(Revision of ASME B36.10M-2018)

Welded and Seamless Wrought Steel Pipe

AN AMERICAN NATIONAL STANDARD



(Revision of ASME B36.10M-2018)

Welded and Seamless Wrought Steel Pipe

AN AMERICAN NATIONAL STANDARD



Date of Issuance: June 30, 2022

The next edition of this Standard is scheduled for publication in 2025.

ASME issues written replies to inquiries concerning interpretations of technical aspects of this Code. Interpretations are published on the Committee web page and under http://go.asme.org/InterpsDatabase. Periodically certain actions of the ASME B36 Committee may be published as Cases. Cases are published on the ASME website under the B36 Committee Page at http://go.asme.org/B36committee as they are issued.

Errata to codes and standards may be posted on the ASME website under the Committee Pages to provide corrections to incorrectly published items, or to correct typographical or grammatical errors in codes and standards. Such errata shall be used on the date posted.

The B36 Committee Page can be found at http://go.asme.org/B36committee. There is an option available to automatically receive an e-mail notification when errata are posted to a particular code or standard. This option can be found on the appropriate Committee Page after selecting "Errata" in the "Publication Information" section.

ASME is the registered trademark of the American Society of Mechanical Engineers.

This code or standard was developed under procedures accredited as meeting the criteria for American National Standards. The standards committee that approved the code or standard was balanced to ensure that individuals from competent and concerned interests had an opportunity to participate. The proposed code or standard was made available for public review and comment, which provided an opportunity for additional public input from industry, academia, regulatory agencies, and the public-at-large.

ASME does not "approve," "rate," or "endorse" any item, construction, proprietary device, or activity. ASME does not take any position with respect to the validity of any patent rights asserted in connection with any items mentioned in this document, and does not undertake to insure anyone utilizing a standard against liability for infringement of any applicable letters patent, nor does ASME assume any such liability. Users of a code or standard are expressly advised that the determination of the validity of any such patent rights, and the risk of infringement of such rights, is entirely their own responsibility.

Participation by federal agency representatives or persons affiliated with industry is not to be interpreted as government or industry endorsement of this code or standard.

ASME accepts responsibility for only those interpretations of this document issued in accordance with the established ASME procedures and policies, which precludes the issuance of interpretations by individuals.

No part of this document may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

The American Society of Mechanical Engineers Two Park Avenue, New York, NY 10016-5990

Copyright © 2022 by
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
All rights reserved
Printed in U.S.A.

CONTENTS

Foreword	l	iv
Committe	ee Roster	vi
Correspo	ndence With the B36 Committee	vii
Summary	of Changes	ix
1	Scope	1
2	Size	1
3	References	1
4	Materials	1
5	Wall Thickness	1
6	Weights/Masses	1
7	Permissible Variations	2
8	Pipe Threads	2
9	Wall-Thickness Designations	2
10	Wall-Thickness Selection	2
Table		
2-1	Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pine	2

FOREWORD

In March 1927, the American Standards Association (ASA) authorized the organization of a Sectional Committee on Standardization of Dimensions and Material of Wrought Steel and Wrought Iron Pipe and Tubing for the purpose of unifying the standards of these commodities in force in this country. The American Society for Testing and Materials (ASTM) and The American Society of Mechanical Engineers (ASME) were designated as sponsors, and the first meeting of the Sectional Committee was held in Pittsburgh, Pennsylvania, on May 18, 1928.

The dimensions of commercial pipe in general use in the United States, at the time, conformed generally to those recommended by the ASME Committee on Standard Pipe and Pipe Threads published in 1886 (ASME Transactions, Vol. VIII, p. 29). On these standards, an enormous industry has been built and the satisfactory use of this product proves the soundness of the original design and specification.

Increasingly severe service demands, at the time of the Committee's organization, had been met by using the nearest available pipe or tubing for heavier sections such as casing and mechanical tubing, with resulting uneconomical multiplicity of wall thicknesses.

Subsequently, the Committee, with the cooperation of the industry, completed a survey of existing practice as the logical starting point for the development of an American Standard. From this survey, a table was designed to provide a selection of wall thicknesses of pipe to cover the power piping requirements of industry where strength to resist internal pressure governs selection and was later expanded to include pipe diameters and thicknesses used in other industries.

The original intent of the Committee was to establish a system of Schedule Numbers for pipe size/wall thickness combinations that would have an approximately uniform relationship equal to 1,000 times the *P/S* expression contained in the modified Barlow formula for pipe wall thickness that was defined in the Appendix to this Standard. The resulting Numbers departed so far from existing wall thicknesses in common use that the original intent could not be accomplished. The Schedule Numbers were then adopted strictly as a convenient designation system for use in ordering.

In all cases, the designer must base his selection on the rules and allowable stresses set by the code that governs his particular construction. The table is dimensionally complete for all sizes and wall thicknesses within its scope, but some of the larger, heavier wall sections are beyond the capability of seamless mill production and must be obtained from forged and bored billets or other sources.

The first issue of this Standard was designated American Standard "tentative" by ASA in November 1935. Subsequent slight revisions to the table and the footnotes of the dimensional tables were approved and the ASA changed the designation to American Standard; the date of ASA approval was April 28, 1939.

Further revisions were made by the Sectional Committee. The list of specifications in the table was revised where necessary and slight revisions in wall thicknesses of some of the large sizes of the heavy schedules were made where P/S values were out of line.

It was the hope in 1939 that the designation of pipe used commercially by all industry as Standard weight, Extra-Strong, and Double Extra-Strong would gradually be replaced by Schedule Number designation. However, owing to customs of over 50 years' standing, demand and production of pipe to these traditional dimensions was undiminished. Consequently, in response to a demand from users, accepted practice for dimensions and weights of commercial wrought steel and welded wrought iron pipe were added. These changes were designated an American Standard on February 23, 1950.

Subcommittee No. 1 was reorganized in 1957. In addition to necessary editorial changes, a simplified format was selected for the tables of weights and dimensions to include and identify the sizes and weights of API Standards 5L and 5LX. These changes to the Standard were approved, and it was designated an American Standard on December 21, 1959.

The Standard was revised in 1969 to include a uniform method to calculate the plain end weight of steel pipe and minor adjustments were made in the tabulated weights of steel pipe to conform to this new method. Additional sizes and thicknesses of steel pipe that had come into common use were also added. Inasmuch as API Standard 5L no longer included wroughtiron pipe, reference to that Standard was deleted. These changes to the Standard were approved and it was designated an American National Standard on February 3, 1970.

The Standard was revised in 1975 to include additional sizes and thicknesses of steel pipe that had been added to API specifications. The table with dimensions and weights of welded wrought iron pipe was deleted in its entirety since wrought iron pipe was no longer produced. These changes in the Standard were approved and it was designated an American National Standard on June 5, 1975.

The Standard was revised in 1978 to include SI (metric) dimensions. The outside diameter and wall thicknesses were converted to millimeters by multiplying the inch dimensions by 25.4. Outside diameters larger than 16 in. were rounded to the nearest millimeter, and outside diameters 16 in. and smaller were rounded to the nearest 0.1 mm. Wall thicknesses were rounded to the nearest 0.01 mm. These converted and rounded SI dimensions were added. A formula to calculate the SI plain end mass, in kilograms per meter, using SI diameters and thicknesses added. The SI plain end mass was calculated and added. These changes in the Standard were approved, and it was designated an American National Standard on July 18, 1979.

Further revisions were made in 1984. The American National Standards Institute (ANSI) designations, which were no longer in use, were deleted, and the list of specifications was revised to agree with current ASTM and API specifications. Additional sizes and thicknesses that had been added to API specifications were added. That edition was approved as an American National Standard on August 19, 1985.

The 1995 edition included additional wall thicknesses and was approved by ANSI on August 24, 1995.

The 1996 edition contained table revisions that included the addition of pipe sizes, changing some plain end weights and masses, identifying metric pipe by the dimensionless designator DN, and eliminating the API Specification column in one table. The 1996 edition was approved as an American National Standard on September 23, 1996.

The 2000 edition contained revisions to the density for steel that were incorporated previously. Other editorial changes to the sections were made. The 2000 edition was approved as an American National Standard on December 1, 2000. The 2004 edition contained revisions that corrected the equation for nominal plain end weight and added the missing

DN schedule numbers. The 2004 edition was approved as an American National Standard on June 23, 2004.

The 2015 edition contained revisions to table notes and references. The 2015 edition was approved as an American

The 2015 edition contained revisions to table notes and references. The 2015 edition was approved as an American National Standard on June 16, 2015.

The 2018 edition expanded Table 2-1 (formerly Table 1) by adding Schedule 160 and Double Extra Strong (XXS) rows for NPS $\frac{1}{8}$ (DN 6), NPS $\frac{1}{4}$ (DN 8), and NPS $\frac{3}{8}$ (DN 10); these data were adapted from ASME B16.11-2011. A plain end weight (mass) was changed in Table 2-1 and a number of editorial revisions were made to Table 2-1 and sections 1, 2, 5, 7, and 8. The 2018 edition was approved as an American National Standard on September 6, 2018.

This Standard is available for public review on a continuing basis. This provides an opportunity for additional public review input from industry, academia, regulatory agencies, and the public-at-large.

The 2022 edition modifies the SI outside diameter rounding rules, updates the calculated plain end mass listings in Table 2-1, and adds new nominal wall thicknesses for some standard sizes from NPS 8 to NPS 28 (DN 200 to DN 700). ASME B36.10-2022 was approved by ANSI on February 18, 2022.

ASME B36 COMMITTEE Nominal Wrought Pipe Sizes and Wall Thicknesses

(The following is the roster of the Committee at the time of approval of this Standard.)

STANDARDS COMMITTEE OFFICERS

F. W. Tatar, Chair D. Papert, Secretary

STANDARDS COMMITTEE PERSONNEL

B. Bounds, Bechtel Energy Inc.

D. Frikken, Becht Engineering Co., Inc.

I. Hamidov, BP

A. Jettley, Bechtel India Private Ltd.

D. Papert, The American Society of Mechanical Engineers

R. Reamey, Turner Industries Group

F. W. Tatar, FM Global

D. O. Bankston, Jr., Contributing Member, TerraPower

R. A. McLeod, Contributing Member, XYTEL Corp.

A. P. Rangus, Contributing Member, Consultant

P. S. Shriwal, Contributing Member, Shriwal Enterprises

CORRESPONDENCE WITH THE B36 COMMITTEE

General. ASME Standards are developed and maintained with the intent to represent the consensus of concerned interests. As such, users of this Standard may interact with the Committee by requesting interpretations, proposing revisions or a case, and attending Committee meetings. Correspondence should be addressed to:

> Secretary, B36 Standards Committee The American Society of Mechanical Engineers Two Park Avenue New York, NY 10016-5990 http://go.asme.org/Inquiry

Proposing Revisions. Revisions are made periodically to the Standard to incorporate changes that appear necessary or desirable, as demonstrated by the experience gained from the application of the Standard. Approved revisions will be published periodically.

This Standard is always open for comment, and the Committee welcomes proposals for revisions. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent documentation.

Proposing a Case. Cases may be issued to provide alternative rules when justified, to permit early implementation of an approved revision when the need is urgent, or to provide rules not covered by existing provisions. Cases are effective immediately upon ASME approval and shall be posted on the ASME Committee web page.

Requests for Cases shall provide a Statement of Need and Background Information. The request should identify the Standard and the paragraph, figure, or table number(s), and be written as a Question and Reply in the same format as existing Cases. Requests for Cases should also indicate the applicable edition(s) of the Standard to which the proposed Case applies.

Interpretations. Upon request, the B36 Standards Committee will render an interpretation of any requirement of the Standard. Interpretations can only be rendered in response to a written request sent to the Secretary of the B36 Standards

Requests for interpretation should preferably be submitted through the online Interpretation Submittal Form. The form is accessible at http://go.asme.org/InterpretationRequest. Upon submittal of the form, the Inquirer will receive an automatic e-mail confirming receipt.

If the Inquirer is unable to use the online form, he/she may mail the request to the Secretary of the B36 Standards Committee at the above address. The request for an interpretation should be clear and unambiguous. It is further recommended that the Inquirer submit his/her request in the following format:

Subject: Cite the applicable paragraph number(s) and the topic of the inquiry in one or two words. Edition: Cite the applicable edition of the Standard for which the interpretation is being requested.

