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Client no.	Contact person	Our ref.	Date
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Test report no. 14.1.7.0016 · Revision 2

Client:	see address
Test samples:	Outerwear processed at the premises of Happy Co. Ltd., Kyoto
Date of order:	June 19, 2013
Receipt of data:	April 28, 2014
Period of assessment:	Until the end of June 2014
Sampling:	The test samples were accepted and documented by the client.

The test report comprises 33 pages.

AIM OF TEST

Examination and assessment of the dimensional stability of outerwear (customer's garments), that has been wet cleaned with the gravity-free balance wet cleaning system of Happy Co. Ltd. Kyoto.
(The “gravity-free balance wet cleaning system” has obtained several patents on both methods and devices, not only from Japan but also European countries and others.)

SITUATION

The wet cleaning method for outerwear was developed to let consumers have washable textiles cleaned by a professional textile cleaner without them having to be processed conventionally using organic solvents (dry cleaning).
Cleaning with water is defined as a cleaning procedure in the EN ISO 3175-4:2003 standard and is common practice in many plants. EN ISO 3758 allows clothing manufacturers to label their products with care instructions that include wet cleaning technology.
The use of wet cleaning processes in professional textile care helps to lower the use of organic solvents and thus reduce the environmental impact caused by the associated emissions.
Unfortunately, wet cleaning technology can generally only be used for water-compatible textiles. The majority of such textiles are labelled with the “washing tub” care symbol. The wet cleaning care symbol is less commonly used.

The Japanese textile cleaning company Happy Co. Ltd. in Kyoto has now developed an alternative wet cleaning process termed the gravity-free balance wet cleaning system. This method aims to allow wet cleaning of outerwear that according to its care label should only be dry-cleaned in organic solvents, without any negative effects or even damage to the garment. The main usual negative effects or damage caused by wet cleaning processes are dimensional changes to the garments – changes which often make further use of the garment impossible for the owner. Other changes that may occur are:

- Changes in the surface structure (e.g. “fuzziness”, crimping, crease formation, felting)
- Reduction of gloss
- Deformation
- Seam pucker/Fraying
- Changes to garments with interlinings (gathering/rippling)

SCOPE OF THE EVALUATION

AIM

The aim of the evaluation is to determine whether the gravity-free balance wet cleaning system developed by Happy Co. Ltd. is suitable for treating outerwear labelled as “dry cleaning in organic solvents only”, without any dimensional changes or only those within the tolerances agreed with the textile industry.
The wet cleaning process is described in the appendix of this report.

PLACE OF TESTING

The cleaning plant of Happy Co. Ltd., Kyoto was chosen as the place of testing, as the only location with both the required equipment and process technology as well as highly experienced staff. The company mainly reprocesses high-quality clothing from major global manufacturers and distributors. As such, the findings are applicable to other countries.

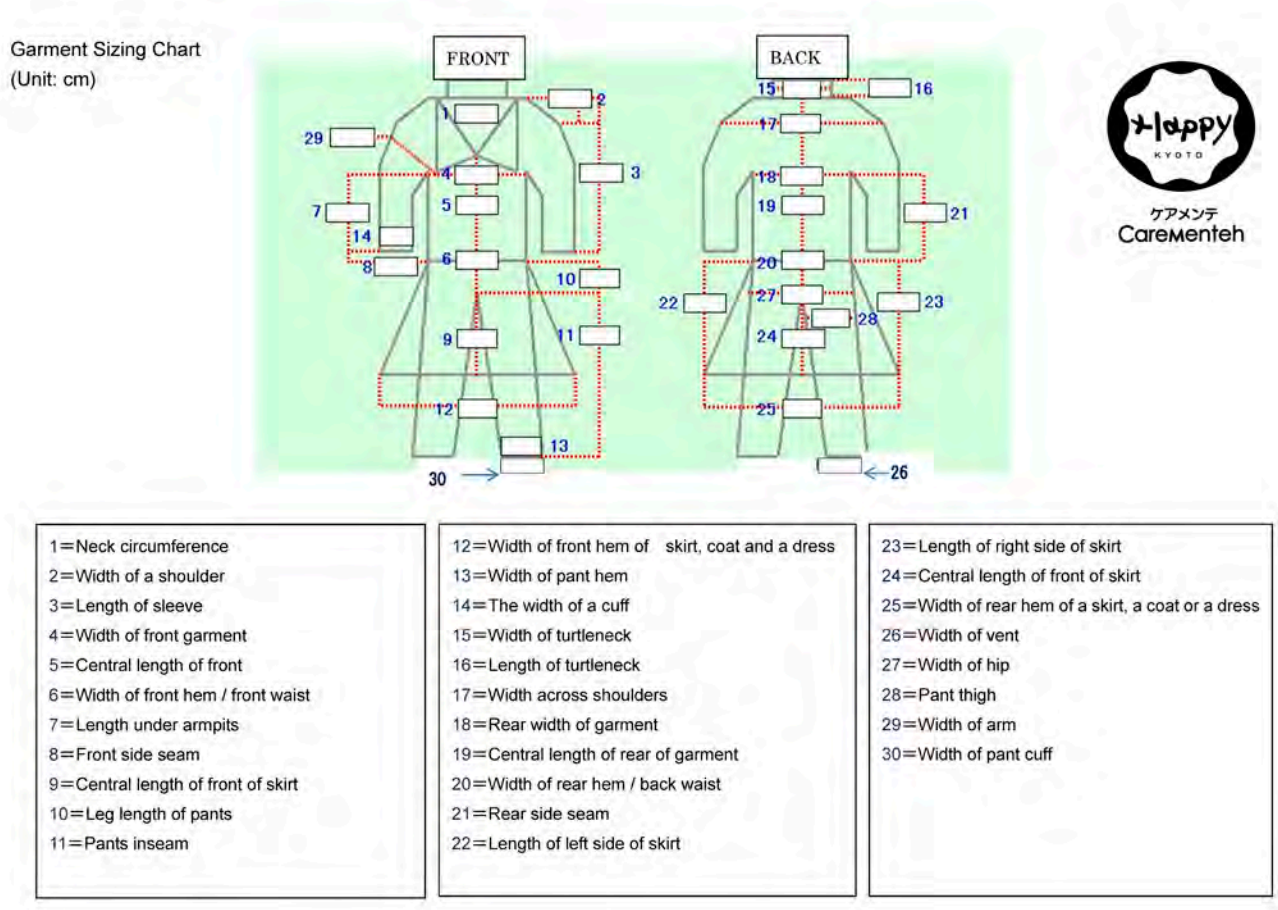
SCOPE OF TESTING AND PARAMETERS

At least 1000 garments will be evaluated. For each garment, the following data will be recorded:

- Type of garment (e.g. trouser, jacket, coat, dress, etc.)
- Material labelling and composition
- Care instructions (manufacturer's instructions must indicate "cleanable in organic solvent only")
- Dimensions upon receipt

The dimensions were recorded with the proprietary measuring system described in the appendix. Multiple measuring sections are defined for each garment type, and for each section there is a description of how to correctly conduct the measurement.

