

# MEN'S CIRCULAR FLAT AND RIB KNIT RAYON UNDERWEAR

COMMERCIAL STANDARD CS148-48

Effective Date For New Production From July 27, 1948



A RECORDED VOLUNTARY STANDARD  
OF THE TRADE

UNITED STATES DEPARTMENT OF COMMERCE

CHARLES SAWYER, Secretary

## COMMODITY STANDARDS

Simplified Practice Recommendations and Commercial Standards are developed by manufacturers, distributors, and users in cooperation with the Commodity Standards Division<sup>1</sup> of the National Bureau of Standards. The purpose of Simplified Practice Recommendations is to eliminate avoidable waste through the establishment of standards of practice for stock sizes and varieties of specific commodities that currently are in general production and demand. The purpose of Commercial Standards is to establish standard methods of test, rating, certification, and labeling of commodities, and to provide uniform bases for fair competition.

The adoption and use of a Simplified Practice Recommendation or Commercial Standard is voluntary. However, when reference to a Commercial Standard is made in contracts, labels, invoices, or advertising literature, the provisions of the standard are enforceable through usual legal channels as a part of the sales contract.

A Simplified Practice Recommendation or Commercial Standard originates with the proponent industry. The sponsors may be manufacturers, distributors, or users of the specific product. One of these three elements of industry submits to the Commodity Standards Division the necessary data to be used as the basis for developing a standard of practice. The Division, by means of assembled conferences or letter referenda, or both, assists the sponsor group in arriving at a tentative standard of practice and thereafter refers it to the other elements of the same industry for approval or for constructive criticism that will be helpful in making any necessary adjustments. The regular procedure of the Division assures continuous servicing of each effective Simplified Practice Recommendation and Commercial Standard, through review and revision, whenever, in the opinion of the industry, changing conditions warrant such action. Simplified Practice Recommendations and Commercial Standards are printed and made available by the Department of Commerce through the Government Printing Office.

### COMMERCIAL STANDARD FOR MEN'S CIRCULAR FLAT AND RIB KNIT RAYON UNDERWEAR

On February 20, 1948, at the instance of the Underwear Institute a Recommended Commercial Standard for Men's Circular Flat and Rib Knit Rayon Underwear was presented to interested producers, distributors, testing laboratories and users for written acceptance. Those concerned have since accepted and approved the Commercial Standard as shown herein.

*Project Manager:* L. R. GILBERT, Commodity Standards Division, National Bureau of Standards.

*Technical Adviser:* W. D. APPEL, Organic & Fibrous Materials Division, National Bureau of Standards.

<sup>1</sup> Effective July 1, 1947, the Division of Simplified Practice, organized in 1921, and the Division of Trade Standards, organized in 1927, were combined to form the Commodity Standards Division. Since their organization, both of these Divisions have assisted many industries in the development of Simplified Practice Recommendations and Commercial Standards for a wide variety of commodities. A list of previously established Commercial Standards appears herein. A list of Simplified Practice Recommendations may be obtained from the Commodity Standards Division, National Bureau of Standards, Washington 25, D. C.

# COMMERCIAL STANDARD CS148-48

for

## MEN'S CIRCULAR FLAT AND RIB KNIT RAYON UNDERWEAR

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### PURPOSE

1. The purpose is to provide standard methods of measuring, standard measurements, and tolerances for the guidance of producers, distributors, and users, in order to eliminate confusion resulting from a diversity of measurements and methods and to provide a uniform basis for guaranteeing correct sizes.

### SCOPE

2. The garments covered in this commercial standard are men's circular flat and rib knit rayon underwear. The standard also covers methods of measuring, measurements and tolerances, and includes a recommended label for guaranteeing conformity to the standard.

### APPLICATION

3. The methods and measurements given herein are applicable to finished garments as delivered by the manufacturer.

### GENERAL

4. *Method of measuring.*—The garment to be measured is laid out without tension on a smooth flat surface so that creases and wrinkles will not affect the measurements.

5. *Accuracy.*—Measurements are taken to the nearest  $\frac{1}{8}$  of an inch.

## MEN'S RAYON KNIT TRACK PANTS

### METHOD OF MEASURING

6. *Waist.*—Twice the distance between the outside edges of waist band. Twice *W*, figure 1.

7. *Total length.*—Measured from top outside edge of waist band to lower edge of leg. *C*, figure 1.

8. *Width across seat.*—Measured across back of garment halfway between bottom of crotch (*D*) and top edge of waist band. *G*, figure 1.

9. *Leg opening.*—Measured across leg at lower edge. *J*, figure 1.

10. *Front rise.*—Measured from bottom of crotch up front of garment to middle point of front edge of waist band. *R*, figure 1.

11. *Back rise.*—Measured from bottom of crotch up back of garment to middle point of back edge of waist band. *S*, figure 1.

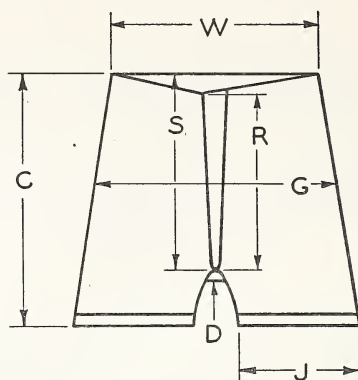


FIGURE 1. Men's rayon track pants.

