U. S. DEPARTMENT OF COMMERCE
BUREAU OF STANDARDS

DIAMOND CORE DRILL FITTINGS

COMMERCIAL STANDARD CS17-30

ELIMINATION OF WASTE

Through

SIMPLIFIED COMMERCIAL PRACTICE

Below are described some of the series of publications of the Department of Commerce which deal with various phases of waste elimination.

Simplified Practice Recommendations.

These present in detail the development of programs to eliminate unnecessary variety in sizes, dimensions, styles, and types of over 100 commodities. They also contain lists of associations and individuals who have indicated their intention to adhere to the recommendations. These simplified schedules, as formulated and approved by the industries, are indorsed by the Department of Commerce.

Commercial Standards.

These are developed by various industries under a procedure similar to that of simplified practice recommendations. They are, however, primarily concerned with considerations of grade, quality, and such other characteristics as are outside the scope of dimensional simplification.

American Marine Standards.

These are promulgated by the American Marine Standards Committee, which is controlled by the marine industry and administered as a unit of the division of simplified practice. Their object is to promote economy in construction, equipment, maintenance, and operation of ships. In general, they provide for simplification and improvement of design, interchangeability of parts, and minimum requisites of quality for efficient and safe operation.

Lists of the publications in each of the above series can be obtained by applying to the division of trade standards, Bureau of Standards, Washington, D. C.

DIAMOND CORE DRILL FITTINGS
COMMERCIAL STANDARD CS17–30

Please Note.

After this pamphlet went to press, the Diamond Core Drill Manufacturer's Association modified the tolerances slightly in Tables 2 to 7, inclusive, to improve manufacturing conditions. These modified tolerances will be published at a later date. There has been no change in the nominal dimensions as published nor in the general plan to obtain interchangeability.

U. S. DEPARTMENT OF COMMERCE
R. P. LAMONT, Secretary
BUREAU OF STANDARDS
GEORGE K. BURGESS, Director

DIAMOND CORE DRILL FITTINGS

COMMERCIAL STANDARD CS17–30

[ISSUED FEBRUARY 15, 1930]

Effective Date For New Production, January 1, 1930
For Clearance of Existing Stock, July 1, 1930

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1930

For sale by the Superintendent of Documents, Washington, D. C. - - Price 10 cents

CONTENTS

ACCEPTORS

ASSOCIATIONS

Diamond Core Drill Manufacturers' Association.
National Association of Purchasing Agents.

FIRMS

Acker Drill Co., Scranton, Pa.
Alden Coal Co., Alden Station, Pa.
Allentown Portland Cement Co., Catasauqua, Pa.
Alton, Quincy & Northern Electric Railroad Co., Quincy, Ill.
American Metal Co. of Texas, The, Shafter, Tex.
American Silica Corporation, Ottawa, Ill.
American Zinc Co. of Tennessee, Mascot, Tenn.
Arkansas Geological Survey, Little Rock, Ark.
Ash-Howard-Needles & Tammen, Kansas City, Mo.
Atkins Co., S. E., Duluth, Minn.
Baltimore & Ohio Railroad Co., The, Baltimore, Md.
Bath & Co., John, Worcester, Mass.
Baton & Co., Geo. S., Pittsburgh, Pa.
Bennett, Russell H., mining geologist, Minneapolis, Minn.
Best Bros. Keene's Cement Co., The, Medicine Lodge, Kans.
Booth & Flinn (Ltd.), New York, N. Y.
Britania Mining-Smelting Co., Britania Beach, British Columbia, Canada.
Brundage Co., Avery, Chicago, Ill.
Bryson, H. J., Raleigh, N. C.
Bureau of Reclamation, Denver, Colo.
Bureau of Reclamation, Fairfield, Mont.
Bureau of Reclamation, Salt Lake City, Utah.
Calumet & Hecla Consolidated Copper Co., Calumet, Mich.
Canon Reliance Fuel Co., The, Canon City, Colo.
Carter Oil Co., The, Tulsa, Okla.
Central Copper Co. of Arizona, Dos Cabezas, Ariz.
Central Power & Light Co., San Antonio, Tex.
City of New York, armory board, New York, N. Y.
Clark & Krebs (Inc.), Charleston, W. Va.
Cleveland-Cliffs Iron Co., The, Ishpeming, Mich.
Clifford & Son, P. T., Valparaiso, Ind.
Climax Molybdenum Co., Climax, Colo.
Cole & McDonald Exploration Co., Virginia, Minn.
Consolidated Coppermines Corporation, Kimberly, Nev.
Continental Diamond Drilling Co., Los Angeles, Calif.
Continental Oil Co., Ponca City, Okla.
Copper Range Co., Painesdale, Mich.
Cusi Mexicana Mining Co., Cusihuiriachic, Chih., Mexico.
Defiance Coal Co., Gallup, N. Mex.
Denver Machine Shop, Denver, Colo.
Diamond Coal & Coke Co., Diamondville, Wyo.
Diamond Coal Co., The, Albuquerque, N. Mex.
Diamond Drill Contracting Co., Spokane, Wash.
Diamond Drilling Co., San Francisco, Calif.
Dixie Oil Co. (Inc.), Shreveport, La.
Doermann-Roehrer Co., The, Cincinnati, Ohio.
Douk Bros. Coal & Coke Co., St. Louis, Mo.
Drake Drilling Co., A. W., Scranton, Pa.
Eiferd, C. R., Drilling Contractor, Hazleton, Pa.
Engineers & Engineering, Philadelphia, Pa. (in principle).
Garvey Diamond Drilling Co., Charles, Port Henry, N. Y.
Geological Survey Division, Lansing, Mich.
Georgia Marble Co., The, Tate, Ga.
Giles Drilling Corporation, The, New York, N. Y.
Glen Alden Coal Co., Scranton, Pa.
Gypsy Oil Co., Tulsa, Okla.
Harza, L. F., consulting engineer, Chicago, Ill.
Hawley Engineering Corporation, Charles B., Washington, D. C.
Hefferman, Dr. James L., Jellico, Tenn.
Herman, C. Edward, Alton, Ill.
Holway Engineering Co., Tulsa, Okla.
Homestake Mining Co., Lead, S. Dak.
Howell & Co. (Inc.), F. J., Pittston, Pa.
Hudson Coal Co., Carbondale, Pa.

