathrooms in kindergarten.



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