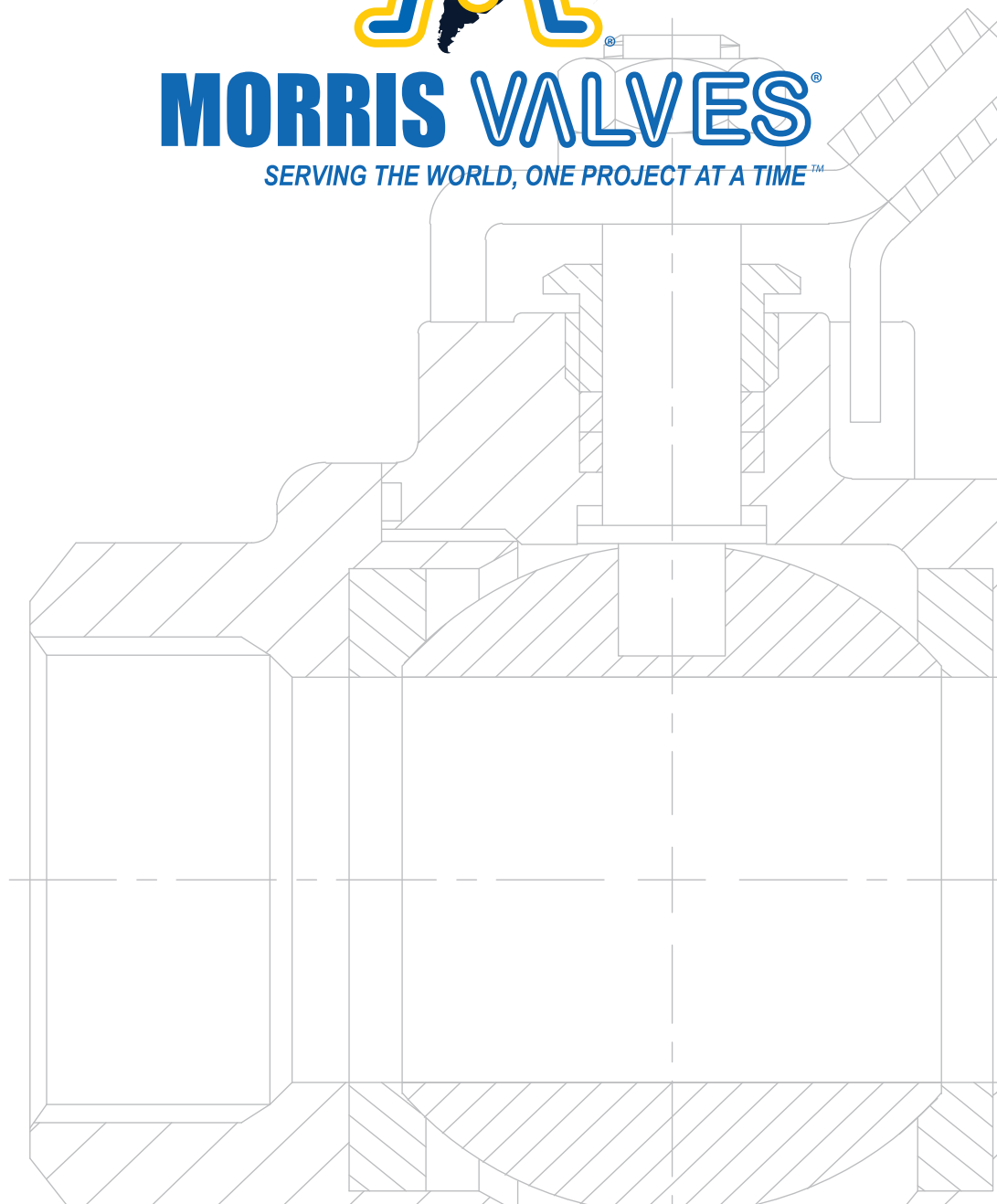




**MORRIS VALVES®**

*SERVING THE WORLD, ONE PROJECT AT A TIME™*



**API 5L SEAMLESS PIPE**

[www.morrisvalve.com](http://www.morrisvalve.com)



In 1984, our journey into the business of repairing valves and industrial instrumentation began. That journey has led us to represent and service well known American brands and companies. In early 2000, our experience and growing passion for the valve industry encouraged our decision to launch our own brand, Morris Valves. Starting with the highly requested Ball Valves, the brand has been based on the principal of quality and performance to match our customers' needs. Our high standards of production later lead us to incorporate other models such as Gate Valve and Check Valves to our production. These additions were carefully selected to match our Standard of Quality. Our success has been driven by our belief of "Tradition with Quality" in everything we do. Our products are developed with that belief which drives our growth and guides the service we provide to our customers.

