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COMMERCIAL STANDARD **CS5-65**

SUPERSEDES CS5-46

WITHDRAWN

**Pipe Nipples: Brass, Copper,
Steel, and Wrought-Iron**

A recorded
voluntary standard of the
trade published by
the U.S. Department
of Commerce



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U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
Office of Commodity Standards

EFFECTIVE DATE

Having been passed through the regular procedures of the Office of Commodity Standards (formerly the Commodity Standards Division, Office of Technical Services; transferred to the National Bureau of Standards July 1, 1963), and approved by the acceptors hereinafter listed, this Commercial Standard is issued by the U.S. Department of Commerce, effective January 15, 1965.

LUTHER H. HODGES, *Secretary.*

COMMERCIAL STANDARDS

Commercial Standards are developed by manufacturers, distributors, and users in cooperation with the Office of Commodity Standards of the National Bureau of Standards. Their purpose is to establish quality criteria, standard methods of test, rating, certification, and labeling of manufactured commodities, and to provide uniform bases for fair competition.

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

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

SIMPLIFIED PRACTICE RECOMMENDATIONS

Under a similar procedure the Office of Commodity Standards cooperates with industries in the establishment of Simplified Practice Recommendations. Their purpose is to eliminate avoidable waste through the establishment of standards of practice for sizes, dimensions, varieties, or other characteristics of specific products; to simplify packaging practices; and to establish simplified methods of performing specific tasks.

The initial printing of CS5-65 was made possible through the cooperation of the National Association of Pipe Nipple Manufacturers, Inc.

Pipe Nipples: Brass, Copper, Steel, and Wrought-Iron

(Effective January 15, 1965)

1. PURPOSE

1.1 This standard provides a basis for common understanding among manufacturers, distributors, and users of pipe nipples regarding the principal sizes and types in general demand. Through the certification of quality according to the requirements of this standard a means is provided to safeguard the user and place competition on a fair basis, to the mutual advantage of all concerned.

2. SCOPE

2.1 This standard covers the requirements for carbon steel and wrought-iron pipe nipples, black- and zinc-coated (hot-dip galvanized), in standard iron-pipe sizes from 1/8 inch to 12 inches, inclusive, in standard lengths; and brass and copper nipples in standard sizes from 1/8 inch to 6 inches, inclusive, in standard lengths. The standard also covers the packaging and marking requirements for standard sizes and assortments of nipples and includes a provision for the identification of nipples complying with the standard.

3. REQUIREMENTS

3.1 **Material and weight.**—Pipe nipples, covered by this standard, shall be made from new, pressure tested pipe conforming to the requirements specified in 3.1.1 to 3.1.4 inclusive.

3.1.1 **Steel.**—Steel pipe nipples shall be made from black or zinc-coated (hot-dip galvanized) pipe conforming to the requirements of ASTM Designation A120-63T¹, Tentative Specifications for Black and Hot-Dipped Zinc-Coated (Galvanized) Welded and Seamless Steel Pipe for Ordinary Uses, or A106-63T, Tentative Specifications for Seamless Carbon-Steel Pipe for High-Temperature Service, as applicable. The nipples shall be made from pipe in the following four weights, as specified: standard (Schedule 40), extra strong (Schedule 80), Schedule 160, and double extra strong.

3.1.2 **Wrought-iron.**—Wrought-iron pipe nipples shall be made from standard or extra strong black or zinc-coated (hot-dip galvanized) wrought-iron pipe conforming to the requirements of ASTM Designation A72-62T, Tentative Specification for Welded Wrought-Iron Pipe.

3.1.3 **Brass.**—Brass pipe nipples shall be made from standard or extra strong brass pipe conforming to the requirements of ASTM Designation B43-62, Standard Specification for Seamless Red Brass Pipe, Standard Sizes.

¹ Later issues of the ASTM publications specified in this standard may be used providing the requirements are applicable and consistent with the issues designated. Copies of ASTM publications are obtainable from the American Society for Testing and Materials, 1916 Race St., Philadelphia, Pa. 19103.