Fig. 1: Overview diagram of defined measuring sections for garment types



SCOPE OF TESTING AND PARAMETERS - *continued*

- Dimensions at the end of the care treatment before returning the garments to customers.
- In addition, photographs of the individual garments before and after treatment have been taken from different angles in order to also visualize possible optical changes.

All data has been entered in Microsoft Excel tables and provided for evaluation.

HOW THE EVALUATION WAS CARRIED OUT

Staff at the workplaces in question recorded the data during the course of their work and entered it into the Excel master sheet via a computer network.
The garments were measured and photographed as follows:

1. After receipt (results entered in “Before” column)
2. After steaming of the cleaned textiles on a pants finisher or a form finisher (results entered in “After 1” column)
3. During manual finishing on the ironing table (results entered in “After 2” column)

The company’s working methods are defined and described in a manual, in accordance with ISO 9001.

RESULTS OF THE EVALUATION

SCOPE OF EVALUATION

The data of 1018 garments was recorded as described immediately above. The mix of garment types was random, as the garments evaluated were arbitrarily chosen from the normal flow of goods in the textile cleaning plant. Table 1 shows the number of garments of each type:

Table 1: Mix of garment types among the evaluated garments

Type of garment	Number of pieces	Proportion (%)
Men's jackets	321	32
Women’s jackets	180	18
Men's trousers	135	14
Dresses	109	11
Coats	88	9
Skirts	49	5
Blouses	43	4
Scarf, neckerchief	14	1.4
Women’s trousers	12	1.2
Shirts	12	1.2
Diverse	58	5.7

Sports jackets, men’s jackets and blazers were combined under the “Men’s jackets” garment type, and together represent the largest proportion of all types of garments. “Diverse” covers all garments not given their own garment type in the table above, as there were fewer than 10 items in each case. It includes blousons, down jackets, evening gowns, vests, wool jackets, pullovers, jeans, etc..

DIMENSIONAL CHANGES AFTER CLEANING AND BODY-PRESSING (AFTER 1)

220 out of all 1018 garments (22%) showed shortening (partial shrinkage) at some measuring sections. 29 garments (3%) had increased in length at some measuring sections. No wet-cleaned garment showed dimensional changes at all of the defined measuring sections.

▪ Distribution of dimensional changes by garment type

Table 2 below shows the distribution of length reductions (-) and linear expansions (+) for the most common garment types. The percentage represents the proportion of changed garments of a given type.

Table 2: Share of changed measuring sections for individual types of garments

Garment type	+	Proportion (%)	-	Proportion (%)
Women's jackets	7	4 %	37	21 %
Men's jackets	7	2 %	93	29 %
Men's trousers	5	4 %	24	18 %
Dresses	1	1 %	17	16 %
Coats	0	0 %	18	20 %
Skirts	1	2 %	7	14 %
Blouses	6	14 %	4	9 %
Jackets	1	7 %	2	14 %
Scarfs, neckerchiefs	1	7 %	1	7 %
Women's trousers	1	8 %	6	50 %
Shirts	1	8 %	0	0 %
Blousons	0	0 %	1	11 %
Down jackets	0	0 %	1	14 %
Evening gowns	0	0 %	1	14 %
Vests	0	0 %	2	29 %
Wool jackets	0	0 %	0	0 %
Pullovers	0	0 %	0	0 %

The women's trousers showed the highest proportion of changed measuring sections (50%), but as 12 pairs of women's trousers (1.2 % of the total number of garments) were evaluated, the results cannot be considered representative for this garment type.
The results for the men's jackets category are much more definitive, due to the large number of garments (321, the highest of any garment type) and the high proportion of garments that exhibited dimensional changes (29%, the second-highest figure after that for women's trousers).
Jackets boast much more elaborate, complex design and manufacture than other garment types. As such, it makes sense to evaluate this garment type in further detail, especially as men's jacket also requires more delicate care than most other garment types.
The following analyses of textile behaviour during treatment with the gravity-free balance wet cleaning system therefore pertain to men's jackets.

■ Analysis of the observed frequency of dimensional change at the measured sections for men's jackets

The following analysis of men's jackets reveals which areas show changes in dimensions and how often this occurs.
Each men's jacket was measured at 11 sections (see photographs in appendix). Table 3 below shows the observed frequency of dimensional changes after cleaning and form pressing at 10 measured sections.

Table 3: Analysis of the observed frequency of dimensional change at the measured sections for 100 men's jackets

No.	Measuring section	Frequency
1	Neck circumference	-
2	Width of shoulder	2
3	Length of sleeve	54
4	Width of front of garment	-
5	Central length of front	-
6	Width of front hem/front waist	-
7	Length under armpits	24
8	Front side seam	21
9	Central length of front of skirt	-
10	Leg length of pants	-
11	Pants inseam	-
12	Width of front hem of skirt, coat or dress	-
13	Width of pant hem	-
14	Width of cuff	1
15	Width of turtleneck	-
16	Length of turtleneck	-
17	Width across shoulders	5
18	Rear width of garment	10
19	Central length of rear of garment	52
20	Width of rear hem/rear waist	-
21	Rear side seam	34
22	Length of left side of skirt	-
23	Length of right side of skirt	-
24	Central length of front of skirt	-
25	Width of rear hem of skirt, coat or dress	-
26	Width of vent	4
27	Width of hip	-
28	Pant thigh	-
29	Width of arm	0
30	Width of pant cuff	-

Note: Measuring sections marked with "-" are not found in men's jackets and thus have no results .

The result shows that about one-third of the men's jackets' dimensions changed during the cleaning process. Apart from sleeve width, this all measuring sections are concerned, however to different extents.

- Most commonly changes in the sleeve length occurred:
  Measured at the front: 54 garments (No. 3); measured at the back seam: 24 garments (No. 7).
- Also the changes in the center seam of the back of the jackets occur at 52 garments (No. 19).
- The dimensions of the lateral back seams (No. 21) near the sleeve were changed at one third of the jackets.
- The analogue seam on the front was concerned at 21 garments (No. 8).

The other measuring sections each have only been changed in a few cases.

Table 4: Frequency distribution of dimensional changes by number of affected measuring sections:

Distribution of frequency	Items
Items with 1 change	36
Items with 2 changes	26
Items with 3 changes	19
Items with 4 changes	9
Items with 5 changes	4
Items with 6 changes	2
Items with 7 changes	1

Out of 100 men's jackets found to have changes, 36 showed only one changed measuring section. The higher the number of changed sections, the lower the number of garments in this category. Around 60 of the jackets showed changes in 2 or more sections after cleaning. None of the jackets evaluated showed changes in more than 7 sections.