Hydraulic Press Brick Co., St. Louis, Mo.
Indiana Department of Conservation, division of geology, Indianapolis, Ind.
Inland Steel Co., Chicago, Ill.
Intermountain Drilling Co., Salt Lake City, Utah.
Joralemon, Ira B., consulting mining engineer and geologist, San Francisco, Calif.
Kentucky Rock Asphalt Co. (Inc.), Kyrock, Ky.
Kosmos Portland Cement Co., Kosmosdale, Ky.
Lafayette College, Easton, Pa.
Lehigh University, department of mining engineering, Bethlehem, Pa.
Locust Mountain Coal Co., Bethlehem, Pa.
Longyear Co., E. J., Minneapolis, Minn.
Lynch Bros., Seattle, Wash.
Madera Irrigation District, Madera, Calif.
Marion County Coal Co., Centralia, Ill.
Marquette Ore Co., Negaunee, Mich.
Massachusetts Institute of Technology, Cambridge, Mass. (in principle).
Matheny, E. R., contractor, Hanover, N. Mex.
McDonough Drilling Co., John, Carbondale, Pa.
Michigan College of Mining & Technology, Houghton, Mich.
Michigan Drilling Co., Detroit, Mich.
Midwest Exploration Co., Russell, Kans.
Minnesota Power & Light Co., Duluth, Minn.
Mississippi Lime & Material Co., Alton, Ill.
Missouri-Kansas-Texas Railroad Co., St. Louis, Mo.
Montevallo Coal Mining Co., Birmingham, Ala.
Mott Core Drilling Co., Huntington, W. Va.
Mott Machine & Manufacturing Co., Huntington, W. Va.
Nevada Consolidated Copper Co., Chino mines, Hurley, N. Mex.
New Mexico Construction Co., Denver, Colo.
New River Co., The, Mount Hope, W. Va.
Odgers, Ira, diamond drill contractor, Crystal Falls, Mich.
Ohio State University, Columbus, Ohio.
Oklahoma Geological Survey, Norman, Okla.
Old Ben Coal Corporation, Chicago, Ill.
Oregon State College, school of mines, Corvallis, Oreg.
Pacific Portland Cement Co., San Francisco, Calif.
Panuco Exploration Co., Denver, Colo.
Pend Oreille Mines & Metals Co., Metaline Falls, Wash.
Pennsylvania Coal Co., Scranton, Pa.
Pennsylvania State College, department of mining, State College, Pa.
Phelps Dodge Corporation, Stag Canon Branch, Dawson, N. Mex.
Philadelphia & Reading Coal & Iron Co., Pottsville, Pa.
Pine Hill Coal Co., Bethlehem, Pa.
Pittsburg & Midway Coal Mining Co., The, Pittsburg, Kans.
Producers & Refiners Corporation, Parco, Wyo.
Punxsutawney Drilling Co. (Inc.), Punxsutawney, Pa.
Quincy Mining Co., Hancock, Mich.
Richards, J. R., diamond drill contractor, Indiana, Pa.
Roberts, Hugh M., mining geologist, Duluth, Minn.
Rockland & Rockport Lime Corporation, Rockland, Me.
St. Louis Smelting & Refining Works of National Lead Co., St. Francois, Mo.
Santa Maria del Oro Mines Co., Pittsburgh, Pa.
Southern Drilling Co., Saltville, Va.
Sprague & Henwood (Inc.), Scranton, Pa.
Standard Drilling Co., New York, N. Y.
Star Iron Works, Punxsutawney, Pa.
State of California, bureau of purchases, Sacramento, Calif.
State of Illinois, division of highways, Springfield, Ill.
State of Ohio, Columbus, Ohio.
State of Tennessee, Nashville, Tenn.
State of Washington, Seattle, Wash.
Stinson, A. J., State inspector of mines, Carson City, Nev.
Sullivan Machinery Co., Chicago, Ill.
Superior Rock Springs Coal Co., Ogden, Utah.
Syracuse Intercepting Sewer Board, Syracuse, N. Y.
Taber, Stephen, State geologist, Columbia, S. C.
Tennessee Copper Co., Copperhill, Tenn.
Testing & Research Laboratory, division of highways, Sacramento, Calif.
Topographic & Geological Survey, Harrisburg, Pa.
Tredway & Inderrieden Diamond Drilling Co. (Inc.), Globe, Ariz.
Twin State Oil Co., Tulsa, Okla.
United States Coal & Coke Co., Lynch, Ky.
United Verde Copper Co., Jerome, Ariz.
University of Idaho, school of mines, Moscow, Idaho.
University of Kansas, department of mining engineering, Lawrence, Kans.
University of Notre Dame, Notre Dame, Ind.