COMMERCE
STANDARDS

DATE

regular procedures of the Office of the Commodity Standards Division, and to the National Bureau of Standards the acceptors hereinafter listed, this the U.S. Department of Commerce,

LUTHER H. HODGES, *Secretary.*

STANDARDS

ped by manufacturers, distributors, Office of Commodity Standards of the their purpose is to establish quality rating, certification, and labeling of provide uniform bases for fair

ercial Standard is voluntary. How- Standard is made in contracts, labels, the provisions of the standard are nels as a part of the sales contract. with the proponent industry. The distributors, or users of the specific nts of industry submits to the Office ary data to be used as the basis for The Office by means of assembled both, assists the sponsor group in practice and thereafter refers it to stry for approval or for constructive ing any necessary adjustments. The es continuous servicing of each Com- nd revision whenever, in the opinion s warrant such action.

RECOMMENDATIONS

Office of Commodity Standards cooper- iminate avoidable waste through the ice for sizes, dimensions, varieties, or acts; to simplify packaging practices; of performing specific tasks.

e through the cooperation of the National Association

3.1.4 **Copper.**—Copper pipe nipples shall be made from standard or extra strong copper pipe conforming to the requirements of ASTM Designation B42-62, Standard Specification for Seamless Copper Pipe, Standard Sizes.

3.2 **Threads.**—The pipe nipples shall be threaded on both ends with standard taper pipe threads conforming to the American Standard for Pipe Threads, ASA No. B2.1-1960². Threads shall be right hand on each end, except that when right and left hand nipples are specified, there shall be a left hand thread on one end. Threads shall gage flush, plus or minus one turn on a working gage.

3.3 **Ends.**—The ends of the pipe nipples shall be chamfered on the outside at an angle of 25° to 45° to the central axis. Ends shall be cut square to the central axis. All burrs on the inside shall be removed.

3.4 **Tolerance.**—A tolerance of plus or minus 1/16 inch is permitted in the length of the nipple.

3.5 **Nipple lengths and sizes.**—The standard lengths and sizes of nipples generally available are shown in Table 1. The availability of

² Copies may be obtained from the American Standards Association, 10 E. 40th St., New York, N.Y., 10016.

TABLE 1.—Standard nipples by length and pipe size

Type of nipple ¹	Standard pipe sizes, inches (nominal inside diameter)																		
	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12	
	Standard nipple lengths, inches																		
Butt ²	1 1/2	3/4	1	1 1/8	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/2	4 3/4	5
Close (Cl).....	1 1/4	3/4	1	1 1/8	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/2	4 3/4	5
Shoulder (Shldr).....	1 1/2	3/4	1	1 1/8	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/2	4 3/4	5
Short (sh).....	1 1/2	3/4	1	1 1/8	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/2	4 3/4	5
Long.....	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Extra long.....	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Right-and-left ³			4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

¹ Trade designation.
² Butt nipples are not recommended for pressure applications. The nipples are intended for use in pipe assemblies for structural purposes.
³ Right and left nipples are regularly available only in 4 inch lengths and in weights of standard and extra heavy, black; standard and extra heavy, galvanized; and standard brass.

TABLE 2.—Standard nipple sizes, according to material, weight and finish

Material	Weight and finish	Standard pipe sizes, inches ¹ (X—indicates standard nipples)								
		½	¾	¾	1½ to 4 inclusive	5	6	8	10	12
Steel	Standard, black	X	X	X	X	X	X	X	X	X
	Standard, galvanized	X	X	X	X	X	X	X	X	X
	Extra strong, black	X	X	X	X	X	X	X	X	X
	Extra strong, galvanized	X	X	X	X	X	X	X	X	X
	Double extra strong, black				X	X	X	X	X	X
	Schedule 160, black				X	X	X	X	X	X
Wrought-iron	Standard, black		X	X	X	X	X	X	X	X
	Standard, galvanized		X	X	X	X	X	X	X	X
	Extra strong, black		X	X	X	X	X	X	X	X
	Extra strong, galvanized		X	X	X	X	X	X	X	X
Brass and copper	Standard	X	X	X	X	X	X			
	Extra strong	X	X	X	X	X	X			

¹ Nominal inside diameter of pipe.

such nipples according to material, finish, and pipe size are shown in Table 2.

3.5.1 **Special lengths and sizes.**—Special lengths and sizes may be specified when required. Special lengths shall conform to the tolerance requirement of 3.4.

