U. S. DEPARTMENT OF COMMERCE
BUREAU OF STANDARDS

WROUGHT-IRON PIPE NIPPLES

COMMERCIAL STANDARD CS6–31

A RECORDED STANDARD
OF THE INDUSTRY

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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

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

WROUGHT-IRON PIPE NIPPLES

COMMERCIAL STANDARD CS6–31

[Issued May 25, 1931]

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WROUGHT-IRON PIPE NIPPLES

COMMERCIAL STANDARD CS6–31

On June 29, 1928, a general conference of representative manufacturers, general interests, and users adopted a commercial standard for wrought-iron pipe nipples which was accepted by the industry and published as Commercial Standard CS6–29.

On October 27, 1930, in accordance with the recommendation of the standing committee, a proposed revision of this commercial standard was circulated to the industry for written acceptance. The industry has since accepted this revision and approved for promulgation by the Department of Commerce the standard as shown herein, which is identified as Commercial Standard CS6–31.

This recommendation is effective for new production and clearance of existing stocks from May 1, 1931.

Promulgation recommended.

I. J. Fairchild,
Chief, Division of Trade Standards.

Promulgated.

George K. Burgess,
Director, Bureau of Standards.

Approved.

R. P. Lamont,
Secretary of Commerce.

GENERAL REQUIREMENTS

Pipe nipples shall be made only from tested new black or zinc-coated (galvanized) wrought-iron pipe, of full weight, in full or short lengths that are free from buckles, bends, kinks, cracks, laminations, imperfect welds, rust, injurious sand marks, or any other defects which might affect its strength or serviceability.

The pipe shall be made from wrought iron[1] and shall be free from any admixture of iron scrap or steel. Pipe shall also conform in all respects to American Society for Testing Materials Specification for Welded Wrought-Iron Pipe, A72–30.

Nipples shall be reamed and chamfered at an angle of 25° to 45° to the central axis.

Nipples shall not exceed one-sixteenth of an inch under or over the specified length.

DETAIL REQUIREMENTS

Dimensions.—Outside diameter variations of the pipe from which wrought iron nipples are made, shall be in accordance with the above-mentioned A. S. T. M. specification, as follows:

For pipe 1½ inches or under in nominal size, the outside diameter at any point shall vary not more than $\frac{1}{64}$ inch over, nor more than $\frac{1}{32}$ inch under the standard outside diameter specified in Tables 1, 2, and 3. For pipe 2 inches or over in nominal size, the outside diameter shall vary not more than 1 per cent over or under the standard outside diameter.

The wall thickness shall be not more than 12½ per cent under the nominal wall thickness at any point.

Weight.—Weight variations of the pipe, from which wrought-iron nipples are made, shall be limited as follows:

The weight of black pipe shall vary not more than 5 per cent over or under that specified in Tables 1 (class A, standard weight) and 2 (class B, extra strong), nor more than 10 per cent over or under that specified in Table 3 (class C, double extra strong).

The weight of zinc-coated (galvanized) pipe shall vary not more than 3 per cent under that given in Tables 1 (class A, standard weight) and 2 (class B, extra strong) nor more than 8 per cent under that specified in Table 3 (class C, double extra strong).

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[1] Wrought iron is a ferrous material, aggregated from a solidifying mass of pasty particles of highly refined metallic iron with which, without subsequent fusion, is incorporated a minutely and uniformly distributed quantity of slag.

TABLE 1.—*Dimensions for class A, standard weight pipe*

Diameter			Thickness	Nominal weight per foot (plain ends)
Nominal	Outside	Inside		
Inches	*Inches*	*Inches*	*Inches*	*Pounds*
⅛	0.405	0.265	0.070	0.24
¼	.540	.360	.090	.42
⅜	.675	.489	.093	.57
½	.840	.618	.111	.85
¾	1.050	.820	.115	1.13
1	1.315	1.043	.136	1.68
1¼	1.660	1.374	.143	2.27
1½	1.900	1.604	.148	2.72
2	2.375	2.059	.158	3.65
2½	2.875	2.459	.208	5.79
3	3.500	3.058	.221	7.58
3½	4.000	3.538	.231	9.11
4	4.500	4.016	.242	10.79
5	5.563	5.037	.263	14.62
6	6.625	6.053	.286	18.97
8	8.625	7.967	.329	28.55
10	10.750	10.006	.372	40.48
12	12.750	11.986	.382	49.56