## Contacts

**Address:** 13548 Cedar Hill Rd., Montgomery, TX. 77356, USA.

**Telephone:** +1 (832) 666-5576

**Cel:** +1 (832) 983 – 0744

**Email:** sales@morrisvalve.com



## Vision

Our vision is to be amongst the leading corporations in the supply of goods and services related to valves, their components and industrial equipment in general. We want to conquer new markets in conformity with international standards and remain committed to customer satisfaction, the welfare of our company and the sustainability our planet.

## Mission

Our mission is to use our highly trained, highly focused, and extremely motivated staff to work with manufacturers who value quality and have the vision for new development and product applications to ensure the timely provision of goods and services related to valves, their components and industrial equipment in general. We maintain a rigorous standard of customer satisfaction, which will provide for the welfare of the company, the welfare of the countries we serve, and most importantly the sustainability of the planet.

*"Serving the world, one project at a time"*

# United States of America

United States Patent and Trademark Office



**Reg. No. 4,840,307**

**Registered Oct. 27, 2015**

**Int. Cl.: 6**

**TRADEMARK**

**PRINCIPAL REGISTER**

MORRIS VALVES, INC. (FLORIDA CORPORATION)  
5590 N.W. 84TH AVE.  
MIAMI, FL 33166

FOR: METAL PIPES AND METAL FITTINGS THEREFOR; METAL TUBES AND METAL FITTINGS THEREFOR, IN CLASS 6 (U.S. CLS. 2, 12, 13, 14, 23, 25 AND 50).

FIRST USE 2-11-2015; IN COMMERCE 2-11-2015.

OWNER OF U.S. REG. NO. 4,241,186.

THE COLOR(S) YELLOW, WHITE, AND BLUE IS/ARE CLAIMED AS A FEATURE OF THE MARK.

THE MARK CONSISTS OF A STYLIZED WHITE LETTER "V" WITH A BLUE OUTLINE INSIDE OF A STYLIZED LETTER "M" IN BLUE OUTLINED WITH YELLOW. THE BACKGROUND OF THE MARK IS WHITE.

SER. NO. 86-543,795, FILED 2-24-2015.

MARCIE MILONE, EXAMINING ATTORNEY



*Michelle K. Lee*

Director of the United States  
Patent and Trademark Office



## SEAMLESS PIPE

(SMLS) is made when steel in a solid, round cylindrical shape, called a "billet" or a "tube round" is heated and then either pushed or pulled (while being rapidly rotated) over a mandrel with a piercing point positioned in the center of the billet. This activity produces a hollow tube or "shell". The tube is then further finished until it becomes the size and wall thickness desired. (Because the pipe is formed in a heated manner the pipe is normalized and should have a consistent steel cellular pattern throughout its circumference).

Seamless pipe is made in sizes from 1/8" to 26" and is widely used in:

- Construction
- Oil refining
- Chemical and
- Petro-chemical industries.

It is available in heavy wall thicknesses and exotic chemistries, and is suitable for coiling, flanging and threading.

It is, however, expensive, in short supply and unavailable in long lengths.

### Seamless pipe is available in the following specifications:

A53 Type S, which is seamless pipe, produced by hot working and possibly cold finishing, the steel (Grades A and ASTM A53) Type S is now currently an outdated specification and has been replaced by ASTM A106 specification for seamless carbon steel pipe.

A-106 (ASTM A106 Seamless Pressure Pipe) Grades A,B, and C;

A-252 Grades 1, 2, and 3;

A-333 Grades 1 through 9; A-335 Grades P-1 through P-22;

A-501, A-523, A-589,

API5L Grades A & B, and

API5L X-42 through X-65.