4. METHODS OF TEST

4.1 **Sampling.**—Samples of nipples sufficient to determine their conformance with the requirements of this standard shall be taken at random from each lot of nipples of the same pipe size, length, and material.

4.2 **Inspection.**—The same nipples shall be inspected to determine their conformance with the dimensional requirements, including thread dimensions and finish, of this standard.

4.3 **Inspection and tests of new pipe.**—In order to determine compliance with 3.1, the pipes from which the nipples are made shall be inspected and tested in accordance with the applicable specification designated in 3.1.

5. PACKAGING AND MARKING

5.1 Packaging.—

5.1.1 **Standard packages.**—The large and small standard package quantities for straight sizes of steel nipples, black and galvanized, and brass nipples of a size and length are given in Table 3.

5.1.2 **Standard assortments.**—The standard assortments and number of pieces per package of steel nipples, black and galvanized, and brass nipples of a size and length are given in Table 4.

5.2 Marking.—

5.2.1 **Standard packages.**—Standard packages containing nipples of one size and length (see Table 3) shall be marked to show:

- (a) The total number in the package.
- (b) The size and length.
- (c) The weight, i.e., standard, extra strong.

TABLE 3.—Standard package quantities of nipples
(Number contained in package)

Pipe size, inches	Nipple lengths, inches										
	Close	1½	2	2½	3	3½	4	4½	5	5½	6
⅝	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25
¾	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25
⅞	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25	100 25
1	200 25	200 25	200 25	200 25	100 25						
1¼	200 25	200 25	200 25	200 25	100 25						
1½	100 25	-----	100 25	100 25	50 25						
1¾	100 25	-----	100 25	100 25	50 25						
2	50 25	-----	50 25	50 25	25 25						
	50 25	-----	50 25	50 25	25 25						

(d) The kind of metal and nipples, and the finish, i.e., black or galvanized, for example: "100—1½" x 4" Standard Black Steel Pipe Nipples".
Packages containing other than the standard packages shown in Table 3 shall be marked in the same manner as the standard package.

5.2.2 **Standard assortments.**—Standard packages containing standard assortments of nipples (see Table 4) shall be marked to show:

- (a) The total number in the package.
- (b) The size.
- (c) The kind of metal, including finish, i.e., black or galvanized.
- (d) The assortment designation, for example: "100—¾" Standard Black Steel Pipe Nipples—Standard Assortment A".

Packages containing other than standard assortments of sizes and lengths shall be marked to give the same information, except that the words "Standard Assortment—" shall be replaced by the number and length of the contents, for example:

"100—¾ x 2" Galvanized Steel Pipe Nipples" or
"100—¾" Black Steel Pipe Nipples—Lengths 25—1½", 50—2", 25—2½"."

6. IDENTIFICATION AND MARKING

6.1 **Labels and literature.**—In order that purchasers may be assured that the pipe nipples actually comply with all requirements of the commercial standard, it is recommended that manufacturers include the following statement in conjunction with their name and address on labels, invoices, sales literature, etc.:

These pipe nipples comply with Commercial Standard CS5-65, as developed by the trade under the Commodity Standards procedures, and issued by the U.S. Department of Commerce.