Range of dimensional changes in men's jackets

In this evaluation step, the range of dimensional change is determined as well as the number of garments affected per measuring section. To allow clear allocation of individual results, the dimensional changes were divided into 9 distinct ranges. Table 5 below shows the results.

Table 5: Frequency of dimensional change per measured section, classified in nine groups by percentage dimensional change

Dimensional changes in %		← Elongation →			← Shrinkage →					
No.	Measuring spot	+1.5 to +1.0	+1.0 to + 0.5	+0.5 to 0	0 to -0.5	-0.5 to -1.0	-1.0 to -1.5	-1.5 to -2.0	-2.0 to -2.5	-2.5 to -3.5
1	Neck circumference									
2	Width of shoulder			2						
3	Length of sleeve				8	31	13	2		
4	Width of front of garment									
5	Central length of front									
6	Width of front hem/front waist									
7	Length under armpits				4	7	12	1		
8	Front side seam		1		2	10	6	2		
9	Central length of front of skirt									
10	Leg length of pants									
11	Pants inseam									
12	Width of front hem of skirt, coat or dress									
13	Width of pant hem									
14	Width of cuff						1			
15	Width of turtleneck									
16	Length of turtleneck									
17	Width across shoulders					1	3	1		
18	Rear width of garment					2	4		2	2
19	Central length of rear of garment		2	1	8	41				
20	Width of rear hem/rear waist									
21	Rear side seam		2		5	21	5	1		
22	Length of left side of skirt									
23	Length of right side of skirt									
24	Central length of front of skirt									
25	Width of rear hem of skirt, coat or dress									
26	Width of vent					2	2			
27	Width of hip									
28	Pant thigh									
29	Width of arm									
30	Width of pant cuff									

The highest number of dimensional changes was in a range between 0.0% and -1.5% shrinkage (Table 5). Shrinkage values > -1.5% (Table 5) at the measured sections for men's jackets were more of an exception, as was elongation. By way of comparison, the tolerance for shrinkage stipulated in agreement with the textile industry for this garment type is two percent, the same percentage seen in textiles dry-cleaned in solvents.

Material behaviour by manufacturer/brand

The garments represented 123 manufacturers and brands. Among the 321 men's jackets tested, most names only occurred once, many others only in the single-digit range. The highest number of garments from a single manufacturer in this evaluation was 15. For this reason, conclusions about the typical behaviour of individual brands with regard to dimensional changes cannot be drawn. (The appendix includes a table of the manufacturers and brands).

Analyses of the material composition of the jackets and its relationship to dimensional changes

The fibre compositions of the individual garments were recorded during data entry on the basis of the sewn-in material labels.
The tables below show the material combinations of the unchanged garments and of the garments with changed measuring sections, in order to ascertain whether certain fibres and/or combinations show an increased tendency to dimensional change. The frequency of occurrence and the area(s) in which the changes primarily occurred are also shown.
Outliers for certain material combination have been documented in the last column; the numbers indicate the percentage value of the dimensional change. Where there was more than one outlier, these values have been separated by semicolon. The appendix contains photographs of these garments to document whether their appearance has changed compared to their original condition as a result of the dimensional changes.

Table 6: Relationship between dimensional changes and material composition

Frequency												
Fibre types	**Total**	**Chan-ged**	**%**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**%-range**	**Outliers**
100% to 95% cotton, including blends with other fibres such as elastane and lycra	47	10	21.3	2	3	1	1	2	1		-0.7 to -1.5	
45% to 85% cotton blended with wool, linen, polyester, silk etc.	25	7	28.0	3	2	1	1				-0.2 to -1.3	-3.3; -2.2
80% to 85% cashmere blended with silk and wool	9	2	22.2	1	2						-0.7 to -1.2	
50% to 65% cashmere blended with linen and silk	3	1	33.3	1							-0.7	
90% to 100% linen including blends with polyamide	19	10	52.6	3	2	2	1	1	1		-0.4 to -1.7	
50% to 60% linen blended with silk, wool, polyamide	10	3	30.0	1	1					1	-0.7 to -1.1	1 item with 7 changes
100% mohair	1	0	-									
50% to 60% mohair blended with wool	3	1	33.3		1						-1.0 to -1.2	

Frequency												
Types of fibres	Total	Chan-ged	%	1	2	3	4	5	6	7	%-Range	Outliers
40% to 60% polyester or polyamide blended with cotton, linen, wool, elastane	4	0	-									
35% to 70% silk blends with wool, linen, cotton, cashmere, elastane	6	2	33.3	1	1						-0.7 to -0.9	
55% to 63% viscose/Tencel blends with wool, cotton, silk, polyester	3	0	-									
80% to 100% wool, including blends with elastane, silk, mohair, cashmere, polyamide, polyester	154	46	29.9	2 1	1 0	1 0	2	3			+0.8 to -2.0	-3.0
35% to 79% wool blends with silk, cashmere, mohair, linen, viscose, polyester	90	13	14.4	2	5	1	3	1		1	+0.1 to -1.7	1 item with 7 changes

The commonest fibre in the men's jackets tested was wool, appearing in 240 items (59%) either as pure wool or blended with other fibres. 100% wool exhibited dimensional changes twice as often as wool blends, ranging from elongation in a few items to shrinkages of 2.0% in others. *(Photographs of the two items classed as outliers are included in the appendix, together with outliers featuring other fibre blends.)* These results suggest that around 50% of wool-containing items will exhibit dimensional change when treated with the gravity-free balance wet cleaning system

The following face fabrics did not show any changes:

- 100 % mohair and mohair blends
- Polyester blends
- Viscose/Tencel blends

However, only a very small number of garments of the above compositions were evaluated, so these results are not statistically significant.

Pure linen and linen blends with low percentages of other fibres were closest to wool in the proportion of garments that showed dimensional change – once again around half. The range of dimensional change,-0.4 to -1.7%, also did not significantly differ from that of wool. However, the sample size (19 items of >90% linen) was not large enough to ascertain the typical behaviour for this fibre type when treated using the gravity-free balance wet cleaning system. Whereas cotton and cotton blends showed a distinctly lower number of changed garments.
Approximatively, it can be said that when treated using this wet cleaning method for outerwear, around half of garments showed dimensional changes **within a tolerable range**.

DIMENSIONAL CHANGES AFTER MANUAL FINISH (AFTER 2)

All 1018 garments assessed, not just the men's jackets, showed no dimensional changes compared to the initial values. This is because of the final production step – manual finishing on the ironing table or ironing press – during which all measured sections were restored to their initial dimensions by the appliance of steam and tension.

