

Drycleaning and wool: perfect match

What effect does drycleaning have on wool fabric?

Except for removing dirt, practically none. That was the finding of a study recently completed at the University of North Carolina. Dr. Manfred Wentz, professor and chairman of the department of clothing and textiles at UNC, conducted the study to learn whether there is any validity to the allegation that drycleaning wears out clothes.

For the study, four different 100% wool fabrics were subjected to 10 drycleanings using three common commercial drycleaning processes. After the cleanings, the fabric qualities were measured with state of the art textile testing equipment and were also evaluated by a panel of 15 judges.

Dr. Wentz's conclusion: "The combined findings of this study lead to the statement that commercial methods of drycleaning did not change the properties of the fabrics." There was no shrinkage, no change in tensile strength and no alteration of air permeability, three key factors affecting the fit and comfort of a garment. No significant changes were measured in the 16 different fabric characteristics analyzed in the study.

The testing was the first scientific study done in America on the effect of drycleaning solvents on



wool fabrics using the new Kawabata measuring system. Developed in Japan, the Kawabata system provides objective measurements of textile characteristics that previously could only be measured subjectively – qualities like softness, flexibility, springiness and crispness. The garment industry expects the Kawabata system to open many new avenues toward improving both the process of manufacturing and the process of

maintenance. In manufacturing, for example, the precise characteristics of top quality silk fabric can be measured and then emulated in production to obtain the desired qualities. In maintenance, cleaning processes can be tailored to keep the fabric's characteristics intact.

The goal in garment cleaning is to remove the soil without changing the characteristics of the fabric. Drycleaning, Dr. Wentz noted, is the gentlest method of cleaning

woolen fabrics and has the least impact on fibers. In other studies of fabric properties which were done for the Smithsonian Institute, Dr. Wentz also concluded that for sensitive woolen fabrics drycleaning was the

gentler method of choice for care.

Coordinated at the University of North Carolina at Greensboro, the study determined that the various drycleaning processes have no negative effect on the properties of wool in men's suiting fabrics.

"Now the drycleaning and allied trades industries have objective testing using state of the art equipment to substantiate that drycleaning has no adverse effect on wools in men's suiting fabrics," Dr. Wentz said.

Results of the research also serve to reassure consumers that drycleaning is still the recommended method for the routine care of wool garments.

While the study breaks new ground in objective measurement of the effect of drycleaning, the results are not surprising to drycleaners themselves. Drycleaners, as one might expect, frequently avail themselves of their own services. In one case, an Indiana drycleaner kept a suit jacket in good condition for over 20 years and through more than 1,000 cleanings.

Only wear-prone points – the back of the collar, inside the cuffs and the front beside the buttons – showed signs of age. Frequent drycleaning, he said, seemed to be a "fountain of youth" for the jacket.