# Size Measurements for Men's Work Trousers

# U. S. DEPARTMENT OF COMMERCE



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Charles Sawyer, Secretary

## BUREAU OF FOREIGN AND DOMESTIC COMMERCE

Office of Industry and Commerce H. B. McCoy, Director

In cooperation with

NATIONAL BUREAU OF STANDARDS

E. U. Condon, Director



# Size Measurements for Men's Work Trousers

A Recorded Voluntary Standard of the Trade

# COMMODITY STANDARDS

Simplified Practice Recommendations and Commercial Standards are developed by manufacturers, distributors, and users in cooperation with the Commodity Standards Division of the Office of Industry and Commerce, and 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 a 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 a 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 and the Department of Commerce field offices.

#### COMMERCIAL STANDARD 166-50

for

# SIZE MEASUREMENTS FOR MEN'S WORK TROUSERS

[Effective May 30, 1950]

#### PURPOSE

The purpose of this commercial standard is to provide standard methods of measuring and standard minimum measurements for men's work trousers 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 full size.

#### 2. SCOPE

The standard covers size designations, methods of measuring, and standard minimum measurements for men's work trousers. It also includes recommendations concerning shrinkage, and a recommended means of identification through labeling work trousers produced in conformity with this standard.

#### 3. APPLICATION

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

#### 4. STANDARD METHODS OF MEASURING

Method of measuring.—The garment to be measured shall be laid out without tension on a smooth, flat surface so that creases and wrinkles will not affect the measurements. Measurements shall be taken to the nearest one-quarter inch.

Waist.—Measured between outside edges of waistband when

garment is buttoned. Twice W, figure 1.

4.3 Inseam.—Measured along inside seams from the crotch 1 to bottom of leg. I, figure 1.

4.4 Outseam to top of waistband.—Measured along outseam from

top of the waistband to the bottom of leg. O, figure 1.
4.5 Seat.—Measured across garment at fullest part between Twice G, figure 1. crotch and waistband.

<sup>&</sup>lt;sup>1</sup> The crotch is the point where the two inseams join the seat seam. D, figure 1.

Front rise.—Measured from crotch up front of garment to top of waistband. R, figure 1.

4.7 Back rise.—Measured from crotch up back of garment to top of waistband. S, figure 1.

4.8 Thigh.—Measured across the leg 1 inch below the crotch, parallel to bottom of the leg. Twice T, figure 1.

4.9 Knee.—Measured across the leg 2 inches above midpoint between the crotch and the bottom of leg. Twice K, figure 1.

4.10 Bottom of leg.—Measured across leg at bottom of garment.

Twice J, figure 1.

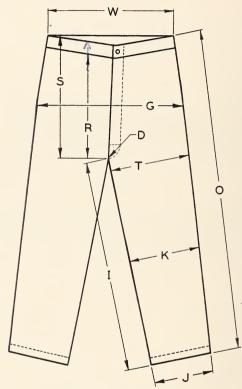


FIGURE 1.-Men's work trousers

## 5. STANDARD MINIMUM MEASUREMENTS

5.1 Minimum measurements for men's work trousers are indicated in table 1, below.

Table 1.—Standard minimum size measurements for men's work trousers

Location	Size designations								
Location	30–32	32-32	34-32	36-32	38-32	40-32	42-32	44-32	46-32
Waist         (twice W)           Inseam         (1)           Outseam         (0)           Seat         (twice G)           Front rise         (R)           Back rise         (S)           Thigh         (twice K)           Bottom of leg         (twice J)	Inches 30 32 42½ 41½ 11 16 26 21½ 20	Inches 32 32 43 43 <sup>1</sup> / <sub>2</sub> 11 <sup>1</sup> / <sub>2</sub> 27 21 <sup>1</sup> / <sub>2</sub> 20	Inches 34 32 43½ 45½ 17 28 22 20	Inches 36 32 44 47 12½2 17½ 29 22 20	Inches 38 32 44 48½ 13 18 30 23 20	Inches 40 32 44½ 50 13½ 18½ 31 23 20	Inches 42 32 44½ 51½ 119 32 23½ 20½	Inches 44 32 45 52½ 14½ 219½ 33 24 20½	Inches 46 32 45 53½ 15 20 34 24½ 20½

