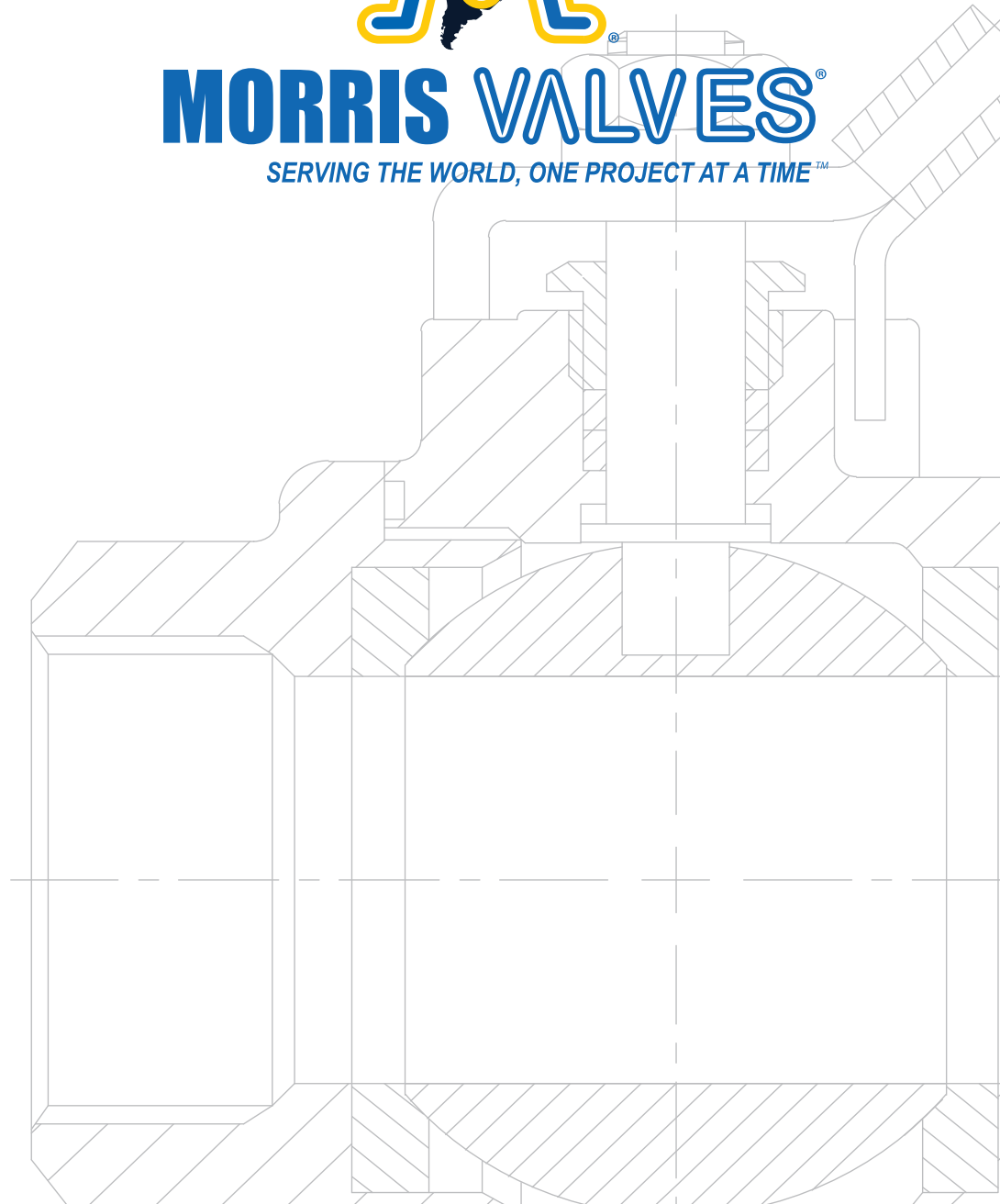




MORRIS VALVES®

SERVING THE WORLD, ONE PROJECT AT A TIME™



API 5L CW PIPE

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.

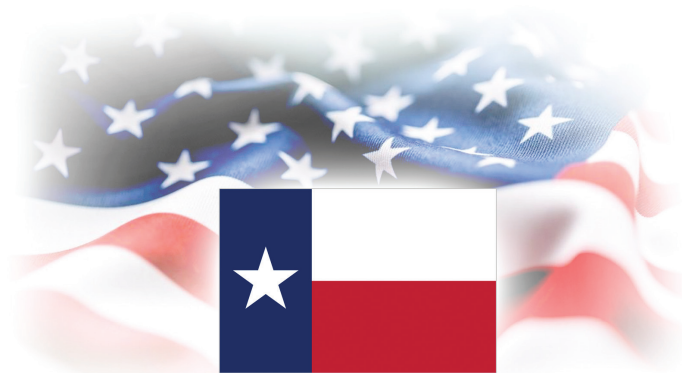
Contacts

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.