TABLE 1. Standard measurements for men's rayon knit track pants

Location	Size (inches)											Tolerances
	30	32	34	36	38	40	42	44	46	48	50	
Waist: (W)												
Elastic band.....	26	28	30	32	34	36	38	40	42	44	46	±1 in.
Elastic back.....	27	29	31	33	35	37	39	41	43	45	47	±1 in.
Total length..... (C)	17	17½	18	18½	19	19½	20	20	21	22	22	±1 in.
Width across seat..... (G)	19	20	21	22	23	24	25	26	26½	27	27½	±1 in.
Leg opening..... (J)	10½	11	11½	12	12½	13	13½	14	14½	15	15½	±¾ in.
Front rise..... (R)	12½	12¾	13	13¼	13½	13¾	14	14¼	14½	15	15½	±¾ in.
Back rise..... (S)	14½	14¾	15	15¼	15½	15¾	16	16¼	16½	17	17½	±¾ in.

## MEN'S RAYON KNIT ATHLETIC SHIRTS

(Pullover shirts, ribbed and flat knit)

### METHOD OF MEASURING

12. *Width of garment*.—Measured across garment 1 inch below bottom of armholes. *B*, figure 2.

13. *Total length*.—Measured from center of shoulder strap to bottom edge of shirt. *C*, figure 2.

14. *Armhole length*.—Measured from top point of armhole at shoulder along outer edge of armhole to lowest point under arm. *A*, figure 2.

15. *Collarett length*.—Measured from point where shoulder joins collarett around inner edge of collarett back to starting point.

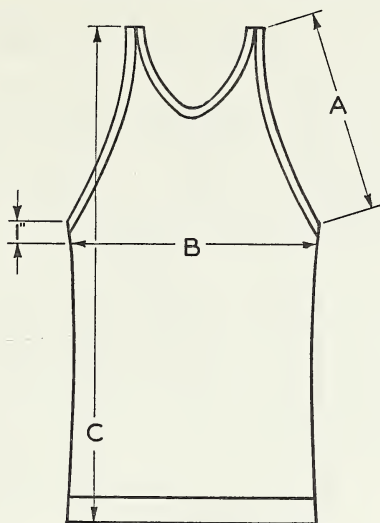


FIGURE 2. Men's athletic pullover shirt.  
(Low neck, no sleeves)

TABLE 2. Standard measurements for men's rayon knit athletic shirts (pullover shirts, ribbed and flat knit)

Location	Size (inches)											Tolerances
	34	36	38	40	42	44	46	48	50	52	54	
Width of garment:												
Rib knit.....(B)	11 $\frac{3}{4}$	12 $\frac{1}{2}$	13 $\frac{1}{4}$	14	14 $\frac{3}{4}$	15 $\frac{1}{2}$	16 $\frac{1}{4}$	17	17 $\frac{1}{2}$	18	18 $\frac{1}{2}$	$\pm 6\%$ .
Flat knit.....(B)	15	16	17	18	19	20	21	22	23	24	25	$\pm 6\%$ .
Total length:												
Rib knit.....(C)	32	32	33	34	35	35	35	36	36	37	37	$\pm 1$ in.
Flat knit.....(C)	29	29	31	31	33	33	33	34	34	35	35	$\pm 1$ in.
Armhole length.....(A)	12	12	13	13	14	14	15	15	16	16	16	$\pm 2$ in.
Collar length.....	26	26	27	27	28	28	28	29	29	29	29	$\pm 2$ in.

## MEN'S RAYON KNITTED POLO SHIRTS

(U. I.—No. M-23)

### METHOD OF MEASURING

16. *Width of garment*.—Measured across garment 1 inch below bottom of armholes. *B*, figure 3.

17. *Total length*.—Measured from point where shoulder joins collar to bottom edge of shirt. *C*, figure 3.

18. *Armhole length*.—Measured from point where sleeve is attached to shoulder to lowest point under arm. *A*, figure 3.

19. *Sleeve length*.—Measured from point where sleeve is attached to shoulder to upper outside edge of sleeve cuff. *E*, figure 3.

20. *Collar length*.—Measured from center of collar button around neck band to end of buttonhole.



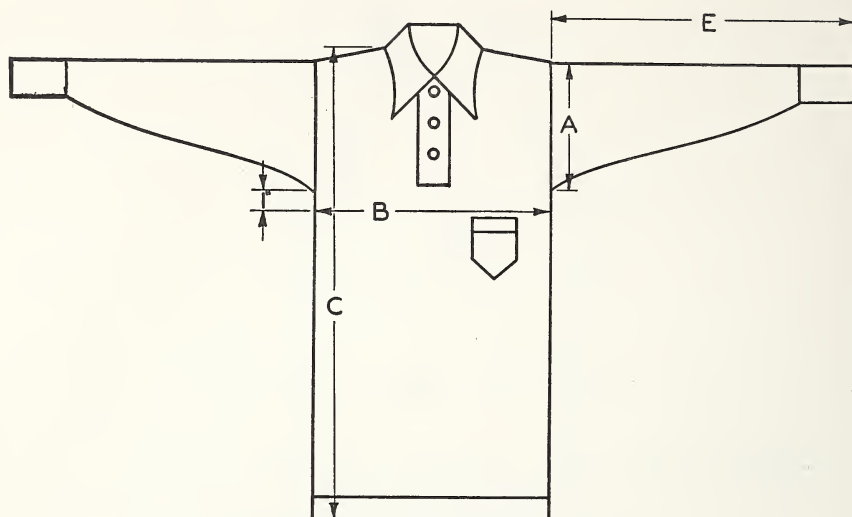


FIGURE 3. Men's polo shirt.