**MORRIS VALVES**  
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SPECIFICATION FOR ASTM A- 106 (Heat Analysis %)& API 5L PSL 1, PSL 2															
Chemical and Mechanical Properties															
STD	Grade	Chemical Properties										Mechanical Properties			
		C Max	Mn Max	P Max	S Max	Si Max	Cr Max	Cu Max	Mo Max	Ni Max	V Max	Yield strength Min (MPa)/Ksi	Yield strength Min (MPa)/Ksi	Tensile Strength Max.(Ksi)	Tensile Strength Max.(Ksi)
ASTM A106	A	0.25B	0.27-0.93	0.035	0.035	0.10	0.40	0.40	0.15	0.40	0.80	30	None	48	None
	B	0.30C	0.29-1.06	0.035	0.035	0.10	0.40	0.40	0.15	0.40	0.80	35	None	60	None
	C	0.35C	0.29-1.06	0.035	0.035	0.10	0.40	0.40	0.15	0.40	0.80	40		70	
ASTM A179	179	0.06	0.27												
		-	-	0.035	0.035	/	/	/	/	/	/	26	None	47	None
		0.18	0.63												
ASTM A192	192	0.06	0.27												
		-	-	0.035	0.035	0.25	/	/	/	/	/	26	None	47	None
		0.18	0.63												
ASTM A192	A210A1	0.27	0.93	0.025	0.020	0.10	/	/	/	/	/	37	None	60	None
	A210C	0.35	0.29-1.06	0.025	0.020	0.10	/	/	/	/	/	40	None	70	None
API 5L	PSL 1	A25 I	0.21	0.60	0.30	0.30						25	None	45	None
		A25 II	0.21	0.60	0.80	0.30						25	None	45	None
		A	0.22	0.90	0.030	0.030						30	None	48	None
		B	0.28	1.20	0.030	0.030						35	None	60	None
		X42	0.28	1.30	0.030	0.030						42	None	60	None
		X46	0.28	1.40	0.030	0.030						46	None	63	None
		X52	0.28	1.40	0.030	0.030						52	None	66	None
		X56	0.28	1.40	0.030	0.030						56	None	71	None
		X60	0.28	1.40	0.030	0.030						60	None	75	None
		X65	0.28	1.45	0.030	0.030						65	None	77	None
	PSL 2	X70	0.28	1.65	0.030	0.030						70	None	82	None
		B	0.24	1.20	0.025	0.015						35	65	60	110
		X42	0.24	1.30	0.025	0.015						42	72	60	110
		X46	0.24	1.40	0.025	0.015						46	76	63	110
		X52	0.24	1.40	0.025	0.015						52	77	66	110
		X56	0.24	1.40	0.025	0.015						56	79	71	110
		X60	0.24	1.40	0.025	0.015						60	82	75	110
		X65	0.24	1.40	0.025	0.015						65	87	77	110
		X70	0.24	1.40	0.025	0.015						70	90	82	110
		X80	0.24	1.40	0.025	0.015						80	100	90	120

- A) The total composition for these five elements shall not exceed 1.00 %.
- B) For each reduction of 0.01 % below the specified carbon maximum, an increase of 0.06 % manganese above the specified maximum will be permitted up to a maximum of 1.35 %.
- C) Unless otherwise specified by the purchaser, for each reduction of 0.1%, below the specified carbon maximum, an increase of 0.06% manganese above the specified maximum will be permitted up to a maximum of 1.65%.

**Weight Class:** STD, XS (Extra Strong), XXS (Double Extra Strong).  
**Schedule Numbers:** 40, 80, 160

**Surface finishes are available in:** Black (oiled). Galvanized. and Bare. Also, supplied with Inorganic coatings (adodic chromate, oxide and vitress enamels); Organic coatings (paints, varnishes, lacquers, rubber, and plastics such as x-tru coat and Scotch kote); Bituminous coatings (asphalt and coal tar).

**Marking:** Required Markings on Each Length (Each Joint, Each Piece). On Tags attached to each Bundle in case of Bundled Pipe.