TABLE 2.—*Dimensions for class B, extra strong pipe*

Diameter			Thickness	Nominal weight per foot (plain ends)
Nominal	Outside	Inside		
Inches	*Inches*	*Inches*	*Inches*	*Pounds*
⅛	0.405	0.209	0.098	0.31
¼	.540	.296	.122	.54
⅜	.675	.417	.129	.74
½	.840	.538	.151	1.09
¾	1.050	.736	.157	1.47
1	1.315	.949	.183	2.17
1¼	1.660	1.270	.195	3.00
1½	1.900	1.492	.204	3.63
2	2.375	1.929	.223	5.02
2½	2.875	2.311	.282	7.66
3	3.500	2.888	.306	10.25
3½	4.000	3.350	.325	12.51
4	4.500	3.812	.344	14.98
5	5.563	4.797	.383	20.78
6	6.625	5.743	.441	28.57
8	8.625	7.605	.510	43.39
10	10.750	9.730	.510	54.74
12	12.750	11.730	.510	65.42

TABLE 3.—*Dimensions for class C, double extra strong pipe*

Diameter			Thickness	Nominal weight per foot (plain ends)
Nominal	Outside	Inside		
Inches	*Inches*	*Inches*	*Inches*	*Pounds*
½	0.840	0.226	0.307	1.71
¾	1.050	.414	.318	2.44
1	1.315	.577	.369	3.66
1¼	1.660	.874	.393	5.21
1½	1.900	1.078	.411	6.41
2	2.375	1.481	.447	9.03
2½	2.875	1.741	.567	13.70
3	3.500	2.270	.615	18.58
3½	4.000	2.698	.651	22.85
4	4.500	3.120	.690	27.54
5	5.563	4.027	.768	38.55
6	6.625	4.857	.884	53.16
8	8.625	6.835	.895	72.42

Threading.—Pipe nipples shall be threaded on both ends, in accordance with the latest issue of American Standard for Pipe Thread, B–2, of the American Standards Association.

Dimensions for taper pipe threads are as given in Figure 1 and Table 4.

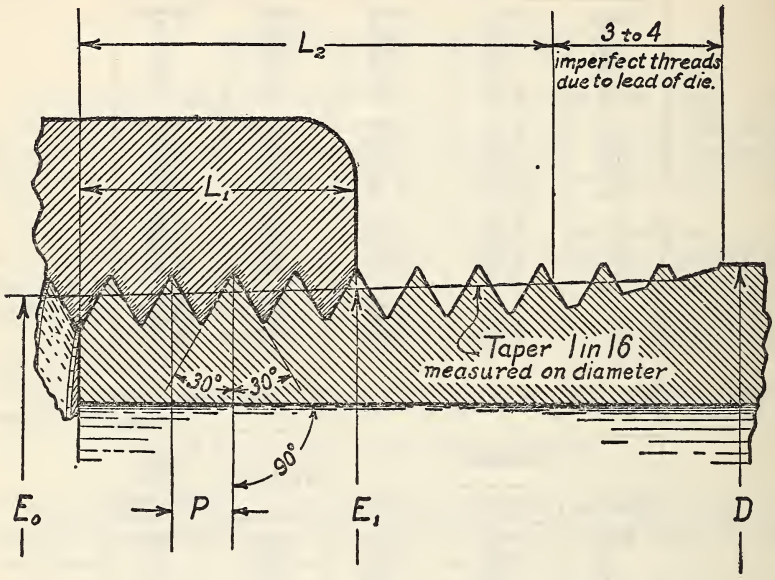

FIGURE 1.—*Taper pipe thread dimensions.*

E_0=pitch diameter of thread at end of pipe.
$=D-(0.05\mathrm{D}+1.1)P$.
D =outside diameter of pipe.
L_2=length of effective thread (threads perfect at root).
$=(0.8\mathrm{D}+6.8)P$.
Depth of thread$=0.8P$.
E_1=pitch diameter of thread at gaging notch.
$=E_0+0.0625L_1$.
L_1=normal engagement by hand between external and internal threads.
P=pitch of thread.