TABLE 3. Standard measurements for men's rayon knitted polo shirts

Location	Size (inches)											Tolerances
	34	36	38	40	42	44	46	48	50	52	54	
Width of garment.....(B)	16	17	18	19	20	21	22	23	24	25	26	±6%
Total length.....(C)	26	26	27	28	28	29	30	30	31	32	32	±1 in.
Armhole length.....(A)	9	9	9½	9½	10	10	10½	10½	11	11	11½	±1 in.
Sleeve length.....(E)	22	22	22	23	23	23	23	24	24	24	24	±1 in.
Short sleeve.....	11	11	11	12	12	12	12	13	13	13	13	±1 in.
Collar length.....	14	14½	15	15½	16	16½	17	17½	18	18½	19	±1 in.

## MEN'S RAYON FLAT KNIT ATHLETIC UNION SUITS

(No sleeves, button shoulder or button front, short leg)

## METHOD OF MEASURING

21. *Width of garment.*—Measured across garment 1 inch below bottom of armholes. *B*, figure 4.

22. *Total length.*—Measured from center of shoulder strap to bottom edge of leg. *C*, figure 4.

23. *Trunk.*—Twice the distance from point where shoulder joins collarette to center of bottom line of gusset at crotch. Spread legs in measuring only sufficiently to adjust crotch gusset. Twice *T*, figure 4.

24. *Armhole length.*—Measured from top point of armhole at shoulder along outer edge of armhole to lowest point under arm. *A*, figure 4.

25. *Leg opening.*—Measured across leg at lower edge. *J*, figure 4.

26. *Collarett* length.—Measured from point where shoulder joins collarett around inner edge of collarett back to starting point.

TABLE 4. *Standard measurements for men's rayon flat knit athletic union suits*

Location	Size (inches)												Tolerances
	34	36	38	40	42	44	46	48	50	52	54		
Width of garment:													
Button shoulder (B)	15	16	17	18	19	20	21	22	23	24	25	±6%	
Button front (B)	16	17	18	19	20	21	22	23	24	25	26	±6%	
Total length (C)	37	38	39	40	41	42	43	44	45	46	47	±1½ in.	
Total length <sup>1</sup>												±1½ in.	
Trunk (T)	60	62	64	66	68	70	72	74	76	78	80	±2 in.	
Armhole length (A)	12	12	13	13	14	14	15	15	16	16	16	±2 in.	
Leg opening (J)	9	9½	10	10½	11	11½	12	12½	13	13½	14	±6%	
Collarett length:													
Button shoulder	26	26	27	27	28	28	28	29	29	29	29	±2 in.	
Button front	20	20	21	21	21	22	22	22	23	23	23	±2 in.	

<sup>1</sup> Trunk and sport leg models according to style.

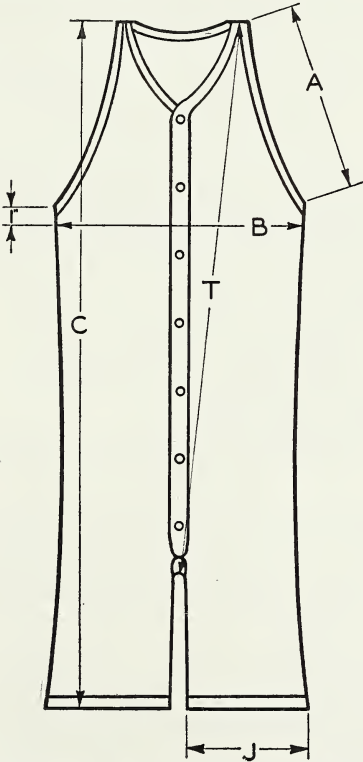


FIGURE 4. *Men's athletic union suits.*  
(No sleeves, button front, short leg)

## MEN'S RAYON RIBBED KNIT ATHLETIC UNION SUITS

(No sleeves, button shoulder or button front, short leg)

## METHOD OF MEASURING

27. *Width of garment*.—Measured across garment 1 inch below bottom of armholes. *B*, figure 4.

28. *Total length*.—Measured from top edge of shoulder strap to bottom edge of leg. *C*, figure 4.

29. *Trunk*.—Twice the distance from point where shoulder joins collarette to center of bottom line of gusset at crotch. Spread legs in measuring only sufficiently to adjust crotch gusset. Twice *T*, figure 4.

30. *Armhole length*.—Measured from top point of armhole at shoulder along outer edge of armhole to lowest point under arm. *A*, figure 4.

31. *Leg opening*.—Measured across leg at lower edge. *J*, figure 4.

32. *Collarette length*.—Measured from point where shoulder joins collarette around inner edge of collarette back to starting point.