Phrase the question as a request for an interpretation of a specific requirement suitable for Question: general understanding and use, not as a request for an approval of a proprietary design or

situation. Please provide a condensed and precise question, composed in such a way that a

"yes" or "no" reply is acceptable.

Proposed Reply(ies): Provide a proposed reply(ies) in the form of "Yes" or "No," with explanation as needed. If

entering replies to more than one question, please number the questions and replies.

Background Information: Provide the Committee with any background information that will assist the Committee in

understanding the inquiry. The Inquirer may also include any plans or drawings that are necessary to explain the question; however, they should not contain proprietary names or

information.

Requests that are not in the format described above may be rewritten in the appropriate format by the Committee prior to being answered, which may inadvertently change the intent of the original request.

Moreover, ASME does not act as a consultant for specific engineering problems or for the general application or understanding of the Standard requirements. If, based on the inquiry information submitted, it is the opinion of the Committee that the Inquirer should seek assistance, the inquiry will be returned with the recommendation that such assistance be obtained.

ASME procedures provide for reconsideration of any interpretation when or if additional information that might affect an interpretation is available. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME Committee or Subcommittee. ASME does not "approve," "certify," "rate," or "endorse" any item, construction, proprietary device, or activity.

Attending Committee Meetings. The B36 Standards Committee regularly holds meetings and/or telephone conferences that are open to the public. Persons wishing to attend any meeting and/or telephone conference should contact the Secretary of the B36 Standards Committee. Future Committee meeting dates and locations can be found on the Committee Page at http://go.asme.org/B36committee.

ASME B36.10-2022 SUMMARY OF CHANGES

 $Following \, approval \, by \, the \, ASME \, B36.Committee \, and \, ASME, and \, after \, public \, review, \, ASME \, B36.10-2022 \, was \, approved \, by \, the \, American \, National \, Standards \, Institute \, on \, February \, 18, \, 2022.$

ASME B36.10-2022 includes the following changes identified by a margin note, (22).

Page	Location	Change
1	2	Last paragraph revised
1	3	Added and subsequent paragraphs redesignated
1	6	Nomenclature for D revised for both U.S. Customary and SI units
2	10	Revised
3	Table 2-1	Revised

INTENTIONALLY LEFT BLANK

WELDED AND SEAMLESS WROUGHT STEEL PIPE

1 SCOPE

This Standard covers the standardization of dimensions of welded and seamless wrought steel pipe for high or low temperatures and pressures.

The word "pipe" is used, as distinguished from "tube", to apply to tubular products of dimensions commonly used for pipeline and piping systems.

(22) 2 SIZE

The size of all pipe in Table 2-1 is identified by the dimensionless designator nominal pipe size (NPS) [diamètre nominal (DN)]. Pipe NPS 12 (DN 300) and smaller have outside diameters numerically larger than their corresponding sizes. In contrast, the outside diameters of tubes are numerically identical to the size number for all sizes.

The manufacture of pipe NPS $\frac{1}{8}$ (DN 6) to NPS 12 (DN 300), inclusive, is based on a standardized outside diameter (O.D.). This O.D. was originally selected so that pipe with a standard O.D. and having a wall thickness that was typical of the period would have an inside diameter (I.D.) approximately equal to the nominal size. Although there is no such relation between the existing standard thickness — O.D. and nominal size — these nominal sizes and standard O.D.s continue in use as "standard."

The manufacture of pipe NPS 14 (DN 350) and larger is based on the O.D. being the same as the nominal pipe size.

(22) 3 REFERENCES

The following publications are referenced in this Standard. Unless otherwise specified, the latest edition applies:

API 5L, Specification for Line Pipe Publisher: American Petroleum Institute (API), 200 Massachusetts Avenue NW, Suite 1100, Washington, DC 20001-5571 (www.api.org)

ASME B1.20.1, Pipe Threads, General Purpose (Inch)
Publisher: The American Society of Mechanical Engineers
(ASME), Two Park Avenue, New York, NY 10016-5990
(www.asme.org)

4 MATERIALS

The dimensional standards for pipe described in this Standard are for products covered in ASTM specifications.

5 WALL THICKNESS

The nominal wall thicknesses are given in Table 2-1.

6 WEIGHTS/MASSES

(22)

The nominal weights (masses) of steel pipe are calculated values and are given in Table 2-1.

The nominal plain end weight, in pounds per foot, is calculated using the following equation:

$$W_{pe} = 10.69(D - t)t$$

where

- D = outside diameter to the nearest 0.001 in. for NPS 8 and smaller, to the nearest 0.01 in. for NPS 10 to NPS 30, inclusive, and to the nearest 0.1 in. for NPS 32 and larger (the symbol D is to be used for 0.D. only in mathematical equations or formulas)
- t = specified wall thickness, rounded to the nearest0.001 in.
- W_{pe} = nominal plain end weight, rounded to the nearest 0.01 lb/ft

The nominal plain end mass, in kilograms per meter, is calculated using the following equation:

$$M_{pe} = 0.0246615(D - t)t$$

where

- D = outside diameter to the nearest 0.01 mm for DN 200 and smaller, to the nearest 0.1 mm for DN 250 to DN 750, inclusive, and to the nearest 1 mm for DN 800 and larger (the symbol D is to be used for O.D. only in mathematical equations or formulas)
- M_{pe} = nominal plain end mass, rounded to the nearest 0.01 kg/m
 - t = specified wall thickness, rounded to the nearest0.01 mm

7 PERMISSIBLE VARIATIONS

Variations in dimensions differ depending upon the method of manufacture employed in making the pipe to the various specifications available. Permissible variations for dimensions are indicated in each specification.

8 PIPE THREADS

Unless otherwise specified, the threads of threaded pipe shall conform to ASME B1.20.1.

Schedules 5 and 10 wall thicknesses do not permit threading in accordance with ASME B1.20.1.

9 WALL-THICKNESS DESIGNATIONS

The wall-thickness designations standard (STD), extrastrong (XS), and double extra-strong (XXS) have been commercially used designations for many years. As explained in the Foreword, the Schedule numbers were subsequently added as a convenient designation for use in ordering pipe. Standard and Schedule 40 are iden-

tical up to NPS 10 (DN 250), inclusive. All larger sizes of STD have $\frac{3}{8}$ in. (9.53 mm) wall thicknesses. XS and Schedule 80 are identical up to NPS 8 (DN 200), inclusive. All larger sizes of XS have $\frac{1}{2}$ in. (12.70 mm) wall thicknesses.

Pipe of sizes and wall thicknesses other than those of STD, XS, and XXS, and Schedule number were adopted from API 5L. It was not considered practical to establish Schedule numbers or new designations for them.

(22)

10 WALL-THICKNESS SELECTION

When the selection of wall thickness depends primarily upon capacity to resist internal pressure under given conditions, the designer shall compute the value of wall thickness suitable for conditions for which the pipe is required, as prescribed in detail in the ASME Boiler and Pressure Vessel Code, ASME B31 Code for Pressure Piping, or other similar codes, whichever governs the construction. A thickness may be selected from Table 2-1 that is suitable for the conditions for which the pipe is required.

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe

(22)

NIDG (DAD	Identification	Schedule	Outside Diameter,	Wall Thickness,	Plain End Weight (Mass),
NPS (DN)	[Note (1)]	No.	in. (mm)	in. (mm)	lb/ft (kg/m)
¹ / ₈ (6)		10	0.405 (10.29)	0.049 (1.24)	0.19 (0.28)
¹ / ₈ (6)		30	0.405 (10.29)	0.057 (1.45)	0.21 (0.32)
¹ / ₈ (6)	STD	40	0.405 (10.29)	0.068 (1.73)	0.24 (0.37)
¹ / ₈ (6)	XS	80	0.405 (10.29)	0.095 (2.41)	0.31 (0.47)
¹ / ₈ (6)	•••	160	0.405 (10.29)	0.124 (3.15)	0.37 (0.55)
¹ / ₈ (6)	XXS		0.405 (10.29)	0.190 (4.83)	0.44 (0.65)
¹ / ₄ (8)		10	0.540 (13.72)	0.065 (1.65)	0.33 (0.49)
¹ / ₄ (8)		30	0.540 (13.72)	0.073 (1.85)	0.36 (0.54)
¹ / ₄ (8)	STD	40	0.540 (13.72)	0.088 (2.24)	0.43 (0.63)
¹ / ₄ (8)	XS	80	0.540 (13.72)	0.119 (3.02)	0.54 (0.80)
¹ / ₄ (8)		160	0.540 (13.72)	0.145 (3.68)	0.61 (0.91)
¹ / ₄ (8)	XXS		0.540 (13.72)	0.238 (6.05)	0.77 (1.14)
³ / ₈ (10)	***	10	0.675 (17.14)	0.065 (1.65)	0.42 (0.63)
³ / ₈ (10)		30	0.675 (17.14)	0.073 (1.85)	0.47 (0.70)
³ / ₈ (10)	STD	40	0.675 (17.14)	0.091 (2.31)	0.57 (0.84)
³ / ₈ (10)	XS	80	0.675 (17.14)	0.126 (3.20)	0.74 (1.10)
³ / ₈ (10)	•••	160	0.675 (17.14)	0.158 (4.01)	0.87 (1.30)
³ / ₈ (10)	XXS		0.675 (17.14)	0.252 (6.40)	1.14 (1.70)
½ (15)		5	0.840 (21.34)	0.065 (1.65)	0.54 (0.80)
½ (15)	***	10	0.840 (21.34)	0.083 (2.11)	0.67 (1.00)
½ (15)		30	0.840 (21.34)	0.095 (2.41)	0.76 (1.13)
½ (15)	STD	40	0.840 (21.34)	0.109 (2.77)	0.85 (1.27)
½ (15)	XS	80	0.840 (21.34)	0.147 (3.73)	1.09 (1.62)
¹ / ₂ (15)		160	0.840 (21.34)	0.188 (4.78)	1.31 (1.95)
½ (15)	XXS		0.840 (21.34)	0.294 (7.47)	1.72 (2.56)
³ / ₄ (20)		5	1.050 (26.67)	0.065 (1.65)	0.68 (1.02)
³ / ₄ (20)		10	1.050 (26.67)	0.083 (2.11)	0.86 (1.28)
³ / ₄ (20)		30	1.050 (26.67)	0.095 (2.41)	0.97 (1.44)
³ / ₄ (20)	STD	40	1.050 (26.67)	0.113 (2.87)	1.13 (1.68)
³ / ₄ (20)	XS	80	1.050 (26.67)	0.154 (3.91)	1.48 (2.19)
³ / ₄ (20)		160	1.050 (26.67)	0.219 (5.56)	1.95 (2.89)
³ / ₄ (20)	XXS		1.050 (26.67)	0.308 (7.82)	2.44 (3.64)
1 (25)		5	1.315 (33.40)	0.065 (1.65)	0.87 (1.29)
1 (25)		10	1.315 (33.40)	0.109 (2.77)	1.41 (2.09)
1 (25)		30	1.315 (33.40)	0.114 (2.90)	1.46 (2.18)
1 (25)	STD	40	1.315 (33.40)	0.133 (3.38)	1.68 (2.50)
1 (25)	XS	80	1.315 (33.40)	0.179 (4.55)	2.17 (3.24)
1 (25)		160	1.315 (33.40)	0.250 (6.35)	2.85 (4.24)
1 (25)	XXS		1.315 (33.40)	0.358 (9.09)	3.66 (5.45)
1½ (32)		5	1.660 (42.16)	0.065 (1.65)	1.11 (1.65)
11/4 (32)		10	1.660 (42.16)	0.109 (2.77)	1.81 (2.69)
11/4 (32)		30	1.660 (42.16)	0.117 (2.97)	1.93 (2.87)
11/4 (32)	STD	40	1.660 (42.16)	0.140 (3.56)	2.27 (3.39)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NPS (DN)	Identification	Schedule No.	Outside Diameter,	Wall Thickness,	Plain End Weight (Mass),
1 ¹ / ₄ (32)	[Note (1)] XS	80	in. (mm) 1.660 (42.16)	in. (mm) 0.191 (4.85)	3.00 (4.46)
1 ¹ / ₄ (32)		160	1.660 (42.16)	0.250 (6.35)	3.77 (5.61)
1 ¹ / ₄ (32)	 XXS		1.660 (42.16)	0.382 (9.70)	5.22 (7.76)
	AAS		1.000 (12.10)	0.302 (7.70)	3.22 (7.70)
1½ (40)	•••	5	1.900 (48.26)	0.065 (1.65)	1.28 (1.90)
$1\frac{1}{2}$ (40)		10	1.900 (48.26)	0.109 (2.77)	2.09 (3.11)
$1\frac{1}{2}$ (40)	****	30	1.900 (48.26)	0.125 (3.18)	2.37 (3.54)
$1\frac{1}{2}$ (40)	STD	40	1.900 (48.26)	0.145 (3.68)	2.72 (4.05)
1½ (40)	XS	80	1.900 (48.26)	0.200 (5.08)	3.63 (5.41)
$1\frac{1}{2}$ (40)		160	1.900 (48.26)	0.281 (7.14)	4.86 (7.24)
1½ (40)	XXS		1.900 (48.26)	0.400 (10.16)	6.41 (9.55)
2 (50)		5	2.375 (60.32)	0.065 (1.65)	1.61 (2.39)
2 (50)			2.375 (60.32)	0.083 (2.11)	2.03 (3.03)
2 (50)		10	2.375 (60.32)	0.109 (2.77)	2.64 (3.93)
2 (50)	***	30	2.375 (60.32)	0.125 (3.18)	3.01 (4.48)
2 (50)	200		2.375 (60.32)	0.141 (3.58)	3.37 (5.01)
2 (50)	STD	40	2.375 (60.32)	0.154 (3.91)	3.66 (5.44)
2 (50)			2.375 (60.32)	0.172 (4.37)	4.05 (6.03)
2 (50)			2.375 (60.32)	0.188 (4.78)	4.40 (6.55)
2 (30)	***		2.373 (00.32)	0.100 (4.70)	4.40 (0.55)
2 (50)	XS	80	2.375 (60.32)	0.218 (5.54)	5.03 (7.48)
2 (50)	•••	•••	2.375 (60.32)	0.250 (6.35)	5.68 (8.45)
2 (50)	***		2.375 (60.32)	0.281 (7.14)	6.29 (9.36)
2 (50)		160	2.375 (60.32)	0.344 (8.74)	7.47 (11.12)
2 (50)	XXS		2.375 (60.32)	0.436 (11.07)	9.04 (13.45)
2½ (65)		5	2.875 (73.02)	0.083 (2.11)	2.48 (3.69)
2½ (65)			2.875 (73.02)	0.109 (2.77)	3.22 (4.80)
$2\frac{1}{2}$ (65)		10	2.875 (73.02)	0.120 (3.05)	3.53 (5.26)
2½ (65)			2.875 (73.02)	0.125 (3.18)	3.67 (5.48)
2½ (65)	paren.		2.875 (73.02)	0.141 (3.58)	4.12 (6.13)
$2\frac{1}{2}$ (65)			2.875 (73.02)	0.156 (3.96)	4.53 (6.74)
$2\frac{1}{2}$ (65)			2.875 (73.02)	0.172 (4.37)	4.97 (7.40)
$2\frac{1}{2}$ (65)	,	30	2.875 (73.02)	0.188 (4.78)	5.40 (8.04)
2½ (65) 2½ (65)	STD	40	2.875 (73.02)	0.203 (5.16)	5.80 (8.64)
$2\frac{1}{2}$ (65)			2.875 (73.02)	0.216 (5.49)	6.14 (9.14)
$2\frac{1}{2}$ (65)			2.875 (73.02)	0.250 (6.35)	7.02 (10.44)
$2\frac{7}{2}$ (65)	xs	80	2.875 (73.02)	0.276 (7.01)	7.67 (11.41)
$2\frac{1}{2}$ (65)		160	2.875 (73.02)	0.375 (9.52)	10.02 (14.91)
$2\frac{7}{2}$ (65) $2^{1}/_{2}$ (65)	 XXS		2.875 (73.02)	0.552 (14.02)	13.71 (20.40)
	۸۸۵				13./1 (20.40)
3 (80)		5	3.500 (88.90)	0.083 (2.11)	3.03 (4.52)
3 (80)			3.500 (88.90)	0.109 (2.77)	3.95 (5.88)
3 (80)		10	3.500 (88.90)	0.120 (3.05)	4.34 (6.46)
3 (80)			3.500 (88.90)	0.125 (3.18)	4.51 (6.72)
3 (80)	***		3.500 (88.90)	0.141 (3.58)	5.06 (7.53)
3 (80)			3.500 (88.90)	0.156 (3.96)	5.58 (8.30)

