U.S. Department of Commerce (DoC) National Institute of Standards and Technology-NIST (formerly National Bureau of Standards-NBS) Office of Standards Services

Body Measurements for the Sizing of Apparel

The commercial standard (CS) and products standards (PS) on the body measurements for the sizing of apparel for the following: Infants, Babies, Toddlers and Children (CS151-50); Boys (PS36-70); Young Men (PS45-71); Girls (PS54-72); and Women (PS42-70) maintained by NBS under the Voluntary Product Standards (VPS) Program were withdrawn. This was in accordance with the procedures announced on January 20, 1983 by the U.S. Department of Commerce (DoC) to withdraw these standards after sponsorship was assumed by the private industry sector.

The American Society for Testing and Materials (ASTM) is developing standards on sizing of apparel. In October 1982, ASTM established Subcommittee DI3,55 on Body Measurement and Apparel Sizes within Technical Committee D13 on Textiles to take over the work previously handled by the U.S. Department of Commerce, National Bureau of Standards (NBS).

For assistance on related or additional standards (see page 2) under the jurisdiction of ASTM Subcommittee D13.55 - Body Measurement for Apparel Sizing and/or copies, please contact:

> American Society for Testing and Materials (renamed ASTM International) 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959, USA Telephone: (610) 832-9500; Information Center (610) 832-9550 ASTM Fax: (610) 832-9555

Internet: http://www.astm.org (click on Standards, Technical Committees, etc.)

Technical Committee ASTM D13 on Textiles

Staff Manager: Maxie Topping (mtopping@astm.org) Telephone: (610) 832-9737; Fax: (610) 832-9666

Technical information and questions, contact:

Ms. Sirvart Mellian Chairperson, Subcommittee ASTM DI3.55 U.S. Natick Clothing and Textile Research Facility 43 Boyd Street, Watertown, Massachusetts 02172, USA Telephone: (508) 233-4I33; Fax: (508) 233-4783

The following organization may provide additional information sources on the subject, contact: American Apparel Manufacturers Association and the Footwear Industries of America (now the American Apparel and Footwear Association-AAFA), 1601 North Kent Street, Suite 1200, Arlington, Virginia 22209, USA Telephone: (800) 520-2262 (ext. 1034-Publications Dept.);

(703) 524-1864 (ext.1034-Publications Dept.); Fax: (703) 522-6741.

The activity on body-size standards began in the late 1940's under the Department of Commerce with NBS serving as a coordinator and point of contact for copies of the documents. The VPS body-size standards were developed by committees made up of textile manufacturers, designers, and retailers, and based on measurements obtained from the Department of Agriculture. The Mail Order Association provided the support for the body-size standards.

6/2002

<u>Listed below are various standards under the jurisdiction of ASTM Subcommittee D13.55:</u>

D4910-99, Standard Tables of Body Measurements for Infants, Sizes 0 to 24

D5219-99, Standard Terminology Relating to Body Dimensions for Apparel Sizing

D5585-95 (2001), Standard Table of Body Measurements for Adult Female Misses Figure Type, Sizes 2-20

D5586-95, Standard Tables of Body Measurements for Women Aged 55 and Older (All Figure Types)

D5826-00, Standard Tables of Body Measurements for Children, Sizes 2 to 6x/7

D6192-98, Standard Tables of Body Measurements for Girls, Sizes 7 to 16

D6240-98, Standard Tables of Body Measurements for Men Sizes Thirty-Four to Sixty (34 to 60) Regular

D6458-99, Standard Tables of Body Measurements for Boys, Sizes 8 to 14 Slim and 8 to 20 Regular

Department of Defense-DOD:

HDBK-743A-1991, Anthropometry of U.S. Military Personnel (Metric)

MIL-STD-984A-1994, Size Labeling for Women's Uniform Clothing, Provisions for

inidinational Marke/ Research (IMR) Reparts

veports are original studies of growth export markets for selected U.S. industries. They are prepared on the spot, in the country of research, by market consultants under contract to the U.S. Department of Commerce or by the U.S. Foreign Commercial Service. The reports reflect the opinions and view of he surveyed country's end users. importers agents, distributors and covernment officials. Fees for such aports are between \$50 and \$100, depending on length of the report. Stephen B. Strauss, Deputy Assistant Secretally for Trade Information and Analysis. FR Doc. 63-1565 Filed 1-19-63: 6:45

National Bureau of Standards

SILLING CODE \$510-25-M

Status Report on Voluntary Product Standards

AGENCY: National Bureau of Standards, Commerce.

ACTION: Development, maintenance, and withdrawal of certain voluntary standards.

SUPPLEMENTARY INFORMATION: On August 30, 1982, the Department of Commerce (Department) announced in the Federal Register (47 FR 38171) the status of 26 standards classified as voluntary standards. The announcement was made in accordance with the revised "Procedures for the **Development of Voluntary Product** Standards" (15 CFR Part 10).

The August 30, 1982, notice specified the retention of specific standards for fixed periods of time. The updated status of all existing voluntary standards is indicated below.

The following Voluntary Product Standards will continue to be maintained by the Department:

Standard and Proponent Organization

PS 1-74 "Construction and Industrial Plywood", American Plywood Association

PS 20-70 "American Softwood Lumber Standard", American Lumber Standards Committee

PS 73-77 "Carbonated Soft Drink Bottles". Glass Packaging Institute

The Department has agreed to sponsor the development of a Voluntary Product Standard for the production of carbonated soft drinks in glass bottles, which was requested by the National Soft Drink Association. It has been determined that this standards project meets the six requirements for

Department sponsorship stated in § 10.0(b) of the mentioned Procedures.

The following standards will be retained by the Department until January 20, 1984, to permit the orderly transfer of sponsorship of such standards from the Department to the identified organizations.

PS 56-73 "Structural Glued Laminated Timber", American Institute of Timber Construction

PS 67-76 "Marking of Gold Filled and Rolled Gold Plate Articles Other Than Watchcases", Jewelers Vigilance Committee

PS 68-76 "Marking of Articles Made of Silver in Combination with Gold". Jewelers Vigilance Committee

PS 69-76 "Marking of Articles Made Wholly or in Part of Platinum" Jewelers Vigilance Committee

PS 70-76 "Marking of Articles Made of Karat Gold", Jewelers Vigilance Committee

PS 71-76 "Marking of Jewelry and Novelties

of Silver", Jewelers Vigilance Committee PS 72-76 "Toy Safety", American Society for Testing and Materials

In accordance with § 10.13 of the mentioned Procedures, notice is hereby given of the withdrawal of the following standards. This action is taken in furtherance of the Department's announced intentions as set forth in the August 30, 1982, notice to withdraw these standards. The effective date for the withdrawal of the standards will be March 21, 1988 This withdrawal action terminates the authority to refer to these standards as voluntary standards developed under the Department of Commerce procedures. The organizations listed below have assumed responsibility for the standards.

PS 36-70 "Body Measurements for the Sizing of Boys' Apparel", American Society for Testing and Materials

PS 42-70 "Body Measurements for the Sizing of Women's Patterns and Apparei", American Society for Testing and Materials

"Body Measurements for the PS 45-71 Sizing of Apparel for Young Men (Students)", American Society for Testing and Materials

PS 51-71 "Hardwood and Decorative Plywood", Hardwood Plywood Manufacturers Association

PS 54-72 "Body Measurements for the Sizing of Girls' Apparel", American Society for Testing and Materials

PS 63-75 "Latex Foam Mattresses for Hospitals", American Society for Testing and Materials

PS 66-75 "Safety Requirements for Home Playground Equipment", American Society for Testing and Materials
CS 151-50 "Body Measurements for the

Sizing of Apparel for Infants. Babies. Toddlers and Children (for the Knit

Underwear Industry)", American Society for Testing and Materials

FOR FURTHER INFORMATION CONTACT: Karl G. Newell, Jr., Office of Product Standards Policy, National Bureau of Standards, Washington, D.C. 20234, Telephone: (301) 921-2368.

Dated: January 6, 1983. Ernest Ambler,

Director.

IFR Doc. 83-927 Filed 1-19-83; 8:45 amj. BILLING CODE 3510-13-M

Office of the Secretary

President's Private Sector Survey on Cost\Control; Open Meeting

AGENCY: Office of the Secretary. Commerce.

ACTION\\Notice of Public megting of the Executive Committee of the President's Private Sector Survey on Cost Control.

SUMMARY: The President's Private Sector Survey on Cost Control was established by the President pursuant to Executive Order 12369 of June 30, 1982, and extended by Executive Order 12398 of December 31, 1982. The Executive Committee of the Survey is chartered by the Department of Commerce as a public advisory committee in accord with the Federal Advisory Committee Act.

The purpose of the President's Private Sector Survey on Cost Control is to conduct a private sector survey on cost control in the Federal Government and to advise the President, the Secretary of Commerce, and other Executive agency heads with respect to improving managment and feducing costs.

Time and Place

February 4, 1983 at 11\00 a.m. The meeting will take place at the U.S. Department of Commerce Auditorium. First Floor, Herbert C. Hoover Building. 14th Street and Constitution Avenue. N.W., Washington, D.C. 20230.

Agenda

(1) Receive a status report on activities of the President's Private Sector Survey.

(2) Establish a Subcommittee of the Executive Committee. The purposes of the Subcommittee are: (i) To review the recommendations submitted, including task force reports and public comments, and (f) determine which recommendations should be made to the President and Departments and Agencies.

