

SPANDEX/COTTON SHIRTS

IFI has received a dramatic increase in the number of inquiries about shirts made from spandex/cotton fabrics. Many cleaners were concerned with wrinkling and the correct way to launder and finish the garments. IFI investigated these inquiries. Many of the shirts are sold by the Gap Inc., which also represents Banana Republic and Old Navy. The recommended care instructions for these shirts state to “machine wash warm, tumble dry medium, cool iron if necessary.” We tested the garments in home and commercial laundering to determine the

best method of care.

For the testing IFI purchased from the Gap two ladies short sleeve fitted shirts (one lavender and one black) and two men’s short sleeve shirts (one navy and one green). Two items were cleaned by the recommended instructions and two garments were commercially laundered. The care instructions on these shirts were machine wash warm, tumble dry medium, cool iron if necessary.

All samples were rated for appearance after washing and again after finishing. Samples 1 and 3 were touched up with a cool iron and rated for appearance. Samples 2 and

4 were finished using professional finishing equipment. The process was repeated for three cycles.

IFI TEST PROCEDURES

Sample	Washing			Drying		Finishing
	washer type/cycle	cleaning time (minutes)	temperature	time (minutes)	temperature	finishing
1	home washer/regular	35	110-120°F	30	140°F	cool iron/ polyester setting
2	home washer/permanent press	35	110-120°F	30	140°F	utility press hand iron, steam water mist
3	commercial washer/light color	33	110-120°F	30	140°F	cool iron/ polyester setting
4	commercial washer/light color	33	110-120°F	30	N/A	pressed damp on shirt unit

Note:

- 1 = Ladies black shirt
- 2 = Ladies lavender shirt
- 3 = Men’s green shirt
- 4 = Men’s navy shirt



HOW SHOULD THE SHIRTS BE LAUNDERED?

While customers may request professional laundering of these shirts, as the bar chart to the right illustrates, our test results show that laundering in a home washer is the best procedure for handling these types of garments. The home laundered shirts did not show significant shrinkage. The shirts that were processed in a commercial washer exhibited considerable shrinkage. With the exception of sample No. 1, the shirts showed slightly more shrinkage with continued washing.

HOW SHOULD THE SHIRTS BE FINISHED?

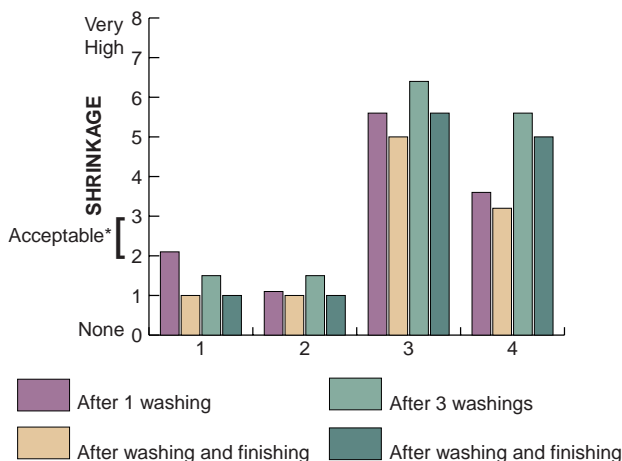
The shirts were examined for appearance after cleaning and again after finishing. The appearance evaluation involves an examination and numerical rating of fabric wrinkling and puckering using a scale from 1 to 5, with 5 equaling "no wrinkling" and 1 equaling "severe wrinkling."

As shown in the bar chart at the bottom of the page, the shirts that were pressed with a cool iron exhibited a poor appearance. Sample No. 2, the ladies shirt pressed using a hand iron, steam, water mist and a utility press, was returned to its original appearance. Note that a hand iron was required to reduce the wrinkling and puckering. The garment with the best appearance was sample No. 4, the shirt that was pressed damp and finished on a shirt unit. This garment, however, did exhibit noticeable shrinkage from laundering.

CONCLUSION

The original appearance of all the shirts was never fully restored after washing and finishing. All of the shirts exhibited puckering in the seams, collar, and shirt front plackets. After cleaning and pressing according to the manufacturer's instructions, the wrinkles are difficult to remove. Based on the test results, the shirts are processed best using the following procedures: home washer/permanent press cycle, water temperature 110-120°F. To reduce potential shrinkage, the garments can be tumble dried low. Finish on a utility press, touch up with a hand iron at the polyester setting. Steam and water mist may be used if necessary. □

SHRINKAGE IN LENGTH



*ASTM D 4038 Standard Performance Specification for women's and girl's woven dress and blouse fabrics — Maximum allowable shrinkage after laundering 3%.

ASTM D 3477 Standard Performance Specification for men's and boy's woven dress shirt fabrics — Maximum allowable shrinkage after pressing and laundering is 2%.

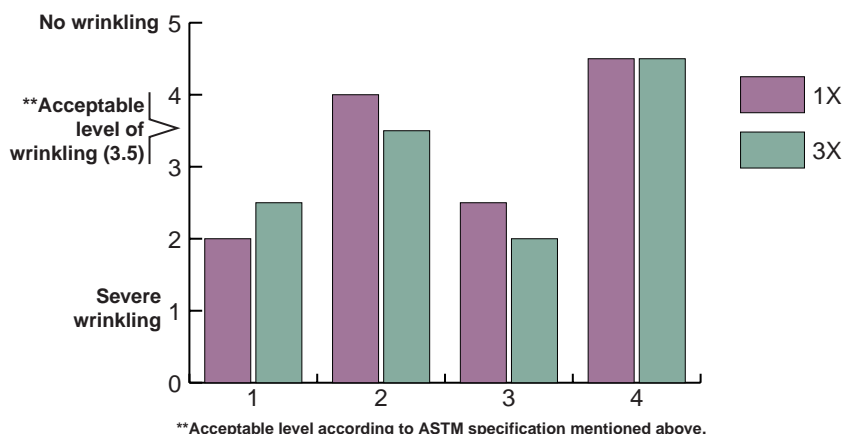


This shirt was pressed according to the manufacturer's instructions, using a cool iron.



This shirt was pressed using water mist, a steam iron and utility press.

APPEARANCE AFTER FINISHING



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