Table 2-1 Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

	Identification	Schedule	Outside Diameter,	Wall Thickness,	Plain End Weight (Mass),
NPS (DN)	[Note (1)]	No.	in. (mm)	in. (mm)	lb/ft (kg/m)
3 (80)			3.500 (88.90)	0.172 (4.37)	6.12 (9.11)
3 (80)		30	3.500 (88.90)	0.188 (4.78)	6.66 (9.92)
3 (80)	STD	40	3.500 (88.90)	0.216 (5.49)	7.58 (11.29)
3 (80)			3.500 (88.90)	0.250 (6.35)	8.69 (12.93)
3 (80)			3.500 (88.90)	0.281 (7.14)	9.67 (14.40)
3 (80)	XS	80	3.500 (88.90)	0.300 (7.62)	10.26 (15.27)
3 (80)		160	3.500 (88.90)	0.438 (11.13)	14.34 (21.35)
3 (80)	XXS		3.500 (88.90)	0.600 (15.24)	18.60 (27.68)
3½ (90)		5	4.000 (101.60)	0.083 (2.11)	3.48 (5.18)
3½ (90)			4.000 (101.60)	0.109 (2.77)	4.53 (6.75)
3½ (90)		10	4.000 (101.60)	0.120 (3.05)	4.98 (7.41)
3½ (90)			4.000 (101.60)	0.125 (3.18)	5.18 (7.72)
3½ (90)			4.000 (101.60)	0.141 (3.58)	5.82 (8.65)
$3\frac{1}{2}$ (90)			4.000 (101.60)	0.156 (3.96)	6.41 (9.54)
3½ (90)			4.000 (101.60)	0.172 (4.37)	7.04 (10.48)
3½ (90)		30	4.000 (101.60)	0.188 (4.78)	7.66 (11.41)
3½ (90)	STD	40	4.000 (101.60)	0.226 (5.74)	9.12 (13.57)
3½ (90)			4.000 (101.60)	0.250 (6.35)	10.02 (14.92)
$3\frac{1}{2}$ (90)		•••	4.000 (101.60)	0.281 (7.14)	11.17 (16.63)
3½ (90)	 XS	80	4.000 (101.60)	0.318 (8.08)	12.52 (18.64)
					, ,
4 (100)		5	4.500 (114.30)	0.083 (2.11)	3.92 (5.84)
4 (100)			4.500 (114.30)	0.109 (2.77)	5.12 (7.62)
4 (100)		10	4.500 (114.30)	0.120 (3.05)	5.62 (8.37)
4 (100)			4.500 (114.30)	0.125 (3.18)	5.85 (8.71)
4 (100)	•••		4.500 (114.30)	0.141 (3.58)	6.57 (9.78)
4 (100)			4.500 (114.30)	0.156 (3.96)	7.24 (10.78)
4 (100)			4.500 (114.30)	0.172 (4.37)	7.96 (11.85)
4 (100)		30	4.500 (114.30)	0.188 (4.78)	8.67 (12.91)
4 (100)			4.500 (114.30)	0.203 (5.16)	9.32 (13.89)
4 (100)			4.500 (114.30)	0.219 (5.56)	10.02 (14.91)
4 (100)	STD	40	4.500 (114.30)	0.237 (6.02)	10.80 (16.08)
4 (100)			4.500 (114.30)	0.250 (6.35)	11.36 (16.91)
4 (100)		***	4.500 (114.30)	0.281 (7.14)	12.67 (18.87)
4 (100)			4.500 (114.30)	0.312 (7.92)	13.97 (20.78)
4 (100)	XS	80	4.500 (114.30)	0.337 (8.56)	15.00 (22.32)
4 (100)		120	4.500 (114.30)	0.438 (11.13)	19.02 (28.32)
4 (100)		160	4.500 (114.30)	0.531 (13.49)	22.53 (33.54)
4 (100)	XXS		4.500 (114.30)	0.674 (17.12)	27.57 (41.03)
5 (125)			5.563 (141.30)	0.083 (2.11)	4.86 (7.24)
5 (125)		5	5.563 (141.30)	0.109 (2.77)	6.36 (9.46)
5 (125)			5.563 (141.30)	0.125 (3.18)	7.27 (10.83)
5 (125)		10	5.563 (141.30)	0.134 (3.40)	7.78 (11.56)
5 (125)			5.563 (141.30)	0.156 (3.96)	9.02 (13.41)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NPS (DN)	Identification [Note (1)]	Schedule No.	Outside Diameter, in. (mm)	Wall Thickness, in. (mm)	Plain End Weight (Mass), lb/ft (kg/m)
5 (125)			5.563 (141.30)	0.188 (4.78)	10.80 (16.09)
5 (125)			5.563 (141.30)	0.219 (5.56)	12.51 (18.61)
5 (125)	STD	40	5.563 (141.30)	0.258 (6.55)	14.63 (21.77)
5 (125)			5.563 (141.30)	0.281 (7.14)	15.87 (23.62)
5 (125)			5.563 (141.30)	0.312 (7.92)	17.51 (26.05)
5 (125)			5.563 (141.30)	0.344 (8.74)	19.19 (28.57)
5 (125)	XS	80	5.563 (141.30)	0.375 (9.52)	20.80 (30.94)
5 (125)	***	120	5.563 (141.30)	0.500 (12.70)	27.06 (40.28)
5 (125)		160	5.563 (141.30)	0.625 (15.88)	32.99 (49.12)
5 (125)	XXS		5.563 (141.30)	0.750 (19.05)	38.59 (57.43)
6 (150)		m	6.625 (168.28)	0.083 (2.11)	5.80 (8.65)
6 (150)		5	6.625 (168.28)	0.109 (2.77)	7.59 (11.31)
6 (150)			6.625 (168.28)	0.125 (3.18)	8.69 (12.95)
6 (150)		10	6.625 (168.28)	0.134 (3.40)	9.30 (13.83)
6 (150)			6.625 (168.28)	0.141 (3.58)	9.77 (14.54)
6 (150)			6.625 (168.28)	0.156 (3.96)	10.79 (16.05)
6 (150)	•••		6.625 (168.28)	0.172 (4.37)	11.87 (17.66)
6 (150)			6.625 (168.28)	0.188 (4.78)	12.94 (19.27)
6 (150)			6.625 (168.28)	0.203 (5.16)	13.94 (20.76)
6 (150)			6.625 (168.28)	0.219 (5.56)	15.00 (22.31)
6 (150)			6.625 (168.28)	0.250 (6.35)	17.04 (25.36)
6 (150)	STD	40	6.625 (168.28)	0.280 (7.11)	18.99 (28.26)
6 (150)	***		6.625 (168.28)	0.312 (7.92)	21.06 (31.32)
6 (150)			6.625 (168.28)	0.344 (8.74)	23.10 (34.39)
6 (150)	***		6.625 (168.28)	0.375 (9.52)	25.05 (37.27)
6 (150)	XS	80	6.625 (168.28)	0.432 (10.97)	28.60 (42.56)
6 (150)			6.625 (168.28)	0.500 (12.70)	32.74 (48.73)
6 (150)		120	6.625 (168.28)	0.562 (14.27)	36.43 (54.20)
6 (150)	•••		6.625 (168.28)	0.625 (15.88)	40.09 (59.68)
6 (150)	***	160	6.625 (168.28)	0.719 (18.26)	45.39 (67.56)
6 (150)	•••	•••	6.625 (168.28)	0.750 (19.05)	47.10 (70.11)
6 (150)	XXS		6.625 (168.28)	0.864 (21.95)	53.21 (79.21)
6 (150)			6.625 (168.28)	0.875 (22.22)	53.78 (80.04)
8 (200)		5	8.625 (219.08)	0.109 (2.77)	9.92 (14.78)
8 (200)			8.625 (219.08)	0.125 (3.18)	11.36 (16.93)
8 (200)		10	8.625 (219.08)	0.148 (3.76)	13.41 (19.97)
8 (200)			8.625 (219.08)	0.156 (3.96)	14.12 (21.01)
8 (200)			8.625 (219.08)	0.188 (4.78)	16.96 (25.26)
8 (200)	***		8.625 (219.08)	0.203 (5.16)	18.28 (27.22)
8 (200)	***		8.625 (219.08)	0.219 (5.56)	19.68 (29.28)
8 (200)		20	8.625 (219.08)	0.250 (6.35)	22.38 (33.31)
8 (200)	•••	30	8.625 (219.08)	0.277 (7.04)	24.72 (36.81)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NPS (DN)	Identification [Note (1)]	Schedule No.	Outside Diameter, in. (mm)	Wall Thickness, in. (mm)	Plain End Weight (Mass), lb/ft (kg/m)
8 (200)			8.625 (219.08)	0.312 (7.92)	27.73 (41.24)
8 (200)	STD	40	8.625 (219.08)	0.322 (8.18)	28.58 (42.55)
8 (200)			8.625 (219.08)	0.344 (8.74)	30.45 (45.34)
8 (200)			8.625 (219.08)	0.375 (9.52)	33.07 (49.20)
8 (200)	•••	 60	8.625 (219.08)	0.406 (10.31)	35.67 (53.08)
			, ,	• •	
8 (200)	 XS		8.625 (219.08)	0.438 (11.13)	38.33 (57.08)
8 (200)	Λ3	80	8.625 (219.08)	0.500 (12.70)	43.43 (64.64)
8 (200)			8.625 (219.08)	0.562 (14.27)	48.44 (72.08)
8 (200)		100	8.625 (219.08)	0.594 (15.09)	51.00 (75.91)
8 (200)	•••		8.625 (219.08)	0.625 (15.88)	53.45 (79.58)
8 (200)		120	8.625 (219.08)	0.719 (18.26)	60.77 (90.43)
8 (200)			8.625 (219.08)	0.750 (19.05)	63.14 (93.97)
8 (200)		140	8.625 (219.08)	0.812 (20.62)	67.82 (100.92)
8 (200)	XXS		8.625 (219.08)	0.875 (22.22)	72.49 (107.88)
8 (200)		160	8.625 (219.08)	0.906 (23.01)	74.76 (111.26)
8 (200)	•••		8.625 (219.08)	1.000 (25.40)	81.51 (121.32)
8 (200)			8.625 (219.08)	1.125 (25.58)	90.20 (134.27)
10 (250)		5	10.75 (273.0)	0.134 (3.40)	15.21 (22.61)
10 (250)			10.75 (273.0)	0.156 (3.96)	17.67 (26.27)
10 (250)		10	10.75 (273.0)	0.165 (4.19)	18.67 (27.78)
10 (250)			10.75 (273.0)	0.188 (4.78)	21.23 (31.62)
