

Standard Pipe



## Standard Pipe: SureThread™ and ERW

# Setting the standard in the standard pipe industry

With a tradition of service and quality that's 80-plus years strong, Wheatland Tube is the only domestic, full-line producer of continuous weld (CW) and electric resistance weld (ERW) ½-18 NPS pipe today. Wheatland is also a worldwide leader in hot-dip galvanization technology.

½-18 nominal sizes produced and stocked in a variety of ASTM standards

Standard hot-dip galvanization to ASTM A53 requirements

350 combinations of finish, end treatments and lengths

All Wheatland black and galvanized pipe (½-6 NPS) is approved for drinking water usage



### **A Full Line of Pipe Products for Any Application**

Wheatland produces and stocks pipe of ½-18 nominal sizes in a variety of ASTM standards. SureThread (ASTM A53) and ERW are used for mechanical and pressure applications, and for ordinary uses in steam, water, gas and air lines.

More than 350 different combinations of finish, end treatments and lengths are available on standard pipe. Our standard process is hot-dip galvanization to ASTM A53 requirements.

Surface finishes include black, passivate, galvanized, uncoated, pickled, pickled and oiled, bare and soluble oil. End finishes include plain end, roll groove, cut groove, threaded and coupled, and threads only (one or both ends).

### **Documented Quality Assurance**

Wheatland facilities have quality systems in place and are ISO certified for Quality Management Systems. Strategically located in the U.S., we carry a large inventory and can ship quickly to meet your tight delivery schedules.



For more information, call **800.257.8182** or visit **wheatland.com**



## A53 Electric Resistance Weld Pipe, Type E, Grade B

Suitable for  
welding, threading  
and grooving

**Finish options:**  
Black and hot-dip  
galvanized

**Sizes:**  
Schedule 40,  
2-18 NPS

Produced to ASTM  
A53/A53M, federal  
specification  
WW-P404 and  
ASME B36.10M

### ASTM A53, TYPE E, WEIGHTS AND DIMENSIONS

TRADE SIZE	OD	NOMINAL WALL THICKNESS	WEIGHT
	in.	in.	lbs./ft.
2	2.375	0.154	3.66
2½	2.875	0.203	5.80
3	3.500	0.216	7.58
4	4.500	0.237	10.80
5	5.563	0.258	14.63
6	6.625	0.280	18.99
8	8.625	0.322	28.58
10	10.750	0.365	40.52
12	12.750	0.375	49.61
14	14.000	0.375	54.62
16	16.000	0.375	62.64
18	18.000	0.375	70.65

### HYDROSTATIC AND NON-DESTRUCTIVE ELECTRIC TESTING

Hydrostatic inspection test pressures for plain-end pipe are listed in Table X 2.2 of the A53/A53M industry specification. Test pressures are maintained for a minimum of five seconds. Non-destructive electric testing of the weld seam is required on each length of ERW pipe NPS 2 and larger.

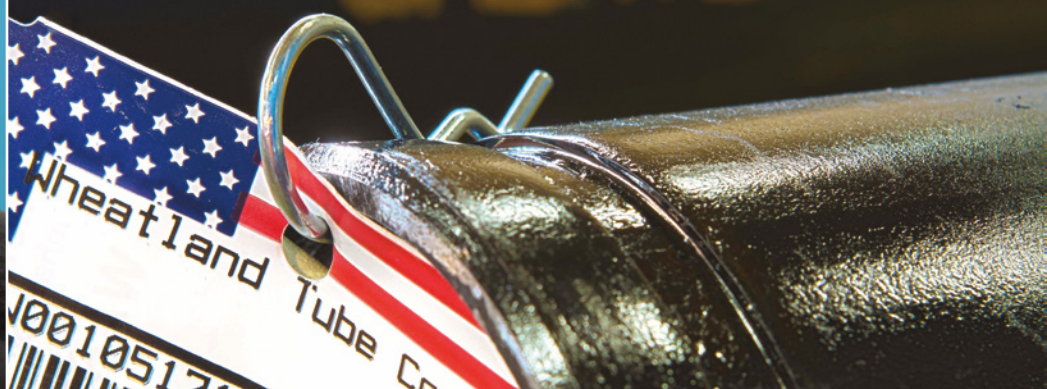
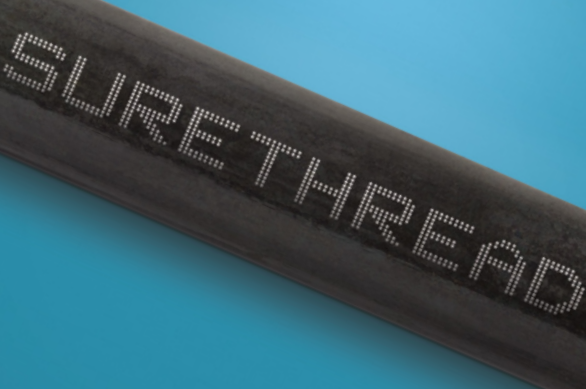
### TENSILE REQUIREMENTS