SUPPLEMENTARY INFORMATION: Th acdomplish the President's objective that the survey be funded, to the



NBS Voluntary Product Standard

PS 36-70



Body Measurements for the Sizing of Boys' Apparel

U.S.
DEPARTMENT
OF
COMMERCE
National
Bureau
of Standards

A Voluntary Standard Developed by Producers, Distributors, and Users With the Cooperation of the National Bureau of Standards UNITED STATES DEPARTMENT OF COMMERCE . Maurice H. Stans, Secretary

NATIONAL BUREAU OF STANDARDS . Lewis M. Branscomb, Director

Voluntary Product Standard PS 36-70

Body Measurements for the Sizing of Boys' Apparel

Technical Standards Coordinator: Charles W. Devereux, II

Abstract

This Voluntary Product Standard covers standard size designations, size classifications, and body measurements for the sizing of boys' apparel. The standard includes sections on applications of the system, recommended methods of identification, methods of measuring, and clothing allowances. The measurements given in this standard are body, not garment, measurements.

Key words: Apparel, boys'; body measurements, boys'; pattern sizes, boys'; size designations, boys'; span charts, boys' sizing.

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Nat. Bur. Stand. (U.S.) Prod. Stand. 36-70, 24 pages (Dec. 1971) CODEN: XNPSA

Contents

		Paye
ī.	Purpose	1
2.	Scope and Classification	1
	2.1. Scope	1
	2.2. Classification	1
	2.3. Size Designations and Ranges	1
	2.3.1. Height	1
	2.3.2. Girth	1
	2.3.3. Size Range	1
	2.4. Body Measurements	1
	2.5. Grading	1
3.	Application	1
4.	Tables of Size Ranges and Corresponding Measurements	1
5.	Identification	5
6.	Effective Date	5
7.	History of Project	5
8.	Standing Committee	5
9.	Acceptors	6
\p p	pendix A—Methods of Measuring the Body	8
\pp	endix B—Clothing Allowances	11
App	pendix C—Chest-Waist Measurements and Drops	12
l pp	pendix D—Sizing Grades	13
חם \	endix E—Span Chart	19

VOLUNTARY PRODUCT STANDARDS

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Voluntary Product Standards are standards developed under procedures established by the Department of Commerce (15 CFR Part 10, as amended, May 28, 1970). The standards may include (1) dimensional requirements for standard sizes and types of various products, (2) technical requirements, and (3) methods of testing, grading, and marking. The objective of a Voluntary Product Standard is to establish requirements which are in accordance with the principal demands of the industry and, at the same time, are not contrary to the public interest.

Development of a VOLUNTARY PRODUCT STANDARD

The Office of Engineering Standards Services of the National Bureau of Standards has been assigned by the Department of Commerce the responsibility to work closely with scientific and trade associations and organizations, business firms, testing laboratories, and other appropriate groups to develop Voluntary Product Standards. The Bureau has the following role in the development process: It (1) provides editorial assistance in the preparation of the standard; (2) supplies such assistance and review as is required to assure the technical soundness of the standard; (3) acts as an unbiased coordinator in the development of the standard; (4) sees that the standard is representative of the views of producers, distributors, and users or consumers; (5) seeks satisfactory adjustment of valid points of disagreement; (6) determines the compliance with the criteria established in the Department's procedures cited above; and (7) publishes the standard.

Industry customarily (1) initiates and participates in the development of a standard; (2) provides technical counsel on a standard; and (3) promotes the use of, and support for, the standard. (A group interested in developing a Voluntary Product Standard may submit a written request to the Office of Engineering Standards Services, National Bureau of Standards, Washington, D.C. 20234.)

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A draft of a proposed standard is developed in consultation with interested trade groups. Subsequently, a Standard Review Committee is established to review the proposed standard. The committee, appropriately balanced, includes qualified representatives of producers, distributors, and users or consumers of the product being standardized. When the committee approves a proposal, copies are distributed for industry consideration and acceptance. When the acceptances show general industry agreement, and when there is no substantive objection deemed valid by the Bureau, the Bureau announces approval of the Voluntary Product Standard and proceeds with its publication.

Use of a VOLUNTARY PRODUCT STANDARD

The adoption and use of a Voluntary Product Standard is completely voluntary. Voluntary Product Standards have been used most effectively in conjunction with legal documents such as sales contracts, purchase orders, and building codes. When a standard is made part of such a document, compliance with the standard is enforceable by the purchaser or the seller along with other provisions of the document.

Voluntary Product Standards are useful and helpful to purchasers, manufacturers, and distributors. Purchasers may order products that comply with Voluntary Product Standards and determine for themselves that their requirements are met. Manufacturers and distributors may refer to the standards in sales catalogs, advertising, invoices, and labels on their product. Commercial inspection and testing programs may also be employed, together with grade labels and certificates assuring compliance, to promote even greater public confidence. Such assurance of compliance promotes better understanding between purchasers and sellers.

Body Measurements for the Sizing of Boys' Apparel

Effective October 10, 1970 (See Section 6.)

(This Voluntary Product Standard, initiated by the Mail Order Association of America, has been developed under the Procedures for the Development of Voluntary Product Standards, published by the U.S. Department of Commerce, as a revision of CS 155-50, Body Measurements for the Sizing of Boys' Apparel. See Section 7. History of Project, for further information.)

1. PURPOSE

The purpose of this Voluntary Product Standard is to establish standard size designations and definitions for the guidance of those engaged in producing, distributing, or specifying boys' apparel and patterns. It is also intended to provide sales clerks and purchasers with a means of associating standard size designations with boys' body types so that the best fit may be obtained irrespective of price, type of garment, or by whom produced.

2. SCOPE AND CLASSIFICATION

- 2.1. Scope-This Voluntary Product Standard covers standard size designations and body measurements for the sizing of boys' apparel. The Standard also covers:
 - a. Application of the system (see section 3).
 - b. Recommended methods of identification (see section 5).
 - c. Methods of measuring (see appendix A).
 - d. Clothing allowances (see appendix B).
 - e. Chest-waist measurements and drops (see appendix C).
 - f. Sizing grades for regulars, huskys, and slims (see appendix D).
 - g. Suggested span charts for regulars, huskys, and slims (see appendix E).
- 2.2. Classification—This Standard contains the following three sizing classifications:
 a. Boys' "Regulars"
 b. Boys' "Slims"

 - c. Boys' "Huskys"
- 2.3. Size designations and ranges—The sizes are designated by numbers which identify a specific set of body measurements (see tables 2, 3, and 4). The sizes do not identify ages.
- 2.3.1. Height—The height of the boy (in his stocking feet) is the primary guide to size. The size designation is directly related to height and is not affected by girth (i.e., a boy 54 inches (137.16 cm) tall is a size 10 in all classifications, irrespective of his girth).

- 2.3.2. Girth-The girth of the boy is the secondary guide to size. He may be a "Slim," "Regular," or "Husky," depending on his waist and chest girths, which vary with each classification.
- 2.3.3. Size range—The size range for each classification is given in table 1.

TABLE 1. Size ranges

Classification	Size Range
Boys' Regulars	2 to 24 6 to 24
Boys' Slims Boys' Huskys	6 to 24

- 2.4. Body measurements-Thirty different body measurements are provided for all boys' sizes above size 5. For sizes 2 to 5 where the body measurement data are less extensive, only 23 measurements are provided (see table 2).
- 2.5. Grading-A guide to grading has been included in appendix D. The difference between similar body measurements of consecutive sizes within a classification is called the grade.

3. APPLICATION

The measurements given herein are applicable to:

- a. Sizing or grading of garment patterns.
- b. Preparing specifications for apparel and model forms.
- c. Coordinating body measurements of boys with classifications and size designations for their apparel.
- d. Studying the marketing aspects of apparel sizing.

4. TABLES OF SIZE RANGES AND CORRESPONDING MEASUREMENTS

The size designations and corresponding body measurements are given in tables 2 to 4.1

¹ These tables were developed from the U.S. Department of Agriculture data used in United States Department of Agriculture Miscellaneous Publication No. 366.

Body measurements for boys' REGULARS * TABLE 2.

Size (number)	24	60	+	2	•	-	•		10	=	12	13	7	16	16	17	18	19	20	21	22 2	23 b 24	4
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Dushes in table indicate lack of reliable data, 1 pound equals 0.45 kilogram, 1 Inch equals 2.54 centimeters.
 Measurement(s) extrapolated from United States Department of Agriculture survey data.

Body measurements for boys' SLIMS" TABLE 3.

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Size (number)	ý	-	∞	6	10	=	12	51	7	16	91	17	82	62	20	21	22	23 b	24 b
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I pound equals 0.45 kilogram, I inch equals 2.54 continutors.
 Alt measurements for these sizes extrapolated from United States Department of Agriculture survey data.
 14. inch pattern grade per size between sizes marked with this footnote.
 14. inch pattern grade per size between sizes marked with this footnote.

Body measurements for boys' HUSKYS. TABLE 4.

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Waist to hips, along side of body.	749 P	ž	, ,	% %	\$, ,	Z :	-	*	? ;	2 2	. 5	20.02		3	32	32 %	32%	33,7
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a I pound equals 0.45 kilogram, I inch equals 2.54 centimeters.

b All measurements for these sizes extrapolated from United States Department of Agricuiture survey data.

c b,g-inch pattern grade per size between sizes marked with this footnote.

d 3,g-inch pattern grade per size between sizes marked with this footnote.

5. IDENTIFICATION

In order that purchasers may identify products conforming to all requirements of this Voluntary Product Standard, producers and distributors may include a statement of compliance in conjunction with their name and address on product labels, invoices, sales literature, and the like. The following statement is suggested when sufficient space is available:

This apparel is sized in accordance with Voluntary Product Standard PS 36-70, developed cooperatively with the industry and published by the National Bureau of Standards under the Procedures for the Development of Voluntary Product Standards of the U.S. Department of Commerce. Full responsibility for the conformance of this product to the standard is assumed by (name and address of producer or distributor).