#### 6. RECOMMENDATIONS

6.1 Shrinkage.

- 6.1.1 It is recognized that fabrics having a varying degree of shrinkage are used in the general production of men's work trousers. Since it is not practical to set up measurements for trousers made from fabrics of every degree of shrinkage, the industry has adopted measurements applicable to fabrics having not more than 1 percent residual shrinkage as determined by appropriate test methods for shrinkage in Commercial Standard 59–44, Textiles—Testing and Reporting, as issued by the United States Department of Commerce.
- 6.1.2 In view of the above fact, it is recommended that manufacturers using unshrunk fabrics or fabrics having a residual shrinkage of more than 1 percent make proper shrinkage allowance.

6.2 Identification.

6.2.1 In order to assure the purchaser that he is receiving garments which comply with standard measurements, it is recommended that men's work trousers 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 (with proper allowance for shrinkage) <sup>2</sup> are in accordance with Commercial Standard CS166–50, as developed by industry and the trade under the procedure of the Commodity Standards Division and issued by the U. S. Department of Commerce.

Or, more briefly—

Size (with proper allowance for shrinkage) <sup>2</sup> conforms to CS166-50, as developed by industry and the trade, and issued by the U. S. Department of Commerce.

#### 7. EFFECTIVE DATE

7.1 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 May 30, 1950.

Edwin W. Ely, Chief, Commodity Standards Division.

<sup>&</sup>lt;sup>2</sup> The words in parentheses are to be included when applicable.

# HISTORY OF PROJECT

On March 15, 1949, following the development of a tentative draft based on size data submitted by representative manufacturers, the International Association of Garment Manufacturers requested the cooperation of the National Bureau of Standards looking to the establishment of a commercial standard on size measurements for men's work trousers.

The proposed commercial standard was then sent to representative manufacturers, distributors, and users for further comment. Following suitable adjustment in the light of the comments received, and with the unqualified endorsement by a number of interested organiza-

tions, no public hearing was believed necessary.

Accordingly, the recommended commercial standard on size measurements for men's work trousers was submitted to those concerned for written acceptance on September 6, 1949. Having received acceptances in writing estimated to represent a satisfactory majority, announcement was issued on March 30, 1950 that the standard, designated CS166-50, would become effective for new production from May 30, 1950.

Project Manager: L. R. Gilbert, Commodity Standards Division,

Office of Industry and Commerce.

Technical Adviser: R. S. Cleveland, Organic and Fibrous Materials Division, National Bureau of Standards.

#### STANDING COMMITTEE

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. Each organization nominated its own representative. Comment concerning the standard and suggestions for revision may be addressed to any member of the committee or to the Commodity Standards Division, Office of Industry and Commerce, United States Department of Commerce, which acts as secretary for the committee.

Jules Goldstein (chairman), International Association of Garment Manufac-

turers, 347 Fifth Avenue, New York, N. Y.
J. E. Doran, Oberman & Co., 40 Worth Street, New York, N. Y.
Fred Pruter, Pacific Coast Garment Manufacturers, San Francisco, Calif.
MILTON A. RADKE, C. P. Brown Manufacturing Co., 217 West Third Street, Des Moines, Iowa.

ROBERT CHAPMAN, Ely & Walker Dry Goods Co., St. Louis, Mo.
MANNING T. JONES, Reliance Manufacturing Co., 212 West Monroe Street,
Chicago, Ill.

Morris Michael, Jr., Happ Bros. Co., Macon, Ga.

Louis Rothschild, National Association of Retail Clothiers & Furnishers, Washington, D. C.

Washington, D. C.
C. G. Peterson, Butler Bros., 516 West 34th Street, New York, N. Y.
Norman Hilfman, National Department Stores, 112 West 38th Street, New York, N. Y. (representing National Retail Dry Goods Association).
Herman Spiegel, The Hecht Co., Washington, D. C.
C. V. Lavery, Independent Wholesale Dry Goods Association, Inc., 56 Worth Street, New York, N. Y. (representing Wholesale Dry Goods Institute).
Preston B. Bergin, American Retail Federation, 1627 K Street NW., Washington, D. C.

ington, D. C.