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CONCLUSION

This evaluation of 1018 pieces of outerwear shows that the gravity-free balance wet cleaning system makes it possible to wet-clean outerwear otherwise normally dry-cleaned in solvent without the many negative changes, especially dimensional changes, that occur with conventional wet cleaning procedures.
During the wet cleaning process, around a quarter of the treated items showed dimensional changes. However, apart from a few exceptions, these remained within the tolerances stipulated by the textile industry. These tolerances were agreed upon as fibres may be stretched during the manufacturing and finishing process, and thus stressed fibres in the finished garments may relax and change in dimensions during wear and in particular during care, especially when moisture is applied in the form of water.
This dimensional change, called relaxation shrinkage, is inevitable and thus no reason for customer complaint.
This notwithstanding, the gravity-free balance wet cleaning system also eliminates dimensional changes of this kind during the ironing stage. As such, the original dimensions as documented upon receipt of the garments are restored before the garment is returned to the customer.

Schloss Hohenstein, September 4, 2014

Director of the Department
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Dr. Andreas Schmidt

Hohenstein Laboratories · Schloss Hohenstein ·

Head of Research and Development of the
Department Function and Care

Dr. Jan Beringer

Appendix

1. DESCRIPTION OF PROCEDURE

The complete procedure not only includes wet cleaning of the textiles using the gravity-free balance wet cleaning system, removal of any remaining stains, and ironing, but also the following process steps:

- Incoming goods inspection
- Recording of dimensions (before)
- Sorting according to care properties
- Wet cleaning using gravity-free balance wet cleaning system
- Steam pressing of the cleaned items
- Measurements check (after 1)
- Retreatment of non-removed soilings
- Ironing, including checking and correction of any dimensional changes (after 2)
- Final check

2. DIAGRAMS OF THE SECTIONS TO BE MEASURED FOR EACH GARMENT TYPE

The following pages show the individual measuring sections, including additional instructions for the responsible staff.

1. Jackets and coats

<Notes>

★The basic method is to measure along the seam.Do not measure, at once, all the way down with a tape measure.Measure little by little, by holding the fabric in order to prevent from getting loose.
— Common instructions for all items.

★Length of sleeve ③ ---Measure along the curve.

★Width of cuff ⑭ --- Button the cuff and measure it.

★Width of vent ㉖ --- Measure the top in the case of a center vent.

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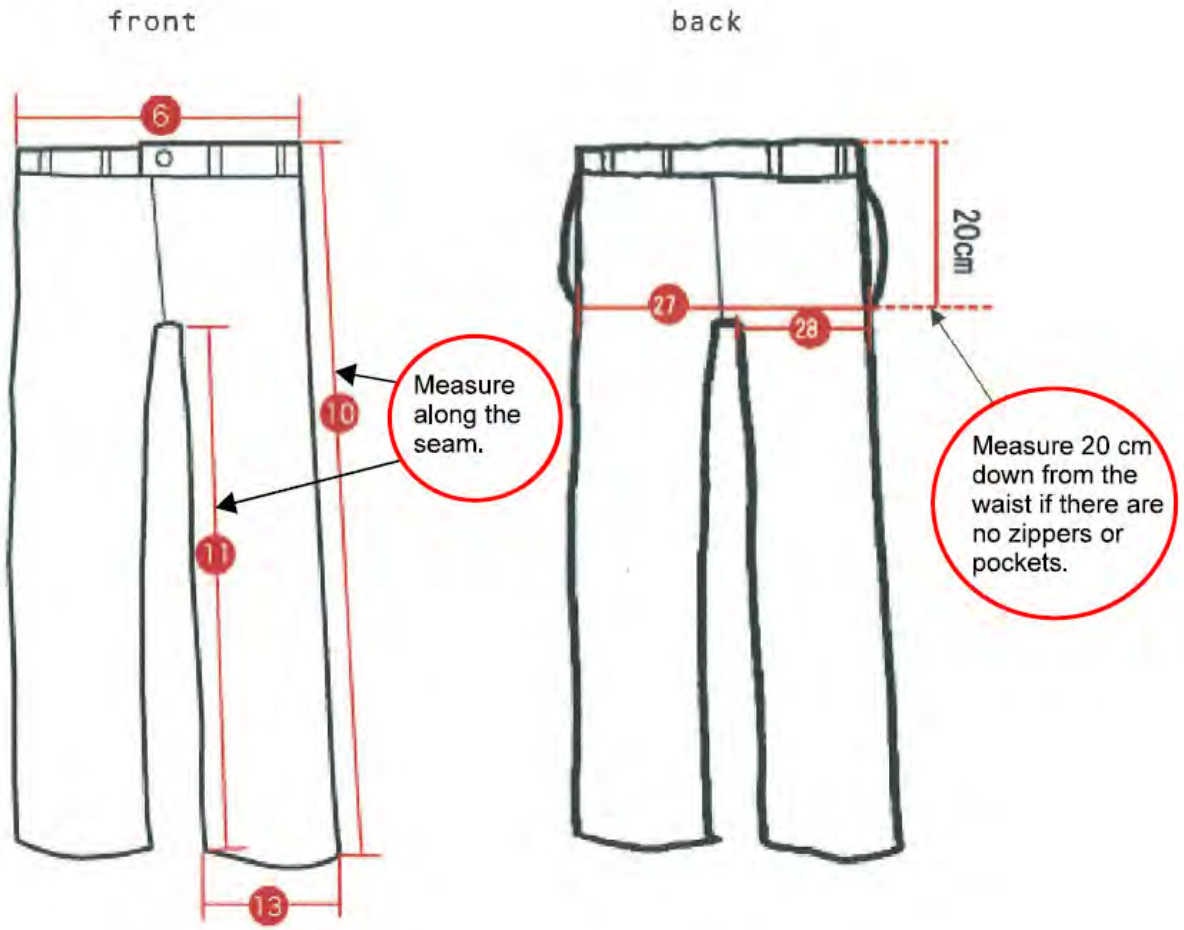
2. Pants

【Pants】



<Notes>

★Waist ⑥
★Width of pant hem ⑬
★Pant thigh ㉘

} Leave the item flat and measure from one side to the other.

★ If there are pant cuffs, enter the data of the width of the pant cuff in ㉚.