TENSILE STRENGTH, MIN.	YIELD STRENGTH, MIN.
60,000 psi	35,000 psi

### BENDING TEST (COLD)

DEGREE OF BEND	DIAMETER OF MANDREL
90°	12x pipe OD





## A53 Continuous Weld Pipe, Type F, Grade B

The continuous weld process creates a uniform grain structure to make bending, cutting and threading easier

Ideal for applications with frequent threading, grooving and bending requirements

### Finish options:

Black, passivate, bare, pickled and oiled, and hot-dip galvanized

### Sizes:

½–4 NPS

Standard and extra heavy

Produced to ASTM A53/A53M, federal specification WW-P404 and ASME B36.10M

**SureThread has now been approved for ASTM A53 Grade B, allowing you to use it in a broader range of applications than ever before.**

### ASTM A53, TYPE F, GRADE B, WEIGHTS AND DIMENSIONS

TRADE SIZE	OD in.	SCHEDULE 40		SCHEDULE 80	
		Wall (in.)	Weight (lbs./ft.)	Wall (in.)	Weight (lbs./ft.)
½	0.84	0.109	0.85	0.147	1.09
¾	1.05	0.113	1.13	0.154	1.48
1	1.315	0.133	1.68	0.179	2.17
1¼	1.66	0.14	2.27	0.191	3
1½	1.9	0.145	2.72	0.2	3.63
2	2.375	0.154	3.66	0.218	5.03
2½	2.875	0.203	5.8	0.276	7.67
3	3.5	0.216	7.58	0.3	10.26
3½	4	0.226	9.12	0.318	12.52
4	4.5	0.237	10.8	0.337	15

### TENSILE REQUIREMENTS

TENSILE STRENGTH, MIN.	YIELD STRENGTH, MIN.	ELONGATION IN 2
60,000 psi	35,000 psi	Refer to A53 table X 4.1, latest revisions—ASTM A53/A53M

### BENDING TEST (LESS THAN NPS 2)

	DEGREE OF BEND	DIAMETER OF MANDREL
	Standard	12x pipe OD
Close Coiling	90°	8x pipe OD

### FLATTENING TEST (NPS 2 AND GREATER)

To test the quality of the weld, we position the weld at 0° and at 90° from the direction of force and flatten until the OD is less than ⅔ of the original outside diameter. No cracks should occur along the inside or outside surface of the weld.