TABLE 5.—Standard measurements for men's rayon ribbed knit athletic union suits (no sleeves, button shoulder or button front, short leg)

Location	Size (inches)											Tolerances
	34	36	38	40	42	44	46	48	50	52	54	
Width of garment:												
Button shoulder.....(B)	12 $\frac{3}{4}$	13	13 $\frac{3}{4}$	14 $\frac{1}{2}$	15	15 $\frac{3}{4}$	16 $\frac{1}{2}$	17 $\frac{1}{4}$	17 $\frac{3}{4}$	18 $\frac{1}{4}$	18 $\frac{3}{4}$	±6%
Button front.....(B)	13	13 $\frac{3}{4}$	14 $\frac{1}{2}$	15 $\frac{1}{4}$	15 $\frac{3}{4}$	16 $\frac{1}{2}$	17 $\frac{1}{4}$	18	18 $\frac{1}{2}$	19	19 $\frac{1}{2}$	±6%
Total length.....(C)	37	38	39	40	41	42	43	44	45	46	47	±1 $\frac{1}{2}$ in.
Total length <sup>1</sup> .....												±1 $\frac{1}{2}$ in.
Trunk.....(T)	60	62	64	66	68	70	72	74	76	78	80	±2 in.
Armhole length.....(A)	12	12	13	13	14	14	15	15	16	16	16	±2 in.
Leg opening.....(J)	6 $\frac{1}{2}$	7	7 $\frac{1}{2}$	8	8 $\frac{1}{2}$	9	9 $\frac{1}{2}$	10	10 $\frac{1}{2}$	11	11 $\frac{1}{2}$	±6%
Collarette length:												
Button shoulder.....	26	26	27	27	28	28	28	29	29	29	29	±2 in.
Button front.....	20	20	21	21	21	22	22	22	23	23	23	±2 in.

<sup>1</sup> Trunk and sport leg models according to style.

## RECOMMENDED METHOD OF WASHING RAYON KNIT UNDERWEAR

33. *Washing*.—Use only good quality neutral soap preferably in powdered or chip form (not soap powder). Dissolve it first in hot water, soft if possible. Wash the garments in warm water taking care not to go over 140° F. If using a washing machine, use plenty of water and a thick cushion of suds. In most cases, 10 minutes will be sufficient time for washing. Avoid overloading the machine. If washing by hand, souse goods gently up and down in the bath until soap permeates the whole fabric. Do not rub. Use rubber gloves for this purpose as this is a delicate fabric and is weak in strength when wet, but regains its strength when dry. Take care not to pull or stretch the fabric when it is wet.

34. *Rinsing*.—Rinse in water of approximately the same temperature as that of the wash water to avoid sharp contrasts in temperature.



Five or six minutes will be usually sufficient. Handle garments gently and wear rubber gloves.

35. *Drying*.—Do not use a roll type wringer for removing excess water. A centrifugal type is satisfactory if the machine is so equipped. Otherwise squeeze out excess water gently by hand. Do not twist. Finish drying by laying garment on a flat surface and dry at ordinary room temperature of 70° to 80° F. Do not hang the garment on a line or on the back of chairs. Keep away from excessive heat in drying. Use medium hot iron.

## IDENTIFICATION

36. In order to assure the purchaser that he is receiving garments which comply with standard measurements, it is recommended that underwear for men manufactured to conform to such standard measurements be identified by a sticker, tag, or other label attached to the garment carrying the following statement:

This garment has been made to measurements which are in accordance with Commercial Standard CS148-48, as developed by industry and the trade, under the procedure of the National Bureau of Standards, and issued by the U. S. Department of Commerce.

Or more briefly

Size conforms to CS148-48, as developed by industry and the trade, and issued by the U. S. Department of Commerce.

## EFFECTIVE DATE

37. Having been passed through the regular procedure of the Commodity Standards Division, and approved by the acceptors hereinafter listed, this Commercial Standard was issued by the United States Department of Commerce, effective from July 27, 1948.

Edwin W. Ely

*Chief, Commodity Standards Division*

## HISTORY OF PROJECT

38. On October 30, 1947, the Underwear Institute requested the cooperation of the National Bureau of Standards in the establishment of a commercial standard for men's circular flat and rib-knit rayon underwear. The measurements and tolerances submitted for incorporation in the proposed standard were previously incorporated in the recommended commercial standard for circular flat and rib-knit rayon underwear, TS-2251, and had been in actual use in the production, distribution and use of men's rayon underwear for a sufficient number of years to justify the belief that they could now be classified as standard.

39. Following receipt of this request, copies of these measurements were sent to key manufacturers for a check on their present accuracy.

40. With the unqualified endorsement of the industry, the recommended commercial standard was submitted to the trade for written acceptance on February 20, 1948. Having received acceptances in writing estimated to represent a satisfactory majority, announcement was issued on May 27, 1948 that the standard would become effective for new production from July 27, 1948.

**STANDING COMMITTEE**

41. The following individuals comprise the membership of the Standing Committee, which is to review, prior to circulation for acceptance, revisions proposed to keep the standard abreast of progress. Comment concerning the standard and suggestions for revisions may be addressed to any member of the committee or to the Commodity Standards Division, National Bureau of Standards, which acts as secretary for the committee.

R. A. SMITH (Chairman), Wilson Brothers, South Bend, Ind.

ROY A. CHENEY, Underwear Institute, 2 Park Avenue, New York, N. Y.

J. B. KREIDER, Walter W. Moyer Company, Ephrata, Pa.

C. J. RUTISHAUSER, Williams Brothers Manufacturing Co., Rome, N. Y.

E. V. HUNTER, Quality Knitting Co., Stowe, Pa.

DONALD C. MCLEOD, Munsingwear, Inc., Minneapolis, Minn.