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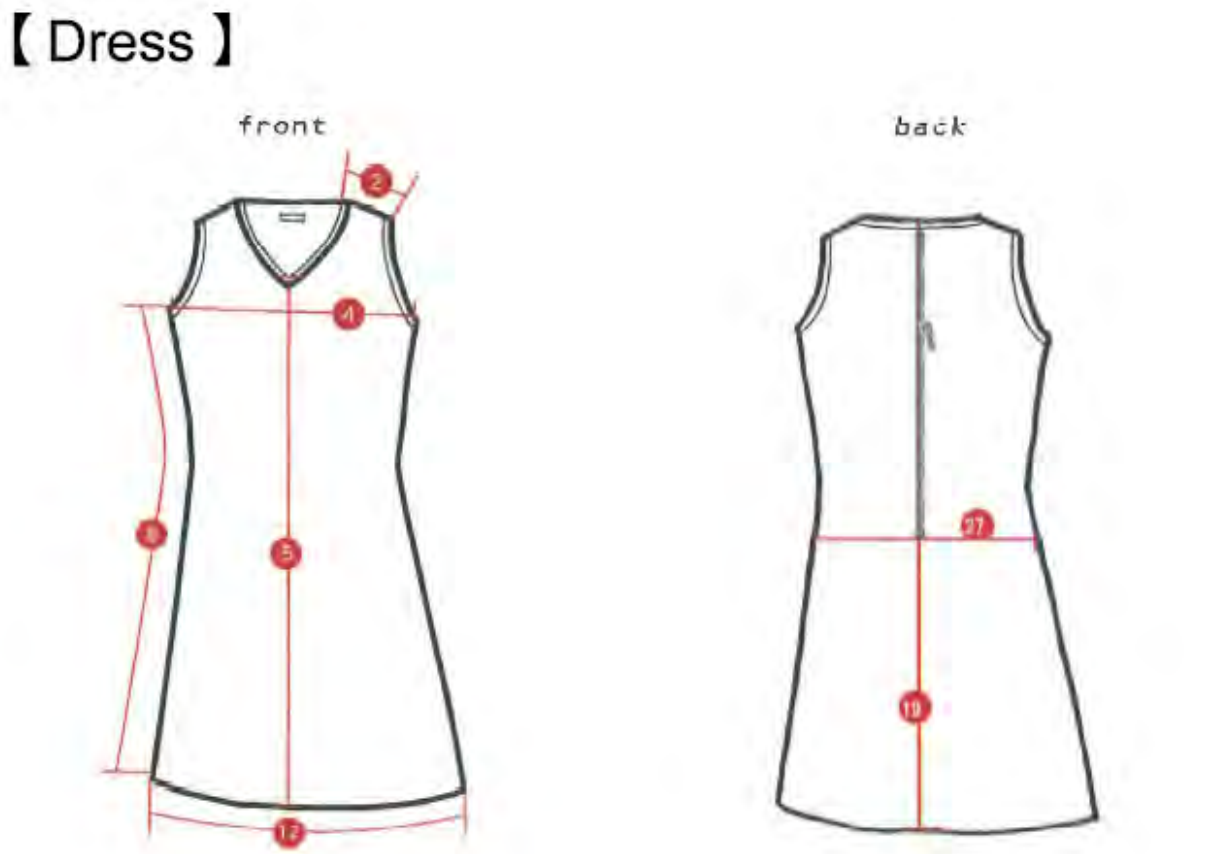
3. Dress



<Notes>

★Width of hip ㉗
— Measure 40 cm down from the bottom of the armhole if there are no zippers on the back or the sides.

★If the fabric for the top is different from the fabric for the bottom, measure them separately.
= Follow the instructions for a blouse and a skirt and enter the data.

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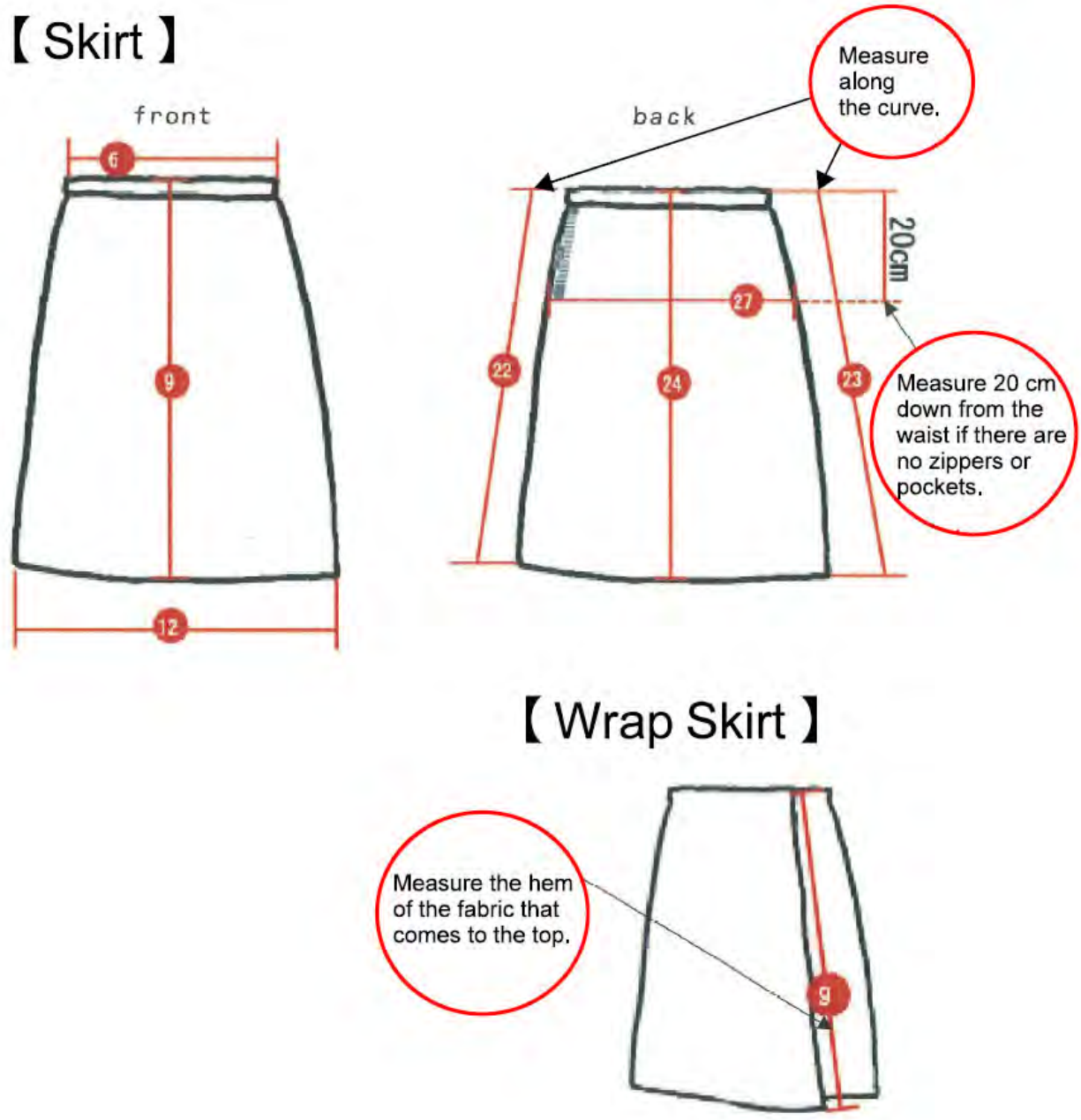
4. Skirt



<Notes>

★Waist⑥ –- Leave the item flat and measure from one side to the other.

★ Right and left lengths of skirt --- Measure along the curve. Measure only ㉒ if it is symmetric.