MRS. MARGARET H. KINGSBURY, United States Department of the Interior, Washington, D. C.

MRS. CHARLOTTE PAYNE, National Council of Women of the United States, 501

Madison Avenue, New York, N. Y.

MRS. ERNEST H. DANIEL, Broad Branch and Grant Roads NW., Washington,

D. C. (representing General Federation of Women's Clubs).

Date \_\_\_\_\_

#### 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.

Commodity Standards Division,

Office of Industry and Commerce,									
United States Department of Commerce, Washington 25, D. C.									
Gentlemen:									
We believe that the Commercial Standard 166-50 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 work trousers.									
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									
\ <u></u>									
<del></del>									
(Kindly typewrite or print the following lines)									
Name and title of above officer									
Organization									
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									
¹ 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 produc-

tion, 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 of the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and

publication.

#### ACCEPTORS

The organizations listed below have individually accepted this standard for use as far as practicable in the production, distribution, testing, or purchase of men's work trousers. In accepting the standard, they reserved the right to depart therefrom 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)

American Retail Federation, Washington, D. C. General Federation of Women's Clubs, Washington,

Wholesale Dry Goods Association, Independent

Inc., New York, N. Y.
National Association of Retail Clothiers and Furnishers, Washington, D. C.

National Retail Dry Goods Association, New York, N. Y.
Pacific Coast Garment Manufacturers, San Francisco, Calif.

Coads Institute, The, Inc., New

Wholesale Dry Goods Institute, The, Inc., New York, N. Y.

#### FIRMS AND OTHER INTERESTS

Aalfs-Baker Manufacturing Co., Sioux City, Iowa. Abramson Clothing Co., Rice Lake, Wis. (General support.)

Akron Dry Goods Co., The, Akron, Ohio. (General support.)

support.)
Allen Manufacturing Co., The, Denver, Colo.
Allen Overall Co., Charlotte, N. C.
Altoona Factories, Inc., Altoona, Pa.
American Overall Co., San Antonio, Tex.
Anderson Bros. Consolidated Co's., Inc., Danville,

Anderson Bros. Consonaated Cos., Inc., Danvine, Va.
Anvil Brand, Inc., High Point, N. C.
Appleman Manufacturing Co., Omaha, Nebr.
Atlas Overall Co., Philadelphia, Pa.
Bamberger, L., & Co., Newark, N. J.
Bartel, Adam H., Co., Richmond, Ind.
Bean, C. W., & Son, Pacolet, S. C.
Berry Garment Manufacturers, Columbus, Kans.
Bilt-Well Manufacturing Co., Boston, Mass.
Black Manufacturing Co., Beattle, Wash.
Blue Bell, Inc., New York, N. Y.
Bonck, J. H., Co., Inc., Philadelphia, Pa.
Blue Bell, Inc., New York, N. Y.
Bonck, J. H., Co., Inc., New Orleans, La.
Boyer-Campbell Co., Detroit, Mich.
Bresse's Oneonta Department Store, Inc., Oneonta,
N. Y.
Brody, F., & Sons Co., Des Moines, Iowa.
Brotman's Men's Wear Stores, Inc., Chicago, Ill.
Brown, C. P., Manufacturing Co., Des Moines,
Iowa. Va.

Iowa.
Brown, L. S., Manufacturing Co., Des Moines, Iowa.
Brown, L. S., Manufacturing Co., Atlanta, Ga.
Brownstein-Louis Co., Los Angeles, Calif.
Buffums', Long Beach, Calif.
Buffums', Long Beach, Calif.
Burk & Co., Nashville, Tenn.
Burk Fried & Co., Baltimore, Md.
Butler Bros., Chicago, Ill.
California Manufacturing Co., Oakland, Calif.
Carwood Manufacturing Co., Winder, Ga.
Central Cooperative Wholesale, Superior, Wis.
Central of Georgia Railway Co., Savannah, Ga.
Chain Department Stores, Roslindale, Mass.
Chicago Department of Welfare, Chicago, Ill.
(General support.)
Cleveland Overall Co., Cleveland, Ohio.
Clifton Manufacturing Co., Waco, Tex.
Columbia River Mercantile Co., Longview, Wash.
Commercial Uniform Factories, Kankakee, Ill.
Cones, C. B., Manufacturing Co., The, Lynchburg, Va.