1. Rolled, Stamped or Stenciled (Manufacture Name) or Registered Trade Mark (MORRIS VALVES OR LOGO).
2. Kind of pipe; that is, CW, ERW A, ERW B, Seamless A; or Seamless B;
3. STD, XS for extra strong, XXS for double extra strong.
4. Manufacturing STD (ASTM A53).
5. Length of pipe.

**Length:** 21 foot uniform lengths. (SRL) single random lengths from 16 foot to 22 foot and (DRL) double random lengths from 38 foot to 80 feet.

**Ends:** Square ends, Beveled 30° for welding, Threaded both ends, Threaded and coupled and Victaulic grooved for use with Victaulic couplings.

## Inspection & Testing:

1. Hydrostatic test pressures for plain-end pipe According ASTM A53/A 53M,
2. Elongation in 2" Refer to A 53 table x 4.1, latest revisions - ASTM A53/A 53M
3. Ultrasonic testing,
4. Eddy current testing,
5. Magnetic particle Testing,
6. Impact testing, Hardness testing, etc.

**Packaging:** For Sizes NPS 1 & 2 and smaller are normally put in standard bundles.



**Certification:** MILL TEST CERTIFICATE PEREN10204 - 3.1 IN ENGLISH LANGUAGE

**Warranty:** 12 MONTHS FROM DATE OF COMMISSIONING OR 18 MONTHS FROM SHIPMENT DATE

SEAMLESS PIPE & LINE PIPE SIZES (NPS / O.D)												
NPS OD	W.T	GRADES										WEIGHT (PE) Lb/FT
		B	C	X42	X46	X52	X56	X60	X65	X70	X80	
1-1/2" 1.900	0.145	STD - 40										2.72
	0.200	XS - 80										3.63
	0.281	160										4.86
NPS 2 2.375	0.154	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40			3.63
	0.218	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80			3.66
	0.344	160	160	160	160	160	160	160	160			7.47
NPS 2-1/2 2.875	0.203	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40			5.80
	0.276	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80			7.67
	0.375	160	160	160	160	160	160	160	160			10.02
NPS 3 3.500	0.216	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40			7.58
	0.300	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80			10.26
	0.438	160	160	160	160	160	160	160	160			14.34
NPS 3-1/2 4.000	0.226	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40			9.12
	0.318	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80			12.52
	0.636	XXS	XXS	XXS	XXS	XXS	XXS	XXS	XXS			22.87
NPS 4 4.500	0.237	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	10.80
	0.250											11.36
	0.281											12.67
	0.312											13.97
	0.337	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	15.00
	0.438	120	120	120	120	120	120	120	120	120	120	19.02
	0.531	160	160	160	160	160	160	160	160	160	160	22.53
NPS 5 5.563	0.258	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	14.63
	0.281											15.87
	0.312											17.51
	0.344											19.19
	0.375	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	20.80
	0.500	120	120	120	120	120	120	120	120	120	120	27.06
	0.625	160	160	160	160	160	160	160	160	160	160	32.99
NPS 6 6.625	0.250											17.04
	0.280	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	18.99
	0.312											21.06
	0.344											23.10
	0.375											25.05
	0.432	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	28.60
	0.500											32.74
NPS 8 8.625	0.562	120	120	120	120	120	120	120	120	120	120	36.43
	0.625											40.09
	0.719	160	160	160	160	160	160	160	160	160	160	45.39
	0.250	20	20	20	20	20	20	20	20	20	20	22.38
	0.277	30	30	30	30	30	30	30	30	30	30	24.72
	0.312											27.73
	0.322	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	28.58
NPS 10 10.750	0.406	60	60	60	60	60	60	60	60	60	60	35.67
	0.500	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	XS - 80	43.43
	0.562											48.44
	0.594	100	100	100	100	100	100	100	100	100	100	51.00
	0.625											53.45
	0.719	120	120	120	120	120	120	120	120	120	120	60.77
	0.812	140	140	140	140	140	140	140	140	140	140	67.82
NPS 12 12.750	0.875	XXS	XXS	XXS	XXS	XXS	XXS	XXS	XXS	XXS	XXS	72.49
	0.906	160	160	160	160	160	160	160	160	160	160	74.76
	0.365	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	STD - 40	40.52
	0.438	XS - 60	XS - 60	XS - 60	XS - 60	XS - 60	XS - 60	XS - 60	XS - 60	XS - 60	XS - 60	48.28
	0.500											54.79
	0.562	80	80	80	80	80	80	80	80	80	80	61.21
	0.594											64.49
NPS 14 14.750	0.625	100	100	100	100	100	100	100	100	100	100	67.65
	0.719											77.10
	0.812	120	120	120	120	120	120	120	120	120	120	86.26
	0.844	XS - 140	XS - 140	XS - 140	XS - 140	XS - 140	XS - 140	XS - 140	XS - 140	XS - 140	XS - 140	89.38
	1.000	160	160	160	160	160	160	160	160	160	160	104.23
	1.125											115.75