10 (250)			10.75 (273.0)	0.203 (5.16)	22.89 (34.08)
10 (250)			10.75 (273.0)	0.219 (5.56)	24.65 (36.67)
10 (250)		20	10.75 (273.0)	0.250 (6.35)	28.06 (41.76)
10 (250)			10.75 (273.0)	0.279 (7.09)	31.23 (46.49)
10 (250)		30	10.75 (273.0)	0.307 (7.80)	34.27 (51.01)
10 (250)			10.75 (273.0)	0.344 (8.74)	38.27 (56.96)
10 (250)	 STD	 40	10.75 (273.0)	0.365 (9.27)	40.52 (60.29)
10 (250)		40	10.75 (273.0)	0.438 (11.13)	48.28 (71.88)
_					
10 (250)	XS	60	10.75 (273.0)	0.500 (12.70)	54.79 (81.53)
10 (250)	605		10.75 (273.0)	0.562 (14.27)	61.21 (91.05)
10 (250)		80	10.75 (273.0)	0.594 (15.09)	64.49 (95.98)
10 (250)			10.75 (273.0)	0.625 (15.88)	67.65 (100.69)
10 (250)		100	10.75 (273.0)	0.719 (18.26)	77.10 (114.71)
10 (250)		•••	10.75 (273.0)	0.812 (20.62)	86.26 (128.34)
10 (250)		120	10.75 (273.0)	0.844 (21.44)	89.38 (133.01)
10 (250)			10.75 (273.0)	0.875 (22.22)	92.37 (137.42)
10 (250)			10.75 (273.0)	0.938 (23.83)	98.39 (146.43)
10 (250)	XXS	140	10.75 (273.0)	1.000 (25.40)	104.23 (155.10)
10 (250)		160	10.75 (273.0)	1.125 (28.58)	115.75 (172.27)
10 (250)			10.75 (273.0)	1.250 (31.75)	126.94 (188.90)
10 (250)			10.75 (273.0)	1.375 (34.92)	137.80 (205.03)
10 (250)			10.75 (273.0)	1.438 (36.53)	143.15 (213.03)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NPS (DN)	Identification [Note (1)]	Schedule No.	Outside Diameter, in. (mm)	Wall Thickness, in. (mm)	Plain End Weight (Mass), lb/ft (kg/m)
12 (300)		5	12.75 (323.8)	0.156 (3.96)	21.00 (31.24)
12 (300)			12.75 (323.8)	0.172 (4.37)	23.13 (34.43)
12 (300)		10	12.75 (323.8)	0.180 (4.57)	24.19 (35.98)
12 (300)	***		12.75 (323.8)	0.188 (4.78)	25.25 (37.61)
12 (300)	***		12.75 (323.8)	0.203 (5.16)	27.23 (40.55)
12 (300)	2000		12.75 (323.8)	0.219 (5.56)	29.34 (43.64)
12 (300)	***	20	12.75 (323.8)	0.250 (6.35)	33.41 (49.71)
12 (300)	***		12.75 (323.8)	0.281 (7.14)	37.46 (55.76)
12 (300)	3000		12.75 (323.8)	0.312 (7.92)	41.48 (61.70)
12 (300)	***	30	12.75 (323.8)	0.330 (8.38)	43.81 (65.19)
12 (300)			12.75 (323.8)	0.344 (8.74)	45.62 (67.91)
12 (300)	STD		12.75 (323.8)	0.375 (9.52)	49.61 (73.79)
12 (300)	***	40	12.75 (323.8)	0.406 (10.31)	53.57 (79.71)
12 (300)			12.75 (323.8)	0.438 (11.13)	57.65 (85.82)
12 (300)	XS		12.75 (323.8)	0.500 (12.70)	65.48 (97.44)
12 (300)	.000	60	12.75 (323.8)	0.562 (14.27)	73.22 (108.93)
12 (300)			12.75 (323.8)	0.625 (15.88)	81.01 (120.59)
12 (300)	***	80	12.75 (323.8)	0.688 (17.48)	88.71 (132.05)
12 (300)	200		12.75 (323.8)	0.750 (19.05)	96.21 (143.17)
12 (300)			12.75 (323.8)	0.812 (20.62)	103.63 (154.17)
12 (300)	***	100	12.75 (323.8)	0.844 (21.44)	107.42 (159.87)
12 (300)			12.75 (323.8)	0.875 (22.22)	111.08 (165.26)
12 (300)	***		12.75 (323.8)	0.938 (23.83)	118.44 (176.29)
12 (300)	XXS	120	12.75 (323.8)	1.000 (25.40)	125.61 (186.92)
12 (300)			12.75 (323.8)	1.062 (26.97)	132.69 (197.43)
12 (300)		140	12.75 (323.8)	1.125 (28.58)	139.81 (208.08)
12 (300)	***		12.75 (323.8)	1.250 (31.75)	153.67 (228.68)
12 (300)		160	12.75 (323.8)	1.312 (33.32)	160.42 (238.69)
12 (300)			12.75 (323.8)	1.375 (34.92)	167.20 (248.78)
12 (300)	***		12.75 (323.8)	1.500 (38.10)	180.39 (268.44)
14 (350)	***	5	14.00 (355.6)	0.156 (3.96)	23.09 (34.34)
14 (350)			14.00 (355.6)	0.188 (4.78)	27.76 (41.36)
14 (350)			14.00 (355.6)	0.203 (5.16)	29.94 (44.59)
14 (350)	(0.0)		14.00 (355.6)	0.210 (5.33)	30.96 (46.04)
14 (350)			14.00 (355.6)	0.219 (5.56)	32.26 (48.00)
14 (350)		10	14.00 (355.6)	0.250 (6.35)	36.75 (54.69)
14 (350)			14.00 (355.6)	0.281 (7.14)	41.21 (61.36)
14 (350)		20	14.00 (355.6)	0.312 (7.92)	45.65 (67.91)
14 (350)	***		14.00 (355.6)	0.344 (8.74)	50.22 (74.76)
14 (350)	STD	30	14.00 (355.6)	0.375 (9.52)	54.62 (81.25)
14 (350)			14.00 (355.6)	0.406 (10.31)	59.00 (87.79)
14 (350)	300	40	14.00 (355.6)	0.438 (11.13)	63.50 (94.55)

Table 2-1 Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NDC (DA)	Identification	Schedule	Outside Diameter,	Wall Thickness,	Plain End Weight (Mass),
NPS (DN)	[Note (1)]	No.	in. (mm)	in. (mm)	lb/ft (kg/m)
14 (350)	ox	***	14.00 (355.6)	0.469 (11.91)	67.84 (100.95)
14 (350)	XS		14.00 (355.6)	0.500 (12.70)	72.16 (107.40)
14 (350)			14.00 (355.6)	0.562 (14.27)	80.73 (120.12)
14 (350)		60	14.00 (355.6)	0.594 (15.09)	85.13 (126.72)
14 (350)		***	14.00 (355.6)	0.625 (15.88)	89.36 (133.04)
14 (350)			14.00 (355.6)	0.688 (17.48)	97.91 (145.76)
14 (350)	***	80	14.00 (355.6)	0.750 (19.05)	106.23 (158.11)
14 (350)			14.00 (355.6)	0.812 (20.62)	114.48 (170.34)
14 (350)			14.00 (355.6)	0.875 (22.22)	122.77 (182.69)
14 (350)		100	14.00 (355.6)	0.938 (23.83)	130.98 (194.98)
14 (350)			14.00 (355.6)	1.000 (25.40)	138.97 (206.84)
14 (350)			14.00 (355.6)	1.062 (26.97)	146.88 (218.58)
14 (350)		120	14.00 (355.6)	1.094 (27.79)	150.93 (224.66)
14 (350)			14.00 (355.6)	1.125 (28.58)	154.84 (230.49)
14 (350)		140	14.00 (355.6)	1.250 (31.75)	170.37 (253.58)
14 (350)		160	14.00 (355.6)	1.406 (35.71)	189.29 (281.72)
14 (350)			14.00 (355.6)	2.000 (50.80)	256.56 (381.85)
14 (350)			14.00 (355.6)	2.125 (53.98)	269.76 (401.52)
14 (350)			14.00 (355.6)	2.200 (55.88)	277.51 (413.04)
14 (350)			14.00 (355.6)	2.500 (63.50)	307.34 (457.43)
16 (400)	***	5	16.00 (406.4)	0.165 (4.19)	27.93 (41.56)
16 (400)			16.00 (406.4)	0.188 (4.78)	31.78 (47.34)
16 (400)			16.00 (406.4)	0.203 (5.16)	34.28 (51.06)
16 (400)			16.00 (406.4)	0.219 (5.56)	36.95 (54.96)
16 (400)	***	10	16.00 (406.4)	0.250 (6.35)	42.09 (62.65)
16 (400)			16.00 (406.4)	0.281 (7.14)	47.22 (70.30)
16 (400)	***	20	16.00 (406.4)	0.312 (7.92)	52.32 (77.83)
16 (400)			16.00 (406.4)	0.344 (8.74)	57.57 (85.71)
16 (400)	STD	30	16.00 (406.4)	0.375 (9.52)	62.64 (93.18)
16 (400)			16.00 (406.4)	0.406 (10.31)	67.68 (100.71)
16 (400)			16.00 (406.4)	0.438 (11.13)	72.86 (108.49)
16 (400)			16.00 (406.4)	0.469 (11.91)	77.87 (115.87)
16 (400)	XS	40	16.00 (406.4)	0.500 (12.70)	82.85 (123.31)
16 (400)			16.00 (406.4)	0.562 (14.27)	92.75 (138.00)
16 (400)			16.00 (406.4)	0.625 (15.88)	102.72 (152.94)
16 (400)		60	16.00 (406.4)	0.656 (16.66)	107.60 (160.13)
16 (400)			16.00 (406.4)	0.688 (17.48)	112.62 (167.66)
16 (400)		···	16.00 (406.4)	0.750 (19.05)	122.27 (181.98)
16 (400)			16.00 (406.4)	0.730 (19.03)	131.84 (196.18)
16 (400)		80	16.00 (406.4)	0.844 (21.44)	136.74 (203.54)
	100				
16 (400)			16.00 (406.4)	0.875 (22.22)	141.48 (210.52)
16 (400)		***	16.00 (406.4)	0.938 (23.83)	151.03 (224.83)

