



# Wheatland Tube Company

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## GUIDELINE FOR DETERMINING THE MAXIMUM WORKING PRESSURE IN PSI, CALCULATIONS ARE BASED ON ASME B31.1 POWER PIPING CODE

CONTINUOUS WELD PIPE ASTM A 53 TYPE F GRADE A, APL5L GRADE A25 PSL				
	SCHEDULE 40		SCHEDULE 80	
NPS	PLAIN END	THREADED	PLAIN END	THREADED
1/2	1750	750	2500	1400
3/4	1450	650	2050	1150
1	1350	550	1900	1050
1 1/4	1100	500	1550	900
1 1/2	1000	450	1400	850
2	850	400	1200	800
2 1/2	900	400	1250	750
3	800	400	1150	700
3 1/2	700	350	1050	650
4	650	350	950	650

  

ELECTRIC RESISTANCE WELD PIPE ASTM A 53 GRADE B & API5L GRADE B PSL 1				
	SCHEDULE 40		SCHEDULE 80	
NPS	PLAIN END	THREADED	PLAIN END	THREADED
1	2400	1000	3350	1900
1 1/4	2000	900	2800	1650
1 1/2	1800	850	2500	1550
2	1500	750	2200	1400
2 1/2	1650	750	2300	1350
3	1400	700	2000	1250
3 1/2	1300	650	1850	1200
4	1200	650	1750	1150
5	1050	600	1550	1100
6	950	600	1500	1100
8	850	550	1350	1050

A SAFETY FACTOR SHOULD ALWAYS BE INCULDED WHEN USING THE ABOVE PRESSURES. WORKING PRESSURES ARE THEORETICAL; THE ACTUAL WORKING PRESSURE MAY VARY BASED ON DESIGN CALCULATIONS.

<u>Safety Factor</u>	<u>Multiplier</u>
5	0.80
6	0.67
7	0.57
8	0.50
9	0.44
10	0.40

A safety factor of 8 would be suitable for the majority of applications, local codes or specific applications may require a higher safety factor. A piping design engineer should be consulted for specific applications. To determine a safe working pressure using a safety factor, multiply the values found in the tables by one of the above multipliers.

Note:

- The pressures listed are based on ASME B31.1 Power Piping Code.
- No provision is made for abnormal or unusual conditions
- No allowance for the coupling design or limitations
- No allowance for the thinning of the pipe wall due to corrosion, bending etc.
- Temperature rating: -20 degrees to 400 degrees Fahrenheit.
- ERW or CW pipe may not be suitable for specific applications, consult a piping design engineer for specific applications.

### LIGHT WALL SPRINKLER PIPE MAXIMUM WORKING PRESSURE

<u>Type</u>	<u>Maximum Pressure in PSI</u>
WST, Wheatland Super Tube	150
WLS, MEGA-FLOW, MLT, GL, MEGA-THREAD & SCH. 10	300

All information contained herein is accurate at the time of publication. Wheatland Tube Company reserves the right to change without notice and without incurring obligations.