TABLE 4.—Standard assortment of nipples and number of pieces per package

Pipe size, inches	Nipple Lengths, inches										Total Pieces Per Pkg.	
	Close	1½	2	2½	3	3½	4	4½	5	5½		6
A Assortments												
¼	20	10	15	10	10	5	10	5	5	5	5	100
⅜	20	10	15	10	10	5	10	5	5	5	5	100
½	20	10	15	10	10	5	10	5	5	5	5	100
¾	25	-----	20	10	10	5	10	5	5	5	5	100
1	15	-----	12	5	12	3	12	3	5	3	5	75
B Assortments												
¼	6	6	6	6	6	6	6	6	6	6	6	66
⅜	6	6	6	6	6	6	6	6	6	6	6	66
½	6	6	6	6	6	6	6	6	6	6	6	66
¾	6	-----	6	6	6	6	6	6	6	6	6	60
1	6	-----	6	6	6	6	6	6	6	6	6	60
1¼	6	-----	6	6	6	6	6	6	6	6	6	60
1½	6	-----	6	6	6	6	6	6	6	6	6	60
2	6	-----	-----	6	6	6	6	6	6	6	6	54
C Assortments												
¼	6	4	4	3	3	2	3	-----	-----	-----	-----	25
⅜	6	4	4	3	3	2	3	-----	-----	-----	-----	25
½	6	4	4	3	3	2	3	-----	-----	-----	-----	25
¾	8	-----	6	3	3	2	3	-----	-----	-----	-----	25
1	6	-----	4	4	4	3	4	-----	-----	-----	-----	25
1¼	6	-----	4	4	4	3	4	-----	-----	-----	-----	25
1½	6	-----	4	4	4	3	4	-----	-----	-----	-----	25
2	6	-----	-----	5	5	4	5	-----	-----	-----	-----	25
D Assortments												
¼	4	3	3	3	2	2	2	1	2	1	2	25
⅜	4	3	3	3	2	2	2	1	2	1	2	25
½	4	3	3	3	2	2	2	1	2	1	2	25
¾	6	-----	4	3	2	2	2	1	2	1	2	25
1	5	-----	5	3	2	2	2	1	2	1	2	25
1¼	5	-----	5	3	2	2	2	1	2	1	2	25
1½	5	-----	5	3	2	2	2	1	2	1	2	25
2	5	-----	-----	4	3	2	3	2	2	2	2	25

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

Complies with CS5-65, as developed by the trade and issued by the U.S. Department of Commerce.

Earlier Editions

The first edition of this standard was approved for promulgation in 1929, and became effective in that year. Since that time the industry has maintained the program abreast of changing conditions through revisions, the present one being the third. The two previous revisions with a summary of changes accomplished by each, are covered in editions of the standard bearing the designations CS5-40, and CS5-46 respectively.

CURRENT REVISION

A proposal for revision of Commercial Standard CS5-46 was submitted on December 14, 1961, by the National Association of Pipe Nipple Manufacturers, Inc. with a request to the Commodity Standards Division for development of the proposal as a new standard to supersede the 1946 issue. A draft of the proposed revision was circulated first to the Standards Committee of the Association for review, and upon receiving their approval an adjusted draft revision, TS-5571C, was circulated on August 15, 1963, to a comprehensive list of producers, distributors and users of pipe nipples for consideration and approval. Members of the Association were included in the list together with all other known manufacturers. The circulation was also announced to the trade press. Approvals were subsequently submitted as signed statements of acceptance voluntarily returned by the individual firms and other interests listed herein. The acceptances include the various elements of the industry and are considered to be broadly representative of all concerned. All suggestions received from the industry were satisfactorily resolved. Accordingly, the revised standard, CS5-65, Pipe Nipples; Brass, Copper, Steel and Wrought-Iron, was announced December 15, 1964, and becomes effective January 15, 1965.

By comparison with the 1946 edition, the principal changes embodied in the revision are the addition of schedule 160 pipe, and references to applicable ASTM specifications. Also, the list of standard lengths and sizes is enlarged, and a list covering material, weight, and finish is included. Additional tables cover standard packaging quantities and current standard assortments, together with provisions for the proper marking of packages.

Project Manager: D. R. Stevenson, Office of Commodity Standards, National Bureau of Standards.

Technical Adviser: R. S. Wyly, Building Research Division, National Bureau of Standards.

STANDING COMMITTEE

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

RICHARD L. MERRIMAN, Lansdale Nipple Co.,
P.O. Box 327, Lansdale, Pa. (Chairman)

RAYMOND P. HEID, Pittsburgh Nipple Works, Inc.,
1435 Spring Garden Ave., Pittsburgh, Pa., 15212

RICHARD L. KOPP, Star Tubular Products Co.,
4747 S. Richmond St., Chicago, Ill., 60632

ERWIN MELTON, Chicago Nipple Manufacturing Co.,
1629 W. Lafayette Blvd., Detroit, Mich., 48216

RICHARD E. WHITE, National Association of Plumbing,
Heating, Cooling Contractors, 1016 20th Street, N.W.,
Washington, D.C., 20036

J. E. BECK, L. E. Beck & Son, Division of Pittsburgh Pipe & Coupling Co.,
P.O. Box 69, Greencastle, Pa., 17225

Commercial Standard CS5-46 was submitted to the National Association of Pipe Fitters by a request to the Commodity Standardization Board of the proposal as a new standard to be adopted by the proposed revision was circulated to the committee of the Association for review, and an adjusted draft revision, TS-46-15, 1963, to a comprehensive list of pipe nipples for consideration by the Association were included in the list of manufacturers. The circulation was completed. Approvals were subsequently submitted and acceptance voluntarily returned by the members listed herein. The acceptances of the industry and are considered to be final. All suggestions received were favorably resolved. Accordingly, the Standard for Nipples; Brass, Copper, Steel and Iron, December 15, 1964, and becomes effective.