University of Pittsburgh, school of mines, Pittsburgh, Pa.
University of Texas, college of mines and metallurgy, El Paso, Tex.
University of Utah, Salt Lake City, Utah.
University of Virginia, University, Va.
Utah Fuel Co., Salt Lake City, Utah.
Valley Smokeless Coal Co., Bethlehem, Pa.
Victor-American Fuel Co., The, Denver, Colo.
Waddell & Hardesty, New York, N. Y.
Washington State College, school of mines & geology, Pullman, Wash.
Wentz Oil Corporation (oil division), Ponca City, Okla.
Western Gulf Oil Co., Los Angeles, Calif.
West Penn Cement Co., Butler, Pa.
West Virginia University, Morgantown, W. Va.
Witherbee, Sherman & Co., Port Henry, N. Y.
Yale University, department of mining, New Haven, Conn.

GOVERNMENT

Federal Specifications Board, Washington, D. C. (in principle).
Government of the District of Columbia, Washington, D. C.
Office of Public Buildings and Public Parks of the National Capital, Washington, D. C.
United States Engineer Office (Chattanooga district), Chattanooga, Tenn.
United States Treasury Department, Washington, D. C.
United States Veterans' Bureau, Washington, D. C.

DIAMOND CORE DRILL FITTINGS

COMMERCIAL STANDARD CS17–30

On May 27, 1929, a joint conference of representative manufacturers, drilling contractors, and general interests adopted a commercial standard for diamond core drill fittings. The industry has since accepted and approved for promulgation by the Department of Commerce the specifications as shown herein.

The recommendation is effective from January 1, 1930, for new production. Existing manufacturers' stocks of nonstandard items are to be cleared by July 1, 1930.

Promulgation recommended.

R. M. Hudson,
Assistant Director for Commercial Standards.

Promulgated.

George K. Burgess,
Director, Bureau of Standards.

Approved.

R. P. Lamont,
Secretary of Commerce.

GENERAL

The following nomenclature, symbols, dimensions, tolerances, and types are recommended as standard for diamond core drill fittings:

The four sizes of diamond core drill casing shall be known as EX, AX, BX, and NX, and these symbols shall also be applied to the appropriate bits, core barrels, and casing couplings as given in Figures 2 to 7, inclusive. Rod and rod coupling sizes are known as E,

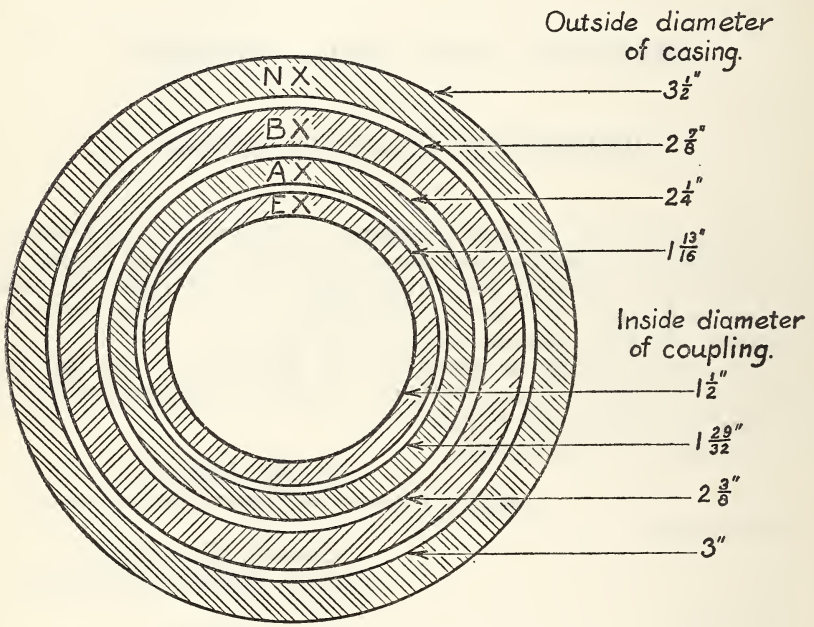


FIGURE 1.—*Section through casing couplings*

A, B, and N. Nominal dimensions are given in Table 1 and illustrated in Figure 1.

TABLE 1.—*Nominal dimensions*

Size designation		Casing O. D.	Casing coupling		Casing bit O. D.	Core-barrel bit O. D.	Drill rod O. D.	Diameter of hole made by core-barrel bit [1]	Approximate diameter of core
Casing, casing coupling, casing bits, C. B. bits	Rod, rod couplings		O. D.	I. D.					
		Inches	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*
EX	E	1 13/16	1 13/16	1 1/2	1 27/32	1 7/16	1 5/16	1 15/32	7/8
AX	A	2 1/4	2 1/4	1 29/32	2 5/16	1 27/32	1 5/8	1 7/8	1 1/8
BX	B	2 7/8	2 7/8	2 3/8	2 15/16	2 5/16	1 29/32	2 1/32	1 5/8
NX	N	3 1/2	3 1/2	3	3 9/16	2 15/16	2 3/8	2 31/32	2 1/8

[1] Assuming hole 1/32 inch larger than bit.

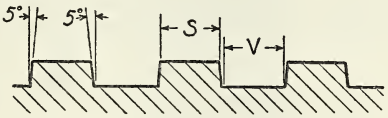
Casings made flush on the outside when connected with couplings shall be known as "Flush coupled casing"; when connected without couplings, shall be known as "Flush joint casing."