TABLE 4.—*Taper pipe thread dimensions*

Nominal size of pipe	Number of threads per inch	Depth of thread	D	L_1	L_2	E_0	E_1
1	2	3	4	5	6	7	8
Inches		*Inch*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*
1/8	27	0.02963	0.405	0.180	0.26385	0.36351	0.37476
1/4	18	.04444	.540	.200	.40178	.47739	.48989
3/8	18	.04444	.675	.240	.40778	.61201	.62701
1/2	14	.05714	.840	.320	.53371	.75843	.77843
3/4	14	.05714	1.050	.339	.54571	.96768	.98887
1	11 1/2	.06957	1.315	.400	.68278	1.21363	1.23863
1 1/4	11 1/2	.06957	1.660	.420	.70678	1.55713	1.58338
1 1/2	11 1/2	.06957	1.900	.420	.72348	1.79609	1.82234
2	11 1/2	.06957	2.375	.436	.75652	2.26902	2.29627
2 1/2	8	.10000	2.875	.682	1.13750	2.71953	2.76216
3	8	.10000	3.500	.766	1.20000	3.34062	3.38850
3 1/2	8	.10000	4.000	.821	1.25000	3.83750	3.88881
4	8	.10000	4.500	.844	1.30000	4.33438	4.38712
5	8	.10000	5.563	.937	1.40630	5.39073	5.44929
6	8	.10000	6.625	.958	1.51250	6.44609	6.50597
8	8	.10000	8.625	1.063	1.71250	8.43359	8.50003
10	8	.10000	10.750	1.210	1.92500	10.54531	10.62094
12	8	.10000	12.750	1.360	2.12500	12.53281	12.61781

NOTE.—The dimensions of American standard pipe threads are expressed in inches to one one-hundred-thousandth (0.00001) of an inch. While this is a greater degree of accuracy than is ordinarily used, the dimensions are so expressed in order to eliminate errors which might result from less accurate dimensions.

Gages.—Gages used for inspection shall not vary from the basic dimensions more than one-half turn either way.

Inspection tolerances.—The maximum allowable variation in the commercial product is one turn plus or one turn minus from the gaging notch when using gages. This is equivalent to a maximum allowable variation of one and one-half turns from the basic dimensions, on account of the tolerance of one-half turn on gages.

Straight threads.—Where straight pipe threads are specified, the sizes and basic dimensions shall be as given in columns 1, 2, 3, and 8, of Table 4.

Diameters of straight threads.—The basic pitch diameter of the straight thread shall be equal to the diameter at the gaging notch of taper pipe thread plug gage and shall be determined by the following formula. (Symbols explained in Fig. 1)

$$E_1 = D - (0.05\ D + 1.1)P + 0.0625\ L_1$$

STOCK SIZES AND LENGTHS

Genuine wrought-iron pipe nipples are regularly made and stocked in the sizes given in Tables 5 to 9, inclusive. These sizes conform, as regards pipe diameters, to the United States Department of Commerce Simplified Practice Recommendation No. 57.