RODNEY W. JONES, Augusta Knitting Corporation, 180 Madison Avenue, New York, N. Y.

I. L. LESAVOY, Blossom Products Corporation, Allentown, Pa.

A. F. ECKERT, Duofold, Inc., Mohawk, N. Y.

T. L. BLANKE, 100 West 31st Street, New York, N. Y. (Representing National Retail Dry Goods Association and American Retail Federation).

G. D. GROSNER, Grosner of Washington, 1325 F Street, NW, Washington, D. C.

W. W. EVERETT, JR., Woodward and Lothrop, Washington, D. C.

DR. EPHRAIM FREEDMAN, R. H. Macy & Co., New York, N. Y.

LOUIS ROTHSCHILD, National Association of Retail Clothiers and Furnishers, Washington Loan and Trust Building, Washington, D. C.

HY THRON, National Textile Distributors Co., 320 Broadway, New York, N. Y. (Representing Wholesale Dry Goods Institute.)

MRS. ERNEST H. DANIEL, Broad Branch and Grant Roads, NW., Washington, D. C. (Representing General Federation of Women's Clubs.)

MRS. MARGARET H. KINGSBURY, United States Department of the Interior, Room 1106, 226 West Jackson Boulevard, Chicago, Ill.

MRS. CHARLOTTE PAYNE, National Council of Women of the U. S., 501 Madison Avenue, New York, N. Y.

MISS CLARA THROPP, Professional Women's League, 417 East 85th Street, New York, N. Y.

MRS. HAROLD BENJAMIN, 3915 Calvert Drive, College Park, Md. (Representing American Association of University Women.)

## ACCEPTANCE OF COMMERCIAL STANDARD

If acceptance has not previously been filed, this sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this commercial standard.

Date\_\_\_\_\_

Commodity Standards Division,  
National Bureau of Standards,  
Washington 25, D. C.

Gentlemen:

We believe that the Commercial Standard CS148-48 constitutes a useful standard of practice, and we individually plan to utilize it as far as practicable in the

production <sup>1</sup>                      distribution <sup>1</sup>                      purchase <sup>1</sup>                      testing <sup>1</sup>  
of men's circular flat and rib knit rayon underwear.

We reserve the right to depart from it as we deem advisable.

We understand, of course, that only those articles which actually comply with the standard in all respects can be identified or labeled as conforming thereto.

Signature of authorized officer \_\_\_\_\_  
(In ink)

(Kindly typewrite or print the following lines)

Name and title of above officer \_\_\_\_\_

Organization \_\_\_\_\_  
(Fill in exactly as it should be listed)

Street address \_\_\_\_\_

City, Zone, and State \_\_\_\_\_

<sup>1</sup> Underscore which one. Please see that separate acceptances are filed for all subsidiary companies and affiliates which should be listed separately as acceptors. In the case of related interests, trade associations, trade papers, etc., desiring to record their general support, the words "General Support" should be added after the signature.

## TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance and its significance:

1. *Enforcement.*—Commercial standards are commodity specifications voluntarily established by mutual consent of those concerned. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions, but since they represent the will of the interested groups as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. *The acceptor's responsibility.*—The purpose of commercial standards is to establish for specific commodities, nationally recognized grades or consumer criteria and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the commercial standard where practicable, in the production, distribution, or consumption of the article in question.

3. *The Department's responsibility.*—The major function performed by the Department of Commerce in the voluntary establishment of commercial standards on a Nation-wide basis is fourfold; first, to act as an unbiased coordinator to bring all interested parties together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users, and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. *Announcement and promulgation.*—When the standard has been endorsed by a satisfactory majority of production or consumption in the absence of active valid opposition, the success of the project is announced. If, however, in the opinion of the Standing Committee or the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.



## ACCEPTORS

42. The organizations listed below have individually accepted this standard for use as far as practicable in the production, distribution, testing or use of men's circular flat and rib knit rayon underwear. In accepting the standard they reserved the right to depart from it as they individually deem advisable. It is expected that articles which actually comply with the requirements of this standard in all respects will be regularly identified or labeled as conforming thereto, and that purchasers will require such specific evidence of conformity.

#### ASSOCIATIONS (General Support)

Intermountain Consumer's Service, Inc., Denver, Colo.  
National Retail Dry Goods Association, New York, N. Y.  
Underwear Institute, New York, N. Y.