Core barrels shall be known as "Single-tube core barrels," "Rigid-type double-tube core barrels," or "Swivel-type double-tube core barrels," as the case may be.

Single-tube and double-tube core-barrel bits shall be identical as regards outside diameter and thread.

The term "Reaming shell" shall be used in preference to "Swell coupling." The bit thread of reaming shells shall conform to the standard bit thread.

The approximate sizes of standard cores are: NX, 2⅛ inches; BX, 1⅝ inches; AX, 1⅛ inches; EX, ⅞ inch. Larger cores are obtainable with special fittings.



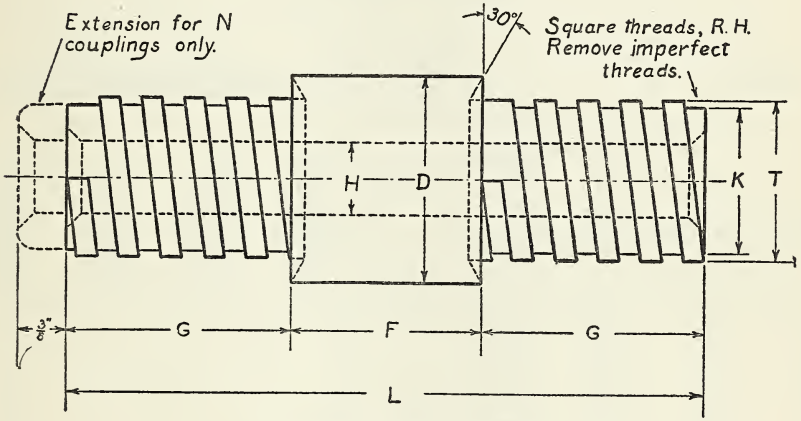


FIGURE 2.—*Rod couplings*

The dimensions and tolerances for rod couplings, drill rods, core-barrel bits, casing couplings, casings, and casing bits are as given in Figures 2 to 7, inclusive.

TABLE 2.—*Rod couplings*

Designating symbol	D	L	H	F	G	Threads per inch	K Maximum, minimum	T Maximum, minimum	S Maximum, minimum	V Maximum, minimum
	Inches	*Inches*	*Inch*	*Inches*	*Inches*		*Inches*	*Inches*	*Inch*	*Inch*
E	1 5/16	4½	7/16	1½	1½	3	{ 0.8740	0.9990	0.1608	0.1628
							{ .8735	.9985	.1598	.1618
A	1⅝	5	9/16	1½	1¾	3	{ 1.1396	1.2646	.1608	.1628
							{ 1.1391	1.2641	.1598	.1618
B	1 29/32	5¼	⅝	1½	1⅞	5	{ 1.2802	1.4052	.0941	.0961
							{ 1.2797	1.4047	.0931	.0951
N	2⅜	6¼	1	1½	2⅜	4	{ 1.6865	1.8740	.1163	.1183
							{ 1.6860	1.8735	.1153	.1173

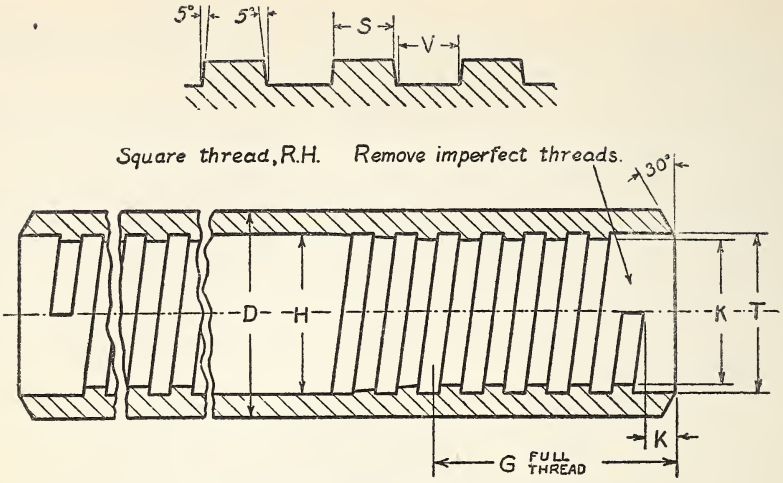


FIGURE 3.—*Drill rod*

TABLE 3.—*Drill rod*

Designating symbol	D	H	G	K	Threads per inch	K Maximum, minimum	T Maximum, minimum	S Maximum, minimum	V Maximum, minimum
	Inches	*Inches*	*Inches*	*Inch*		*Inches*	*Inches*	*Inch*	*Inch*
E	1 5/16	27/32	1 5/8	1/4	3	0.8765	1.0015	0.1608	0.1628
						.8760	1.0010	.1598	.1618
A	1 5/8	1 17/64	1 7/8	1/4	3	1.1421	1.2671	.1608	.1628
						1.1416	1.2666	.1598	.1618
B	1 29/32	1 13/32	2	1/4	5	1.2827	1.4077	.0941	.0961
						1.2822	1.4072	.0931	.0951
N	2 3/8	2	2 1/2	5/16	4	1.6890	1.8765	.1163	.1183
						1.6885	1.8760	.1153	.1173