The following abbreviated statement is suggested when available space on labels is insufficient for the full statement:

Sized in accordance with Voluntary Product Standard PS 36-70, (name and address of producer or distributor).

6. EFFECTIVE DATE

The effective date of this Voluntary Product Standard is the date upon which reference to the Standard may be made by producers, distributors, users and consumers, and other interested parties. Compliance by producers with all of the requirements of this Voluntary Product Standard may not actually occur until some time after its effective date. Products shall not be represented as conforming to this Voluntary Product Standard until such time as all requirements established in the Standard are met. The effective date of this Standard is October 10, 1970.

7. HISTORY OF PROJECT

Commercial Standard CS 155-50, Body Measurements for the Sizing of Boys' Apparel, was developed at the request of the Mail Order Association of America and was published in 1950.

At the request of the Mail Order Association of America in May 1968, a revision of CS 155-50 was developed to provide size definitions for more of the boys' population. The revision defines not only the regular sizes but includes two additional classifications, slim and husky. All references to trouser lengths have been deleted. Span charts and grading charts were added as appendixes.

With the approval of the reconstituted Standing Committee, copies of the recommended Standard designated TS 5502c were distributed June 9, 1970, to the industry to determine acceptability. An analysis of the responses indicated a consensus among producers, distributors, and users as defined in the published procedures.

The new edition of the Standard was designated Voluntary Product Standard PS 36-70, Body Measurements for the Sizing of Boys' Apparel, and became effective on October 10, 1970.

Technical Standards Coordinator:

Charles W. Devereux, II, Office of Engineering Standards Services, National Bureau of Standards, Washington, D.C. 20234

8. STANDING COMMITTEE

The individuals whose names are listed below constitute the membership of the Standing Committee for this Standard. The function of the committee is to review all proposed revisions and amendments in order to keep this Standard up to date. Comments concerning this Standard and suggestions for its revision may be addressed to any member of the committee or to the Office of Engineering Standards Services, National Bureau of Standards, Washington, D.C. 20234, which acts as secretary for the committee.

Representing Producers

David P. Trachtenburg, (Chairman), Chips'n Twigs, 112 West 34th Street, New York, New York 10010

Charles Lentnek. Elder Manufacturing Company, P. O. Box 273, St. Louis, Missouri 63166

Frances Alsen, Wolf Form Company, Inc., 140 Fifth Avenue, New York, New York 10011 Ivan Moser, Tex-Togs, Inc., P. O. Box 1021, El Paso, Texas 79901

J. M. Niver, Blue Bell, Inc., 335 Church Street, Greensboro, North Carolina 27402

Representing Distributors

Joan Brinkman, Jewel Home Shopping Service, Jewel Park, Barrington, Illinois 60010

James M. Considine, Aldens, Inc., 5000 West Roosevelt Road, Chicago, Illinois 60607

Shirley Trosk, 350 Fifth Avenue, Room 4616, New York, New York 10001

Moe Sklar, Ida's Department Store, 5601 Georgia Avenue, NW., Washington, D.C. 20005

John O'Sullivan, A. H. Benoits', 278 Middle Street, Portland, Maine 04111

Representing Consumer-Users

Mrs. John Stochaj, 65 Riceman Road, Berkley Heights, New Jersey 07922

Mattie Waymer, Morris Brown College, Atlanta, Georgia 30314

Mrs. Walter Varney Magee, General Federation of Women's Clubs, 1734 N Street, NW., Washington, D.C. 20036

Mrs. Mark Valory, 1234 Valory Lane, Lafayette, California 94549

Doris J. Brockway, School of Home Economics, University of Washington, Seattle, Washington 98105

Representing General Interest

Rowena Dowlen, Textiles and Clothing Laboratory, Southern Marketing and Nutrition Research Development Division, Agricultural Research Service, U.S. Department of Agriculture, 2005 Lake Avenue, Knoxville, Tennessee 37916

9. ACCEPTORS

The producers, distributors, users, and others listed below have individually indicated in writing their acceptance of this Voluntary Product Standard prior to its publication. The acceptors have indicated their intention to use this Standard as far as practicable but reserve the right to depart from it when necessary. The list is published to show the extent of recorded public support for this Standard.

ASSOCIATIONS

Boys' and Young Men's Apparel Buyers Association, New York, New York

Communications Workers of America, Washington, D.C. Consumers League of New Jersey, Berkeley Heights, New Jersey

Mail Order Association of America, Chicago, Illinois Menswear Retailers of America, Washington, D.C. National Consumers League, Washington, D.C.

PRODUCERS

A-1 Kotzin Company, Los Angeles, California Aberdeen Sportswear, Inc., New York, New York Adler Pants Company, New York, New York Ainsbrooke, New York, New York Allison Manufacturing Company, Inc., Allentown,

Pennsylvania

Anson Pajama Company, Dushore, Pennsylvania Anthracite Overall Manufacturing Company, Inc., Scranton, Pennsylvania

Ark Manufacturing Company, Inc., Los Angeles, California

Arkay Outerwear, Division of Arkay Pants Company, Fall River, Massachusetts Atlas Underwear Corporation, Piqua, Ohio B. V. D. Boya' Pajamas, New York, New York Barouch Brothers, Inc., New York, New York Barrow Manufacturing Company, Winder, Georgia Bauer, Eddie, Inc., Seattle, Washington Berkley Fashions, Inc., Chicago, Illinois Berkley Shirt Company, New York, New York Blue Bell, Inc., Greensboro, North Carolina Blue Jeans, Jonbil Corporation, New York, New York Branson Manufacturing Company, Jay Zee, Inc., Branson, Missouri

Breier of Amsterdam, Inc., Amsterdam, New York Butwin Sportswear Company, St. Paul, Minnesota Calvin Clothing Corporation, New Bedford, Massachuzetta

Cameo Sportswear, Woods Cross, Utah Campus Sweater & Sportswear Company, Cleveland, Ohio

Cape Cod Sportswear, Inc., New York, New York Carolina Underwear Company, Inc., Thomasville, North Carolina

Carter & Churchill Company, Inc., West Lebanon, New Hampshire

Carter, H. W., & Sons, Inc., Lebanon, New Hampshire Champion Products, Inc., Rochester, New York Chesterfield Manufacturing Corporation, Chesterfield, South Carolina

Chester Sportswear, Chester, South Carolina
Chips 'n Twigs, Philadelphia, Pennsylvania
Cinderella Knitting Mills, Inc., New York, New York
Day's Sportswear, Inc., Tacoma, Washington
Dunmar Robes, Ltd., New York, New York
Elder Manufacturing Company, St. Louis, Missouri
Finesilver Manufacturing Company, San Antonio,
Texas

Finkelstein, J. & Sons, Woonsocket, Rhode Island Genesco, Inc., Nashville, Tennessee Glaser Enterprises, Inc., New York, New York Good Lad Company, Philadelphia, Pennsylvania Gordon & Ferguson Company, St. Paul, Minnesota Grinchuck, J., Company, Braidwood, Illinois Hansley, Inc., Paris, Kentucky Hansley Industries, New York, New York Hellgate Industries, Inc., Missoula, Montana Hill Company, Inc., Fort Smith, Arkansas H. I. S. for Boys, New York, New York Hortex, Inc., El Paso, Texas Hubbard Company, Bremen, Georgia Ideal Outerware Company, Inc., New York, New York Imperial Reading, Lynchburg, Virginia Jablow, I., & Company, Inc., Philadelphia, Pennsylvania Janville Manufacturing Compay, Inc., New York, New

Jay Garment Company, Portland, Indiana
JEB, Inc., Los Angeles, California
Jem Manufacturing Corporation, Rockville Centre, Long
Island, New York
Kazoo, Inc., Kalamazoo, Michigan
Kellwood Company, St. Louis, Missouri

Lee, H. D., Company, Inc., Shawnee Mission, Kansas

Leesons Clothes, Inc., New York, New York Levi Strauss & Company, San Francisco, California Lion Knitting Mills, Cleveland, Ohio MacPerth Sportswear, Cincinnati, Ohio Marks, Irving, Nite-Wear Corporation, Ambassador Pajama Corporation, New York, New York Marshall Ray Corporation, Troy, New York Matsil, Harry, & Sons, New York, New York McMurray Slacks, New York, New York Mighty-Mac, Inc., Gloucester, Massachusetts Miller, Henry L., & Son, Inc., Port Carbon, Pennsyl-Vania. Modern Jacket Company, St. Louis, Missouri Morell, Barry, Shirt Company, Division Morell Industries, New York, New York Neumann, D. H., Ltd., New York, New York Nurses Uniform Company, Inc., Baltimore, Maryland Oklee Manufacturing Company, Oklee, Minnesota Palm Island of Miami, Inc., Miami, Florida Pilgrim Sportswear, Inc., New York, New York Prior Company, The, Denver, Colorado Roanoke Mills, Inc., Roanoke, Virginia Rob Roy Company, Inc., Cambridge, Maryland Rough Rider, Inc., Napa, California Royal Manufacturing Company, Inc., New York, New York Ruddock Manufacturing Company, El Paso, Texas Russell Mills, Inc., Alexander City, Alabama Salant & Salant, Inc., New York, New York Salmar Sportswear, Inc., Los Angeles, California Santone Industries, Inc., San Antonio, Texas Seegull Manufacturing Company, Jenkintown, Pennsylvania Shirtees, Inc., New York, New York Simon & Mogilner, Birmingham, Alabama Spartans Industries, Inc., Sparta, Tennessee Standard Knitting Mills, Inc., Knoxville, Tennessee Standard Romper Company, Inc., New York, New York Sturdi-Wear Clothes, Inc., Scranton, Pennsylvania Sunset Sportswear, San Francisco, California Sweet-Orr & Company, Inc., New York, New York Thompson, Les, Associates, Athens, Georgia Union Underwear Company, Inc., Bowling Green, Kentucky United Knitwear, Cincinnati, Ohio Warmflash, Louis, Associates, Inc., New York, New Weathercraft Manufacturing, Inc., Farmingdale, New