#### FIRMS AND OTHER INTERESTS

Adam, Meldrum & Anderson Co., Inc., Buffalo, N. Y.  
Allied Purchasing Corp., New York, N. Y.  
Arkwright, Inc., New York, N. Y.  
Askin Brothers Co., Inc., Baltimore, Md.  
Atlas Underwear Co., Richmond, Ind.  
Atwood, J. J., Co., Upland, Calif.  
Augusta Knitting Corp., New York, N. Y.  
B & B Stores, Inc., Logansport, Ind.  
Bailey Co., Cleveland, Ohio.  
Bean, C. W., & Son, Paeoet, S. C.  
Better Fabrics Testing Bureau, Inc., New York, N. Y.  
Blossom Products Corp., Allentown, Pa.  
Boggs & Buhl, Inc., Pittsburgh, Pa.  
Boston Store, The, Manitowoc, Wis.  
Brager's, Inc., Baltimore, Md.  
Bush & Bull Corp., Bethlehem, Pa.  
Butler Brothers, New York, N. Y.  
Chalmers Knitting Co., Amsterdam, N. Y.  
Continental Undergarment Co., Inc., Brooklyn, N. Y.  
Deisroth's, P., Sons, Hazleton, Pa.  
Desmond's, Los Angeles, Calif.  
Donaldson, L. S., Co., Minneapolis, Minn.  
Duofold, Inc., Mohawk, N. Y.  
Eagle Stores Co., Charlotte, N. C.  
Eagle, S., & Sons, Selma, Ala.  
Elder Manufacturing Co., St. Louis, Mo.  
Fair, The, Chicago, Ill.  
Field, Marshall, & Co., Chicago, Ill.  
Foley's, Houston, Tex.  
Fowler, Dick & Walker, Wilkes-Barre, Pa.  
Globe Knitting Works, Grand Rapids, Mich.  
Goodman, Al., Merchandising Corp., New York, N. Y.  
Grosner of Washington, Washington, D. C.  
Gugenheimer, C. M., Corp., Lynchburg, Va.  
Halle Bros. Co., The, Cleveland, Ohio.  
Hamilton Bros., Houston, Tex.  
Hatch Textile Research, New York, N. Y.  
Hengerer, Wm., Co., The, Buffalo, N. Y.  
Holmes, D. H., Co., Ltd., New Orleans, La.  
Hornik, M., & Co., Charleston, S. C.  
Howland Dry Goods Co., The, Bridgeport, Conn.  
Industrial By Products & Research Co., Philadelphia, Pa.  
Ives, Upham & Rand Co., Meriden, Conn.  
Johnston & Larimer, Inc., Wichita, Kans.  
Kann, S., Sons Co., Washington, D. C.  
Kaufmann's, Pittsburgh, Pa.  
Keller's, Liberty, N. Y.  
Klein-Norton Co., Los Angeles, Calif.  
Kugelman's, Woodsville, N. H.  
Laurel Underwear Co., Pottstown, Pa.  
Lazarus, F. & R., & Co., Columbus, Ohio.  
Levy Bros., Burlingame, Calif.  
Lewiston Manufacturing Corp., Robbinsville, N. J.  
Luxuray, Inc., New York, N. Y.  
Macy's Bureau of Standards, New York, N. Y.  
Macy's, San Francisco, Calif.  
May Co., The, Baltimore, Md., and Denver, Colo.  
McKelvey, G. M., Co., Youngstown, Ohio.  
Men's Wear Sales Corp., New York, N. Y.  
Miller & Rhoads, Inc., Richmond, Va.  
Missouri, University of, Columbia, Mo.  
Moore, Harry C., Dry Goods Co., Nevada, Mo.  
Moyer, Walter W., Co., Ephrata, Pa.  
Munsingwear, Inc., Minneapolis, Minn.  
Myer Brothers, Springfield, Ill.  
National Shirt Shops, Inc., New York, N. Y.  
New Boston Store Co. of Chicago, Chicago, Ill.  
Ogden Utah Knitting Co., Inc., Ogden, Utah.  
Pacific Department Store, Portland, Ore.  
Pennsylvania State College, The, State College, Pa.  
Quality Knitting Co., Inc., Stowe, Pa.  
Raleigh Haberdasher, Inc., Washington, D. C.  
Rankin Dry Goods Co., Inc., Santa Ana, Calif.  
Rich's, Inc., Atlanta, Ga.  
Rike-Kumler Co., The, Dayton, Ohio.  
Rodgers, Eugene, Inc. (formerly Tamro Products, Inc.), New York, N. Y.  
Salt Lake Knitting Works, Salt Lake City, Utah.  
Schear's Department Store, Evansville, Ind.  
Schofield Corp., The, Philadelphia, Pa.  
Schudson, Chas., Inc., Milwaukee, Wis.  
Seranton Dry Goods Co., Seranton, Pa.  
Shannon Mills, Inc., New Albany, Ind.  
Shorewood Mills, Milwaukee, Wis.  
Smith, Timothy, Co., Roxbury, Mass.  
Smith-Murray Co., The, Bridgeport, Conn.  
Snell, Foster D., Inc., New York, N. Y.  
Strawbridge & Clothier, Philadelphia, Pa.  
Swartz, W. G., Co., Inc., Norfolk, Va.  
Textile Testing & Research Laboratories, New York, N. Y.  
Textron, Inc., New York, N. Y.  
United States Testing Co., Inc., Hoboken, N. J.  
Utica Knitting Co., Utica, N. Y.  
Wakefield Knitting Mills, Philadelphia, Pa.  
Walser Manufacturing Co., Inc., Clifton, N. J.  
Wasson, H. P., & Co., Indianapolis, Ind.  
Waterville Textile Mills, Waterville, N. Y.  
Weinstein Co., Inc., San Francisco, Calif.  
White, J. B., & Co., Augusta, Ga.  
Williams Bros. Manufacturing Co., Rome, N. Y.  
Wilson Brothers, Chicago, Ill., and South Bend, Ind.  
Woodward & Lothrop, Washington, D. C.  
Wright-Metzler Co., Uniontown, Pa.  
Ziesel Brothers Store, Elkhart, Ind.