TABLE 5.—*Stock sizes and lengths of standard weight black pipe nipples*

Diameter	Close	Special short	Short	Long	Extra long
Inches	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*
⅛	¾	1	1½	2, 2½, 3, and 3½	4, 4½, 5, 5½, 6, 7, 8, 9, 10, 11, and 12.
¼	⅞	1¼	1½	2, 2½, 3, and 3½	4, 4½, 5, 5½, 6, 7, 8, 9, 10, 11, and 12.
⅜	1		1½	2, 2½, 3, and 3½	4, 4½, 5, 5½, 6, 7, 8, 9, 10, 11, and 12.
½	1⅛		1½	2, 2½, 3, and 3½	4, 4½, 5, 5½, 6, 7, 8, 9, 10, 11, and 12.
¾	1⅜	1½	2	2½, 3, 3½, and 4	4½, 5, 5½, 6, 7, 8, 9, 10, 11, and 12.
1	1½		2	2½, 3, 3½, and 4	4½, 5, 5½, 6, 7, 8, 9, 10, 11, and 12.
1¼	1⅝	2	2½	3, 3½, 4, and 4½	5, 5½, 6, 7, 8, 9, 10, 11, and 12.
1½	1¾	2	2½	3, 3½, 4, and 4½	5, 5½, 6, 7, 8, 9, 10, 11, and 12.
2	2		2½	3, 3½, 4, and 4½	5, 5½, 6, 7, 8, 9, 10, 11, and 12.
2½	2½		3	3½, 4, 4½, and 5	5½, 6, 7, 8, 9, 10, 11, and 12.
3	2⅝		3	3½, 4, 4½, and 5	5½, 6, 7, 8, 9, 10, 11, and 12.
3½	2¾		4	4½, 5, 5½, and 6	7, 8, 9, 10, 11, and 12.
4	2⅞		4	4½, 5, 5½, and 6	7, 8, 9, 10, 11, and 12.
5	3	4	4½	5, 5½, and 6	7, 8, 9, 10, 11, and 12.
6	3⅛	4	4½	5, 5½, and 6	7, 8, 9, 10, 11, and 12.
8	3½		5	6, 7, and 8	10 and 12.
10	3⅞		5	6, 7, and 8	10 and 12.
12	4½		6	8	10 and 12.

TABLE 6.—*Stock sizes and lengths of extra strong black pipe nipples*

Diameter	Close	Special short	Short	Long	Extra long
Inches	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*
⅛	¾		1½	2, 2½, 3, and 3½	4, 5, and 6.
¼	⅞		1½	2, 2½, 3, and 3½	4, 5, and 6.
⅜	1		1½	2, 2½, 3, and 3½	4, 4½, 5, and 6.
½	1⅛		1½	2, 2½, 3, and 3½	4, 4½, 5, and 6.
¾	1⅜	1½	2	2½, 3, 3½, and 4	4½, 5, and 6.
1	1½		2	2½, 3, 3½, and 4	4½, 5, and 6.
1¼	1⅝	2	2½	3, 3½, 4, and 4½	5 and 6.
1½	1¾	2	2½	3, 3½, 4, and 4½	5 and 6.
2	2		2½	3, 3½, 4, and 4½	5 and 6.
2½	2½		3	3½, 4, 4½, and 5	6.
3	2⅝		3	3½, 4, 4½, and 5	6.
3½	2¾		4	5 and 6	
4	2⅞		4	5 and 6	

TABLE 7.—*Stock sizes and lengths of standard weight galvanized pipe nipples*

Diameter	Close	Special short	Short	Long	Extra long
Inches	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*
1/8	3/4	1	1 1/2	2, 2 1/2, 3, and 3 1/2	4, 5, and 6.
1/4	7/8		1 1/2	2, 2 1/2, 3, and 3 1/2	4, 5, and 6.
3/8	1		1 1/2	2, 2 1/2, 3, and 3 1/2	4, 4 1/2, 5, 5 1/2, 6, 8, 10, and 12.
1/2	1 1/8		1 1/2	2, 2 1/2, 3, and 3 1/2	4, 4 1/2, 5, 5 1/2, 6, 8, 10, and 12.
3/4	1 3/8	1 1/2	2	2 1/2, 3, 3 1/2, and 4	4 1/2, 5, 5 1/2, 6, 8, 10, and 12.
1	1 1/2		2	2 1/2, 3, 3 1/2, and 4	4 1/2, 5, 5 1/2, 6, 8, 10, and 12.
1 1/4	1 5/8	2	2 1/2	3, 3 1/2, 4, and 4 1/2	5, 5 1/2, 6, 8, 10, and 12.
1 1/2	1 3/4	2	2 1/2	3, 3 1/2, 4, and 4 1/2	5, 5 1/2, 6, 8, 10, and 12.
2	2		2 1/2	3, 3 1/2, 4, and 4 1/2	5, 5 1/2, 6, 8, 10, and 12.
2 1/2	2 1/2		3	3 1/2, 4, and 5	6, 8, 10, and 12.
3	2 5/8		3	3 1/2, 4, 4 1/2, and 5	6.
3 1/2	3 3/4		4	5 and 6	
4	2 7/8		4	4 1/2, 5, 5 1/2, and 6	