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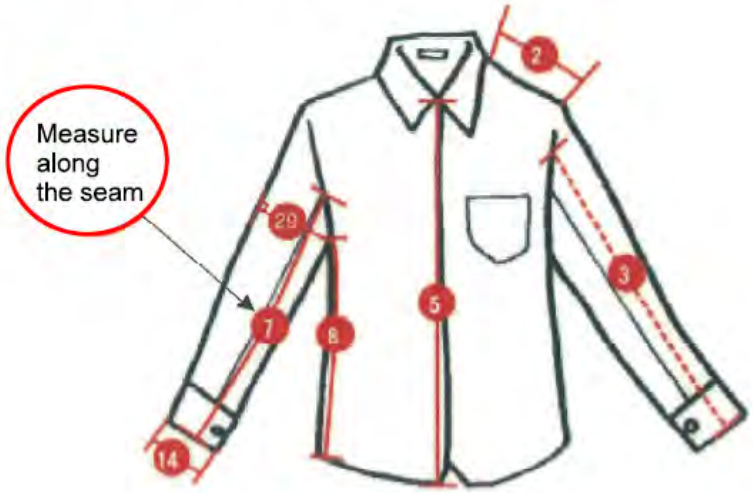
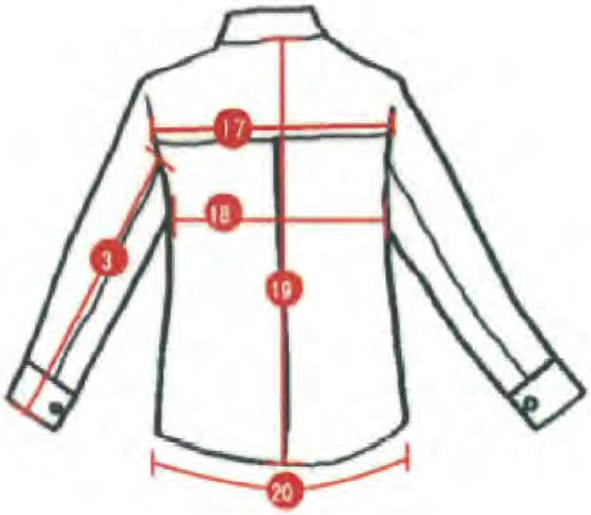
5. Shirt and blouse

【 Shirt and Blouse 】

front



back

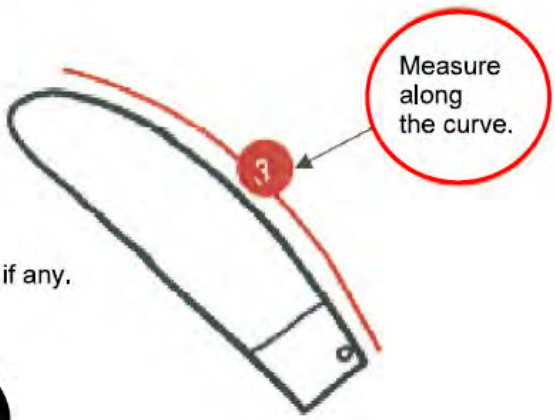


<Notes>

★Central length of front ⑤
— Measure the one that has no buttons.

★Width of cuff ⑭
— Unfasten the buttons and measure it.

★Width across shoulders ⑰
— Measure along the seam under the yoke, if any.



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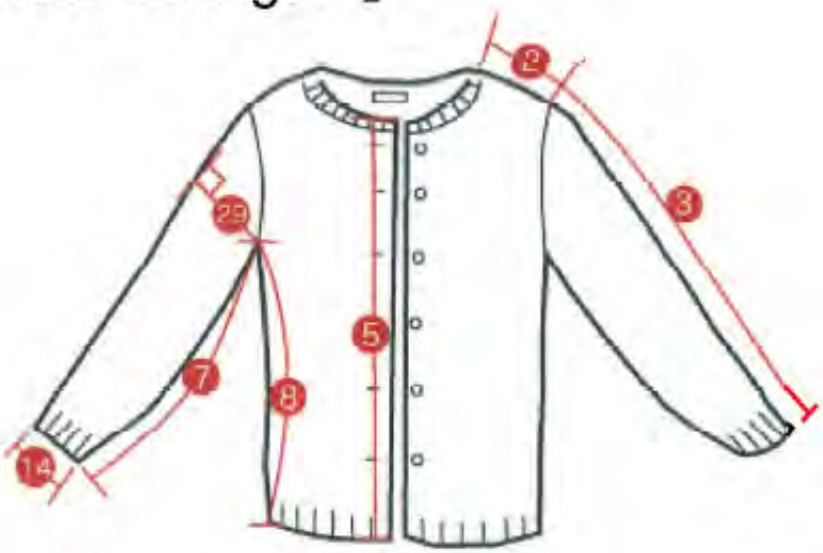
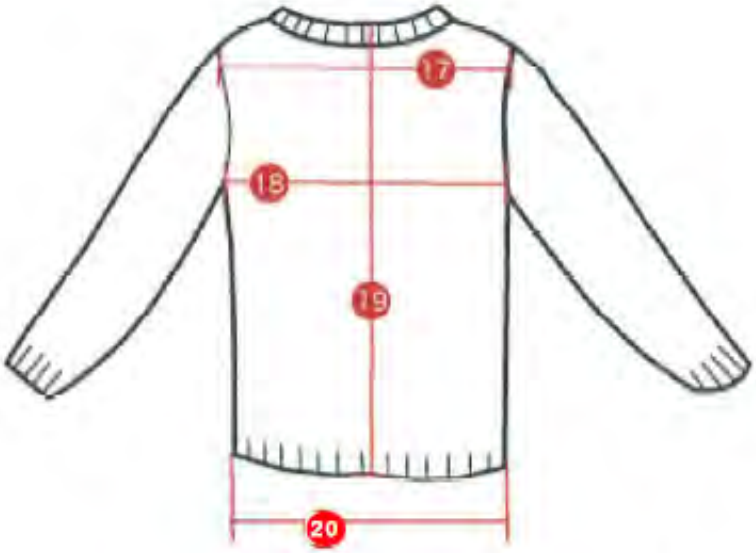
6. Cardigan (crew neck and V-neck)

【 Crew neck cardigan 】

front



back

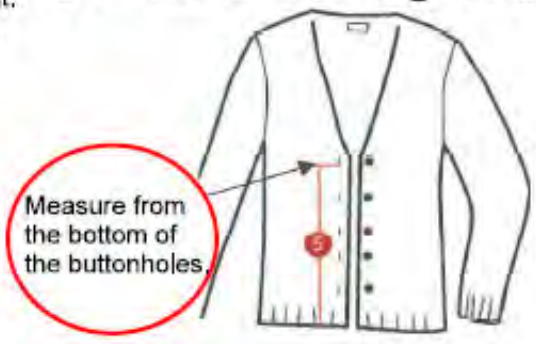


<Notes>

★Do not stretch a knit sweater. Measure it when it is laid flat.