#### UNITED STATES GOVERNMENT

Agriculture, United States Department of, Division of Purchase, Sales, and Traffic, Washington, D. C.  
Interior, United States Department of, the, Indian Service, Chicago, Ill.



## COMMERCIAL STANDARDS

## CS No.

- 0-40. Commercial standards and their value to business (third edition).
- 1-42. Clinical thermometers (third edition).
- 2-30. Mopsticks.
- 3-40. Stoddard solvent (third edition).
- 4-29. Staple porcelain (all-clay) plumbing fixtures.
- 5-46. Pipe nipples; brass, copper, steel and wrought-iron (second edition).
- 6-31. Wrought-iron pipe nipples (second edition). Superseded by CS5-46.
- 7-29. Standard weight malleable iron or steel screwed unions.
- 8-41. Gage blanks (third edition).
- 9-33. Builders' template hardware (second edition).
- 10-29. Brass pipe nipples. Superseded by CS5-46.
- 11-41. Moisture regains of cotton yarns (second edition).
- 12-48. Fuel oils (sixth edition).
- 13-44. Dress patterns (fourth edition).
- 14-43. Boys' button-on waists, shirts, junior and sport shirts (made from woven fabrics) (third edition).
- 15-46. Men's pajama sizes (made from woven fabrics) (third edition).
- 16-29. Wallpaper.
- 17-47. Diamond core drill fittings (fourth edition).
- 18-29. Hickory golf shafts.
- 19-32. Foundry patterns of wood (second edition).
- 20-47. Staple vitreous china plumbing fixtures (fourth edition).
- 21-39. Interchangeable ground-glass joints, stopcocks, and stoppers (fourth edition).
- 22-40. Builders' hardware (nontemplate) (second edition).
- 23-30. Feldspar.
- 24-43. Screw threads and tap-drill sizes.
- 25-30. Special screw threads. Superseded by CS24-43.
- 26-30. Aromatic red cedar closet lining.
- 27-36. Mirrors (second edition).
- 28-46. Cotton fabric tents, tarpaulins and covers (second edition).
- 29-31. Staple seats for water-closet bowls.
- 30-31. Cotton for sanitary ware. (Withdrawn as commercial standard, March 15, 1948).
- 31-38. Wood shingles (fourth edition).
- 32-31. Cotton cloth for rubber and pyroxylin coating.
- 33-43. Knit underwear (exclusive of rayon) (second edition).
- 34-31. Bag, case, and strap leather.
- 35-47. Hardwood plywood (third edition).
- 36-33. Fourdrinier wire cloth (second edition).
- 37-31. Steel bone plates and screws.
- 38-32. Hospital rubber sheeting.
- 39-37. Wool and part wool blankets (second edition). (Withdrawn as commercial standard, July 14, 1941).
- 40-32. Surgeons' rubber gloves.
- 41-32. Surgeons' latex gloves.
- 42-43. Structural fiber insulating board (third edition).
- 43-32. Grading of sulphonated oils.
- 44-32. Apple wraps.
- 45-48. Douglas fir plywood (eighth edition).
- 46-40. Hosiery lengths and sizes (third edition).
- 47-34. Marking of gold-filled and rolled-gold-plate articles other than watch cases.
- 48-40. Domestic burners for Pennsylvania anthracite (underfired type) (second edition).
- 49-34. Chip board, laminated chip board, and miscellaneous boards for bookbinding purposes.
- 50-34. Binders board for bookbinding and other purposes.
- 51-35. Marking articles made of silver in combination with gold.
- 52-35. Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze).
- 53-35. Colors and finishes for cast stone.
- 54-35. Mattresses for hospitals.
- 55-35. Mattresses for institutions.

## CS No.

- 56-41. Oak flooring (second edition).
- 57-40. Book cloths, buckrams, and impregnated fabrics for bookbinding purposes except library bindings (second edition).
- 58-36. Woven elastic fabrics for use in overalls (over-elastic webbing).
- 59-44. Textiles—testing and reporting (fourth edition).
- 60-48. Hardwood dimension lumber. (Second edition).
- 61-37. Wood-slat venetian blinds.
- 62-38. Colors for kitchen accessories.
- 63-38. Colors for bathroom accessories.
- 64-37. Walnut veneers.
- 65-43. Methods of analysis and of reporting fiber composition of textile products (second edition).
- 66-38. Marking of articles made wholly or in part of platinum.
- 67-38. Marking articles made of karat gold.
- 68-38. Liquid hypochlorite disinfectant, deodorant, and germicide.
- 69-38. Pine oil disinfectant.
- 70-41. Phenolic disinfectant (emulsifying type) (second edition) (published with CS71-41).
- 71-41. Phenolic disinfectant (soluble type) (second edition) (published with CS70-41).
- 72-38. Household insecticide (liquid spray type).
- 73-48. Old growth Douglas fir, Sitka spruce and Western hemlock standard stock doors (fourth edition).
- 74-39. Solid hardwood wall paneling.
- 75-42. Automatic mechanical draft oil burners designed for domestic installations (second edition).
- 76-39. Hardwood interior trim and molding.
- 77-48. Enameled cast iron plumbing fixtures (second edition).
- 78-40. Ground-and-polished lenses for sun glasses (second edition) (published with CS79-40).
- 79-40. Blown, drawn, and dropped lenses for sun glasses (second edition) (published with CS78-40).
- 80-41. Electric direction signal systems other than semaphore type for commercial and other vehicles subject to special motor vehicle laws (after market).
- 81-41. Adverse-weather lamps for vehicles (after market).
- 82-41. Inner-controlled spotlamps for vehicles (after market).
- 83-41. Clearance, marker, and identification lamps for vehicles (after market).
- 84-41. Electric tail lamps for vehicles (after market).
- 85-41. Electric license-plate lamps for vehicles (after market).
- 86-41. Electric stop lamps for vehicles (after market).
- 87-41. Red electric warning lanterns.
- 88-41. Liquid burning flares.
- 89-40. Hardwood stair treads and risers.
- 90- . (Reserved for power shovels and cranes.)
- 91-41. Factory-fitted Douglas fir entrance doors.
- 92-41. Cedar, cypress, and redwood tank stock lumber.
- 93-41. Portable electric drills (exclusive of high frequency).
- 94-41. Calking lead.
- 95-41. Lead pipe.
- 96-41. Lead traps and bends.
- 97-42. Electric supplementary driving and passing lamps for vehicles (after market).
- 98-42. Artists' oil paints.
- 99-42. Gas floor furnaces—gravity circulating type.
- 100-47. Porcelain-enameled steel utensils (third edition).
- 101-43. Flue-connected oil-burning space heaters equipped with vaporizing pot-type burners (Reserved for Diesel and fuel-oil engines.)
- 102- . (Reserved for Diesel and fuel-oil engines.)
- 103-48. Rayon jacquard velour (with or without other decorative yarn (second edition).
- 104-46. Warm-air furnaces equipped with vaporizing pot-type oil burners (second edition).

