

# INDUSTRIAL GRADE PIPE

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Wil-loc Galvanized Pipe is built to the rugged standards required for suction and discharge applications found in dewatering, sewer bypass, vac-truck and viscous material handling jobs. Not just any pipe can handle the strain and abuse of these industrial environments.

With over 40 years of field-tested experience, Wil-loc Pipe matches the industry's best combination of dependable performance and superior value.

- + Full vacuum rating (29 Hg) makes Wil-loc Pipe the most versatile and durable pipe in the industry.
- + Industrial grade wall thickness ensures pipe will not collapse under vacuum and minimizes transportation damage.
- + Wil-loc's articulating coupling system provides maximum flexibility in system design.
- + More cost effective than high abrasive hose in most abrasive applications.
- + No relief valves needed for long discharge systems due to vacuum rating.
- + Wil-loc Pipe is an ideal substitution for hose on long suction applications.



**SYSTEM VERSATILITY :**  
The Wil-loc System's versatility can accommodate nearly any suction or discharge application.



**VACUUM TIGHT O-RINGS :**  
Wil-loc Couplers allow for up to 30° of articulation—ideal for rough terrain.



**SAFETY PIN HANDLES :**  
Rugged lever clip handles ensure smooth assembly. Safety pins prevent accidental opening.

#### **STEEL PIPE :**

Wil-loc Pipe is manufactured from laminated steel formed by a cold rolling process. Seams are longitudinally or spiral welded by an electrical arc process for unmatched strength. Our wall thickness outperforms and outlasts irrigation-grade piping.

#### **GALVANIZATION :**

Wil-loc Pipe is galvanized by vertical immersion in a zinc bath at 450° C. This process is ideally suited for pipe, as both internal and external surfaces are evenly coated, leaving no beads or scum. To ensure perfect galvanization, our zinc bath uses 99.995% pure electrolytic zinc with aluminum added in a 2 to 3% proportion. All Wil-loc Couplings are spin dried to minimize material pooling.

#### **COUPLINGS :**

All pipe is equipped with the Wil-loc Quick Coupling System, providing flexibility in application and trouble-free assembly. Integrated rubber O-rings not only prevent leakage, they allow for full vacuum throughout the system.



# SPECIFICATIONS & USAGE

**WIL-LOC INDUSTRIAL GRADE PIPE USES :**

Mining & Tunneling  
 Civil Engineering Projects  
 Road Construction  
 Fresh Water Delivery  
 Wastewater Management  
 Compressed Air Systems

Offshore Drilling  
 Emergency / Disaster Control  
 Potable Water Supply  
 Sewage Removal  
 Waste Removal  
 By-Pass Lines

Emission Handling  
 Petrol-Chemical Applications  
 Vacuum Extraction Systems  
 Irrigation & Drainage  
 Dredging

**GALVANIZED PIPE**

	4 Inch	6 Inch	8 Inch	10 Inch	12 Inch
Nominal O.D.	4.25"	6"	8"	10"	12"
Wall Thickness	.071" / 1.8mm	.071" / 1.8mm	.079" / 2.0mm	.079" / 2.0mm	.079" / 2.0mm
Max W.P. PSI	175	175	175	88	88
Vacuum Rating (Hg)	29	29	29	29	29
Weight (lbs.)					
3 Feet		28	43		
6 Feet	21	35	52		
10 Feet	33	55	78	95	173
15 Feet				165	225
20 Feet	60	93	128	209	278
Articulation Angle	30°	30°	30°	15°	15°

**Conversions**

TDH = Suction Lift + Vertical Discharge Head + Friction Loss  
 1 Bar = 14.5038 PSI  
 1 mm = .03937 inches  
 1 m = 3.28084 feet  
 1 kg = 2.20462 lbs.  
 Specifications subject to change without notice.

**LOSS OF HEAD IN 100 LINEAR FEET OF PIPE :**

Gallons per Minute	Nominal Diameter of Standard Pipe in Inches												
	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12
10	8.4	2.4	1.1	.32									
15	18.0	4.8	2.2	.65	.28								
20	30.0	8.0	3.7	1.10	.47	.16							
30		17.0	8.0	2.30	1.00	.34	.17	.09					
40		29.0	13.5	3.9	1.7	.58	.29	.15					
50			21.0	5.8	2.6	.88	.44	.24	.08				
75				12.5	5.4	1.85	.93	.51	.17	.07			
100				21.0	9.3	3.10	1.60	.85	.28	.12			
150					19.5	6.5	3.3	1.8	.58	.25	.07		
200					33.0	11.3	5.8	3.1	1.03	.42	.11	.04	
250						17.0	8.5	4.6	1.53	.63	.17	.06	
300						24.0	12.2	6.6	2.10	.87	.24	.08	
350							16.0	8.5	2.8	1.3	.31	.10	.04
400							21.0	11.0	3.6	1.5	.39	.13	.06
500								17.0	5.3	2.3	.58	.19	.08
600								23.0	7.4	3.1	.82	.27	.11
800									13.0	5.2	1.4	.47	.19
1000									20.0	8.0	2.1	.71	.29
1200										11.5	3.0	1.00	.42
1500										17.0	4.5	1.50	.62
2000											7.7	2.6	1.05
2500											12.0	3.9	1.60
3000											16.8	5.5	2.30
4000												9.3	3.90

**WIL-LOC PIPE REDUCES OPERATING COSTS :**

- + Typical coupling time of 10 - 15 seconds
- + Quick Coupling connections decrease man-hours for pump installation/dismantling
- + Ball and Socket designed with O-Ring ensures vacuum-tight seal
- + Durable construction provides years of use and decreases replacement costs
- + Lever locking clamps can be secured with locking pin to prevent accidental or deliberate uncoupling
- + Up to 30° coupling articulation allows for misaligned connections

**Material Metallurgy**

Element	Carbon	Phosphorus	Sulphur	Manganese
Fe PO4	0.08 %	0.03 %	0.03 %	0.40 %
Fe PO5	0.06 %	0.025 %	0.025 %	0.35 %

**Galvanization**

Specifications	Coverage mil.	Coverage mic.	Coverage g/m <sup>2</sup>
ASTM	2.80 mils.	75 mics.	516 g/m <sup>2</sup>
Wil-loc*	4.25 mils.	108 mics.	763 g/m <sup>2</sup>

\*Average galvanization coverage dependent on wall thickness, chemical composition and environmental factors.