★Measure the central length of front ⑤ from the bottom of the buttonholes in the case of a V-neck sweater.

【 V-neck cardigan 】



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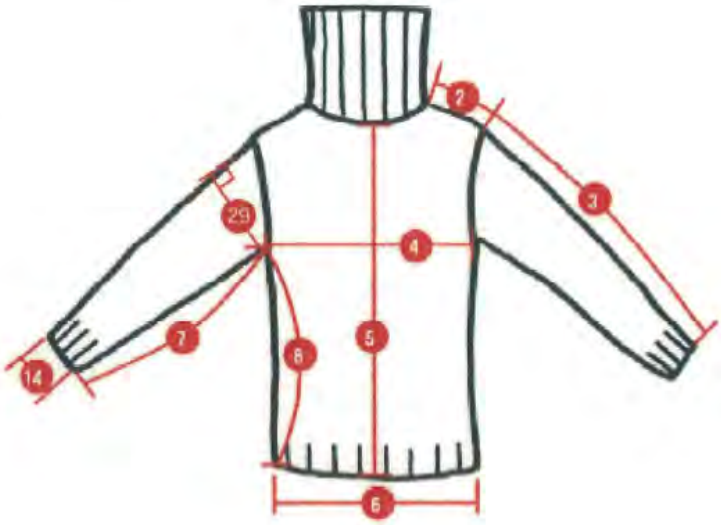
7. Sweater (turtleneck and V-neck)

【 Turtleneck sweater 】

front



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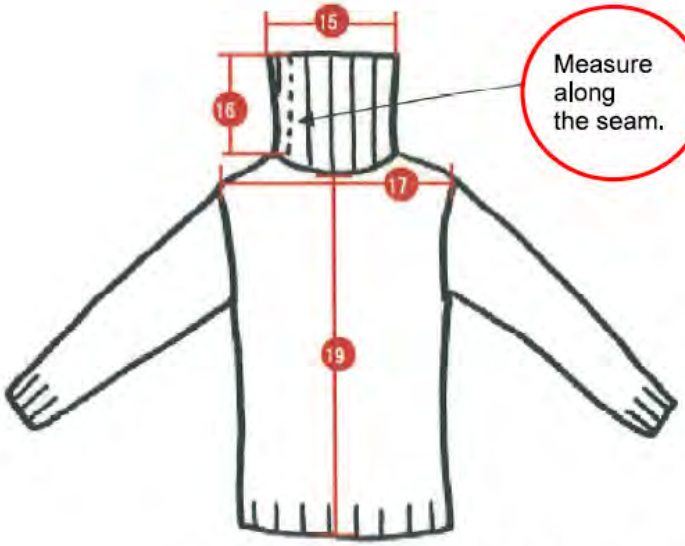

<Notes>

★Do not stretch a knit sweater. Measure it when it is laid flat.

★Measure the central length of front ⑤ from the top of the rib in the case of a V-neck sweater.

【 V-neck sweater 】

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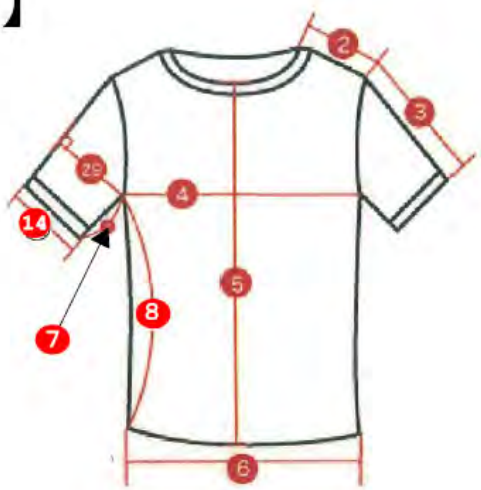
8. T-shirt and polo shirt

【 T-shirt 】

front



back

【 Polo shirt 】

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3. GARMENT MANUFACTURERS/BRANDS

Manufacturers/Brandname	Pieces
Eikokuya	4
GOTAIRIKU	1
ACQUAVIVA	1
Aldgate	1
ALESSANDRO DELL'ACQUA	1
ALFRED DUNHILL	1
ALTA SARTORIA	1
Aquascutum	5
ARMANI	4
Artigianale	1
ARTISAN	1
Attolini	5
AUSTIN REED	1
azabu tailor	3
BAFFALOBOBS	1
BALMAIN	1
BANANA REPUBLIC	2
BARENA	1
BARNEYSNEWYORK	3
BASILISK	1
batack	2
Belvest	6
BLESS	1
BOGLIOLI	7
BORRELLI	1
Boss	5
Brilla	1
Brioni	11
rooksBrOthers	2
BRUNELLO CUCINELLI	1
BURBERRY	3
BURBRRY BLACK LABEL	1
Cantarelli	3
CesareAttoliniNapoli	1
DAIMARU	1
DAKS	2
DALCUORE	1
DIGNU	1
DOLCE&GABBANA	2
Dorland House	1
dunhill	4
DURBAN	5
EDIFICE	3
ErmenegildoZegna	12
EMPORIO ARMANI	1
ESTNATION	3

Manufacturers/Brandname	Pieces
ETRO	4
FARIANI	1
FeliceTabasso	1
Ferragamo	1
FRANCO PRINZIVALLI	5
Fw ORMEZZANO	1
GAIOLA	2
GC	1
GianFrancoBommezzadrl	1
GIANNI VERSACE	1
GIORGIO ARMANI	6
GUCCI	6
HICKEY FREEMAN	4
HILTON	1
INTERMEZZO	1
ISAIA	7
ISSEY MIYAKE MEN	1
JOSEPH ABBOUD	1
JOSEPHHOMME	1
KITON	12
KT	1
LaLu	1
LANVIN	1
LARDINI	7
LaVera	1
Loro Piana	3
LOUIS VUITTON	2
Lubiam	1
LUCIANO	1
Mano nella Mano	1
MARIANO RUBINACC	1
mila schon	2
NUNBER NINE	1
Ondata	1
OSCAR MARANGON	1
Papas	3
Partenopea	1
PAUL SMITH	6
Paul Stuart	4
PRADA	1
PROZESTT	1
Raffaele Caruso	1
RAGAZZOTTO	1
RALPHLAUREN	2
Ravassolo	1
Rethen	1

HOHENSTEIN

Manufacturers/Brandname	Pieces
RING JACKET	1
S.T.Dupont	2
salonFiore	1
SartoriaAttoliniNapol	1
SartoriaPromesssa	1
SartoriaRing	1
Sartorio	1
SEVEN UNIFORM	1
SHIPS	5
StanleyBlacker	1
STRAS BURGO	4
TAILOR ISHIDA,KOBE	1
TakahiroMiyahita	1
TAKEO KIKUCHI	3
Takizawa Shigeru	3

Manufacturers/Brandname	Pieces
TETSU s.p.a	1
THE DAIMARU	1
THE SUIT COMPANY	1
theory	2
TheStyleGate	1
THOM BROWNE	2
TOMORROWLAND	15
TRANS CONTINENTS	1
UNITED ARROWS	1
Vightex	1
VITALE BARBERIS CANONICO	1
Vivvienne Westwood	1
W-D MAN	1
Yentry Complex	1
Zegna	11

4. PICTURES OF GARMENTS DETERMINED AS “OUTLIERS” DURING EVALUATION

JACKET WITH SHRINKAGE VALUE OF 3.3%

This unusual jacket is made of cotton blended with “Japanese paper”, which is not listed in the ISO standard for fibre names. It is likely to be a cellulose fibre derived from bamboo, hemp, rice or wheat, potentially also mulberry tree.