In this edition, the principal changes emanate from the revision of schedule 160 pipe, and refer to the list covering material, weight, and dimensions cover standard packaging quantities, together with provisions for

Office of Commodity Standards, National Bureau of Standards, National Bureau of Standards, National Bureau of Standards

COMMITTEE

comprise the membership of the Standardization Board, prior to circulation for acceptance, and standard abreast of progress. Comment and suggestions for revision may be addressed to the Office of Commodity Standards, U.S. Department of Commerce, National Bureau of Standards, National Bureau of Standards, National Bureau of Standards.

- Co.,
- (In)
- orks, Inc.,
- Pa., 15212
- s Co.,
- 632
- cturing Co.,
- h., 48216
- n of Plumbing,
- th Street, N.W.,
- of Pittsburgh Pipe & Coupling Co.,

ACCEPTORS

The manufacturers, distributors, users and others listed below have individually indicated in writing their acceptance of this Commercial Standard prior to its publication. The acceptances indicate an intention to utilize the standard as far as practicable, but reserve the right to depart from it as may be deemed desirable. The list is published to show the extent of recorded public support for the standard and should not be construed as indicating that all products made by the acceptors actually comply with its requirements.

Products that meet all the requirements of the standard may be identified as such by a certificate, grade mark, or label. Purchasers are encouraged to require such specific representation of compliance, which may be given by the manufacturer whether or not he is an acceptor.

ASSOCIATIONS

(General Support)

- American Hot Dip Galvanizers Association, Inc., Washington, D.C.
- American Specification Institute, Chicago, Ill.
- Central Supply Association, Chicago, Ill.
- National Association of Plumbing, Heating, Cooling Contractors, Washington, D.C.
- Pipe Fabrication Institute, Pittsburgh, Pa.

FIRMS

- Aetna Pipe Products Co. of Ill., Chicago, Ill.
- Aitchison-Richmond Supply Co., St. Joseph, Mo.
- Albert Pipe Supply Co., Inc., Brooklyn, N.Y.
- Allen, W. D., Manufacturing Co., Bellwood, Ill.
- American Standards Testing Bureau, Inc., New York, N.Y.
- A-One Nipple Co., South Gate, Calif.
- Appleby Bros. & Whittaker Co., Harrisburg, Pa.
- Armco Division—Armco Steel Corp., Middletown, Ohio (General Support)
- Banner Pipe Products Co., Division Pittsburgh Nipple Works, Inc., Pittsburgh, Pa.
- Basco Manufacturing Corp., South Boston, Mass.
- Bayonne Nipple Co., Bayonne, N.J.
- Beaton & Corbin Manufacturing Co., Southington, Conn.
- Beck, L. E., & Son, Inc., Greencastle, Pa.
- Behrer-Nason Co., Inc., New York, N.Y.
- B-I-F Industries, a Division of The New York Air Brake Co., Providence, R.I.
- Blue Ridge Pipe & Nipple Co., Talladega, Ala.
- Blue Ridge Pipe & Nipple Co., Greenstone, Pa.
- Bohn & Kern, Inc., Zanesville, Ohio
- Brugger Manufacturing Co., Orangeburg, N.Y.
- Brust & Brust, Milwaukee, Wis.
- Byers, A. M., Co., Ambridge, Pa.
- Campbell Metals Co., Los Angeles, Calif.
- Capital City Supply Co., Charleston, W. Va.
- Capitol Manufacturing Co., Division of Harsco Corp., Columbus, Ohio
- Cardinal Machine & Nipple Works, Inc., St. Louis, Mo.
- Careva Co., Inc., York, Pa.
- Carlson Nipple Corp., South Boston, Mass.
- Champion Pipe Products Co., Division Pittsburgh Nipple Works, Inc., Pittsburgh, Pa.
- Chicago Nipple Manufacturing Co., Baltimore, Md.
- Chicago Nipple Manufacturing Co., Chicago, Ill.
- Clow, James B., & Sons, Inc., Chicago, Ill.