Table 2-1 Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NPS (DN)	Identification [Note (1)]	Schedule No.	Outside Diameter, in. (mm)	Wall Thickness, in. (mm)	Plain End Weight (Mass), lb/ft (kg/m)
16 (400)			16.00 (406.4)	1.000 (25.40)	160.35 (238.66)
16 (400)		100	16.00 (406.4)	1.031 (26.19)	164.98 (245.57)
16 (400)	ww.		16.00 (406.4)	1.062 (26.97)	169.59 (252.37)
16 (400)	***		16.00 (406.4)	1.125 (28.58)	178.89 (266.30)
16 (400)			16.00 (406.4)	1.188 (30.18)	188.11 (280.01)
16 (400)		120	16.00 (406.4)	1.219 (30.96)	192.61 (286.66)
16 (400)	***		16.00 (406.4)	1.250 (31.75)	197.10 (293.35)
16 (400)		140	16.00 (406.4)	1.438 (36.53)	223.85 (333.21)
16 (400)		160	16.00 (406.4)	1.594 (40.49)	245.48 (365.38)
16 (400)			16.00 (406.4)	1.750 (44.45)	266.58 (396.77)
				, ,	
18 (450)	***	5	18.00 (457.2)	0.165 (4.19)	31.46 (46.81)
18 (450)			18.00 (457.2)	0.188 (4.78)	35.80 (53.33)
18 (450)			18.00 (457.2)	0.219 (5.56)	41.63 (61.93)
18 (450)		10	18.00 (457.2)	0.250 (6.35)	47.44 (70.60)
18 (450)	***		18.00 (457.2)	0.281 (7.14)	53.23 (79.25)
18 (450)		20	18.00 (457.2)	0.312 (7.92)	58.99 (87.75)
18 (450)			18.00 (457.2)	0.344 (8.74)	64.93 (96.66)
18 (450)	STD		18.00 (457.2)	0.375 (9.52)	70.65 (105.11)
18 (450)	100		18.00 (457.2)	0.406 (10.31)	76.36 (113.63)
18 (450)	***	30	18.00 (457.2)	0.438 (11.13)	82.23 (122.44)
18 (450)			18.00 (457.2)	0.469 (11.91)	87.89 (130.79)
18 (450)	XS		18.00 (457.2)	0.500 (12.70)	93.54 (139.22)
18 (450)		40	18.00 (457.2)	0.562 (14.27)	104.76 (155.88)
18 (450)			18.00 (457.2)	0.625 (15.88)	116.09 (172.83)
18 (450)			18.00 (457.2)	0.688 (17.48)	127.32 (189.56)
18 (450)		60	18.00 (457.2)	0.750 (19.05)	138.30 (205.84)
18 (450)			18.00 (457.2)	0.812 (20.62)	149.20 (222.01)
18 (450)			18.00 (457.2)	0.875 (22.22)	160.18 (238.36)
18 (450)	•••	80	18.00 (457.2)	0.938 (23.83)	171.08 (254.68)
18 (450)	***		18.00 (457.2)	1.000 (25.40)	181.73 (270.48)
18 (450)	***		18.00 (457.2)	1.062 (26.97)	192.29 (286.15)
18 (450)			18.00 (457.2)	1.125 (28.58)	202.94 (302.10)
18 (450)		100	18.00 (457.2)	1.156 (29.36)	208.15 (309.78)
18 (450)			18.00 (457.2)	1.188 (30.18)	213.51 (317.82)
18 (450)			18.00 (457.2)	1.250 (31.75)	223.82 (333.13)
18 (450)		120	18.00 (457.2)	1.375 (34.92)	244.37 (363.66)
		140		1.562 (39.67)	274.48 (408.48)
18 (450) 18 (450)	•••	160	18.00 (457.2) 18.00 (457.2)	1.781 (45.24)	308.79 (459.62)
				,	, ,
20 (500)		5	20.00 (508.0)	0.188 (4.78)	39.82 (59.32)
20 (500)			20.00 (508.0)	0.219 (5.56)	46.31 (68.89)
20 (500)		10	20.00 (508.0)	0.250 (6.35)	52.78 (78.56)
20 (500)			20.00 (508.0)	0.281 (7.14)	59.23 (88.19)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NPS (DN)	Identification [Note (1)]	Schedule No.	Outside Diameter, in. (mm)	Wall Thickness, in. (mm)	Plain End Weight (Mass), lb/ft (kg/m)
20 (500)			20.00 (508.0)	0.312 (7.92)	65.66 (97.68)
20 (500)			20.00 (508.0)	0.344 (8.74)	72.28 (107.61)
20 (500)	STD	20	20.00 (508.0)	0.375 (9.52)	78.67 (117.03)
20 (500)			20.00 (508.0)	0.406 (10.31)	85.04 (126.54)
20 (500)			20.00 (508.0)	0.438 (11.13)	91.59 (136.38)
20 (500)			20.00 (508.0)	0.469 (11.91)	97.92 (145.71)
20 (500)	XS	30	20.00 (508.0)	0.500 (12.70)	104.23 (155.13)
20 (500)			20.00 (508.0)	0.562 (14.27)	116.78 (173.75)
20 (500)		40	20.00 (508.0)	0.594 (15.09)	123.23 (183.43)
20 (500)			20.00 (508.0)	0.625 (15.88)	129.45 (192.73)
20 (500)			20.00 (508.0)	0.688 (17.48)	142.03 (211.45)
20 (500)			20.00 (508.0)	0.750 (19.05)	154.34 (229.71)
20 (500)		60	20.00 (508.0)	0.812 (20.62)	166.56 (247.84)
20 (500)			20.00 (508.0)	0.875 (22.22)	178.89 (266.20)
20 (500)			20.00 (508.0)	0.938 (23.83)	191.14 (284.54)
20 (500)			20.00 (508.0)	1.000 (25.40)	203.11 (302.30)
20 (500)		80	20.00 (508.0)	1.031 (26.19)	209.06 (311.19)
20 (500)			20.00 (508.0)	1.062 (26.97)	215.00 (319.94)
20 (500)		***	20.00 (508.0)	1.125 (28.58)	227.00 (337.91)
20 (500)			20.00 (508.0)	1.188 (30.18)	238.91 (355.63)
20 (500)			20.00 (508.0)	1.250 (31.75)	250.55 (372.90)
20 (500)		100	20.00 (508.0)	1.281 (32.54)	256.34 (381.55)
20 (500)		•••	20.00 (508.0)	1.312 (33.32)	262.10 (390.05)
20 (500)			20.00 (508.0)	1.375 (34.92)	273.76 (407.41)
20 (500)		120	20.00 (508.0)	1.500 (38.10)	296.65 (441.52)
20 (500)		140	20.00 (508.0)	1.750 (44.45)	341.41 (508.15)
20 (500)		160	20.00 (508.0)	1.969 (50.01)	379.53 (564.85)
22 (550)		5	22.00 (558.8)	0.188 (4.78)	43.84 (65.31)
22 (550)			22.00 (558.8)	0.219 (5.56)	50.99 (75.86)
22 (550)		10	22.00 (558.8)	0.250 (6.35)	58.13 (86.51)
22 (550)	ou.	***	22.00 (558.8)	0.281 (7.14)	65.24 (97.14)
22 (550)			22.00 (558.8)	0.312 (7.92)	72.34 (107.60)
22 (550)			22.00 (558.8)	0.344 (8.74)	79.64 (118.56)
22 (550)	STD	20	22.00 (558.8)	0.375 (9.52)	86.69 (128.96)
22 (550)			22.00 (558.8)	0.406 (10.31)	93.72 (139.46)
22 (550)	***		22.00 (558.8)	0.438 (11.13)	100.96 (150.33)
22 (550)			22.00 (558.8)	0.469 (11.91)	107.95 (160.63)
22 (550)	XS	30	22.00 (558.8)	0.500 (12.70)	114.92 (171.04)
22 (550)			22.00 (558.8)	0.562 (14.27)	128.79 (191.63)
22 (550)			22.00 (558.8)	0.625 (15.88)	142.81 (212.62)
22 (550)			22.00 (558.8)	0.688 (17.48)	156.74 (233.35)
22 (550)			22.00 (558.8)	0.750 (19.05)	170.37 (253.58)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