Before care treatment	After care treatment
	

Before care treatment	After care treatment
	

Before care treatment	After care treatment
	

The front and back views of the jacket do not show any negative changes in appearance, and neither do the close-ups of the surface structure of the fabric.

HOHENSTEIN

JACKET WITH SHRINKAGE VALUE OF 2.2%

A cotton jacket blended with linen. No changes were visible after the cleaning process.

Before care treatment	After care treatment
	
	

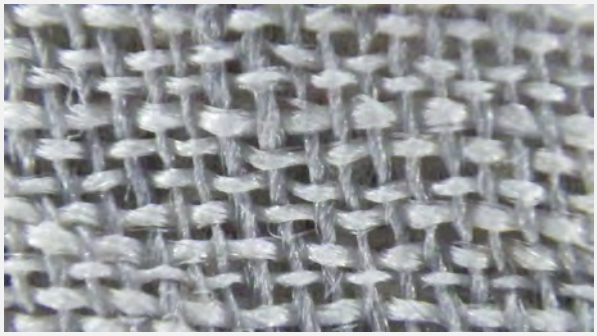
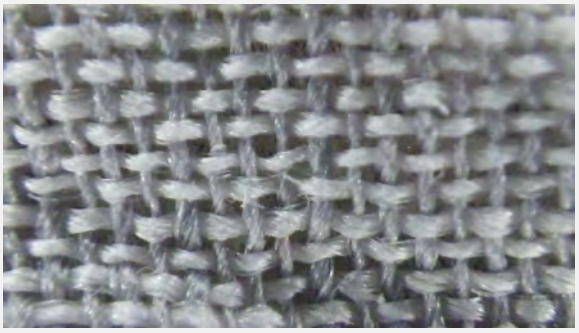
Before care treatment	After care treatment
	

LINEN JACKET WITH CHANGES VISIBLE IN 6 MEASURED SECTIONS

The fabric has a crinkle effect. In the magnified picture, the fabric structure seems slightly tighter after the treatment. (However, the number of warp threads in the same section appears to have decreased from 17 to 16. This suggests that the picture taken after the treatment used a different camera setting, and thus the fabric did not actually tighten in reality.)

Before care treatment	After care treatment
	

Before care treatment	After care treatment
	

Before care treatment	After care treatment
	

LINEN JACKET WITH A 43 % SILK BLEND THAT SHOWED CHANGED DIMENSIONS AT SEVEN MEASURED SECTIONS, BUT WITH ACCEPTABLE SHRINKAGE VALUES

Magnification of the surface structure revealed no changes after the treatment.

Before care treatment	After care treatment
	
	

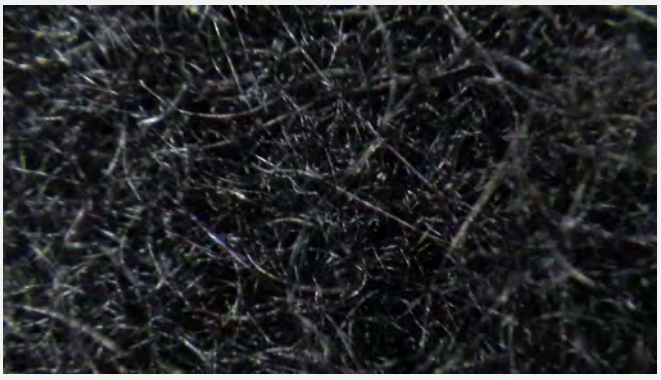
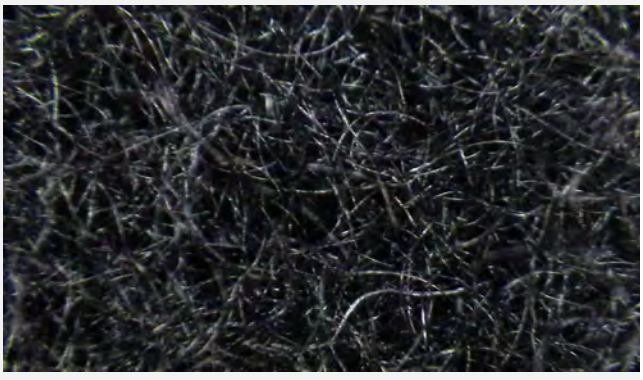
Before care treatment	After care treatment
	

BLACK CASHMERE JACKET WITH SHRINKAGE OF 1.2%

Cashmere is a delicate wool that is superfine and has a tendency to shrink when exposed to water. As the garment is black, no details are discernible in the photos.

Before care treatment	After care treatment
	

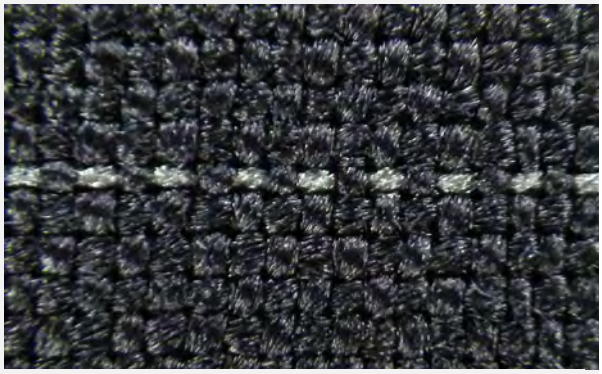
Before care treatment	After care treatment
	

Before care treatment	After care treatment
	

BLACK WOOL JACKET WITH WHITE STRIPES AND SHRINKAGE OF 3%

In this case too, as the jacket is black, any changes cannot be seen in great detail.

Before care treatment	After care treatment
	
	

Before care treatment	After care treatment
	

WOOL JACKET THAT SHOWED CHANGED DIMENSIONS AT SEVEN MEASURED SECTIONS

Blended fabric of 55% wool and 45% cotton. The fibre structure did not show any changes in appearance after the care treatment.

Before care treatment	After care treatment
	

HOHENSTEIN

Before care treatment	After care treatment

Before care treatment	After care treatment