- Consolidated Supply Co., Portland, Oreg.
- Crescent Machine & Nipple Co., Allegan, Mich.
- Danser Hardware & Supply Co., Weston, W. Va.
- Emery Industries, Inc., Cincinnati, Ohio
- Enterprise Galvanizing Co., Philadelphia, Pa.
- Fall River Steam & Gas Pipe Co. Corp., Fall River, Mass.
- Florida Pipe & Nipple Manufacturing Co., Inc., Hialeah, Fla.
- Frick & Lindsay Co., Pittsburgh, Pa.
- Geck Plumbing & Heating Supply Co., Inc., Rochester, N.Y.
- Grabler Manufacturing Co., Cleveland, Ohio
- Gray, Edmund A., Co., Inc., Los Angeles, Calif.
- Great American Manufacturing and Sales Co., Pacoima, Calif.
- Heffley Co., Battle Creek, Mich.
- Hudson Pipe Nipple Manufacturing Co., Inc., Brooklyn, N.Y. (General Support)
- Hunting Co., Rochester, N.Y.
- Imperial-Eastman Corp., Chicago, Ill.
- Iowa Machinery & Supply Co., Inc., Des Moines, Iowa
- Johnson, J. D., Co., Inc., Pensacola, Fla.
- Johnstown Nipple Works, Patton, Pa.
- Kennedy Tubular Products Co., New Castle, Pa.
- Kiefaber, W. H., Co., Dayton, Ohio
- LaCrosse Plumbing Supply Co., LaCrosse, Wis.
- Lansdale Nipple Co., Lansdale, Pa.
- Malone Plumbing Supply Co., Pittsburgh, Pa.
- M and S Nipple & Fittings Manufacturing Co., Venice, Calif.
- McCarthy, A. M., & Sons Co., Warren, Mich.
- Memphis Nipple Co., Memphis, Tenn.
- Mineola Plumbing Supply Co., Inc., Mineola, N.Y.
- Missouri Pipe Fittings Co., St. Louis, Mo.
- Mott Bros. Co., Rockford, Ill.
- National Fittings Co. of N.Y., Inc., Brooklyn, N.Y.
- New Jersey Engineering & Supply Co., Passaic, N.J.
- Northwest Nipple Co., Division of Northwest Bolt & Nut Co., Seattle, Wash.
- Norvell-Wilder Supply Co., Beaumont, Tex.
- Ohio Pipe & Supply Co., Inc., Cleveland, Ohio
- Olney Pipe Products Co., Philadelphia, Pa.