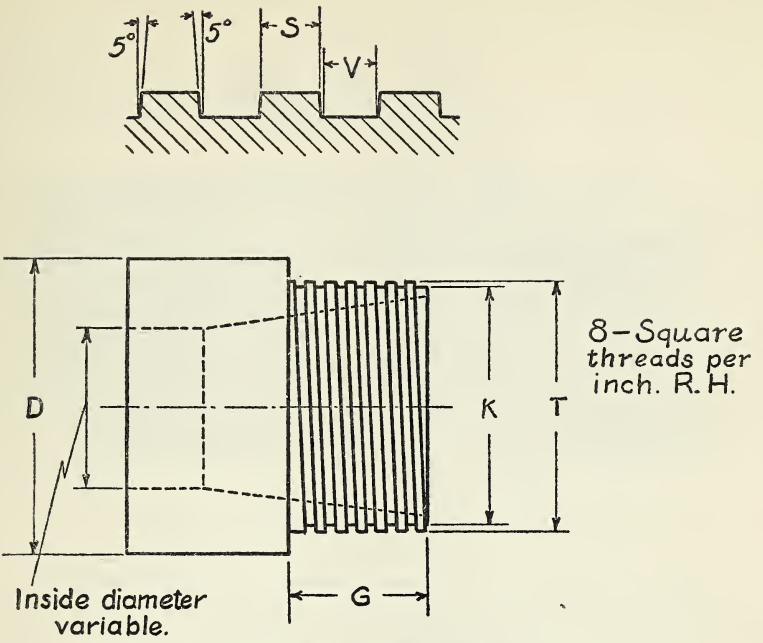


FIGURE 4.—*Core-barrel bits*

TABLE 4.—*Core-barrel bits*

Designating symbol	D Maximum, minimum	G	K Maximum, minimum	T Maximum, minimum	S Maximum, minimum	V Maximum, minimum
	Inches	*Inches*	*Inches*	*Inches*	*Inch*	*Inch*
EX	1.439	7/8	1.1240	1.1865	0.0593	0.0613
	1.435		1.1235	1.1860	.0583	.0603
AX	1.845	1	1.4990	1.5615	.0593	.0613
	1.841		1.4985	1.5610	.0583	.0603
BX	2.314	1 1/8	1.9677	2.0302	.0593	.0613
	2.310		1.9672	2.0297	.0583	.0603
NX	2.939	1 1/4	2.5927	2.6552	.0579	.0599
	2.935		2.5922	2.6547	.0569	.0589

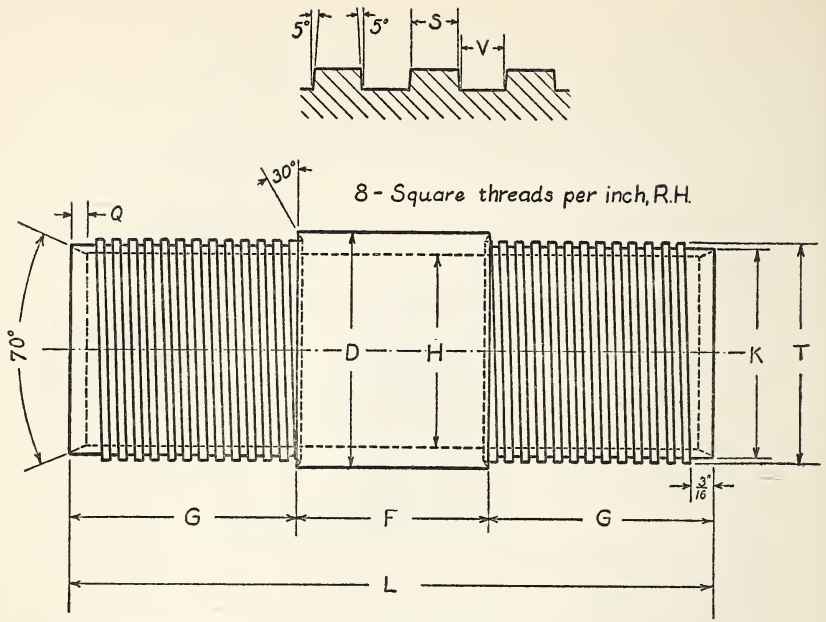


FIGURE 5.—*Casing couplings*

TABLE 5.—*Casing couplings*

Designating symbol	D	L	F	G	Q	H Maximum, minimum	K Maximum, minimum	T Maximum, minimum	S Maximum, minimum	V Maximum, minimum
	Inches	*Inches*	*Inches*	*Inches*	*Inch*	*Inches*	*Inches*	*Inches*	*Inch*	*Inch*
EX	1 13/16	5	1½	1¾	⅛	1.502	1.655	1.717	0.0593	0.0613
						1.498	1.654	1.716	.0583	.0603
AX	2¼	7	3	2	3/16	1.908	2.061	2.124	.0592	.0612
						1.904	2.060	2.123	.0582	.0602
BX	2⅞	7¾	3½	2⅛	¼	2.377	2.592	2.686	.0579	.0599
						2.373	2.591	2.685	.0569	.0589
NX	3½	8¼	3½	2⅜	¼	3.002	3.217	3.311	.0579	.0599
						2.998	3.216	3.310	.0569	.0589