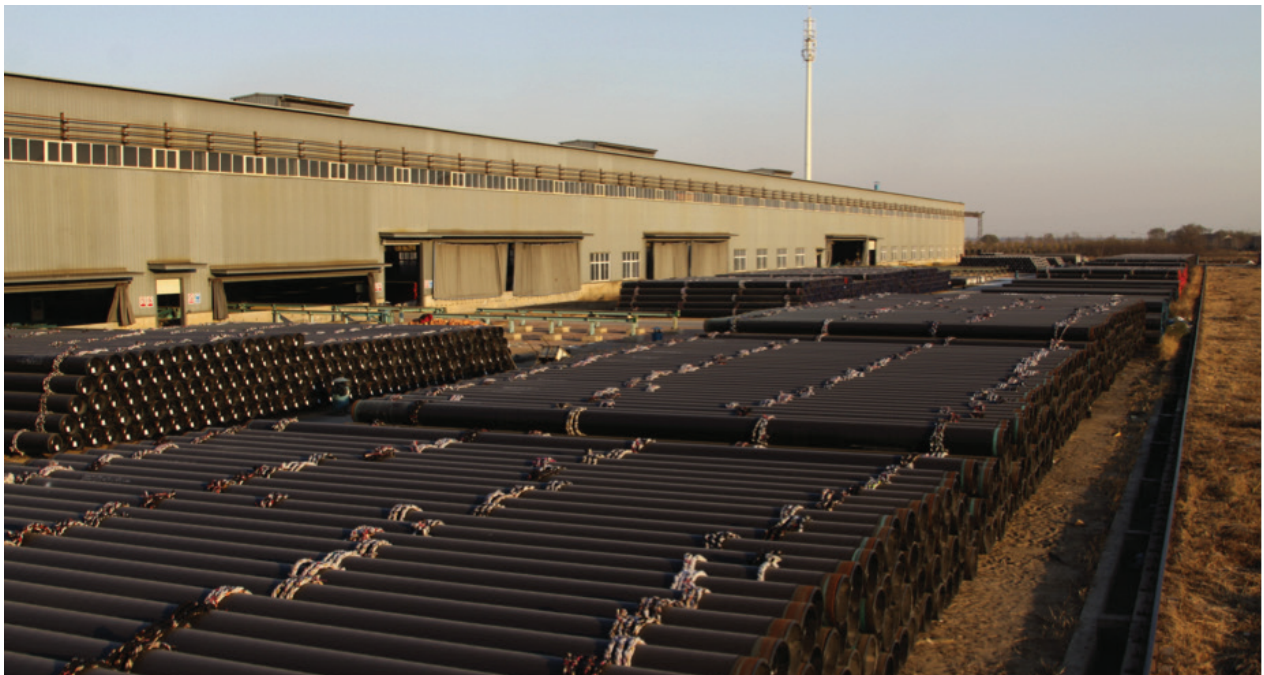
MARCIE MILONE, EXAMINING ATTORNEY



Michelle K. Lee

Director of the United States
Patent and Trademark Office

Pipe Specifications					
Grade		Domestic Size Range		Usage	
ASTM A-53		TYPE E	Gr A (CW) Gr B (ERW)	Steel Pipes for General uses, Domestic and plumbing piping under normal pressures and temperatures.	
		TYPE S (SMLS)			
ASTM A-106		Gr A (SMLS) Gr B (SMLS) Gr C (SMLS)	1/8" thru 26"	Special use where severe conditions exist. Seamless pipe for high temperatures and pressures	
ASTM A-139			4" and larger		
ASTM A-252		Gr 1 (ERW/DSAW) Gr 2 (ERW/DSAW) Gr 3 (ERW/DSAW/SMLS)	Any size	Steel Pipe Piles. Pipe piling, drilled shafts and other structural applications	
ASTM A-500(COLD FORMED ERW, ROUND,SQ & RECTANGULAR)			Maximum 64" OD		
API 5 L ERW, DSAW, SMLS	PSL1	Grade	Class I	1/8" thru 48"	1/8" Oil and natural gas transmission thru 48"
			Class II		
			A		
			B		
			X42		
			X46		
			X52		
	PSL2	Grade	X56		
			X60		
			X65		
			X70		
			B		
			X42		
			X46		
		Grade	X52		
			X56		
			X60		
			X65		
			X70		
			X80		
API 2 B			54" and larger	Rolled and welded for oil and gas offshore platform construction	
AWWA C-200			6" and larger	Water and waste water piping	



CONTINUOUS WELDED PIPE (CW).

-Longitudinally furnace butt welded or by mean of continuous welded process.

* Continuous welded pipes are considered as the lowest cost variants among all steel pipes.

Specifications.

* ASTM A-53 Type F, which is (Grade A only).

* ASTM A-53A/53M, Federal, Specification WW-P404 & ASME B36.10M & B36.19M.

* ASTM A-120 (withdrawn 1988). A-501. A-589, A-618.and API5L.

SPECIFICATION FOR Type F (FURNACE WELDED PIPE or CW Pipe)

Chemical Requirements										Mechanical Properties	
	C ^B	Mn	P	S	Cu ^A	Ni ^A	Cr ^A	Mo ^A	V ^A	Min. Yield Strength	Min. Tensile Strength
Grade A	0.30B	1.20	0.05	0.045	0.40	0.40	0.40	0.15	0.08	30,000 psi	48,000 psi

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 %.