DISTRIBUTORS

Young Squire, Inc., Mount Olive, North Carolina

Adam, Meldrum & Anderson, Buffalo, New York

Anderson Newcomb Company, Huntington, West Virginia

Ann & Hope Factory Outlet, Inc., Cumberland, Rhode Island

Arkwright, Inc., New York, New York

Aldens, Inc., Chicago, Illinois

Associated Dry Goods Corporation, New York, New Ball Stores, Inc., Muncie, Indiana Beckwith Men's Shop, Winfield, Kansas Benoit, A. H., & Company, Portland, Maine Blackburn Men's Stores, Amarillo, Texas Bond Stores, New York, New York Bon Marche, Lewiston, Idaho Brody, F., & Sons Company, Des Moines, Iowa Butlers Stores, Inc., Biddeford, Maine Carlisle-Allen Department Stores, Ashtabula, Ohio Chambers Bect Company, Inc., Phoenix, Arizona Donaldson's, Minneapolis, Minnesota Dorfman-Pacific Company, Oakland, California Eckles Department Store Company, Inc., Dodge City, Kansas Europa Sport, Inc., New York, New York Feinsteins, Aberdeen, South Dakota Filene, William, & Sons Company, Boston, Massachusetts Furchgott's Jacksonville, Florida Galloway's Inc., Madison, South Dakota Gamble-Skogmo, Inc., Minneapolis, Minnesota Grant, W. T., Company, New York, New York Holmes, Grace, Inc., Ashton, Rhode Island Hovey's Shops Inc., St. Johnsburg, Utah Hutton, A.P., & Company Department Store, Kellogg, Idaho Ida's Department Store, Washington, D.C. Jacobson Stores, Inc., Jackson, Michigan Jewel Direct Marketing, Division of Jewel Companies, Inc., Barrington, Illinois Kassis, Inc., Laramie, Wyoming Kresge, S. S., Company, Detroit, Michigan Krosney, Manny, Inc., New York, New York Leggett Department Store, Lynchburg, Virginia Lipschultz, Irving, Company, San Francisco, California Lynch Corporation, The Manchester, New Hampshire M & G Sportswear, Fall River, Massachusetts Macy, R. H., Company, Inc., New York, New York Miller Brothers, Chattanooga, Tennessee Milwaukee Knit, Inc., Milwaukee, Wisconsin Montgomery Ward & Company, New York, New York Paul's Stores, Inc., Hurley, Wisconsin Peck, B., Company, Lewiston, Maine Penney, J. C., Company, Inc., New York, New York Polsky's, Akron, Ohio Proffitt's Inc., Alcoa, Tennessee Ritz Department Stores, The, Honolulu, Hawaii Roeper, Hanson & Newman Company, Cincinnati, Ohio Sears, Roebuck and Company, Chicago, Illinois Shushan Brothers, New Orleans, Louisiana Spiegel, Inc., Chicago, Illinois Springfoot, Inc., New York, New York Stiefel's Store for Men & Boys, Salina, Kansas Stienmetz Brothers, Inc., New York, New York Van Arsdell's Inc., West St. Paul, Minnesota Vornado, Inc., Hanover, New Jersey Wender's Department Store, Woodstock, Virginia Woodward & Lothrop, Washington, D.C.

Zollingen-Harred, Allentown, Pennsylvania Zussman, H., & Son Company, The, Cincinnati, Ohio

USERS

Clemson University, Clothing Extension Specialist, Clemson, South Carolina

Family Service Center, Syracuse, New York

Georgia, University of, Cooperative Extension Service, Athens, Georgia

Iowa State University Extension Service, Newton. Iowa

Iowa, University of, Textiles & Clothing Department, Iowa City, Iowa

Maryland, University of, Cooperative Extension Service, College Park, Maryland

Michigan State University, Department of Textiles, East Lansing, Michigan

Minnesota, University of, St. Paul, Minnesota

Missouri, University of, Textiles and Clothing Department, Columbia, Missouri

Montana State University, School of Home Economics, Bozeman, Montana

Montgomery Blair High School, Silver Spring, Maryland

Southeastern Louisiana College, Hammond, Louisiana Wayne State University, Detroit, Michigan Winthrop College, Rock Hill, South Carolina Wyoming, University of, Laramie, Wyoming

GENERAL INTEREST

Antioch College, Yellow Springs, Ohio
California Fashion Institute, Los Angeles, California
Consumers' Research, Inc., Washington, New Jersey
Department of General Service, Bureau of Procurement, Washington, D.C.

Department of Property and Supplies, Harrisburg, Pennsylvania

Fashion Institute of Technology, New York, New York Italian Trade Commission, Philadelphia, Pennsylvania Merchandise Research Laboratories, Glenside, Pennsylvania

Office of Consumer Affairs, Mineola, New York Parents' Magazine, New York, New York

FEDERAL GOVERNMENT

U.S. Army Natick Laboratories, Natick, Massachusetts U.S. Department of Agriculture, Knoxville, Tennessee

LOCAL GOVERNMENT

Cooperative Extension Service, Cannelton, Indiana Cooperative Extension Service, Las Vagas, Nevada

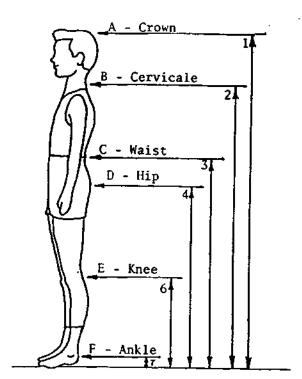


FIGURE 1A. Principal body landmarks.

APPENDIX A-METHODS OF MEASURING THE BODY

1. GENERAL

A1.1. All measurements were taken in centimeters and converted to the nearest 1/8 inch.

A1.2. Principal body landmarks are identified on figure 1A by capital letters—A to F. Body measurements in the Standard are identified on figures 1A to 9A by numbers—1 to 29.

2. PRINCIPAL BODY LANDMARKS

A2.1. Crown-Top of head, A, figure 1A.

A2.2. Cervicale—The prominence on the seventh, or lowest cervicale vertebra at the back of the neck, B, figure 1A, which becomes more prominent when the head is bent forward. (Cervicale height measurements are taken, however, only when the head is in an erect position.)

A2.3. Waist—The lower edge of lower floating rib, located at the side of the body in a line directly below the center of the armpit, C, figure 1A.

A2.4. Hip—The outer bony prominence at the upper end of the thigh bone (the femur), D, figure 1A.

A2.5. Knee—The inner bony prominence at the upper end of the tibia, the larger of the two bones of the leg extending from knee to ankle, E, figure 1A.

A2.6. Ankle—The inner bony prominence of the lower end of the tibia, the larger of the two bones of the leg extending from knee to ankle, F, figure 1A.

METHODS OF MEASURING THE BODY!

A3.1. Vertical measurements—

1-Stature-Measured from crown to soles of feet, figure 1A.

Cervicale height—Measured from cervicale to soles of feet, figure 1A.

3-Waist height-Measured from waist height to soles of feet, figure 1A. This waist height establishes the waist level around the body.

4-Hip height-Measured from hip to

soles of feet, figure 1A.

5-Crotch height-Measured from the midpoint of the crotch to soles of feet. The end of the tape measure (or anthropometer) should be raised until it firmly presses against the flesh of the midpoint of the crotch, figure 2A.

6-Knee height-Measured from knee to

soles of feet, figure 1A.

(

es agains

7-Ankle height-Measured from ankle to soles of feet, figure 1A.

A3.2. Girth measurements—See figure 4A or 5A for garments worn at time of measuring.2

8---Chest-Measured horizontally close up under arms, figure 3A. The measurements should include the lower portion of the shoulder blades.

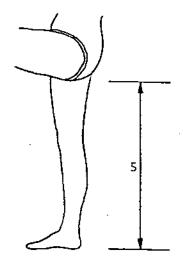


FIGURE 2A. Crotch height.

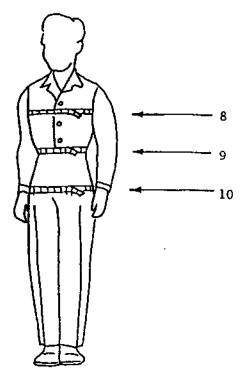


FIGURE 3A. Chest, waist, and hip girths.

9—Waist—Measured horizontally waist height with belt removed, figure 3A.

10-Hip-Measured horizontally at hip

height, figure 3A.

11-Vertical trunk-Measured from a point on the shoulder midway between the neck and the normal armhole line, down the front through the crotch, and up the back to the shoulder point, figure 4A. The measurement should be taken without constriction at the crotch.

12-Total crotch length (girth of crotch) -Measured from waist level at front through the crotch to the waist level at the back, figure 9A.

13—Thigh—Measured horizontally around the upper part of the leg, close up to the crotch, figure 4A.

14-Knee-Measured horizontally around the leg at knee height, figure 4A.

15-Calf-Measured horizontally around the leg at the level of maximum girth, below the knee, figure 4A.

16-Neck base-Measured around the neck, touching the cervicale at the back and the upper borders of the collar bone at the front, and following the curve that would be made by a fine link chain passing over these landmarks, figures 5A and 6A.

More complete information regarding the methods of measuring the body may be obtained from Miscellaneous Publication No. 366 of the U.S. Department of Agriculture.

See appendix B, regarding weights and clothing allowances inclinded in these measurements.