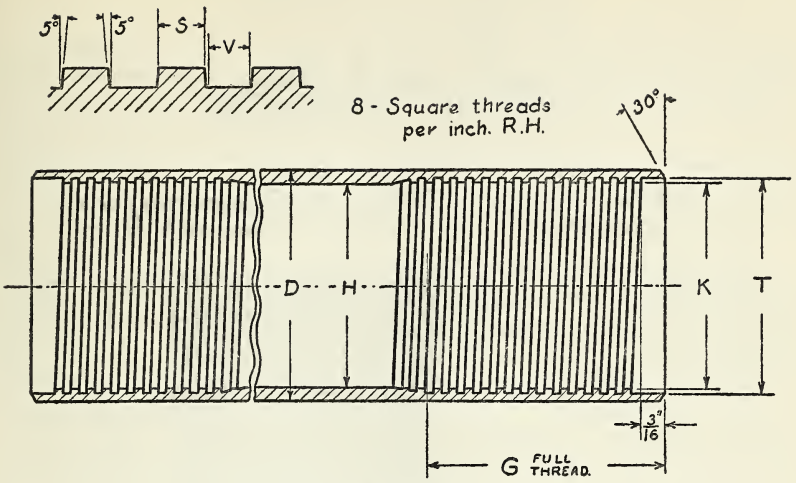


FIGURE 6.—*Casing*

TABLE 6.—*Casing*

Designating symbol	D	H	G	K Maximum, minimum	T Maximum, minimum	S Maximum, minimum	V Maximum, minimum
	Inches	*Inches*	*Inches*	*Inches*	*Inches*	*Inch*	*Inch*
EX	1 13/16	1 5/8	1 7/8	1.658	1.720	0.0593	0.0613
				1.657	1.719	.0583	.0603
AX	2 1/4	2	2 1/8	2.064	2.127	.0592	.0612
				2.063	2.126	.0582	.0602
BX	2 7/8	2 15/32	2 1/4	2.595	2.689	.0579	.0599
				2.594	2.688	.0569	.0589
NX	3 1/2	3 1/16	2 1/2	3.220	3.314	.0579	.0599
				3.219	3.313	.0569	.0589

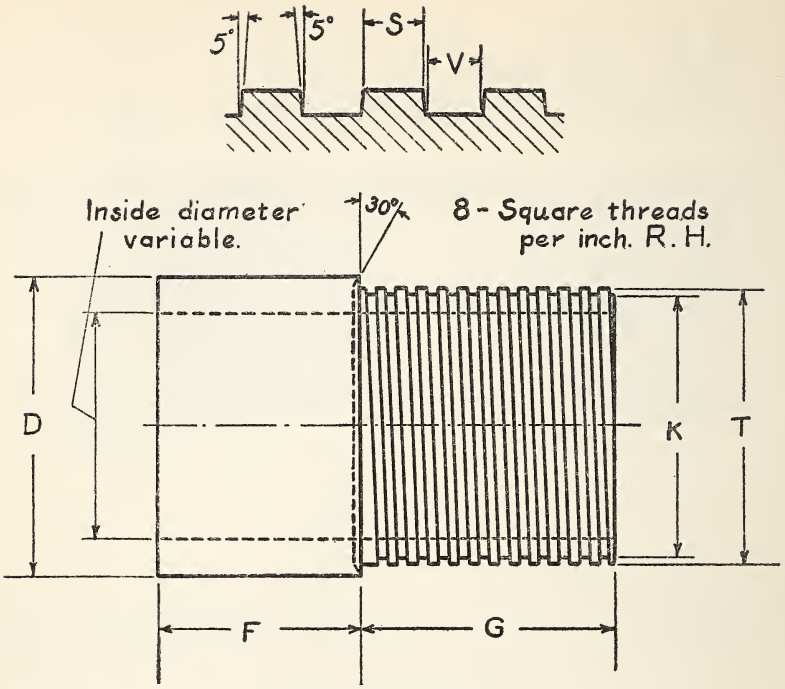


FIGURE 7.—*Casing bit*

TABLE 7.—*Casing bit*

Designating symbol	D Maximum, minimum	F	G	K Maximum, minimum	T Maximum, minimum	S Maximum, minimum	V Maximum, minimum
	Inches	*Inches*	*Inches*	*Inches*	*Inches*	*Inch*	*Inch*
EX	1.845	1¼	1 9/16	1.655	1.717	0.0593	0.0613
	1.841			1.654	1.716	.0583	.0603
AX	2.314	1½	1 13/16	2.061	2.124	.0592	.0612
	2.310			2.060	2.123	.0582	.0602
BX	2.939	1¾	1 15/16	2.592	2.686	.0579	.0599
	2.935			2.591	2.685	.0569	.0589
NX	3.564	2	1 15/16	3.217	3.311	.0579	.0599
	3.560			3.216	3.310	.0569	.0589

GENERAL CONFERENCE

Agreeable to a request from the Diamond Core Drill Manufacturers Association, a general conference of manufacturers, drilling contractors, and general interests was held on May 27, 1929, at Chicago, Ill., to which were invited approximately 1,100 interested organizations.

The meeting was called to order by I. J. Fairchild, of the Bureau of Standards, who outlined the procedure for the establishment of commercial standards and the function of the Department of Commerce in such work.

R. D. Longyear reviewed the development of the proposed commercial standard as representing the experience and consensus of the manufacturers to provide complete interchangeability of similar parts as produced by various manufacturers, to facilitate replacement or extension of equipment, to lower stocks, and the other usual advantages of standardization.

The written comment submitted by organizations unable to attend the conference was carefully considered seriatim, with the result that several changes were agreed upon.

It was admitted that it might be necessary later to increase the size of drill rods if warranted by experience, but the opinion prevailed that present sizes should be retained for the present as promising the most satisfactory solution of the problem.

Upon motion by Mr. Officer, seconded by Mr. Gowling, it was voted to adopt the recommended commercial standard as revised by the conference.