Applications:

1. Primarily utilized for supply of water and gas at lower costs and higher productivity.
2. Structural applications, Plumbing applications, and other **low pressure applications.**

Produced in three Weights Class & Schedule Numbers: Standard. STD, Extra Heavy (XS), and Double Extra Heavy (XXS), Lighter weights than standard are available in certain sizes.

Schedule Numbers: 40,80,160

Surface finishes are available in:

1. 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 Scotchkote); Bituminous coatings (asphalt and coal tar).

Marking:

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

1. Rolled, Stamped or Stenciled (Mfrs 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. ASTM A53.
5. Length of pipe.
6. Heating Number.

Reading the Mill Stencil

1. Manufacture (BERGE)-5L – API Registration (**0153-0501**)
2. Hydro pressure **3030**, E = Symbol for welded pipe.
3. Weight/piece and length.
4. **F** = Foreign plate then Heat #.
5. **SR5**=Charpy 70Ft.Lbs @ 23 degrees F.
6. **B** (supplemental requirement).
7. Customer and P.O # (NGS P.O # 051457)
8. Size and wall thickness.
9. Piece number and grade



Sizes: The NPS value in inches relates to the inside diameter (ID). i.e. a 1" SCH STD tube has an I.D= 1" (25.4mm); but only up to 12 inches.

For NPS 14 and larger, the NPS Is equal to the outside diameter in inches, which are based on ASME standards B36.10M and B36.19M).

CW PIPE, SIZES. From NPS 1/2" to NPS 4".							
NPS	O.D(IN)	WT(IN)	Weight Class	Schedule No	Working Pressure at 400F (Psig)	Test Pressure Grade A	Plain End (P/E) (Kg/m)
1/4"	0.540	0.088	STD	40	188	700	0,63
1/4"	0.540	0.119	XS	80	871	850	0,80
3/8"	0.675	0.091	STD	40	203	700	0,84
3/8"	0.675	0.126	XS	80	820	850	1,10
1/2"	0.840	0.109	STD	40	214	700	1,27
1/2"	0.840	0.147	XS	80	753	850	1,62
1/2"	0.840	0.188	-	160	-	900	1,95
1/2"	0.840	0.294	XXS	-	-	1000	2,65
3/4"	1.050	0.113	STD	40	217	700	1,69
3/4"	1.050	0.154	XS	80	681	850	2,20
3/4"	1.050	0.219	-	160	-	950	2,90
3/4"	1.050	0.308	XXS	-	-	1000	3,64
1"	1.315	0.133	STD	40	226	700	2,50
1"	1.315	0.179	XS	80	642	850	3,24
1"	1.315	0.250	-	160	-	950	4,24
1"	1.315	0.358	XXS	-	-	1000	5,45
1-1/4"	1.660	0.140	STD	40	229	1200	3,39
1-1/4"	1.660	0.191	XS	80	594	1800	4,47
1-1/4"	1.660	0.250	-	160	-	1900	5,61
1-1/4"	1.660	0.382	XXS	-	-	2200	7,77
1-1/2"	1.900	0.145	STD	40	231	1200	4,05
1-1/2"	1.900	0.200	XS	80	576	1800	5,41
1-1/2"	1.900	0.281	-	160	-	1950	7,25
1-1/2"	1.900	0.400	XXS	-	-	2200	9,56
2"	2.375	0.154	STD	40	230	2300	5,44
2"	2.375	0.218	XS	80	551	2500	7,48
2"	2.375	0.344	-	160	-	2500	11,11
2"	2.375	0.436	XXS	-	-	2500	13,44
2-1/2"	2.875	0.203	STD	40	533	2500	8,63
2-1/2"	2.875	0.276	XS	80	835	2500	11,41
2-1/2"	2.875	0.375	-	160	-	2500	14,90
2-1/2"	2.875	0.552	XXS	-	-	2500	20,39
3"	3.500	0.216	STD	40	482	2220	11,29
3"	3.500	0.300	XS	80	767	2500	15,27
3"	3.500	0.438	-	160	-	2500	21,35
3"	3.500	0.600	XXS	-	-	2500	27,68
4"	4.500	0.237	STD	40	430	1900	16,07
4"	4.500	0.337	XS	80	695	2700	22,32

Length:

21 foot uniform lengths.

1. (SRL) single random lengths from 16 foot to 22-foot and.
2. (DRL) double random lengths from 38 foot to 42 foot.

Ends:

1. Plain Ends.
2. Beveled 30° for welding.
3. Threaded both ends.
4. Threaded and coupled and
5. 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, Eddy current testing, Magnetic particle Testing,
4. Impact testing, Hardness testing, etc.

Certification: MILLTEST CERTIFICATE ACCORDING TO EN10204 - 3.1 IN ENGLISH LANGUAGE

Packaging: 25 or 40 Ft Containers. For Sizes NPS 1 & 2 and smaller are normally put in standard bundles.
Warranty:12 MONTHS FROM DATE OF COMMISSIONING OR 18 MONTHS FROM SHIPMENT DATE.





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"