Omaha Testing Laboratories, Omaha, Nebr.
 Patzig Testing Laboratories, Inc., Des Moines, Iowa
 Pehrson, G. A., & Associates, Spokane, Wash.
 Perfection Corp., Madison, Ohio
 Pittsburgh Nipple Works, Inc., Pittsburgh, Pa.
 Pittsburgh Steel Co., Monessen, Pa.
 Pleasantville Plumbing Supply Co., Pleasantville, N.J.
 Plumbers & Factory Supplies, Inc., Columbus, Ohio
 Plumbers Supply Co., New Bedford, Mass.
 Pottstown Pipe Products, Inc., Pottstown, Pa.
 Ra-Rich Manufacturing Corp., Holtzville, L.I., N.Y.
 Reed-Cromex Corp., Cleveland, Ohio
 Republic Steel Corp., Youngstown, Ohio
 Rockwell Manufacturing Co., Barberton, Ohio
 Rom, Robert, Co., Milwaukee, Wis.
 Sacramento Pipe Works, Sacramento, Calif.
 Sawhill Tubular Products, Inc., Sharon, Pa.
 Sears, Roebuck & Co., Chicago, Ill.
 Seattle Plumbing Supply Co., Seattle, Wash.
 Sherman, H. B., Manufacturing Co., Battle Creek, Mich.
 Shoe-Taylor, Inc., Jersey City, N.J.
 South Bend Supply Co., South Bend, Ind.
 Southern Nipple Manufacturing Co., Inc., Dallas, Tex.
 Southern Testing Laboratories, Inc., Birmingham, Ala.
 Standard Nipple Works, Garwood, N.J.
 Standard Supply Co., Portsmouth, Ohio
 Star Tubular Products Co., Chicago, Ill.
 Sullivan County Plumbing & Heating Supply Co., Inc., Liberty, N.Y.
 Superior Pipe Specialties Co., Cicero, Ill.
 Trenton Pipe Nipple Co., Trenton, N.J.
 Trumbull Plumbing Supply Co., Inc., Youngstown, Ohio
 Union Malleable Manufacturing Co., Ashland, Ohio
 United Pipe Nipple Co., Inc., Brooklyn, N.Y.
 Valley Supply Corp., Neenah, Wis.
 Ware Coupling & Nipple Co., Ware, Mass.
 Waynesboro Nipple Co., Waynesboro, Pa.
 Weatherhead Co., Cleveland, Ohio
 Weber, C. L., & Co., Inc., Philadelphia, Pa.
 Weekes, John, & Son Co., Watertown, N.Y.
 Westchester Square Plumbing Supply Co., Inc., Bronx, N.Y.
 Wheeling Machine Products Co., Wheeling, W. Va.
 Wheeling Pacific Co., Woodlake, Calif.
 White Manufacturing Co., Houston, Tex.
 Wickwire Brothers, Inc., Cortland, N.Y.
 Wisconsin Nipple & Fabricating Corp., West Allis, Wis.
 Wolverine Tube, Division of Calumet & Hecla, Inc., Allen Park, Mich. (General Support)
 Woodhill Nipple & Fittings, Inc., Cleveland, Ohio
 Woodrow Corp., Chicago, Ill.
 Woolcock Plumbing & Heating Co., Inc., Niagara Falls, N.Y.

GOVERNMENT

Department of Health, Education & Welfare (Procurement & Supply Management Branch), Washington, D.C.
 Department of the Interior, Office of Management Operations, Office of the Secretary, Washington, D.C.
 Department of Justice, Bureau of Prisons, Washington, D.C.
 Department of the Navy, Bureau of Yards and Docks, Washington, D.C.
 Veterans Administration, D M & S Supply Service, Washington, D.C.

OTHER COMMERCIAL STANDARDS

A list of Commercial Standards may be obtained from the Office of Commodity Standards, National Bureau of Standards, U.S. Department of Commerce, Washington, D.C., 20234. This list includes the purchase price of the publication and directions for ordering copies.

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nd, Ohio
ted Pipe Nipple Co., Inc., Brooklyn, N.Y.
ey Supply Corp., Neenah, Wis.
e Coupling & Nipple Co., Ware, Mass.
nesboro Nipple Co., Waynesboro, Pa.
therhead Co., Cleveland, Ohio
er, C. L., & Co., Inc., Philadelphia, Pa.
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If acceptance has not previously been filed, this sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this Commercial Standard.

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COMMERCIAL STANDARD CS5-65
PIPE NIPPLES: BRASS, COPPER, STEEL, AND WROUGHT-IRON

Commercial Standard CS5-65 was withdrawn by the U.S. Department of Commerce.

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The following ASTM standards were used to replace CS5-65 and Federal Specification WW-N-00351A, Nipple, Pipe, Threaded:

ASTM A733-Standard Specification for Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples (direct responsibility of subcommittee A01.09, Steel Pipe).

ASTM B687-Standard Specification for Brass, Copper, and Chromium-Plated Pipe Nipples (direct responsibility of Subcommittee B05.04, Pipe and Tube).

The ASTM Committees can provide further guidance and assistance on additional standards; can also give sources for other committees/subcommittees and/or sources for information.

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Committees: **A01** on Steel, Stainless Steel and Related Alloys
Telephone: (610) 832-9709
B05 on Copper and Copper Alloys
Telephone: (610) 832-9710
Committee Operations Fax: (610) 832-9666

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To obtain copies, further guidance and assistance for information on Federal Specifications (FED-SPEC); Federal Standards (FED-STD) and GSA specifications and standards, contact:

Specifications Branch
Federal Supply Service Bureau
General Services Administration (GSA)
470 East L'Enfant Plaza, SW, Suite 8100
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