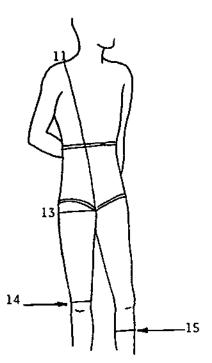


FIGURE 4A. Vertical trunk, thigh, knee, and calf girths.

17—Armscye—Measured from a point at the armhole edge of the shoulder, midway between the acromion and the highest prominence at the lateral end of the collar bone and through the underarm midpoint, figures 5A and 6A.

18—Upper arm—Measured horizontally, when the arms are relaxed, midway between the shoulder and the elbow without constriction, figure 5A.

19—Elbow—With the arm flexed at approximately a 90° angle, measure around the arm over the elbow, figure 5A.

A3.3. Width and length measurements-

20—Shoulder length—Measured along a line corresponding to the customary shoulder line of a garment from the neck base line to the armscye line, figure 5A.

21—Cross-back width—Measured across the back from armscye to armscye, halfway between the cervicale and the bottom of the armscye, figure 6A.

22—Cross-chest width—Measured across the chest from armscye to armscye, halfway between the high shoulder point and the bottom of the armscye, figure 5A.

23-Scye depth-Measured from cervicale

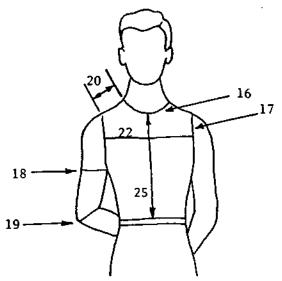


FIGURE 5A. Neck base, armscye, upper arm, and elbow girths; shoulder and collar bone to waist lengths; cross-chest width.

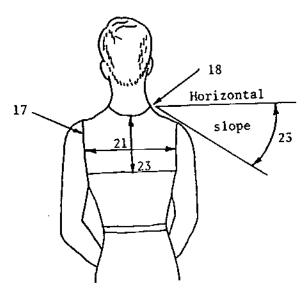


FIGURE 6A. Neck base and armscye girths; shoulder slope; cross-back width; scye depth.

to point at the "center back" where chest line crosses the "center back" line, figure 6A.

24—Cervicale to waist, including curve of spine (posterior waist length)—Measured along the spine from cervicale to waist, figure 9A.

25—Collar bone to waist, along front of body (anterior waist length)—
Measured from upper edge of collar bone to waist, figure 5A.

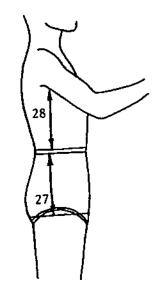


FIGURE 7A. Trunk line waist to hips.

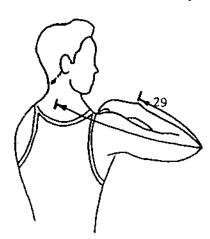


FIGURE 8A. Cervicale to wrist length.

- 26—Trunk line (armscye to waist)—
 Measured from the mid-underarm
 point downward along the side of
 the body to the waist level, figure
 7A.
- 27.—Waist to hips—Measured along the side of the body from the waist level to the mid-hip directly below, figure 7A.
- 28—Shoulder slope (degrees)—Slope in degrees of the shoulder with respect to the horizontal, figure 6A.
- 29—Cervicale to wrist length—Measured from the cervicale, to the wristbone at the back of the hand. The arm should be bent at the elbow and raised so that the measurement can be taken as straight as possible from cervicale to elbow, figure 8A.

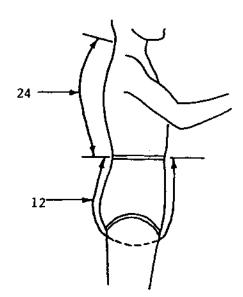


FIGURE 9A. Cervicale to waist and total crotch length.

APPENDIX B-CLOTHING ALLOWANCES

B1.1. Weight—As there is no way to predetermine just what clothing will be worn when the measurements are taken, the weights represented in table 1B were selected and added to the body weights as clothing allowances.

TABLE 1B. Clothing weight allowances for classification by size

Sies sangs	Weigh	t for classific	cation
Size range	Slim	Regular	Husky
	0.	0:°	0Z*
Sizes 2 to 6	12	14	16
Sizes 7 to 10	16	18	20 26
Sizes 11 to 16	22	24	
Sizes 17 to 24	24	26	28

¹ ounce equals 28.35 grams.

B1.2. Girth—Similarly, adjustments had to be made in some of the girth measurements. These allowances were arbitrarily selected and uniformly added to the body measurements given in table 2B.

Table 2B. Clothing girth allowances for all sizes

Girth	Allowance for all sizes of all classifications
	(inches)*
Chest	1 %
Waist.	1_
Hip	34
Vertical trunk girth	1 3 §

¹ inch equals 2.54 centimeters.

The "nude" or "skin" measurements of the body may be obtained by deducting these clothing allowances from the body measurement data in tables 2 to 4.

APPENDIX C .-- CHEST-WAIST MEASUREMENTS AND DROPS'

KEY MEASUREMENT DATA BY CLASSIFICATIONS .

Size	Stature		CHEST		Ì		WA	ist		
	0-400	Slims	Regs.	Huskys	Sli	ms	Reg	ılars	Hu	skys
			į		Meas't	Drop	Meas't	Drop	Meas't	Drop
No.	in	in	in	in	in	in	in	in	in	in
6	46	231/4	25	26	201/2	31/4	221/2	21/2	24 1/2	13%
7	48	24 1/2	251/4	2634	21	31/2	23	21/4	25.	13/4
8	50	251/4	261/2	271/2	21 1/2	31/4	231/2	3	251/2	2
9	52	26	271/4	281/4	22	4	24	31/4	26	21/4
10	54	263/4	28	29	221/2	434	24 1/2	31/2	261/2	2 1/2
11	56	2734	2834	30	23	43/2	25	33/4	27	3
12	58	281/2	291/2	31	231/2	5	251/2	4	2734	81/2
13	5914	291/4	301/2	32	24	51/4	26	43/2	28	4
14	61	30	31 1/2	33	24 1/2	51/2	261/2	5	29	4
15	621/2	303/4	321/4	34	25	51/4	27	51/4	291/4	41/2
16	64	31 1/2	33	35	251/2	6	271/2	51/2	30	5
17	65	321/4	33¾	351/4	26	61/4	28	53/4	301/2	51/4
18	66	33	34 1/2	361/2	261/2	61/2	281/2	6	31	51/2
19	€7	331/4	351/4	371/4	27	63/	29	61/4	311/2	53/4
20	68	341/2	36	38	271/2	7	291/2	61/2	32	6
21	69	3514	361/4	383/4	28	71%	30	63/4	321/2	61/4
22	70	36	3714	39 1/2	281/2	71/2	301/4	7	33	61/2
-2 3	71	363/4	381/4	401/4	29	73%	31	73/4	331/2	63/
•24	72	3714	39	41	291/2	8	31 1/2	71/2	34	7

^{*} Drop is the arithmetic difference between the chest and waist measurements.

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b 1 inch equals 2.54 centimeters.

Measurement (s) extrapolated from United States Department of Agriculture survey data.

APPENDIX D. SIZING GRADES Boys' Regulars (R)

					Grade Between 6R-7R					Grade Between 11R- 12R	Grade Between 12R- 13R
				GIR'	ГН МЕА	SUREM	ENTS (i	nches)			
Chest	. 1	1	1	1	3/4	3/4	*	*	34	*	1
Waist	1/2	1/2	1/2	1/2	1/2	1/2	3/2	1/2	1/2	3/2	1/2
Hip	1	ı	1	1	1/4	*	3/4	3/4	1 2	1	1
Vertical trunk	2	21/2	2	2	11/2	11/2	11/4	11/2	11/2	11/2	11/2
Neck base	3/8	1/4	3/6	3∕6	1/2	3/4	1/2	1/2	1/2 1/4		
Armscye	1,4	1/2	1/2	1/2	<i>¾</i>	** **	3/8			¥.	*
Upper arm	- 72 1/8	<i>7</i> 2	/2 1/4	1/2 1/4	78 14			1/2	1/2	1/2	1/2
Elbow	78	74	71	74	74 1/4	14 14	1/4	14	14	<i>X</i>	1/4
Thigh	3/2	<u></u>	1/				1 /4	14	*	34	<i>X</i>
Colf	72		⅓	1/2	5/E	5/8	3/4	1/2	1/2	34	1/2
Calf, mar	_	_	_	_	3/8	14	3/6	×	1/8	<i>Y</i>	1/8
Knee	_	_		_	%	1 ∕8	3/8	¾	1∕8	1/8	3/8
WID	INA HT	LENG	TH (inc	hes) Al	ND SLO	PE (deg	rees) M	EASUR	EMENT.	S	
Shoulder length	1/4	⅓,	1/4	1/8	1/8	1/8	1/4	1/4	1/8	1/8	1/8
Shoulder slope	_				0	0	0	0	0	0	0
Cross back width		₹8	⅓ 8	3∕6	1/2	3/8	1/2	3/8	*	⅓ 8	34
Cross chest width		_	_		3/8	<i>X</i>	3∕6	14	3∕8	1/4	3/6
Crotch length, total		1	1/4	3/4	3/4	3/4	34	1/4	1/4	3/4	34
Cervicale to wrist	3/8	3∕8	3∕8	3/8	1	1	1	1	1	1	1/8
				VERT!	CAL ME	EASURE	MENTS	(inches)			
Head & neck length	3/8	*	1/	17	1/	17	17	1/	1/		17
Cervicale height		234	1 /4	3 ∕8	1/8 1.7/	1/4	176	1/8	⅓8 1.7∕	1/8	14
Seye depth along	1.78	471	23/4	25ڇ	1 1/8	134	1 1/8	1 1/8	1 1/8	11/8	11/8
	17	1/	17	17	17	17	1,	1/	1,	17	17
spine Trunk line along	¼	1/4	1/4	1/4	1/8	1/4	1/8	1/4	1/8	1/4	1/8
							• .				
body	_	_		_	14	1/8	¼	⅓	14	⅓	14
spine	1/2	1/2	1/2	3/6	3/8	3/8	3∕ε	⅓	3/8	3∕6	⅓ 6
Neck to waist, along	-	,,	,.	/ 0	/ 0	/ 0	70	70	/5	/ 0	, e
front of body	_	_	_	_	1/4	3/8	1/4	18	1/4	3∕8	34
Waist height		21/4	21/4	2	11/2	11/2	1 1/2	1 14	11/2	1 1/2	1
Waist to hips, along	~74	-74	-74	_	* 72	1/2	4 72	+ 772	<i>7</i> 2	* 72	•
side of body	1/2	3.5	3/8	3 6	1/8	1/4	1.6	14	1/8	1/4	14
Crotch height		75 156	78 15/8	7 <u>8</u> 1½	78 11/4	11/4	11/4	11/4	11/4	11/4	33
Knee height		1 78	178	1 2 2 2 5	1 74 5/8	1 1/4 5/8	1 % 5/5	1 % 5 ś	174 5/4	1 /4 5/5	74 13
served neithness	L	£	1	2.5	78	7'R	78	2.5	7/8	7/5	- ,