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| <p>CS No.<br/> 105-43. Mineral wool; loose, granulated, or felted form, in low-temperature installations.<br/> 106-44. Boys' pajama sizes (woven fabrics) (second edition).<br/> 107-45. Commercial electric-refrigeration condensing units (second edition). (Withdrawn as commercial standard September 4, 1947.)<br/> 108-43. Treading automobile and truck tires.<br/> 109-44. Solid-fuel-burning forced-air furnaces.<br/> 110-43. Tire repairs—vulcanized (passenger, truck, and bus tires).<br/> 111-43. Earthenware (vitreous-glazed) plumbing fixtures.<br/> 112-43. Homogeneous fiber wallboard.<br/> 113-44. Oil-burning floor furnaces equipped with vaporizing pot-type burners.<br/> 114-43. Hospital sheeting for mattress protection.<br/> 115-44. Porcelain-enameled tanks for domestic use.<br/> 116-44. Bituminized-fibre drain and sewer pipe.<br/> 117-44. Mineral wool; blankets, blocks, insulating cement, and pipe insulation for heated industrial equipment.<br/> 118-44. Marking of jewelry and novelties of silver.<br/> (E)119-45.<sup>1</sup> Dial indicators (for linear measurements).<br/> 120-48. Standard stock ponderosa pine doors (third edition).<br/> 121-45. Women's slip sizes (woven fabrics).<br/> 122-45. Western hemlock plywood.<br/> 123-45. Grading of diamond powder.<br/> (E)124-45.<sup>1</sup> Master disks.<br/> 125-47. Prefabricated homes (second edition).<br/> 126-45. Tank mounted air compressors.<br/> 127-45. Self-contained mechanically refrigerated drinking water coolers.<br/> 128-45. Men's sport shirt sizes—woven fabrics (other than those marked with regular neckband sizes).</p> | <p>CS No.<br/> 129-47. Materials for safety wearing apparel (second edition).<br/> 130-46. Color materials for art education in schools.<br/> 131-46. Industrial mineral wool products, all types—testing and reporting.<br/> 132-46. Hardware cloth.<br/> 133-46. Woven wire netting.<br/> 134-46. Cast aluminum cooking utensils (metal composition).<br/> 135-46. Men's shirt sizes (exclusive of work shirts).<br/> 136-46. Blankets for hospitals (wool, and wool and cotton).<br/> 137-46. Size measurements for men's and boys' shorts (woven fabrics).<br/> 138-47. Insect wire screening.<br/> 139-47. Work gloves.<br/> 140-47. Convectors: testing and rating.<br/> 141-47. Sine bars, blocks, plates, and fixtures.<br/> 142-47. Automotive lifts.<br/> 143-47. Standard strength and extra strength perforated clay pipe.<br/> 144-47. Formed metal porcelain enameled sanitary ware.<br/> 145-47. Testing and rating hand-fired hot water supply boilers.<br/> 146-47. Gowns for hospital patients.<br/> 147-47. Colors for molded urea plastics.<br/> 148-48. Men's circular flat and rib knit rayon underwear.<br/> 149-48. Utility type house dress sizes.<br/> 150-48. Hot rolled rail steel bars (produced from Tee-section rails).<br/> 151-48. Body measurements for the sizing of apparel for infants, babies, toddlers, and children (for the knit-underwear industry).<br/> 152-48. Copper naphthenate wood preservative.</p> |
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<sup>1</sup> Where "(E)" precedes the CS number, it indicates an emergency commercial standard, drafted under war conditions with a view toward early revision.

NOTICE.—Those interested in commercial standards with a view toward accepting them as a basis of everyday practice may secure copies of the above standards, while the supply lasts, by addressing the National Bureau of Standards, Washington 25, D. C.