Conro Manufacturing Co., Inc., Dallas, Tex. Consolidated Garment Manufacturing Co., Altamont, Ill.

mont, III.
Consolidated Pants Co., Hammonton, N. J.
Dainty Duck Uniform Co., New York, N. Y.
Day's Tailor-D Clothing, Inc., Tacoma, Wash.
Diamond-Feinstein Mercantile Co., St. Louis, Mo.
Dichter, Max, Inc., Boston, Mass.

Tex

District of Columbia, Department of Corrections, Lorton, Va.

District of Columbia, Department of Corrections, Lorton, Va. Dunn Products, Chicago, Ill.
Eastern-Columbia, Inc., Los Angeles, Calif.
Easton, D. A., Co., San Francisco, Calif.
Eckerling Bros., Chicago, Ill.
Edwards, E. W., & Son, Syracuse, N. Y.
Elder Manufacturing Co., St. Louis, Mo.
Elk Brand Shirt & Overall Co., Hopkinsville, Ky.
Elman, Samuel, Co., Inc., Syracuse, N. Y.
Ely & Walker Dry Goods Co., St. Louis, Mo.
Enterprise Stores, Inc., Boston, Mass.
Erlanger Dry Goods Co., The, Canton, Ohio.
Feldman's, Inc., Baltimore, Md.
Finck, W. M., & Co., Detroit, Mich.
Fitz Overall Co., The, Atchison, Kans.
Florida State University, Department of Clothing and Textiles, Tallahassee, Fla.
Freeland Manufacturing Co., Freeland, Pa.
Gable, Wm. F., Co., Altoona, Pa.
Grant, W. T., Co., New York, N. Y.
H & B Pants Co., Boston, Mass.
Hamilton Carhartt Overall Co., Inc., Detroit, Mich.
Happ Bros. Co., Macon, Ga.
Hartley, J. M., & Son Co., Fairmont, W. Va.
Hartmann-Schneider Co., Johnstown, Pa.
Hatch Textile Research, New York, N. Y.
Hildreth, A. G., Co., Worcester, Mass.
Hornik, M., & Co., Charleston, S. C.
Howard Stores Co., Brooklyn, N. Y.
Hyman, Edward, Co., Los Angeles, Calif.
Industrial By-Products & Research Co., Philadelphila, Pa.
Industrial Garment Manufacturing Co., Cleveland,

phia, Pa Industrial Garment Manufacturing Co., Cleveland,

Ohio. Industrial Overall Service, Dallas, Tex. Johnson & Co., St. Peter, Minn.