APPENDIX O. SIZING GRADES (Continued) Boys' Regulars (R) (Continued)

:	Grade Between 13R- 14R	Grade Between 14R- 15R	Grade Between 15R – 16R		Grade Between 17R- 18R	Grade Between 18R– 19R	Grade Between 19R- 20R	Grade Between 20R- 21R	Grade Between 21R- 22R	Grade Between 22R- 23R	Grade Between 23R- 24R
			GIRTH	MEASU	REMEN	ITS (inc	hes)				
Chest	1	3/4	3/4	3/4	3/4	3/	3/4	3/4	34	3⁄4	*
Waist		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Hip		1	1	1	56	5 /8	%	1/4	1/6	5/8	3/8
Vertical trunk		11/2	11/2	11/4	11/4	1	1	1	1	1	1
Neck base		3/8	3/8	·/ ₃	%	3/8	- 34	3/8	1/2	3∕8	34
Armscye		1/2	3/4	3/8	%	1/6	½	3%	3/8	3/8	3/8
Upper arm		× × ×	14	<i>'</i> ''	1/4	1/4	14	*	14	14	1/4
Elbow		1/4	<i>x</i>	<i>'</i> ''	×	×	×	×	1/4	34	74
Thigh	_	1/2	1/2	% %	<i>¾</i>	3/8	3/8	<i>%</i>	*	1/8	3/6
Calf, max		<i>y</i>	¥	1,4	×	ý,	í,	1/4	34	1/4	1/4
Knee		× ×	1/4	<i>x</i>	74	×	î,	1/4	74	3/4	1/4
Milee	76	74	74	/4	/*						
<u> </u>			-			<u>-</u>	grees) M			_	⅓
Shoulder length		1/8	⅓8	. ⅓ 8	1/8	1/8	1/8	,½	<i>⅓</i> r 0	₀ ¹ ⁄s	0 28
Shoulder slope		0	0	0	0	0	0	0	_	-	34
Cross back width		*	1/4	1/4	1/4	34	1/4	× ×	1/	14	
Cross chest width		1/5	1/4	3/6	1/4	3/8	× 14	1/8	1/4	₹8 1.7	14 14
Crotch length, total		1/4	3/4	1/2	3/2	1/2	1/2	1/2	1/2	1/2	72 1/4
Cervicale to wrist	. 14	3/4	3/4	1/2	1/2	1/2	3/2	1/2	1/2	3/2	72
				VERT	ICAL M	EASURE	EMENTS	(inches)		-	
Head & neck length	. 1/4	1/6	⅓				1/4	0	1/8	0	<i>y</i> ₈
Cervicale height		13/8	13/8	7/8	1/8	1	1/8	1	7∕8	I	7∕8
Seve depth along	,,	-/5	-, •	, •							
spine	. 14	V6	1/4	1/8	1/4	1/8	1/4	1/8	1/4	1/8	1/4
Trunk line along	- /*	/ 6	/ •	,,		, •					
body	- }s	1/4	1/8	1/4	1/8	1/4	1/8	1/4	1/5	34	1/8
Cervicale to waist, along curve of	- ,,	74	/ 5	/-	,•	~		, ,			
spine	. %	₹	⅓8	3/8	3/8	1/2	⅓8	1/2	3∕≦	1/2	34
Neck to waist, along	. 1/5	1/4	3∕8	14	1/4	3/8	3/8	1 ∕8	34	3/8	3/5
front of body		i 74	1 78	74 1/2	1/2	× ×	1/2	1/2	1/2	1/2	3/2
Waist height	. т	1	1	72	72	72	72	/2	/ 1	7.	
							• • •		1/		1/
Waist to hips, along	1/	1/	1/	1/	1/	1/	1/2	V-	79	/0	74
side of body	_	1/8 1/	1/4 3/	1/8 3/	<i>1</i> /4	1/8 2/2	½ ¾	⅓ 3∕a	14 1/4	1/8 3/8	- X - %
	- 3,	1/8 1/4 1/2	1/4 3/4 1/2	⅓ ⅓s ⅓	1/4 1/8 1/4	1/8 1/8 1/4	% % %	% % %	% % %	% 3/8 5/4	** ** **

APPENDIX D. SIZING GRADES (Continued) Boys' Slims (S)

	Grade Between 6S-7S	Grade Between 7S-8S		Grade Between 98–108	Grade Between 10S- 11S	Grade Between 11S- 12S	Grade Between 12S- 13S	Grade Between 13S- 14S	Grade Between 14S- 15S	Grade Betwee 15S- 16S
				CIRTH 1	MEASUR	EMENT	S (inche	s)		
Chest	. ¾	3/4	*	*	3/4	1	34	*	3/4	3/4
Waist	1/2	3/2	1/2	1/2	1/2	1/2	1/2	1/2	3/2	1/2
Hip		1/4	*	1	1	1	%	3/4	1	1
Vertical trunk		1 1/2	1	11/2	11/2	11/2	11/2	11/2	11/2	11/2
Neck base		3/8	*	*	3/6	3/8	34	3/4	36	3/4
Armscye		3/8	%	9%	3/8	14	1/2	3/8	%	3/
		× ×	×	<i>1</i> %	÷.	×	×	î,	ý,	1
Upper arm				<i>x</i>	<i>1</i> 4	<i>x</i>	û	î,	14	í,
Elbo₩		*	<i>1</i> 4	1/2	74 1/2	74 1/2	<i>7</i> 4	1/2	1/2 1/2	1/2
Thigh		3/2	1/2							1/4
Calf, max		14	1/4	1/4	1/4	1/4	*	×	*	×
Knee	. 14	14	¾	14	×	14	1/4	×	*	1/4
Shoulder length Shoulder slope Cross back width Cross chest width Crotch length, total Cervicale to wrist length	. 0 . 1/6 . 1/4	1/8 0 1/4 1/4 1	% 0 % % 34 1	1/4 0 1/4 1/4 1/4 1	1/8 0 1/6 1/6 1/4 1	% 0 % % % 1	% % % % %	% 0 14 14 14 14 14	% % % % %	% % % %
-			VE	RTICAL	MEAS	UREME	NTS (inc	hes)		
Head & neck length	. <u>}</u> ;	ж	1/8	1/8	1/6	⅓	1/8	1/8	1/8	⅓
Cervicale height		11/4	11/4	11%	11%	1 1/8	13/8	13/8	13/8	13/
Scye depth, along spine		1/4	7/6	3/6	1/6	3/6	%	3/6	1/6	1/4
Trunk line, along body		76 1/6	2/6	*/16	1/6	1/16	4	1/16	3/16	1
TIME HEE, STORE DOG!	- >16	716	/16	7}6	/16	~ 10	***	∠10	- 10	
Convincia to maint along							3/	1/	3/6	1.
, -	3/	3/	1/	3.2	3/	3.2				
curve of spine	3/8	3/8	⅓ έ	3∕ 6	₹8	3/8	3/8	3/8	76	78
curve of spine Neck to waist, along front		-								3/6
curve of spine	- \$16	*/6	1/16	1/16	1/16	5/16	1/16	1/16	1/16	*
curve of spine	- \$16	-								
Neck to waist, along front	- \$16	*/6	1/16	1/16	1 1/2	% 1½	% 1	*/s 1	3/16 1	1
curve of spine	. 1½ . 1½	*/6	1/16	1/16	1/6 1/2	% 1½ %	1/16 1 1/16	1 %	⅓6 1 ⅓6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
curve of spine	. 1½ . 1½	%6 1 ½	11/2	1 1/2	1 1/2	% 1½	%6 1 %6 %	% 1 % %	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	** 1 **
curve of spine	. ½6 . 1½ . ½	*/6 1 ½ */6	⅓6 1⅓ ⅓6	1 1/2 1 1/2	1/6 1/2	% 1½ %	1/16 1 1/16	1 %	⅓6 1 ⅓6	1 1

300 C

APPENDIX D. SIZING GRADES (Continued) Boys' Slims (S) (Continued)