TABLE 8.—*Packing of standard weight black or galvanized nipples*

[Number contained in carton]

Diameter	Close	Sizes in inches										Total
		Short	Long				Extra long					
		1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6	
Inch												
3/8	20	10	15	10	10	5	10	5	5	5	5	100
1/4	20	10	15	10	10	5	10	5	5	5	5	100
1/2	20	10	15	10	10	5	10	5	5	5	5	100
3/4	20	10	15	10	10	5	10	5	5	5	5	100
1	15		12	5	12	3	12	3	5	3	5	75

TABLE 9.—*Stock sizes and lengths of right and left standard weight black pipe nipples*

Diameter	Short	Long	Extra long
Inches	*Inches*	*Inches*	*Inches*
1/8			
1/4			
3/8		2 and 3	4, 5, and 6.
1/2		2, 2 1/2, 3, and 3 1/2	4, 5, and 6.
3/4	2	2 1/2, 3, 3 1/2, and 4	5 and 6.
1	2	2 1/2, 3, 3 1/2, and 4	5 and 6.
1 1/4	2 1/2	3, 3 1/2, 4, and 4 1/2	5 and 6.
1 1/2	2 1/2	3, 3 1/2, 4, and 4 1/2	5 and 6.
2	2 1/2	3, 3 1/2, 4, and 4 1/2	5 and 6.

GENERAL CONFERENCE

Pursuant to request of a preliminary conference of interested producers, a general conference of representative interests was held on June 29, 1928, at the Department of Commerce, Washington, D. C. The following individuals were present:

ARMSTRONG, JULIAN, Pipe Nipple Standards Corporation, Chicago, Ill.
BADGER, A. C., Youngstown Sheet & Tube Co., Youngstown, Ohio.
BIHLMAN, V. W., Wheeling Steel Corporation, Wheeling, W. Va.
BRADY, J. F., Plumbers and Heating Contractors Trade Journal, New York, N. Y.

Chasnoff, A., Jackwill Nipple Corporation, New York, N. Y.
Cooke, E. L., National Nipple Manufacturing Co., Chicago, Ill.
Englar, Charles D., Waynesboro Nipple Works (Inc.), Waynesboro, Pa.
George, O. H., Government Printing Office, Washington, D. C.
Grindlay, L. B., Republic Iron & Steel Co., Youngstown, Ohio.
Groff, Raymond, S. S. Fretz, jr., & Co., Philadelphia, Pa.
Hampton, W. J., Spang, Chalfant & Co., Pittsburgh, Pa.
Harvey, Charles D., Department of Agriculture, Washington, D. C.
Howe, Donald W., Ware Coupling & Nipple Co., Ware, Mass.
Jeffries, W. J., Bureau of Construction and Repair, Navy Department, Washington, D. C.
Kleinman, H. J., Smith Bros. Nipple Works, Philadelphia, Pa.
Knapp, H. F., National Tube Co., Washington, D. C.
Levin, Max, Woodrow Nipple Manufacturing Co., Chicago, Ill.
McBroom, Walter, Chicago Nipple Manufacturing Co., Chicago, Ill.
McCray, William, V., War Department, Office of Chief of Engineers, Washington, D. C.
Ressler, C. T., Reading Iron Co., Reading, Pa.; A. M. Byers Co., Pittsburgh, Pa.
Shapiro, J. S., Baltimore Pipe Nipple Co., Baltimore, Md.
Shoe, R. B., Shoe-Letcher Co., Jersey City, N. J.
Smith, Nevin B., Smith Bros. Nipple Works, Hamburg, Pa.
Speller, F. N., American Society for Testing Materials; American Society of Mechanical Engineers; and National Tube Co., Pittsburgh, Pa.
Strickland, O. I., Wheeling Steel Corporation, Wheeling, W. Va.
Wiedman, F. M., Fred Pabst Co., Milwaukee, Wis.
Department of Commerce:
Fairchild, I. J., Division of Trade Standards, Bureau of Standards.
Miller, D. R., Bureau of Standards.