Johnston & Larimer, Inc., The, Wichita, Kans. Kahn Manufacturing Co., Inc., Mobile, Ala. Kalamazoo, Mich. Kalamazoo, Mich. Kann, S., Sons Co., Washington, D. C. Kaufmann Department Stores, Pittsburgh, Pa. Kaufmans, Inc., San Antonio, Tex. Keller's Department Store, Liberty, N. Y. Klinkerfues Bros. Manufacturing Co., St. Paul, Minn Keller's Department Store, Liberty, N. Y.
Klinkerfuse Bros. Manufacturing Co., St. Paul,
Minn.
Kriegel, I., Brooklyn, N. Y.
Kugelman's, Woodsville, N. H.
Lang, Harry, Manufacturing Co., Des Moines, Iowa.
Lankford, T. S., & Sons, Abilene, Tex.
Leinbach, J. G., Co., Inc., The, Reading, Pa.
Liberty Trouser & Overall Co., Birmingham, Ala.
Lion Uniform Co., Dayton, Ohio.
Loeb, Marcus, & Co., Inc., Atlanta, Ga.
Loyal Manufacturing Co., Inc., South Boston, Mass.
Mabley & Carew Co., Cincinnati, Ohio.
Maison Blanche Co., New Orleans, La.
Markson Bros., Boston, Mass.
McBratney's, Monrovia, Calif.
McDonald, B. F., Co., Los Angeles, Calif.
Melrose Hospital Uniform Co., Inc., Brooklyn, N.Y.
Mendenhall-Graham Co., Duluth, Minn.
Meyers & Son Manufacturing Co., Madison, Ind.
Milburn Co., Detroit, Mich.
Miller Bros., Houston, Tex.
Miller & Paine, Inc., Lincoln, Nebr.
Modelr & Son, Chicago, Ill.
Moore, B. F., & Co., Boston, Mass.
Moeller & Son, Chicago, Ill.
Moore, B. F., & Co., Newport, Vt.
Moyer Manufacturing Co., The, Youngstown, Ohio.
N & W Industries, Inc., Lynchburg, Va.
Namm's Department Store, Brooklyn, N. Y.
New England Overall Co., Inc., Boston, Mass.
New England Pants Co., Willimantic, Conn. (General support.)
New Jersey, State of, State Use Division, Trenton, New Jersey, State of, State Use Division, Trenton, N. J. Northwestern Garment Factory, Chicago, Ill. Notelman Bros., Portland, Oreg.
Oberman & Co., Jefferson City, Mo.
Oregon Textile Mills, Portland, Oreg.
Patzig Testing Laboratories, Des Moines, Iowa.
Perfect Jacket Manufacturing, Inc., Philadelphia,

Pa.
Polsky, A., Co., The, Akron, Ohio.
Pool, Carl, Manufacturing Co., San Antonio, Tex.
Pool Manufacturing Co., Sherman, Tex.
Price, M., New York, N. Y.
Pyke Manufacturing Co., Salt Lake City, Utah.
Red Diamond Clothing Co., St. Louis, Mo.
Reed Bros., Inc., Tupelo, Miss.
Reed's, Jacob, Sons, Philadelphia, Pa.
Reliable Clothing Manufacturing Inc., New York,
N. Y. Reliance Manufacturing Co., Chicago, Ill. Rice Lake Furnishing Goods Co., Rice Lake, Wis.

(General support.)

Rice-Stix, Inc., St. Louis, Mo. Rich's, Inc., Atlanta, Ga. Riverside Manufacturing Co., Moultrie, Ga. Riverside Manufacturing Co., Moultrie, Ga. Rombro Bros., Inc., Baltimore, Md. Rome Bros., Inc., Baltimore, Md. Rome Manufacturing Co., Rome, Ga. Safety Clothing & Equipment Co., Cleveland, Ohio. Salant & Salant, Inc., New York, N. Y. Salkin & Linoff, Inc., Minneapolis, Minn. Sawyer-Barker Co., Portland, Maine. Schramm & Schmieg Co., Burlington, Iowa. Schudson, Charles, Inc., Milwaukee, Wis. Scranton Dry Goods Co., Scranton, Pa. Seattle Woolen Co., Seattle, Wash. Seminole Manufacturing Co., Columbus, Miss. Sheldon Lasky Co., Dallas, Tex. Siecloff Manufacturing Co., Inc., Lexington, N. C. Silver Manufacturing Co., Chicago, Ill. Sinkin, N., San Antonio, Tex. Sledge Manufacturing Co., Tyler, Tex. Smith Bros. Manufacturing Co., Kansas City, Mo. Snower Manufacturing Co., Kansas City, Mo. Southern Manufacturing Co., Nashville, Tenn. Spiegel, Inc., Chicago, Ill. Southern Manufacturing Co., Nashvine, Tenn. Spiegel, Inc., Chicago, Ill. Stahl-Urban & Co., Brookhaven, Miss. Standard Garments, Inc., Baltimore, Md. Standard Linen Co., Inc., The, Seattle, Wash. Steiner & Lobman Dry Goods Co., Montgomery, Ala. Sunshine Clothing Manufacturing Co., San Antonio, Tex.