SEAMLESS PIPE & LINE PIPE SIZES (NPS / O.D)											
NPS OD	W.T	GRADES									
		B	C	X42	X46	X52	X56	X60	X65	X70	X80
NPS 12 12.750	0.219										
	0.250					20					
	0.281										
	0.312										
	0.330					30					
	0.344										
	0.375					STD					
	0.406					40					
	0.438										
	0.500					XS					
	0.562					60					
	0.625										
	0.688					80					
	0.750										
NPS 14 OD = 14.00	0.844					100					
	1.000					XXS - 120					
	1.125					140					
	1.312					160					
	0.375					STD - 30					
	0.406										
	0.438					40					
	0.469										
	0.500					XS					
	0.562										
	0.594					60					
	0.625										
	0.688										
	0.750					80					
NPS 16 OD=16	0.812										
	0.938					100					
	1.094					120					
	1.250					140					
	1.406					160					
	0.375					STD - 30					
	0.406										
	0.438										
	0.469										
	0.500					XS - 40					
	0.562										
	0.625										
	0.656					60					
	0.688										
NPS 18 OD = 18	0.750										
	0.812										
	0.844					80					
	1.031					100					
	1.219					120					
	1.250										
	1.438					140					
	1.594					160					
	0.375					STD					
	0.406										
	0.438					30					
	0.469										
	0.500					XS					
	0.562					40					
NPS 18 OD = 18	0.625										
	0.688										
	0.750					60					
	0.812										
	0.938					80					
	1.000										
	1.156					100					
	1.375					120					
	1.562					140					



SEAMLESS PIPE & LINE PIPE SIZES (NPS / O.D)												
NPS OD	W.T	GRADES										WEIGHT (PE) Lb/FT
		B	C	X42	X46	X52	X56	X60	X65	X70	X80	
	0.375											78.67
	0.406											85.04
	0.438											91.59
	0.469											97.92
	0.500											104.23
	0.562											116.78
NPS 20 OD = 20	0.594											123.23
	0.625											129.45
	0.688											143.03
	0.750											154.34
	0.812											166.56
	1.031											209.06
	1.250											250.55
	1.281											256.34
	1.375											273.76
	1.500											296.65
OD = 26	0.375											102.72
	0.500											136.30
	0.375											86.69
	0.406											93.72
	0.438											100.96
	0.469											107.95
	0.500											114.92
	0.562											128.79
NPS 22 OD=22	0.625											142.81
	0.688											156.74
	0.750											170.37
	0.812											183.92
	0.875											197.60
	1.000											224.49
	1.125											251.05
	1.219											270.80
	1.250											277.27
	0.375											94.71
	0.406											102.40
	0.438											110.32
	0.469											117.98
	0.500											125.61
	0.562											140.81
	0.625											156.17
NPS 24 OD = 24	0.688											171.45
	0.750											186.41
	0.812											201.28
	0.875											216.31
	0.938											231.25
	0.969											238.57
	1.000											245.87
	1.031											253.15
	1.062											260.41
	1.219											296.86
	0.375											102.72
	0.406											111.08
	0.438											119.69
	0.469											128.00
NPS 26 OD = 26	0.500											136.30
	0.562											152.83
	0.625											169.54
	0.688											186.16
	0.750											202.44
	0.812											218.64
	1.062											283.12



*A Tradition of Quality*

*Our passion is to develop  
solutions for difficult situations in  
Industrial Applications, no matter  
how large or small the project.*

*"Serving the world, one project at a time"*