The proposed commercial standard for wrought-iron pipe nipples recommended by the preliminary conference was considered in detail, with the result that a few changes were agreed upon, and the standard as revised was adopted by the conference.

The conference set Jan. 1, 1929, as the effective date for the original draft both for new production and for clearance of existing stocks.

STANDING COMMITTEE

The following standing committee was appointed to consider annually any comments or suggestions as to changes in the existing standard in order that it may be kept continuously in accord with the desires of the industry and the advance in the art:

Raymond Groff, S. S. Fretz, jr., & Co.
C. T. Ressler, Reading Iron Co.
James Aston, A. M. Byers Co.
James A. Messer, James A. Messer Co. (Inc.).
A. G. Getty, Standard Sanitary Manufacturing Co.
W. J. Spillane, James B. Clow & Sons.
Jere L. Murphy, National Association of Master Plumbers.
W. E. McCollum, Central Supply Association.
A. V. Hutchinson, American Society of Heating and Ventilating Engineers.

FIRST REVISION

On the recommendation of the standing committee, which considered the criticisms and suggestions received from the industry through the annual adherence survey, the Commercial Standard for Wrought-Iron Pipe Nipples, CS6–29 was revised to include a definition for wrought iron as set forth in American Society for Testing Materials Specification A72–30 for Welded Wrought-Iron Pipe, as well as changes in actual thickness and inside diameters of pipe on the basis of the actual density of wrought iron instead of steel as formerly. The

revised draft was circulated to the industry for written acceptance on October 27, 1930. The revised commercial standard was accepted and authorized by the industry for publication as Commercial Standard CS6–31.

EFFECTIVE DATE

The effective date for new production and clearance of existing stocks was set for May 1, 1931.

CERTIFICATION PLAN

The general conference voted its approval of the certification plan for application to wrought-iron pipe nipples made in accordance with the commercial standard specification.

The certification plan as applied by the National 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. 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 National 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 invite attention to 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 National Bureau of Standards will, therefore, furnish a copy of any standard under consideration for acceptance. To facilitate this procedure, a list appears on page 14 that may be checked and mailed to the division of trade standards, National 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 introduction, 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 11.

ACCEPTANCE OF COMMERCIAL STANDARD

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

Date_____

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

GENTLEMEN: We the undersigned, do hereby accept the accompanying draft of the commercial standard, as our standard practice in the {production [1] / distribution [1] / use [1]} of wrought-iron pipe nipples, 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)

Signature_____
(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 wrought-iron pipe nipples:

_____

_____

_____

[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 act as a referee to 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.

CS6–31

REQUEST FOR COMMERCIAL STANDARDS

Date_____

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

GENTLEMEN: 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
0-30	The commercial standards service and its value to business.
1-28	Clinical thermometers.
2-30	Mopsticks.
3-28	Stoddard solvent.
4-29	Staple porcelain (all-clay) plumbing fixtures.
5-29	Steel pipe nipples.
6-31	Wrought-iron pipe nipples.
7-29	Standard weight malleable iron or steel screwed unions.
8-30	Plain and thread plug and ring gage blanks.
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.
14-31	Boys' blouses, button-on waists, shirts and junior shirts.
15-29	Men's pajamas.
16-29	Wall paper.
17-30	Diamond core drill fittings.
18-29	Hickory golf shafts.
19-30	Foundry patterns of wood.
20-30	Staple vitreous china plumbing fixtures.
21-30	Interchangeable ground-glass joints.
22-30	Builders' hardware (nontemplate).
23-30	Feldspar.
24-30	Standard screw threads.
25-30	Special screw threads.
26-30	Aromatic red cedar closet lining.
27-30	Plate-glass mirrors.
28-32	Cotton-fabric tents, tarpaulins, and covers (in preparation).
29-31	Staple seats for water-closet bowls (in preparation).

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