	Grade Between 16S-17S	Grade Between 17S-18S	Grade Between 18S–19S	Grade Between 19S–20S	Grade Between 20S-21S	Grade Between 21S-22S	Grade Between 22S–23S	Grade Between 28S-24S
			GIRTH	MEASUR	EMENTS	(inches)		
When the	3/4	<u> </u>	*	*	3⁄4	*	3/4	%
Chest		74 1/2	1/2	1/2	1/2	1/2	1/2	3/2
Waist	1/2		3/4	1/4	34	%	3/4	*
Hip	1/4	*		1 74	1	1	1	1
Vertical trunk	11/2	11/2	1	_	_	_	_	
Neck base	¾	34	3/8	½	*	%	1/8	1 /4
Armscye	1/8	3%	3/8	3/6	1/8	34	1/8	*
Jpper arm	14	1 4	1/4	1/4	14	*	*	*
Elbow	1/4	14	1/4	1/4	14	1/4	*	34
Thigh	1/2	3/2	1/2	3/2	1/2	⅓	1/2	34
Calf max	1/4	1/4	14	×	1/4	14	% .	×
Knee.	1/4	1/4	1/4	3/4	1/4	*	¼	1/4
	~	, ,						
WIDTH AND	LENGT	H (inches)	AND SI	OPE (deg	rees) ME	ASUREM	ENTS	
Shoulder length	1/8	<u>}</u>		1/4	⅓	У	<i>y</i> ₈	<i>1</i> / ₈
Shoulder slope	0	0	0	0	0	0	0	0
Cross back width	1/4	¾	1/4	1/4	*	1/4	1/4	*
Cross chest width	%	1/4	1/6	1/4	%	1/4	1/16	1/4
Crotch length, total		1/2	1/2	1/2	3/2	1/2	1/2	34
Cervicale to wrist length		1/2	1/2	1 /2	1/2	1/2	1/2	3/2
			170 p.m.	AL MEAS		PS (inches)	<u> </u>	
	<u> </u>		VERTIC	AL MEAS	UKEMEN.	ro (menes)		<u> </u>
Head & neck length	1/8	1/8	0	1/8	0	⅓	0	1/1
Cervicale height		· /s	1	3/8	1	1/8	1	74
Scye depth, along spine	1.7	1/8	1/8	1/8	1/8	1/8	1/8	3/
Trunk line, along body	1.7	3,16	1/4	1/6	1/6	1/6	1/6	1/4
· -	/16	-10	· **	- 104		••		
Cervicale to waist, along	37	3/6	1/2	3/8	1/2	3/8	1/2	3/
curve of spine	. 3/5	7/8	73	78	/2	/8		•
Neck to waist, along front of		• .	• /	3/	3∕8	1/4	3/8	1/2
body		1/4	1/8	3/8			1/2	ĵ
Waist beight	. 1/2	1/2	⅓	1/2	1/2	1/2	72	7
Waist to hips, along side of					- 4		.,	4.
body	. %	16	1/6	*16	1/6	3/6	%	*
DOUJ			• /	1.0	3∕8	1/8	34	3/
	. 3/5	3 ∕5	3/8	3∕6	78			
Crotch height Knee height		⅓s ⅓	% 1/4	76 1/4	14	14	, 14 0	ĵ.

APPENDIX D. SIZING GRADES (Continued) Boys' Huskys (H)

	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade
			Between 8H-9H				Between 12H- 13H		Between 14H- 15H	Between 15H- 16H	Between 16H- 17H
		7H-8H		9H- 10H	10H- 11H	11H- 12H		13H- 14H			
				GIRT	H MEA	SUREM	ENTS (ir	nches)			
Chest	. %	1/4	3/4	3/4	1	1	1	1	1	1	3/4
Waist	3/2	1/2	1/2	1/2	⅓	3/2	3/2	1	1/2	3/2	3/2
Hip		1	1	1	1	1	1	1	1	1	1/4
Vertical trunk		11/2	11/2	11/2	11/2	11/2	11/2	11/2	11/2	11/2	13/2
Neck base		1/4	1/4	1/4	×	1/4	34	3/8	*	%	%
Arm scye		7	3/8	7,	1/4	1/2	1/2	3/2	1/2	*	3/2
Upper arm		×	ý,	ű,	4	×	×	3/8	1/8	1/8	3/6
Elbow		14	×	×	%	%	3/4	34	34	×	34
Thigh		% %	×4	%	<i>%</i>	Ŷ,	%	9/2	7,	3/2	3/2
					% %	<i>7</i> 1	%	1/2	1/8	3/8	1/4
Calf, max		1 ∕6	3/8	%							<i>x</i>
Knee	. 3/8	¾	3∕8	¾	%	*	%	⅓	×	14	74
wid:	TH AN	DLENG	TH (in	ches) Al	ND SLO	PE (de	grees) N	EASUR	EMENT	rs .	
Shoulder length	1/8	1/8	⅓		1/8	1/6	3/4	1/4	- ¼	½	⅓
Shoulder slope	. •	ດ໌້	ດ໌	0 "	o´ Č	o´°	o´ Č	o T	0	0	0
Cross back width		5/6	3/6	5/6	1/4	3/6	36	1/4	3/6	5/6	1/4
Cross chest width		5/4	3/6	·/6	1/4	1/4	1/4	3/6	3/6	5/6	1/4
Crotch length, total	•••	3/4	2/4	3/4	1/4	/	*	1/4	%	7	1/4
Cervicale to wrist	74	74	74	74	74	/4	^	74	74	/•	/ *
length	. 1	1	1	1	1	1	*	3/4	3/4	3/4	3/2
<u></u>				VERT	ICAL M	EASURE	MENTS	(inches)			
Head & neck length	1/8	1/4	1/6	⅓ 8	1/8	1/8	⅓8	1/8	1/8	1/8	1/8
Cervicale beight	. 11/8	11/4	1 1/8	1 1/6	1%	1 1/8	1 1/8	1 3/g	11/8	1⅓	1/6
Scye depth, along											
spine	. ½	3/6	1/6	1/6	1/6	1/6	1/6	16	₹/6	16	3/4
Trunk line, along	•	-	•								
body	1/6	1/4	3/6	1/6	1/16	₹⁄6	3/6	3/4	3/6	3/6	3/16
Cervicale to waist, along curve of					- •-	-	-				
spine	1/8	1/8	3/8	3/8	1/8	3/8	3∕6	3∕6	½	3/8	3/6
Neck to waist, along	. /6	7.6	78	/•	,,	, ,	, 4	. •	. •	. •	
front of body	. ÷16	3∕16	5√16	3/16	5/16	3/16	3/6	1/46	¥.	<u>5</u> ∕6	3/6
-					11/2	1 1/2	1	1	1	1	1
Waist height	. 11/2	1 1/2	1 1/2	11/2	1 7/2	1 72	•	•	•	*	-
Waist to hips, along	• •	• .	• •	• -	17	1/	1/	3/	3/	3/16	1/4
side of body		3/16	3/16	3/16	3/6	1/4	3/6	*16	16		3/s
Crotch beight		×	1/4	1/4	1/4	1/4	34	34	¥	3/4	7: 1/4
Knee height		3∕6	3/8	.≯6	_ 5∕8	3/8	1/2	1/2	1/2	1/2	
Ankle height	. 0	0	1/6	0	0	0	1/8	0	0	0	ì

APPENDIX D. SIZING GRADES (Continued)

Boys' Huskys(H) (Continued)