### TEST PRESSURES (GRADE B)

NOMINAL SIZE	TEST PRESSURE (psi)
½	700
¾	700
1	700
1¼	1,200
1½	1,200
2	2,300
2½	2,500
3	2,220
3½	2,030
4	1,900

## STANDARD PIPE SCHEDULE 40 — ASTM A53 GRADES A AND B

TRADE SIZE	DN DESIGNATOR	OD		ID		WALL THICKNESS		NOMINAL WEIGHT (MASS) PER UNIT LENGTH			
		in.	mm	in.	mm	in.	mm	Plain End (lbs./ft.)	Plain End (kg/m)	Threads & Couplings (lbs./ft.)	Threads & Couplings (kg/m)
½	15	0.840	21.3	0.622	15.8	0.109	2.77	0.85	1.27	0.86	1.27
¾	20	1.050	26.7	0.824	20.9	0.113	2.87	1.13	1.69	1.14	1.69
1	25	1.315	33.4	1.049	26.6	0.133	3.38	1.68	2.50	1.69	2.50
1¼	32	1.660	42.2	1.380	35.1	0.140	3.56	2.27	3.39	2.28	3.40
1½	40	1.900	48.3	1.610	40.9	0.145	3.68	2.72	4.05	2.74	4.04
2	50	2.375	60.3	2.067	52.5	0.154	3.91	3.66	5.44	3.68	5.46
2½	65	2.875	73.0	2.469	62.7	0.203	5.16	5.80	8.63	5.85	8.67
3	80	3.500	88.9	3.068	77.9	0.216	5.49	7.58	11.29	7.68	11.35
3½	90	4.000	101.6	3.548	90.1	0.226	5.74	9.12	13.57	9.27	13.71
4	100	4.500	114.3	4.026	102.3	0.237	6.02	10.80	16.07	10.92	16.23
5	125	5.563	141.3	5.047	128.2	0.258	6.55	14.63	21.77	14.90	22.07
6	150	6.625	168.3	6.065	154.1	0.280	7.11	18.99	28.26	19.34	28.58
8	200	8.625	219.1	7.981	202.7	0.322	8.18	28.58	42.55	29.35	43.73
10	250	10.750	273.0	10.020	254.5	0.365	9.27	40.52	60.29	41.49	63.36
12	300	12.750	323.0	12.000	304.8	0.375	9.52	49.61	73.78	51.28	76.21
14	350	14.000	355.6	13.250	336.5	0.375	9.52	54.62	81.25	-	-
16	400	16.000	406.4	15.250	387.5	0.375	9.52	62.64	93.17	-	-
18	450	18.000	457.0	17.250	438.1	0.375	9.52	70.65	105.10	-	-

Black and galvanized Schedule 40 A53 CW and ERW Grade A and Grade B trade sizes ½–8 are FM Approved.



## EXTRA-HEAVY PIPE SCHEDULE 80 — ASTM A53, TYPE F, GRADE B

TRADE SIZE	DN DESIGNATOR	OD		ID		WALL THICKNESS		NOMINAL WEIGHT (MASS) PER UNIT LENGTH			
		in.	mm	in.	mm	in.	mm	Plain End (lbs./ft.)	Plain End (kg/m)	Threads & Couplings (lbs./ft.)	Threads & Couplings (kg/m)
½	15	0.840	21.3	0.549	13.9	0.147	3.73	1.09	1.62	1.09	1.62
¾	20	1.050	26.7	0.742	18.8	0.154	3.91	1.48	2.20	1.48	2.21
1	25	1.315	33.4	0.957	24.3	0.179	4.55	2.17	3.24	2.19	3.25
1¼	32	1.660	42.2	1.278	32.5	0.191	4.85	3.00	4.47	3.03	4.49
1½	40	1.900	48.3	1.500	38.1	0.200	5.08	3.63	5.41	3.65	5.39
2	50	2.375	60.3	1.939	49.3	0.218	5.54	5.03	7.48	5.08	7.55
2½	65	2.875	73.0	2.323	59.0	0.276	7.01	7.67	11.41	7.75	11.52
3	80	3.500	88.9	2.900	73.7	0.300	7.62	10.26	15.27	10.35	15.39
3½	90	4.000	101.6	3.364	85.4	0.318	8.08	12.52	18.63	12.67	18.82
4	100	4.500	114.3	3.826	97.2	0.337	8.56	15.00	22.32	15.20	22.60

## PERMISSIBLE VARIATIONS — ASTM A53 GRADES A AND B PIPE

Outside Diameter	OD	OVER	UNDER
	NPS ½ to 1½; DN 6 to 40	¼ (0.4 mm)	¼ (0.4 mm)
	NPS 2 and up; DN 50 and up	1%	1%
Wall Thickness at Any Point	—	—	12.5%
Weight	—	10%	10%

Mechanical Properties:

Grade A: Yield — 30,000 psi [205 MPa] minimum; Tensile — 48,000 psi [330 MPa] minimum.

Grade B: Yield — 35,000 psi [240 MPa] minimum; Tensile — 60,000 psi [415 MPa] minimum.



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### About Wheatland Tube Standard Pipe

Wheatland produces a full line of standard pipe — SureThread™ and ERW pipe — in a broad range of sizes. We're the industry leader in hot-dip galvanized pipe, and we offer more than 350 different combinations of finish, end treatments and lengths on our standard pipe.

All Wheatland manufacturing locations' quality management systems are certified to ISO requirements.

For more information, contact Wheatland Tube at:

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Or, visit our website at [wheatland.com](http://wheatland.com)

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