

## **Effect of certain construction elements on holding of Terry in towels fabrics**

**Osama Ezz Eldeen Aly**

**Assistant Professor, Textile Dept, Faculty of Applied Arts, Helwan Unversity.**

### **Summary of the research:-**

Textile towels vary in their construction and weave structure according to their usage and their performance properties where we can use them as kitchen towels or they can be used on dinning tables and thus we use simple weaves with them like plain weaves and their kinds or twill weaves or different satin weaves and they can be used for drying as using them as terry towels for drying our faces or aprons or using them in making bathrobes where all these products have the same way for fabric production with their used pile weaves ( pile structure ) which produces piles in one face or both faces of the fabric whether these piles are closed ( terry ) or opened ( velvet ) , terry fabrics are considered one of the important fabrics that need development and continuous improvement to keep up with the high quality and suitability to the usage method so as to face the fierce competition for both national and international .

One of the most important problems and defects in these pile fabrics with open pile after cutting it was the unstability of the produced pile and facility of taking out and with drawing the pile yarns from the produced fabric when used.

So this research cared about studying the effect of some factors of the construction weaves in increasing the tenacity of the closed piles or the cut piles (open piles) when used and thus through some variables such as varying the pile length and increasing the weft thickness under the warp threads floats and varying the degrees of tenacity and with hold of the pile threads.

Also scientific experiments was done like testing the samples resistance to friction and testing the cohesion of the pile ( pile removal resistance) adding to this calculating pile density in cm square and this was for measuring the effect of varying the construction factors used to fulfill the aim of the research.