	Grade Between 17H–18H	Grade Between 18H-19H	Grade Between 19H–20H	Grade Between 20H-21H	Grade Between 21H–22H	Grade Between 22H–23H	Grade Between 23H-24F
GI	RTH ME	ASUREME	NTS (inch	es)			
Chest	3/4	- 34	*	3/4	*	%	*
Waist	3/2	⅓	₹2	3⁄2	3/2	3/2	3/2
lip	3/8	5/8	5/8	%	5∕8	5∕8	%
Vertical trunk	1	1	1	1	1	1	1
Neck base	3/8	1/8	3/8	3∕8	3/8	₹8	1/8
Armseve	3/8	1/4	3/8	3/8	3∕8	*	₹
Jpper arm	4	*	*	34	1/4	34	*
	¼	$\widehat{\varkappa}$	74	1/4	1/4	34	34
Elbow	3/8	%	₹8	1/8	1/8	3∕8	%
Thigh	78 1/4	14	ý.	×	×	*	1/4
Cali, max		<i>7</i> 4	×	34	1/4	34	34
Knee	1/4	74	/4		/-		
WIDTH AND LENGTH							
Shoulder length		1/8		⅓ 8	⅓	0 1∕8	⅓ 0
Shoulder slope	0	0	0	0	0	0	0
Shoulder slope	0 ¾	0 ¾	0 14	0 ¾	0 ¾	0 34	0 ¾
Shoulder slope	0 ¼ ¼	0 ¾ ¼	0 ½ %	0 1/4 1/6	0 ¼ ¼	0 ¼ %	0 ¾ %
Shoulder length	0 1/4 1/4 1/2	0 34 54 54 34	0 ½ ½ ½	0 14 16 12	0 34 34 34 32	0 }4 % }4	0 14 14 14 14
Shoulder slope	0 ¼ ¼	0 ¾ ¼	0 ½ %	0 1/4 1/6	0 ¼ ¼	0 ¼ %	0 ¾ %
Shoulder slope	0 % % ½ ½ ½	0 ½ ½ ½ ½	0 ½ ½ ½	0 ¼ ¼ ½ ½	0 34 34 34 32	0 }4 % }4	0 ¾ % ½
Shoulder slope	0 % % % % % % % % RTICAL M	0 ½ ½ ½ ½ MEASURE	0 14 14 14 15 MENTS (in	0 ¼ ¼ ½ ½	0 34 34 34 32	0 }4 % }4	0 % % ½ ½ ½
Shoulder slope	0 % % % ½ ½ % RTICAL N	0 ½ ½ ½ ½ MEASURE:	0 14 14 14 15 18 MENTS (in	0 14 16 12 12 12 nches)	0 14 14 14 14	0 14 16 14 14	0 % % ½ ½ ½
Shoulder slope	0 % % ½ ½ ½ % RTICAL N	0 34 34 34 34 4 MEASURE:	0 14 14 14 15 15 MENTS (in	0 ½4 ½6 ½2 ½2 ½2 nches)	0 ¼ ¼ ½ ½ ½	0	0 % % % ½ ½ ½
Shoulder slope	0 % % ½ ½ ½ % RTICAL N	0 14 14 14 15 16 16 16 16 16 16 16 16 16 16	0 14 14 15 15 16 MENTS (in	0 14 14 12 12 12 12 12 12 12 13 14 15 16 17 18 18 18 18 18 18 18 18 18 18	0 % % ½ ½ ½	0 14 14 14 14 14 14 14 14 14 14 14 14 14	0 % % % % %
Shoulder slope	0 % % ½ ½ ½ % %	0 ½ ½ ½ ½ 1 1 1 ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½	0 14 14 14 15 18 18 18 18 18 18	0	0 % % ½ ½ ½ % %	0 1/4 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2	0 14 14 14 14 14 14 14 14 14 14
Shoulder slope	0 % % ½ ½ ½ % % % %	0 ½ ½ ½ ½ 1 1 ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½	0 14 14 14 15 16 18 18 18 18 18	0	0 % % ½ ½ ½ % %	0 14 14 14 15 0 0 0 16 16 12	0 14 14 14 14 14 14 16 16 16 16 16 16 16 16 16 16 16 16 16
Shoulder slope	0 % % ½ ½ ½ % % % %	0 ½ ½ ½ ½ ½ ½ 1 1 ½ ½ ½ ½ ½ ½	0 14 14 14 15 16 18 18 18 18 18 18 18	0	0 % % ½ ½ ½ % % %	0 % % ½ ½ ½ 0 0 0 % %	0 14 14 14 14 14 14 14 14 14 14 14 14 14
Shoulder slope	0 % % ½ ½ ½ % % % % % %	0 ½ ½ ½ ½ ½ 1 1 ½ ½ ½ ½ ½ ½	0 14 14 14 15 16 18 18 18 18 18 18 18 18 18 18	0 14 14 14 14 14 16 16 16 16 16 16 16 16 16 16	0 14 14 14 14 18 16 16 16 16 16 16 16 16 16 16	0 % % ½ ½ ½ % % ½ ½ %	0 14 14 14 14 14 16 16 16 16 16 16 16 16 16 16 16 16 16
Shoulder slope	0 % % ½ ½ ½ % % % % % %	0 ½ ½ ½ ½ ½ 1 1 1 ½ ½ ½ ½ ½ ½ ½ ½	0 14 14 14 15 16 18 18 18 18 18 18 18 18 18 18	0	0 34 34 34 34 36 36 36 36 36 36 36 36 36 36	0 % % 14 % 14 14 15 0 0 0 % % 14 14 14 14 14 14 14 14 14 14 14 14 14	0 14 14 14 14 14 16 16 16 16 16 16 16 16 16 16 16 16 16
Shoulder slope	0 14 14 14 14 14 16 16 16 16 16 16 16 16 16 16	0 ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½	0 14 14 14 15 18 18 18 18 18 18 18 18 18 18	0	0 34 34 34 34 36 36 36 36 36 36 36 36 36 36	0 14 14 14 14 14 15 0 0 0 14 14 14 14 14 14 14 14 14 14 14 14 14	0 14 14 14 14 14 14 14 14 14 14 14 14 14
Shoulder slope	0 % % ½ ½ ½ % % % % % %	0 ½ ½ ½ ½ ½ 1 1 1 ½ ½ ½ ½ ½ ½ ½ ½	0 14 14 14 15 16 18 18 18 18 18 18 18 18 18 18	0	0 34 34 34 34 36 36 36 36 36 36 36 36 36 36	0 % % 14 % 14 14 15 0 0 0 % % 14 14 14 14 14 14 14 14 14 14 14 14 14	0 14 14 14 14 14 14 14 14 14 14

APPENDIX E. SPAN CHARTI

Boys' Slims (S)

	6	7	8	10	12	14
7-7-1-	44 -461/	47 -481/2	49 -501/2	51 -541/4	55 -581/2	59 -6114
leight	44 -46½ 23½-24	24 -24 1/2	25 -251/2	26 -27	2734-29	2934-3034
Chest	20 -201/2	201/2-21	211/4-22	2234-23	2314-24	2414-25
Vaist	2314-24	24 -24 \(\frac{1}{2} \)	25 -2514	26 -2714	28 -2914	80 -31
Iip						
	16	18	20		24	<u>,. </u>
leight	62 -64 1/2	65 -661/2	67 -681/2	69 -701/2	71 -721/2	
hest	31 -32	321/4-331/2	34 –35	3 5½- 3 6½	37 -38	,
Vaist	2514-26	26 14-2 7	27 <i>5/</i> 2-28	28]4 -29	2914-30	
Hip	3 1 ½-33	331/2-341/2	35 –36	8614-8714	88 -8 9	
		Boys' Regul	ars (R)			
	2	3	4	5	6	7
* * 1.	90 .941/	35 -371/4	38 -401/2	41 -431/2	44 -461/2	47 -481/2
leight	32 -34½	35 -3174 2114-22	22 14-23	2314-24	2414-25	2514-26
Chest	2014-21	201/2-21	21 -211/2	21 1/2-22	22 -221/2	221/4-23
Waist	20 -201/2	21 14-22	221/4-23	231/4-24	2414-25	2514-26
Hip	201/2-21			- -		
	8 .	10	12	14		
Teight	49 -501/2	51 -541/2	55 -581/2	59 -611/2	62 -641/2	65 -6614
hest	2614-27	271/2-281/2	29 -30	30 34-3 2	3214-3314	34 -35
Waist	231/2-24	2412-25	25½-26	26 34-2 7	271/2-28	281/2-29
Hip	261/2-27	271/2-281/2	29 -301/2	31 -3234	33 -341/2	85 -36
	20	22	24			
Height	67 -681/2	69 -701/2	71 -7234			
Chest	351/2-361/2	37 -38	381/2-391/2			
Waist	2912-30	301/4-31	31 1/2-32			
Hip.	361/2-371/2	38 -381/2	39 -40			
		Boys' Husk	eys (H)			
	6	7	8	10	12	14
Height	44 -461/2	47 -481/2	49 -501/2	51 -541/2	55 -581/2	59 -6134
Chest	2516-26	26 -27	271/2-28	2814-2914	30 -311/2	32 -33 1/4
Waist	24 -241/2	24 1/2-25	2514-26	2612-27	271/2-28	281/2-291/2
Hip.	26 -2614	27 -271/2	28 -29	291/2-301/2	31 -321/2	33 -3 5
	16	18	20	22	24	
U simbe	62 -641/2	65 -661/2	67 -681/2	69 -701/2	71 -721/2	
Height	34 -3532	36 -37	371/2-381/2	39 -40	401/2-411/2	
C'nest	30 -3012	301-2-311/2	32 -321/2	33 -331/2	34 -341/2	
Waist	3512-3612	37 -38	381/2-391/2	40 -401/2	41 -42	

This span represents a range of measurements for each size for each key measurement. It is included only to assist the consumer in identifying boys' body types and sizes, and is not a requirement of the standard. I inch equals 2.54 centimeters, I pound equals 0.45 kilograms.

TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance of a Voluntary Product Standard and its significance:

- 1. Enforcement—Voluntary Product Standards contain requirements which are established by mutual consent of those concerned in accordance with the Procedures for the Development of Voluntary Product Standards published by the Department of Commerce (15 CFR Part 10, as amended, May 28, 1970). The standards provide a common basis of understanding among producers, distributors, and users or consumers. The National Bureau of Standards has no regulatory power in the enforcement of the provisions of voluntary standards, but since these standards represent the will of the interested groups as a whole, their provisions soon become established as trade customs and become effective when the standard are referenced in sales contracts, procurement specifications, government regulations, and the like.
- 2. The Responsibility of the Acceptor—The purpose of Voluntary Product Standards is to establish, for specific items, nationally recognized sizes, grades, material requirements, or performance criteria. The benefits that result from these standards will be in direct proportion to general recognition and actual use of the standards. Instances will occur when it may be necessary to deviate from a standard. The signing of an acceptance does not preclude such departures. The acceptor's signature, however, indicates an intention to follow the standard, where practicable, in the production, distribution, or use and consumption of the product in question.

WIFDRAWN

ACCEPTANCE OF VOLUNTARY PRODUCT STANDARD

PS 36-70, BODY MEASUREMENTS FOR THE SIZING OF BOYS' APPAREL

This form properly completed, signed Voluntary Product Standard.	, and returned will show your acceptance of this
	Date
Office of Engineering Standards Services National Bureau of Standards U. S. Department of Commerce Washington, D.C. 20234	3
Gentlemen:	
We are primarily engaged in the follo	wing segment of the industry:
(Please	check only one.)
() Production() Distribution	() Use/consumption() General Interest
	ct Standard constitutes a useful standard of practicable. However, we reserve the right to dvisable.
We understand, of course, that only standard in all respects may be repres	those products which actually conform to the ented as conforming thereto.
Signature of authorized officer	
· (Please type o	or print the following)
Name and title of above officer	
	as it should be listed.)
Street Address	
City, State, and ZIP Code	
(Vote: Sanarata accentances should be	filed for each subsidiary company and affiliate

which is to be listed as an acceptor.)

ut or a line