PROMOTION OF FOREIGN TRADE

It was the consensus of opinion among manufacturers that the standards should be established and tried out in America (including Canada and Mexico) before attempting a translation into other languages as a basis for promoting foreign trade.

STANDING COMMITTEE AND EFFECTIVE DATE

The following standing committee was appointed by unanimous consent:

H. C. Johansen, chairman, Sullivan Machinery Co.
R. D. Longyear, E. J. Longyear Manufacturing Co.
B. H. Mott, Mott Core Drilling Co.
Fred Lindhe, Boyles Bros., Vancouver, British Columbia, Canada.
E. L. Derby, jr., Cleveland Cliffs Iron Mining Co.
T. D. Sturges, Pennsylvania Drilling Co.

The effective date for new production is January 1, 1930, and existing stocks of nonstandard items are to be disposed of by July 1, 1930.

The normal revision interval for the standard was set at one year from effective date.

CERTIFICATION PLAN

The conference voted to request the application of the certification plan to this commercial standard by the National Bureau of Standards whereby a list of willing-to-certify manufacturers will be prepared.

The certification plan as applied by the Bureau of Standards to commercial standards consists in the compilation and distribution of lists of manufacturers who are willing, when requested to do so, to certify to purchasers that products supplied by them comply with all the requirements and tests set forth in nationally recognized commercial standards. The plan is also applied to selected Federal specifications.

These lists are available on request to individual consumers, consumer groups, companies, and, in fact, to any prospective purchasers for their guidance.

The benefits now derived from the use of specifications by large consumers are thus made immediately available to the small consumer, with incidental advantage to the larger consumers of convenience in ordering and accepting material with fewer laboratory tests and of lowering the price by reason of broadening the field of supply. The manufacturer also benefits from the well-known economies accompanying "mass production."

The lists of manufacturers "willing to certify" to the quality of certain commodities are made by corresponding with, as nearly as possible, all the manufacturers of that product and listing only those who signify their willingness to certify to the purchaser, when requested to do so, that the commodities delivered actually comply with the commercial standard.

Obviously, the purchaser making use of the lists of "willing-to-certify" manufacturers will select therefrom such manufacturers as are known (or assumed) by him to be reliable.

The trend toward the purchase of materials of certified quality from sources shown on such willing-to-certify lists supplies added incentive to standardization on the part of other producers, and thus the benefits of the certification plan will be felt by purchasers either directly or indirectly, whether or not they make use of the plan themselves.

COMMERCIAL STANDARDS SERVICE

Industry has long sensed the need for a wider application and use of specifications developed and approved by nationally recognized organizations. To assist these bodies and the producers and consumers in securing this result and as a natural outgrowth of the movement toward elimination of waste through simplified practice, the Bureau of Standards has set up a procedure under which specifications, properly indorsed, may be printed as official publications of the Department of Commerce and promulgated as "Commercial Standards." This service parallels that of simplified practice in many respects and is available only upon request.

Broadly speaking, the aim is to continue the same character of cooperative service in this field that is being rendered in simplification. The division of trade standards is not designed to act as a standardizing body, nor will it engage in the preparation of specifications. Its service is mainly promotional in character, since its chief mission is

to get behind a standard or a specification which any branch of industry may want to promulgate on a nation-wide basis; to determine its eligibility for promulgation; to publish and broadcast it in the event the prerequisites of procedure have been met, including a satisfactory majority acceptance; to facilitate the application of the certification plan for the assurance and convenience of the purchaser; to provide means for periodic audits of adherence; and to cooperate with the Bureau of Foreign and Domestic Commerce in determining the desire of industry relative to translation and promulgation of such specifications as a basis for foreign commerce.

In general, it may be said that a simplification covers types, sizes, and varieties of a commodity which are retained by industry on the basis of demand, whereas a commercial standard establishes definite requirements as to grade, quality, or dimensional tolerances in addition to any limitation of variety desired and accepted by the industry.

ORGANIZATION AND DUTIES OF STANDING COMMITTEE

In order to carry on the aims and desires of the industry in the standardization of their product, a standing committee is appointed at the general conference. This committee consists of members from each division of the industry—namely, producers, distributors, and consumers—and thus reflects the well-balanced viewpoint of all concerned.

The members of the committee receive all suggestions regarding the commercial standard and consider its revision in the event that such action is desirable and mutually beneficial.

If the commercial standard does not warrant revision, it is reaffirmed in its existing form, but if any important changes are found desirable their adoption is recommended by the committee, whereupon the industry is again solicited for written acceptance of the standard in its revised form.

The committee is in effect a centralizing agency for criticisms and comments regarding the commercial standard and is charged with the responsibility of recommending revisions to keep the standard abreast with current industrial practice.

The proper functioning of the committee requires that, when necessary, its members be willing to attend meetings held at some central place, although in many cases it will be possible to conduct the work by correspondence.

When any deceptions in reference to the commercial standard are reported to the standing committee, it applies moral suasion or such other corrective measures as seem desirable. The Department of Commerce has no "police power" to compel adherence; therefore, it is incumbent upon the standing committee to do all in its power to encourage all divisions of the industry to follow the provisions of the commercial standard and contribute in every way possible to its general adoption and usefulness.

YOUR COOPERATION

As a producer, distributor, or consumer of some of the commodities for which commercial standards have already been established, you are in a position to avail yourself of the benefits arising from the use of quality standards and incidentally to add impetus to this method of eliminating waste.

The first step is a declaration in favor of the standard by recording your intention to adhere, as closely as circumstances will allow, to the standards for those products which you may buy or sell.