	Identification	Schedule	Outside Diameter,	Wall Thickness,	Plain End Weight (Mass),
NPS (DN)	[Note (1)]	No.	in. (mm)	in. (mm)	lb/ft (kg/m)
22 (550)			22.00 (558.8)	0.812 (20.62)	183.92 (273.68)
22 (550)		60	22.00 (558.8)	0.875 (22.22)	197.60 (294.03)
22 (550)			22.00 (558.8)	0.938 (23.83)	211.19 (314.39)
22 (550)			22.00 (558.8)	1.000 (25.40)	224.49 (334.12)
22 (550)			22.00 (558.8)	1.062 (26.97)	237.70 (353.73)
22 (550)		80	22.00 (558.8)	1.125 (28.58)	251.05 (373.71)
22 (550)	***	•••	22.00 (558.8)	1.188 (30.18)	264.31 (393.44)
22 (550)	***		22.00 (558.8)	1.250 (31.75)	277.27 (412.68)
22 (550)			22.00 (558.8)	1.312 (33.32)	290.15 (431.80)
22 (550)	***	100	22.00 (558.8)	1.375 (34.92)	303.16 (451.15)
22 (550)			22.00 (558.8)	1.438 (36.53)	316.08 (470.50)
22 (550)	***		22.00 (558.8)	1.500 (38.10)	328.72 (489.25)
22 (550)		120	22.00 (558.8)	1.625 (41.28)	353.94 (526.85)
22 (550)		140	22.00 (558.8)	1.875 (47.62)	403.38 (600.32)
22 (550)	***	160	22.00 (558.8)	2.125 (53.98)	451.49 (672.03)
24 (600)		5	24.00 (609.6)	0.218 (5.54)	55.42 (82.53)
24 (600)		10	24.00 (609.6)	0.250 (6.35)	63.47 (94.47)
24 (600)			24.00 (609.6)	0.281 (7.14)	71.25 (106.08)
24 (600)	***		24.00 (609.6)	0.312 (7.92)	79.01 (117.52)
24 (600)			24.00 (609.6)	0.344 (8.74)	86.99 (129.51)
24 (600)	STD	20	24.00 (609.6)	0.375 (9.52)	94.71 (140.89)
24 (600)	***		24.00 (609.6)	0.406 (10.31)	102.40 (152.38)
24 (600)	***		24.00 (609.6)	0.438 (11.13)	110.32 (164.27)
24 (600)	****		24.00 (609.6)	0.469 (11.91)	117.98 (175.55)
24 (600)	XS		24.00 (609.6)	0.500 (12.70)	125.61 (186.95)
24 (600)		30	24.00 (609.6)	0.562 (14.27)	140.81 (209.51)
24 (600)			24.00 (609.6)	0.625 (15.88)	156.17 (232.52)
24 (600)		40	24.00 (609.6)	0.688 (17.48)	171.45 (255.25)
24 (600)			24.00 (609.6)	0.750 (19.05)	186.41 (277.44)
24 (600)	***		24.00 (609.6)	0.812 (20.62)	201.28 (299.51)
24 (600)			24.00 (609.6)	0.875 (22.22)	216.31 (321.87)
24 (600)			24.00 (609.6)	0.938 (23.83)	231.25 (344.25)
24 (600)		60	24.00 (609.6)	0.969 (24.61)	238.57 (355.04)
24 (600)			24.00 (609.6)	1.000 (25.40)	245.87 (365.94)
24 (600)			24.00 (609.6)	1.062 (26.97)	260.41 (387.52)
24 (600)			24.00 (609.6)	1.125 (28.58)	275.10 (409.52)
24 (600)			24.00 (609.6)	1.188 (30.18)	289.71 (431.25)
24 (600)		80	24.00 (609.6)	1.219 (30.96)	296.86 (441.80)
24 (600)	***		24.00 (609.6)	1.250 (31.75)	304.00 (452.46)
24 (600)		***	24.00 (609.6)	1.312 (33.32)	318.21 (473.54)
24 (600)			24.00 (609.6)	1.375 (34.92)	332.56 (494.90)
24 (600)			24.00 (609.6)	1.438 (36.53)	346.83 (516.27)
24 (600)			24.00 (609.6)	1.500 (38.10)	360.79 (536.98)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NDC (DAD	Identification	Schedule	Outside Diameter,	Wall Thickness,	Plain End Weight (Mass),
NPS (DN)	[Note (1)]	No.	in. (mm)	in. (mm)	lb/ft (kg/m)
24 (600) 24 (600)	· · ·	100	24.00 (609.6) 24.00 (609.6)	1.531 (38.89) 1.562 (39.67)	367.74 (547.36) 374.66 (557.57)
24 (600)			, ,	, ,	429.79 (639.62)
, ,		120	24.00 (609.6)	1.812 (46.02)	, ,
24 (600)	w.	140	24.00 (609.6)	2.062 (52.37)	483.57 (719.68)
24 (600)		160	24.00 (609.6)	2.344 (59.54)	542.64 (807.68)
26 (650)			26.00 (660.4)	0.250 (6.35)	68.82 (102.42)
26 (650)			26.00 (660.4)	0.281 (7.14)	77.26 (115.03)
26 (650)		10	26.00 (660.4)	0.312 (7.92)	85.68 (127.44)
26 (650)			26.00 (660.4)	0.344 (8.74)	94.35 (140.46)
26 (650)	STD		26.00 (660.4)	0.375 (9.52)	102.72 (152.81)
26 (650)			26.00 (660.4)	0.406 (10.31)	111.08 (165.29)
26 (650)			26.00 (660.4)	0.438 (11.13)	119.69 (178.21)
26 (650)			26.00 (660.4)	0.469 (11.91)	128.00 (190.47)
26 (650)	V.C	20	26.00 (660.4)	0.500 (42.50)	126 20 (202 06)
26 (650)	XS	20	26.00 (660.4)	0.500 (12.70)	136.30 (202.86)
26 (650)	605	•	26.00 (660.4)	0.562 (14.27)	152.83 (227.39)
26 (650)			26.00 (660.4)	0.625 (15.88)	169.54 (252.41)
26 (650)		•••	26.00 (660.4)	0.688 (17.48)	186.16 (277.15)
26 (650)			26.00 (660.4)	0.750 (19.05)	202.44 (301.31)
26 (650)			26.00 (660.4)	0.812 (20.62)	218.64 (325.34)
26 (650)		***	26.00 (660.4)	0.875 (22.22)	235.01 (349.71)
26 (650)	ox.		26.00 (660.4)	0.938 (23.83)	251.30 (374.10)
26 (650)			26.00 (660.4)	1.000 (25.40)	267.25 (397.77)
28 (700)			28.00 (711.2)	0.250 (6.35)	74.16 (110.38)
28 (700)			28.00 (711.2)	0.281 (7.14)	83.26 (123.97)
28 (700)		10	28.00 (711.2)	0.312 (7.92)	92.35 (137.36)
28 (700)			28.00 (711.2)	0.344 (8.74)	101.70 (151.41)
00 (500)	OMD.		20.00 (544.2)	0.055 (0.50)	440 54 (464 54)
28 (700)	STD		28.00 (711.2)	0.375 (9.52)	110.74 (164.74)
28 (700) 28 (700)	m.	•••	28.00 (711.2)	0.406 (10.31)	119.76 (178.21)
28 (700)		•••	28.00 (711.2) 28.00 (711.2)	0.438 (11.13) 0.469 (11.91)	129.05 (192.16) 138.03 (205.39)
28 (700)			20.00 (/11.2)	0.405 (11.91)	130.03 (203.39)
28 (700)	XS	20	28.00 (711.2)	0.500 (12.70)	146.99 (218.77)
28 (700)			28.00 (711.2)	0.562 (14.27)	164.84 (245.26)
28 (700)		30	28.00 (711.2)	0.625 (15.88)	182.90 (272.30)
28 (700)			28.00 (711.2)	0.688 (17.48)	200.87 (299.05)
28 (700)			28.00 (711.2)	0.750 (19.05)	218.48 (325.17)
28 (700)			28.00 (711.2)	0.812 (20.62)	236.00 (351.17)
28 (700)			28.00 (711.2)	0.875 (22.22)	253.72 (377.55)
28 (700)			28.00 (711.2)	0.938 (23.83)	271.36 (403.96)
28 (700)			28.00 (711.2)	1.000 (25.40)	288.63 (429.59)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NPS (DN)	Identification [Note (1)]	Schedule No.	Outside Diameter, in. (mm)	Wall Thickness, in. (mm)	Plain End Weight (Mass), lb/ft (kg/m)
28 (700)			28.00 (711.2)	1.062 (26.97)	305.82 (455.10)
30 (750)		 5	30.00 (762.0)	0.250 (6.35)	79.51 (118.34)
30 (750)			30.00 (762.0)	0.281 (7.14)	89.27 (132.92)
30 (750)		10	30.00 (762.0)	0.312 (7.92)	99.02 (147.29)
30 (750)			30.00 (762.0)	0.344 (8.74)	109.06 (162.36)
30 (750)	STD		30.00 (762.0)	0.375 (9.52)	118.76 (176.67)
30 (750)			30.00 (762.0)	0.406 (10.31)	128.44 (191.12)
30 (750)			30.00 (762.0)	0.438 (11.13)	138.42 (206.10)
30 (750)			30.00 (762.0)	0.469 (11.91)	148.06 (220.32)
30 (750)	XS	20	30.00 (762.0)	0.500 (12.70)	157.68 (234.68)
30 (750)			30.00 (762.0)	0.562 (14.27)	176.86 (263.14)
30 (750)		30	30.00 (762.0)	0.625 (15.88)	196.26 (292.20)
	•••			, ,	, ,
30 (750)		•••	30.00 (762.0)	0.688 (17.48)	215.58 (320.95)
30 (750)	***		30.00 (762.0)	0.750 (19.05)	234.51 (349.04)
30 (750)	300	•••	30.00 (762.0)	0.812 (20.62)	253.36 (377.01)
30 (750)	***		30.00 (762.0)	0.875 (22.22)	272.43 (405.38)
30 (750)			30.00 (762.0)	0.938 (23.83)	291.41 (433.81)
30 (750)			30.00 (762.0)	1.000 (25.40)	310.01 (461.41)
30 (750)	***		30.00 (762.0)	1.062 (26.97)	328.53 (488.88)
30 (750)	***		30.00 (762.0)	1.125 (28.58)	347.26 (516.93)
30 (750)			30.00 (762.0)	1.188 (30.18)	365.90 (544.68)
30 (750)			30.00 (762.0)	1.250 (31.75)	384.17 (571.79)
32 (800)			32.0 (813)	0.250 (6.35)	84.85 (126.32)
32 (800)			32.0 (813)	0.281 (7.14)	95.28 (141.90)
32 (800)		10	32.0 (813)	0.312 (7.92)	105.69 (157.25)
32 (800)		•••	32.0 (813)	0.344 (8.74)	116.41 (173.35)
32 (800)	STD		32.0 (813)	0.375 (9.52)	126.78 (188.64)
32 (800)			32.0 (813)	0.406 (10.31)	137.12 (204.09)
32 (800)			32.0 (813)	0.438 (11.13)	147.78 (220.10)
32 (800)			32.0 (813)	0.469 (11.91)	158.08 (235.29)
32 (800)	XS	20	32.0 (813)	0.500 (12.70)	168.37 (250.65)
32 (800)			32.0 (813)	0.562 (14.27)	188.87 (281.09)
32 (800)		30	32.0 (813)	0.625 (15.88)	209.62 (312.17)
32 (800)		40	32.0 (813)	0.688 (17.48)	230.29 (342.94)
32 (800)	200		32.0 (813)	0.750 (19.05)	250.55 (373.00)
32 (800)			32.0 (813)	0.812 (20.62)	270.72 (402.94)
32 (800)		<u></u>	32.0 (813)	0.875 (22.22)	291.14 (433.33)
32 (800)			32.0 (813)	0.938 (23.83)	311.47 (463.78)
32 (800)			32.0 (813)	1.000 (25.40)	331.39 (493.35)
32 (800)			32.0 (813)	1.062 (26.97)	351.23 (522.80)
32 (800)	***		32.0 (813)	1.125 (28.58)	371.31 (552.88)
32 (800)			32.0 (813)	1.188 (30.18)	391.30 (582.64)
32 (800)			32.0 (813)	1.250 (31.75)	410.90 (611.72)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