Tex.
Tennessee Overall Co., Inc., Tullahoma, Tenn.
Texas Technological College, Division of Home
Economics, Lubbock, Tex.
Topps Manufacturing Co., Rochester, Ind.
Union Manufacturing Co., Los Angeles, Calif.
U. S. Mail Order Co., St. Paul, Minn.
U. S. Testing Co., Inc., Hoboken, N. J.
Unitog Manufacturing Co., Kansas City, Mo.
Van Wert Manufacturing Co., The, Van Wert,
Obio

Ohio. Warshal's Sporting Goods Co., Seattle, Wash. Washington Manufacturing Co., The, Huntington,

W. Va. Welch-Cook-Beals Co., Cedar Rapids, Iowa

Williamson-Dickie Manufacturing Co., Fort Worth,

Tex.

Tex.

Wirk Garment Corp., Ligonier, Ind.

Woolf, H., & Co., Inc., Chicago, Ill.

Work Clothes Headquarters Corp., New York,

N. Y.

Lighton Sales Co., Linden, N. J.

Lighton Sales Co., Linden, N. J.

Work Uniform Sales Co., Linden, N. J. Zion's Cooperative Mercantile Institution, Salt Lake City, Utah.

#### UNITED STATES GOVERNMENT

Agriculture, United States Department of, Division of Purchase, Sales and Traffic, Washington, D. C. Interior, United States Department of, Washington,

#### COMMERCIAL STANDARDS

CS No.

0-40. Commercial standards and their value to business (third edition)

Clinical thermometers (third edition).

2-30. Mopsticks.
3-40. Stoddard solvent (third edition).

3-40. Stoddard solvent (third edition).
4-29. Staple porcelain (all-clay) plumbing fixtures.
5-46. Pipe nipples; brass, copper, steel and wroughtiron (second edition).
6-31. Wroughtiron 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.
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tion). 12-48. Fuel oils (sixth edition)

12-45. Puer ons (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).

CS No.

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).
20-49. Vitreous china plumbing fixtures (fifth 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 CS 24-43.

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. (Withdrawn).

CS No.

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. 35-49. Hardwood plywood (fourth edition). 36-33. Fourdrinier wire cloth (second edition).

37–31. Steel bone plates and screws. 38–32. Hospital rubber sheeting.

38-32. Hospital Tuber Sheets 39-37. (Withdrawn). 40-32. Surgeons' rubber gloves. 41-32. Surgeons' latex gloves.

42-49. Structural fiber insulating board (fourth edition).

43-32. Grading of sulphonated oils.

43-32. Grading of surphonaced ons.
44-32. Apple wraps.
45-48. Douglas fir plywood (eighth edition).
46-49. Hosiery lengths and sizes (fourth edition).
47-34. Marking of gold-filled and rolled-gold-plate articles other than watchcases.
48-40. Domestic burners for Pennsylvania anthracite

(underfeed 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 combina-tion with gold.
52-35. Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze). Colors and finishes for cast stone.

53-35. Colors and misnes for cast stone.
54-35. Mattresses for hospitals.
55-35. Mattresses for institutions.
56-49. Oak flooring (third 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 (overall edition).
58-36. Woven elastic fabrics for use in overalls (overall edition).

all elastic webbing) 59-44. Textiles—testing and reporting (fourth edition)

60-48. Hardwood dimension lumber (second edition)

61-37. Wood-slat venetian blinds. Colors for kitchen accessories 62-38.

63-38. Colors for bathroom accessories.

64-37. Walnut veneers

-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.

Marking articles made of karat gold.

68-38. Liquid hypochlorite disinfectant, deodorant, and germicide.
Pine oil disinfectant. 69-38

70-41. Phenolic disinfectant henolic disinfectant (emulsifying type) (second edition) (published with CS71-41).

(second edition) (published with CS/1-41).
71-41. Phenolic disinfectant (soluble type) (second edition) (published with CS70-41).
72-38. Houshold 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

79-40. Blown, trawil, 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 (ofter market). laws (after market).

CS No.

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.

90-49. Power cranes and shovels

91-41. Factory-fitted Douglas fir entrance doors.

92-41. Cedar, cypress and redwood tank stock lumher 93-50. Portable electric drills (exclusive of high

frequency) (second edition). 94-41. Calking lead.