The receipt of your signed acceptance will permit the listing of your company in new editions of the commercial standards that you accept.

You will, of course, want to examine any commercial standards before signing a formal acceptance. The Bureau of Standards will, therefore, furnish a copy of any standard under consideration for acceptance. To facilitate this procedure, a list appears on page 16 that may be checked and mailed to the Division of Trade Standards, Bureau of Standards, Washington, D. C. The publications may also be secured singly or in quantities at a nominal price from the Government Printing Office. Prices will be furnished upon request.

The acceptance of a commercial standard is an entirely voluntary action and applies to the production, sale, and use of stock items. It is not meant to interfere with the manufacture or sale of special sizes and types sometimes required.

Trade associations and individual companies often distribute large numbers of the printed standard for the information and guidance of their members or customers. In such cases it is possible to extend the scope and degree of adherence by urging each recipient to send in an acceptance, bearing in mind that the practical value of any standardization is measured by the observance it receives.

An acceptance form for the commercial standard herein covered is included on page 13.

ACCEPTANCE OF COMMERCIAL STANDARD

[Please sign and return this sheet to Division of Trade Standards, Bureau of Standards, Washington, D. C.]

Date_____

DIVISION OF TRADE STANDARDS,
BUREAU OF STANDARDS,
Washington, D. C.

GENTLEMEN: We, the undersigned, do hereby accept the original draft of the commercial standard as our standard practice in the {production [1] / distribution [1] / use [1]} of diamond core drill fittings beginning_____ (Date), and will use our best effort in securing its general adoption.

To permit intelligent review of the effectiveness of the commercial standard every year by an accredited committee of all interests, working in cooperation with the Department of Commerce, we plan to supply all data, upon request, which may be necessary for the development of constructive revisions. It is understood that any suggested modifications will be submitted as soon as formulated, and shall not be promulgated until accepted in form similar to this recommendation.

(Cut on this line)

Signed_____

(Kindly typewrite or print the following lines)

Title_____

Company_____

Street address_____

City and State_____

We are members of the following associations or other organizations interested in the production, sale, or use of diamond core drill fittings:

_____

_____

_____

[1] Please designate which group you represent by drawing lines through the other two. In the case of related interests, trade papers, colleges, etc., desiring to record their general approval, the words "in principle" should be added after the signature.

TO THE ACCEPTOR

In signing the acceptance blank, please bear the following points clearly in mind:

1. *Adherence.*—The Department of Commerce has no regulatory powers to enforce adherence to the commercial standards. Instead, this waste-elimination program is based on voluntary cooperation and self-government in industry. To make this specific standardization operate as a satisfactory example of self-government, it is highly desirable that it be kept distinct from any plan or method of governmental regulation or control. It will be successful according to the degree to which manufacturers, distributors, and purchasers adhere to its terms and conditions.

2. *The industry's responsibility.*—The department cooperates only on the request of the industry and assumes no responsibility for industrial acceptance or adherence. This program was developed by the industry on its own initiative. Its success depends wholly on the active cooperation of those concerned.

3. *The acceptor's responsibility.*—You are entering into an entirely voluntary arrangement whereby the members of the industry—the distributors and consumers of the product and others concerned—hope to secure the benefits inherent in commercial standardization. Those responsible for this standard realize that instances may occur in which it will be necessary to supply or purchase items not included therein. The purpose is, however, to secure wider support for nationally recognized standards covering grade, quality, and other characteristics of products. Consumers can make the program a success if, in their purchasing, they will make a definite and conscientious effort to specify in terms of this commercial standard.

4. *The department's responsibility.*—The function performed by the Department of Commerce is fourfold: First, to provide a neutral agency which will insure adequate consideration of the needs of all interests; second, to supply such assistance and advice in the development of this program as past experience with similar programs may suggest; third, to solicit and record the extent of adoption and adherence to the standard; and fourth, to add all possible prestige to this standardization movement by publication and promulgation if and when it is adopted and accepted by all elements directly concerned.

REQUEST FOR COMMERCIAL STANDARDS

Date_____

DIVISION OF TRADE STANDARDS,
BUREAU OF STANDARDS,
Washington, D. C.

SIRS: The undersigned wishes to examine the commercial standards checked on the reverse side of this page with a view toward accepting them as our standard of practice in the production, distribution, or consumption of the standardized lines.

Cut on this line

Signed_____
(Kindly typewrite or print the following lines)

Title_____

Company_____

Street address_____

City and State_____

COMMERCIAL STANDARDS

CS. No.	Item
1–28.	Clinical thermometers.
2–29.	Surgical gauze (preparation postponed).
3–28.	Stoddard solvent.
4–29.	Staple porcelain (all-clay) plumbing fixtures.
5–29.	Steel-pipe nipples.
6–29.	Wrought-iron pipe nipples.
7–29.	Standard-weight malleable-iron or steel screwed unions.
8–29.	Plain and thread plug and ring limit gauge blanks (in preparation).
9–29.	Builders' template hardware.
10–29.	Brass-pipe nipples.
11–29.	Regain of mercerized-cotton yarns.
12–29.	Domestic and industrial fuel oils.
13–30.	Dress patterns.
14–29.	Boys' blouses, waists, shirts, and junior shirts (in preparation).
15–29.	Men's pajamas (in preparation).
16–29.	Wall paper.
17–30.	Diamond core drill fittings.
18–29.	Hickory golf shafts.
19–30.	Foundry patterns of wood (in preparation).

○