	Identification	Schedule	Outside Diameter,	Wall Thickness,	Plain End Weight (Mass),
NPS (DN)	[Note (1)]	No.	in. (mm)	in. (mm)	lb/ft (kg/m)
34 (850)			34.0 (864)	0.250 (6.35)	90.20 (134.31)
34 (850)			34.0 (864)	0.281 (7.14)	101.29 (150.88)
34 (850)		10	34.0 (864)	0.312 (7.92)	112.36 (167.21)
34 (850)			34.0 (864)	0.344 (8.74)	123.77 (184.34)
34 (850)	STD		34.0 (864)	0.375 (9.52)	134.79 (200.61)
34 (850)			34.0 (864)	0.406 (10.31)	145.80 (217.06)
34 (850)			34.0 (864)	0.438 (11.13)	157.14 (234.10)
34 (850)			34.0 (864)	0.469 (11.91)	168.11 (250.27)
34 (850)	XS	20	34.0 (864)	0.500 (12.70)	179.06 (266.63)
34 (850)			34.0 (864)	0.562 (14.27)	200.89 (299.04)
34 (850)		30	34.0 (864)	0.625 (15.88)	222.99 (332.14)
34 (850)		40	34.0 (864)	0.688 (17.48)	245.00 (364.92)
34 (850)			34.0 (864)	0.750 (19.05)	266.58 (396.96)
34 (850)			34.0 (864)	0.812 (20.62)	288.08 (428.88)
34 (850)			34.0 (864)	0.875 (22.22)	309.84 (461.28)
34 (850)			34.0 (864)	0.938 (23.83)	331.52 (493.75)
34 (850)	***		34.0 (864)	1.000 (25.40)	352.77 (525.30)
34 (850)		***	34.0 (864)	1.062 (26.97)	373.94 (556.73)
34 (850)	***	***	34.0 (864)	1.125 (28.58)	395.36 (588.83)
34 (850)			34.0 (864)	1.188 (30.18)	416.70 (620.60)
34 (850)			34.0 (864)	1.250 (31.75)	437.62 (651.65)
36 (900)			36.0 (914)	0.250 (6.35)	95.54 (142.14)
36 (900)			36.0 (914)	0.281 (7.14)	107.30 (159.68)
36 (900)		10	36.0 (914)	0.312 (7.92)	119.03 (176.97)
36 (900)		***	36.0 (914)	0.344 (8.74)	131.12 (195.12)
36 (900)	STD		36.0 (914)	0.375 (9.52)	142.81 (212.35)
36 (900)			36.0 (914)	0.406 (10.31)	154.48 (229.77)
36 (900)	•••		36.0 (914)	0.438 (11.13)	166.51 (247.82)
36 (900)			36.0 (914)	0.469 (11.91)	178.14 (264.96)
36 (900)	XS	20	36.0 (914)	0.500 (12.70)	189.75 (282.29)
36 (900)			36.0 (914)	0.562 (14.27)	212.90 (316.63)
36 (900)		30	36.0 (914)	0.625 (15.88)	236.35 (351.73)
36 (900)			36.0 (914)	0.688 (17.48)	259.71 (386.47)
36 (900)		40	36.0 (914)	0.750 (19.05)	282.62 (420.45)
36 (900)			36.0 (914)	0.812 (20.62)	305.44 (454.30)
36 (900)			36.0 (914)	0.875 (22.22)	328.55 (488.68)
36 (900)			36.0 (914)	0.938 (23.83)	351.57 (523.14)
36 (900)			36.0 (914)	1.000 (25.40)	374.15 (556.62)
36 (900)			36.0 (914)	1.062 (26.97)	396.64 (589.98)
36 (900)			36.0 (914)	1.125 (28.58)	419.42 (624.07)
36 (900)			36.0 (914)	1.188 (30.18)	442.10 (657.81)
36 (900)	•••	***	36.0 (914)	1.250 (31.75)	464.35 (690.80)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NPS (DN)	Identification	Schedule No.	Outside Diameter, in. (mm)	Wall Thickness, in. (mm)	Plain End Weight (Mass), lb/ft (kg/m)
38 (950)			38.0 (965)	0.312 (7.92)	125.70 (186.94)
38 (950)	***		38.0 (965)	0.344 (8.74)	138.47 (206.11)
38 (950)	STD		38.0 (965)	0.375 (9.52)	150.83 (224.33)
38 (950)			38.0 (965)	0.406 (10.31)	163.16 (242.74)
38 (950)			38.0 (965)	0.438 (11.13)	175.87 (261.82)
38 (950)			38.0 (965)	0.469 (11.91)	188.17 (279.94)
38 (950)	XS	***	38.0 (965)	0.500 (12.70)	200.44 (298.26)
38 (950)			38.0 (965)	0.562 (14.27)	224.92 (334.58)
38 (950)			38.0 (965)	0.625 (15.88)	249.71 (371.70)
38 (950)			38.0 (965)	0.688 (17.48)	274.42 (408.46)
38 (950)			38.0 (965)	0.750 (19.05)	298.65 (444.41)
38 (950)			38.0 (965)	0.812 (20.62)	322.80 (480.24)
38 (950)			38.0 (965)	0.875 (22.22)	347.26 (516.62)
38 (950)			38.0 (965)	0.938 (23.83)	371.63 (553.11)
38 (950)			38.0 (965)	1.000 (25.40)	395.53 (588.57)
38 (950)			38.0 (965)	1.062 (26.97)	419.35 (623.90)
50 (750)			30.0 (703)	1.002 (20.77)	113.55 (525.76)
38 (950)	***	***	38.0 (965)	1.125 (28.58)	443.47 (660.01)
38 (950)			38.0 (965)	1.188 (30.18)	467.50 (695.77)
38 (950)			38.0 (965)	1.250 (31.75)	491.07 (730.74)
40 (1 000)			40.0 (1 016)	0.312 (7.92)	132.37 (196.90)
40 (1 000)			40.0 (1 016)	0.344 (8.74)	145.83 (217.11)
40 (1 000)	STD		40.0 (1 016)	0.375 (9.52)	158.85 (236.30)
40 (1 000)			40.0 (1 016)	0.406 (10.31)	171.84 (255.71)
40 (1 000)	***		40.0 (1 016)	0.438 (11.13)	185.24 (275.82)
40 (1 000)			40.0 (1 016)	0.469 (11.91)	198.19 (294.92)
40 (1 000)	XS		40.0 (1 016)	0.500 (12.70)	211.13 (314.23)
40 (1 000)			40.0 (1 016)	0.562 (14.27)	236.93 (352.53)
				, ,	0.00.00.00.00.00
40 (1 000)			40.0 (1 016)	0.625 (15.88)	263.07 (391.67)
40 (1 000)			40.0 (1 016)	0.688 (17.48)	289.13 (430.45)
40 (1 000)			40.0 (1 016)	0.750 (19.05)	314.69 (468.37)
40 (1 000)	***	***	40.0 (1 016)	0.812 (20.62)	340.16 (506.17)
40 (1 000)	***		40.0 (1 016)	0.875 (22.22)	365.97 (544.57)
40 (1 000)			40.0 (1 016)	0.938 (23.83)	391.68 (583.08)
40 (1 000)			40.0 (1 016)	1.000 (25.40)	416.91 (620.51)
40 (1 000)			40.0 (1 016)	1.062 (26.97)	442.05 (657.82)
40 (1 000)	***		40.0 (1 016)	1.125 (28.58)	467.52 (695.96)
40 (1 000)			40.0 (1 016)	1.188 (30.18)	492.90 (733.73)
40 (1 000)			40.0 (1 016)	1.250 (31.75)	517.80 (770.67)
42 (1 050)	····		42.0 (1 067)	0.344 (8.74)	153.18 (228.10)
42 (1 050)	STD		42.0 (1 067)	0.375 (9.52)	166.86 (248.27)
42 (1 050)	•••		42.0 (1 067)	0.406 (10.31)	180.52 (268.67)
42 (1 050)	***	***	42.0 (1 067)	0.438 (11.13)	194.60 (289.82)

Table 2-1 Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NDG (F-2)	Identification	Schedule	Outside Diameter,	Wall Thickness,	Plain End Weight (Mass),
NPS (DN)	[Note (1)]	No.	in. (mm)	in. (mm)	lb/ft (kg/m)
42 (1 050)		***	42.0 (1 067)	0.469 (11.91)	208.22 (309.90)
42 (1 050)	XS		42.0 (1 067)	0.500 (12.70)	221.82 (330.21)
42 (1 050)			42.0 (1 067)	0.562 (14.27)	248.95 (370.48)
42 (1 050)			42.0 (1 067)	0.625 (15.88)	276.44 (411.64)
42 (1 050)			42.0 (1 067)	0.688 (17.48)	303.84 (452.43)
42 (1 050)			42.0 (1 067)	0.750 (19.05)	330.72 (492.33)
42 (1 050)			42.0 (1 067)	0.812 (20.62)	357.52 (532.11)
42 (1 050)			42.0 (1 067)	0.875 (22.22)	384.67 (527.52)
42 (1 050)			42.0 (1 067)	0.938 (23.83)	411.74 (613.05)
42 (1 050)			42.0 (1 067)	1.000 (25.40)	438.29 (652.46)
42 (1 050)			42.0 (1 067)	1.062 (26.97)	464.76 (691.75)
42 (1 050)			42.0 (1 067)	1.125 (28.58)	491.57 (731.91)
42 (1 050)			42.0 (1 067)	1.188 (30.18)	518.30 (771.69)
42 (1 050)			42.0 (1 067)	1.250 (31.75)	544.52 (810.60)
44 (1 100)			44.0 (1 118)	0.344 (8.74)	160.54 (239.09)
44 (1 100)	STD		44.0 (1 118)	0.375 (9.52)	174.88 (260.25)
44 (1 100)			44.0 (1 118)	0.406 (10.31)	189.20 (281.64)
44 (1 100)			44.0 (1 118)	0.438 (11.13)	203.97 (303.82)
44 (1 100)			44.0 (1 118)	0.469 (11.91)	218.25 (324.88)
44 (1 100)	 XS		44.0 (1 118)	0.500 (12.70)	232.51 (346.18)
44 (1 100)			44.0 (1 118)	0.562 (14.27)	260.97 (388.42)
44 (1 100)			44.0 (1 118)	0.625 (15.88)	289.80 (431.62)
44 (1 100)			44.0 (1 110)	0.023 (13.00)	207.00 (431.02)
44 (1 100)			44.0 (1 118)	0.688 (17.48)	318.55 (474.42)
44 (1 100)			44.0 (1 118)	0.750 (19.05)	346.76 (516.29)
44 (1 100)			44.0 (1 118)	0.812 (20.62)	374.88 (558.04)
44 (1 100)			44.0 (1 118)	0.875 (22.22)	403.38 (600.46)
44 (1 100)			44.0 (1 118)	0.938 (23.83)	431.79 (643.03)
44 (1 100)			44.0 (1 118)	1.000 (25.40)	459.67 (684.41)
44 (1 100)			44.0 (1 118)	1.062 (26.97)	487.47 (725.67)
44 (1 100)			44.0 (1 118)	1.125 (28.58)	515.63 (767.85)
44 (1 100)			44.0 (1 118)	1.188 (30.18)	543.70 (809.65)
44 (1 100)			44.0 (1 118)	1.250 (31.75)	571.25 (850.54)
46 (1 150)		***	46.0 (1 168)	0.344 (8.74)	167.89 (249.87)
46 (1 150)	STD	***	46.0 (1 168)	0.375 (9.52)	182.90 (271.99)
46 (1 150)			46.0 (1 168)	0.406 (10.31)	197.88 (294.35)
46 (1 150)		***	46.0 (1 168)	0.438 (11.13)	213.33 (317.54)
46 (1 150)			46.0 (1 168)	0.469 (11.91)	228.27 (339.56)
46 (1 150)	XS		46.0 (1 168)	0.500 (12.70)	243.20 (361.84)
46 (1 150)			46.0 (1 168)	0.562 (14.27)	272.98 (406.02)
46 (1 150)			46.0 (1 168)	0.625 (15.88)	303.16 (451.20)
46 (1 150)			46.0 (1 168)	0.688 (17.48)	333.26 (495.97)
46 (1 150)	•••	•••	46.0 (1 168)	0.750 (19.05)	362.79 (539.78)
46 (1 150)	***		46.0 (1 168)	0.750 (19.05)	392.24 (583.47)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NPS (DN)	Identification [Note (1)]	Schedule No.	Outside Diameter, in. (mm)	Wall Thickness, in. (mm)	Plain End Weight (Mass), lb/ft (kg/m)
46 (1 150)			46.0 (1 168)	0.875 (22.22)	422.09 (627.86)
46 (1 150)			46.0 (1 168)	0.938 (23.83)	451.85 (672.41)
46 (1 150)			46.0 (1 168)	1.000 (25.40)	481.05 (715.73)
46 (1 150)	***		46.0 (1 168)	1.062 (26.97)	510.17 (758.92)
46 (1 150)	•••		46.0 (1 168)	1.125 (28.58)	539.68 (803.09)
46 (1 150)			46.0 (1 168)	1.188 (30.18)	569.10 (846.86)
46 (1 150)	***		46.0 (1 168)	1.250 (31.75)	597.97 (889.69)
48 (1 200)					
,	 CTD		48.0 (1 219)	0.344 (8.74)	175.25 (260.86)
48 (1 200)	STD		48.0 (1 219)	0.375 (9.52)	190.92 (283.96)
48 (1 200)			48.0 (1 219)	0.406 (10.31)	206.56 (307.32)
48 (1 200)	***		48.0 (1 219)	0.438 (11.13)	222.70 (331.54)
48 (1 200)			48.0 (1 219)	0.469 (11.91)	238.30 (354.54)
48 (1 200)	XS		48.0 (1 219)	0.500 (12.70)	253.89 (377.81)
48 (1 200)	***	***	48.0 (1 219)	0.562 (14.27)	285.00 (423.97)
48 (1 200)			48.0 (1 219)	0.625 (15.88)	316.52 (471.17)
48 (1 200)			48.0 (1 219)	0.688 (17.48)	347.97 (517.95)
48 (1 200)	•••		48.0 (1 219)	0.750 (19.05)	378.83 (563.74)
48 (1 200)			48.0 (1 219)	0.812 (20.62)	409.61 (609.40)
48 (1 200)	***	***	48.0 (1 219)	0.938 (23.83)	471.90 (702.38)
48 (1 200)	***	***	48.0 (1 219)	0.875 (22.22)	440.80 (655.81)
48 (1 200)			48.0 (1 219)	1.000 (25.40)	502.43 (747.67)
48 (1 200)			48.0 (1 219)	1.062 (26.97)	532.88 (792.84)
48 (1 200)			48.0 (1 219)	1.125 (28.58)	563.73 (839.04)
48 (1 200)			48.0 (1 219)	1.188 (30.18)	594.50 (884.82)
48 (1 200)			48.0 (1 219)	1.250 (31.75)	624.70 (929.62)
52 (1 300)	***		52.0 (1 321)	0.375 (9.52)	206.95 (307.91)
52 (1 300)			52.0 (1 321)	0.406 (10.31)	223.93 (333.26)
52 (1 300)	***		52.0 (1 321)	0.438 (11.13)	241.42 (359.54)
52 (1 300)	•••		52.0 (1 321)	0.469 (11.91)	258.36 (384.50)
52 (1 300)			52.0 (1 321)	0.500 (12.70)	275.27 (409.76)
52 (1 300)			52.0 (1 321)	0.562 (14.27)	309.03 (459.86)
52 (1 300)			52.0 (1 321)	0.625 (15.88)	343.25 (511.12)
52 (1 300)			52.0 (1 321)	0.688 (17.48)	377.39 (561.93)
52 (1 300)			52.0 (1 321)	0.750 (19.05)	410.90 (611.66)
52 (1 300)			52.0 (1 321)	0.875 (22.22)	478.21 (711.70)
52 (1 300)			52.0 (1 321)	0.812 (20.62)	444.33 (661.27)
			E2 0 (1 221)		
52 (1 300) 52 (1 300)	•••		52.0 (1 321) 52.0 (1 321)	0.938 (23.83) 1.000 (25.40)	512.01 (762.33) 545.19 (811.57)
52 (1 300)	***			1.062 (26.97)	578.29 (860.69)
		•••	52.0 (1 321)		
52 (1 300)			52.0 (1 321) 52.0 (1 321)	1.125 (28.58)	611.84 (910.93)
52 (1 300) 52 (1 300)	***	•••	, ,	1.188 (30.18) 1.250 (31.75)	645.30 (960.74) 678.15 (1 009.49)
52 (1 300)	300	***	52.0 (1 321)	1.230 (31.73)	070.13 (1 009.49)
56 (1 400)			56.0 (1 422)	0.375 (9.52)	222.99 (331.62)
56 (1 400)	***		56.0 (1 422)	0.406 (10.31)	241.29 (358.94)