94-41. Calking leau.
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.
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98-43. Basakin-grameled steel utensils (third edi-

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).
104-49. Warm-air furnaces equipped with vaporizing-type oil burners (third edition).
105-48. Mineral wool insulation for low temperatures (second edition).
106-44. Boys' pajama sizes (woven fabrics) (second edition).
107-45. (Withdown)

107–45. (Withdrawn). 108–43. Treading automobile and truck tires.

109-44. Solid-fuel-burning forced-air furnaces.

110-43. Tire repairs—vulcanized (passenger, truck, and bus tires).

111-43. Earthenware (vitreous-glazed) plumbing fixtures.

2-43. Homogeneous fiber wallboard.

112-43. Homogeneous noet wantooard.
113-44. Oil-burning floor furnaces equipped with vaporizing pot-type burners.
114-43. Hospital sheeting for mattress protection.
115-44. Porcelain-enameled tanks for domestic use.
116-44. Bituminized-fibre drain and sewer pipe.

117-49. Mineral wool insulation for heated industrial equipment (second edition)

118-44. Marking of jewelry and novelties of silver. (E)119-45. Dial indicators (for linear measurements) 120-48. Standard stock ponderosa pine doors (third

121-45. Women's slip sizes (woven fabrics). 122-49. Western softwood plywood (second edition). 123-49. Grading of diamond powder (second edition).

(E)124-45.1 Master disks.

(E)124-45. Master usass. 125-47. Prefabricated homes (second edition). 126-45. Tank mounted air compressors.

127-45. Self-contained mechanically refrigerated drinking water coolers.

128-49. Men's sport shirt sizes—woven fabrics (other than those marked with regular neckband sizes) (second edition).

129-47. Materials for safety wearing apparel (second edition).

Color materials for art education in schools. 131-46. Industrial mineral wool products, all types-

testing and reporting.

132–46. Hardware cloth. 133–46. Woven wire netting. 133-46.

134-46. Cast aluminum cooking utensils (metal composition).

135-46. Men's shirt sizes (exclusive of work shirts).

 $<sup>^1</sup>$  Where "(E)" precedes the CS number, it indicates an emergency commercial standard, drafted under war conditions with a view toward early revision.

CS No. 136-46. Blankets for hospitals (wool, and wool and cotton).

137-46. Size measurements for men's and boys' shorts (woven fabrics)

138-49. Insect wire screening (second edition).

133-47. Work gloves.
140-47. Testing and rating convectors.
141-47. Sine bars, blocks, plates, and fixtures.
142-47. Automotive lifts.
143-47. Standard strength and extra strength per-

forated clay pipe. 144-47. Formed metal porcelain enameled sanitary ware.

145-47. Testing and rating hand-fired hot water supply boilers.

146–47. Gowns for hospital patients. 147–47. Colors for molded urea plastics

148-48. Men's circular flat and rib knit rayon underwear.

149-48. Utility type house dress sizes.

150-48. Hot rolled rail steel bars (produced from Tee-section rails).

151-48. Body measurements for the sizing of apparel for infants, babies, toddlers, and children (for the knit underwear industry).

CS No.

152-48. Copper naphthenate wood-preservative

152-48. Copper napathenate wood-preservative (spray, brush, dip application). 153-48. Body measurements for the sizing of apparel for girls (for the knit underwear industry). (Reserved for wire rope.)

apparel (knit underwear, shirts, trousers).
156-49. Colors for polystyrene plastics.
157-49. Ponderosa pine and sugar pine plywood.
155-49. Model forms for girls' apparel

159-49. Sun glass lenses made of ground and polished plate glass, thereafter thermally curved.
160-49. Wood-fiber blanket insulation (for building

construction). 161-49. "Standard grade" hot-dipped ware (coated after fabrication). 162-49. Tufted bedspreads. hot-dipped galvanized

163-49. Standard stock ponderosa pine windows, sash, and screens.
164- . (Reserved for "concrete mixers".)

165-50. Zinc naphthenate wood-preservative (spray,

brush, dip application) 166-50. Size measurements for men's work trousers. 167-50. Automotive and general service copper tube

168-50. Polystyrene plastic wall tiles, and adhesives for their application.

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 Commodity Standards Division, Office of Industry and Commerce, United States Department of Commerce, Washington 25. D. C.