Table 2-1 Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

	Identification	Schedule	Outside Diameter,	Wall Thickness,	Plain End Weight (Mass),
NPS (DN)	[Note (1)]	No.	in. (mm)	in. (mm)	lb/ft (kg/m)
56 (1 400)		***	56.0 (1 422)	0.438 (11.13)	260.15 (387.26)
56 (1 400)			56.0 (1 422)	0.469 (11.91)	278.41 (414.17)
56 (1 400)		***	56.0 (1 422)	0.500 (12.70)	296.65 (441.39)
56 (1 400)		•••	56.0 (1 422)	0.562 (14.27)	333.06 (495.41)
56 (1 400)			56.0 (1 422)	0.625 (15.88)	369.97 (550.67)
56 (1 400)			56.0 (1 422)	0.688 (17.48)	406.80 (605.46)
56 (1 400)			56.0 (1 422)	0.750 (19.05)	442.97 (659.11)
56 (1 400)			56.0 (1 422)	0.812 (20.62)	479.05 (712.63)
56 (1 400)		***	56.0 (1 422)	0.875 (22.22)	515.63 (767.05)
56 (1 400)		***	56.0 (1 422)	0.938 (23.83)	552.12 (821.68)
56 (1 400)			56.0 (1 422)	1.000 (25.40)	587.95 (874.83)
56 (1 400)			56.0 (1 422)	1.062 (26.97)	623.70 (927.86)
56 (1 400)			56.0 (1 422)	1.125 (28.58)	659.94 (982.12)
56 (1 400)			56.0 (1 422)	1.188 (30.18)	696.10 (1 035.91)
56 (1 400)			56.0 (1 422)	1.250 (31.75)	731.60 (1 088.57)
60 (1 500)	***		60.0 (1 524)	0.375 (9.52)	239.02 (355.57)
60 (1 500)			60.0 (1 524)	0.406 (10.31)	258.65 (384.87)
60 (1 500)			60.0 (1 524)	0.438 (11.13)	278.88 (415.26)
60 (1 500)			60.0 (1 524)	0.469 (11.91)	298.47 (444.13)
60 (1 500)			60.0 (1 524)	0.500 (12.70)	318.03 (473.34)
60 (1 500)			60.0 (1 524)	0.562 (14.27)	357.09 (531.30)
60 (1 500)		***	60.0 (1 524)	0.625 (15.88)	396.70 (590.62)
60 (1 500)			60.0 (1 524)	0.688 (17.48)	436.22 (649.44)
60 (1 500)		***	60.0 (1 524)	0.750 (19.05)	475.04 (707.03)
60 (1 500)			60.0 (1 524)	0.812 (20.62)	513.77 (764.50)
60 (1 500)			60.0 (1 524)	0.875 (22.22)	553.04 (822.94)
60 (1 500)			60.0 (1 524)	0.938 (23.83)	592.23 (881.63)
60 (1 500)	***		60.0 (1 524)	1.000 (25.40)	630.71 (938.73)
60 (1 500)			60.0 (1 524)	1.062 (26.97)	669.11 (995.71)
60 (1 500)		***	60.0 (1 524)	1.125 (28.58)	708.05 (1 054.01)
60 (1 500)			60.0 (1 524)	1.188 (30.18)	746.90 (1 111.83)
60 (1 500)			60.0 (1 524)	1.250 (31.75)	785.05 (1 168.44)
64 (1 600)			64.0 (1 626)	0.375 (9.52)	255.06 (379.51)
64 (1 600)			64.0 (1 626)	0.406 (10.31)	276.01 (410.81)
64 (1 600)			64.0 (1 626)	0.438 (11.13)	297.61 (443.25)
64 (1 600)			64.0 (1 626)	0.500 (12.70)	339.41 (505.29)
64 (1 600)			64.0 (1 626)	0.562 (14.27)	381.12 (567.20)
64 (1 600)			64.0 (1 626)	0.469 (11.91)	318.52 (474.09)
64 (1 600)			64.0 (1 626)	0.625 (15.88)	423.42 (630.56)
64 (1 600)	***	***	64.0 (1 626)	0.688 (17.48)	465.64 (693.41)
64 (1 600)			64.0 (1 626)	0.750 (19.05)	507.11 (754.95)
64 (1 600)			64.0 (1 626)	0.812 (20.62)	548.49 (816.37)
64 (1 600)			64.0 (1 626)	0.875 (22.22)	590.46 (878.84)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NDC (DN)	Identification	Schedule	Outside Diameter,	Wall Thickness,	Plain End Weight (Mass),
NPS (DN)	[Note (1)]	No.	in. (mm)	in. (mm)	lb/ft (kg/m)
64 (1 600)			64.0 (1 626)	0.938 (23.83)	632.34 (941.57)
64 (1 600)	***	è	64.0 (1 626)	1.000 (25.40)	673.47 (1 002.62)
64 (1 600)		5	64.0 (1 626)	1.062 (26.97)	714.52 (1 063.55)
64 (1 600)		····	64.0 (1 626)	1.125 (28.58)	756.15 (1 125.90)
64 (1 600)	***	***	64.0 (1 626)	1.188 (30.18)	797.69 (1 187.74)
64 (1 600)		į 	64.0 (1 626)	1.250 (31.75)	838.50 (1 248.30)
68 (1 700)		(***	68.0 (1 727)	0.469 (11.91)	338.57 (503.75)
68 (1 700)		g	68.0 (1 727)	0.500 (12.70)	360.79 (536.92)
68 (1 700)	****	ç	68.0 (1 727)	0.562 (14.27)	405.15 (602.74)
68 (1 700)	***	(****	68.0 (1 727)	0.625 (15.88)	450.15 (670.12)
68 (1 700)		<u></u>	68.0 (1 727)	0.688 (17.48)	495.06 (736.95)
68 (1 700)	***	ç	68.0 (1 727)	0.750 (19.05)	539.18 (802.40)
68 (1 700)		e	68.0 (1 727)	0.812 (20.62)	583.21 (867.73)
68 (1 700)		6 	68.0 (1 727)	0.875 (22.22)	627.87 (934.18)
68 (1 700)		ş	68.0 (1 727)	0.938 (23.83)	672.45 (1 000.92)
68 (1 700)		p	68.0 (1 727)	1.000 (25.40)	716.23 (1 065.89)
68 (1 700)		5	68.0 (1 727)	1.062 (26.97)	759.93 (1 130.73)
68 (1 700)		S	68.0 (1 727)	1.125 (28.58)	804.26 (1 197.09)
68 (1 700)		ž	68.0 (1 727)	1.188 (30.18)	848.49 (1 262.92)
68 (1 700)			68.0 (1 727)	1.250 (31.75)	891.95 (1 327.39)
72 (1 800)		s	72.0 (1 829)	0.500 (12.70)	382.17 (568.87)
72 (1 800)	***	ÿ	72.0 (1 829)	0.562 (14.27)	429.18 (638.64)
72 (1 800)			72.0 (1 829)	0.625 (15.88)	476.87 (710.06)
72 (1 800)		į 	72.0 (1 829)	0.688 (17.48)	524.48 (780.92)
72 (1 800)	***) err	72.0 (1 829)	0.750 (19.05)	571.25 (850.32)
72 (1 800)		y 	72.0 (1 829)	0.812 (20.62)	617.93 (919.60)
72 (1 800)	200	ç	72.0 (1 829)	0.875 (22.22)	665.29 (990.08)
72 (1 800)	•••	(m	72.0 (1 829)	0.938 (23.83)	712.55 (1 060.87)
72 (1 800)		y 	72.0 (1 829)	1.000 (25.40)	758.99 (1 129.78)
72 (1 800)		y 	72.0 (1 829)	1.062 (26.97)	805.34 (1 198.57)
72 (1 800)	***	2000	72.0 (1 829)	1.125 (28.58)	852.36 (1 268.98)
72 (1 800)	***		72.0 (1 829)	1.188 (30.18)	899.29 (1 338.83)
72 (1 800)		ē	72.0 (1 829)	1.250 (31.75)	945.40 (1 407.25)
76 (1 900)	3000	200	76.0 (1 930)	0.500 (12.70)	403.55 (600.50)
76 (1 900)		č	76.0 (1 930)	0.562 (14.27)	453.21 (674.18)
76 (1 900)		ā 	76.0 (1 930)	0.625 (15.88)	503.60 (749.62)
76 (1 900)			76.0 (1 930)	0.688 (17.48)	553.90 (824.45)
76 (1 900)		ì	76.0 (1 930)	0.750 (19.05)	603.32 (897.77)
76 (1 900)	****	E	76.0 (1 930)	0.812 (20.62)	652.65 (970.96)
76 (1 900)		ă 	76.0 (1 930)	0.875 (22.22)	702.70 (1 045.42)
76 (1 900)		ķ	76.0 (1 930)	0.938 (23.83)	752.66 (1 120.22)
76 (1 900)	222	ş	76.0 (1 930)	1.000 (25.40)	801.75 (1 193.05)
76 (1 900)	***		76.0 (1 930)	1.062 (26.97)	850.75 (1 265.74)

Table 2-1
Dimensions and Weights (Masses) of Welded and Seamless Wrought Steel Pipe (Cont'd)

NPS (DN)	Identification [Note (1)]	Schedule No.	Outside Diameter, in. (mm)	Wall Thickness, in. (mm)	Plain End Weight (Mass), lb/ft (kg/m)
76 (1 900)	***	•••	76.0 (1 930)	1.125 (28.58)	900.47 (1 340.17)
76 (1 900)	****		76.0 (1 930)	1.188 (30.18)	950.09 (1 414.01)
76 (1 900)	5		76.0 (1 930)	1.250 (31.75)	998.85 (1 486.33)
80 (2 000)			80.0 (2 032)	0.562 (14.27)	477.25 (710.08)
80 (2 000)	3	****	80.0 (2 032)	0.625 (15.88)	530.32 (789.56)
80 (2 000)			80.0 (2 032)	0.688 (17.48)	583.32 (868.43)
80 (2 000)	··· É	***	80.0 (2 032)	0.750 (19.05)	635.39 (945.69)
80 (2 000)	5		80.0 (2 032)	0.812 (20.62)	687.37 (1 022.83)
80 (2 000)		3	80.0 (2 032)	0.875 (22.22)	740.12 (1 101.32)
80 (2 000)	·•• §	***	80.0 (2 032)	0.938 (23.83)	792.77 (1 180.17)
80 (2 000)		****	80.0 (2 032)	1.000 (25.40)	844.51 (1 256.94)
80 (2 000)		•••5	80.0 (2 032)	1.062 (26.97)	896.17 (1 333.59)
80 (2 000)			80.0 (2 032)	1.125 (28.58)	948.57 (1 412.06)
80 (2 000)			80.0 (2 032)	1.188 (30.18)	1,000.89 (1 489.92)
80 (2 000)			80.0 (2 032)	1.250 (31.75)	1,052.30 (1 566.20)

NOTE: (1) STD = standard; XS = extra-strong; and XXS = double extra-strong.

INTENTIONALLY LEFT BLANK



