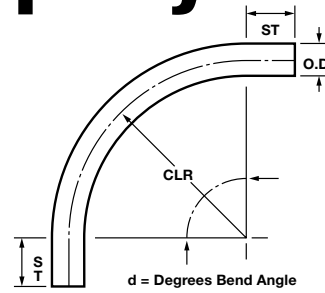


# Morris Coupling Company

## Tube Bending Capabilities

Pipe and tube bends of up to 180 degrees are readily available in aluminum, stainless, carbon steel and galvanized in the sizes listed below. Other centerline radii are available but not shown. Special shapes, "U" bends, offsets, and bifurcated bends available upon request. Morris tube bends are shipped from our Knoxville, Tennessee plant.



For PNEUMATIC SYSTEMS ... Short and Long Radius

TUBE SIZE	PIPE SIZE	OUTSIDE DIAMETER		COMMON CENTERLINE RADII (CLR) INCHES	STD. TANGENT (ST)
		INCHES	MILLIMETERS		
1"		1.0	25.4	3, 4, 6, 12	4"
	1"	1.315	33.4	3, 5	4"
1-1/4"		1.25	31.8	3, 7.25	4"
	1-1/4"	1.660	42.2	3.5, 4, 6.25	4"
1-1/2"		1.5	38.1	2.5, 6, 7.5, 9, 12, 15, 18, 24, 30, 36	4"
1-3/4"		1.75	44.5	2.5, 8, 9, 12, 15, 24, 30, 36, 48	4"
	1-1/2"	1.9	48.3	5, 6, 7.5, 9, 10, 12, 18, 24, 30, 36, 48	4"
2"		2.0	50.8	2.5, 5, 6, 8, 8.5, 9, 10, 12, 15, 18, 24, 30, 36, 48	4"
2-1/8"		2.125	54.0	5, 12, 24, 30, 36	4-1/4"
2-1/4"		2.25	57.2	3, 9, 12, 15, 17, 24, 30, 36	4-1/2"
	2"	2.375	60.2	6, 7.5, 10, 12, 15, 17, 24, 30, 36, 48	4"
2-1/2"		2.5	63.5	4, 6, 9, 12, 15, 17, 24, 30, 36, 48	5"
2-3/4"		2.75	69.9	17, 30, 36, 48	5-1/2"
	2-1/2"	2.875	73.0	12, 12.5, 15, 17, 24, 30, 36, 60	5"
3"		3.0	76.2	4.5, 7.5, 9, 10, 12, 15, 18, 24, 30, 36, 48, 60	6"
3-1/4"		3.25	82.6	17, 30, 36	6-1/2"
3-1/2"	3"	3.5	88.9	3.5, 6, 8.75, 12, 15, 16, 18, 24, 30, 36, 48	7" (6" - pipe)
3-3/4"		3.75	95.3	17, 24, 32, 36	7-1/2"
4"	3-1/2"	4.0	101.6	6, 10, 12, 16, 18, 20, 24, 30, 32, 36, 48, 60	8" (7" - pipe)
4-1/4"		4.25	107.9	16, 30, 36, 48, 60	8-1/2"
4-1/2"	4"	4.5	114.3	6, 9, 12, 16, 18, 20, 24, 30, 32, 36, 48, 60	9" (8" - pipe)
4-3/4"		4.75	120.7	36	9-1/2"
5"		5.0	127.0	7.5, 12.5, 17, 22, 24, 30, 36, 42, 48, 60	10"
	5"	5.563	141.3	15, 20, 24, 30, 36, 42, 48, 60, 72	10"
5-1/2"		5.5	139.7	30, 36	11"
6"		6.0	152.4	9, 15, 18, 24, 30, 36, 42, 48, 60, 72	12"
	6"	6.625	168.2	18, 24, 30, 36, 42, 48, 60, 72	12"
8"		8.0	203.2	12, 20, 32, 48, 60, 72	16"
	8"	8.625	219.1	24, 32, 40, 48, 60, 72	16"
	10"	10.75	273.1	40, 50	20"

Capabilities subject to change without notice.

**ORDER BENDS:** By O.D., wall thickness, alloy, degree of bend, centerline radius and tangent.

**WALL THICKNESS:** 16 ga. (.063), 14 ga. (.083), and 11 ga. (.120) in tubing.

Schedules 5, 10 and 40 pipe. Other wall thicknesses on request.

**MATERIALS:** Aluminum is 6063-T1 extruded. Stainless is T304 ASTM A312 for pipe and T304 ASTM A249 for tubing.

Carbon steel ASTM A53 for pipe; A513 for tubing. Galvanized A53 for galvanized-coated pipe and A513 for galvanized-coated tubing.

### STOCK TUBE BENDS

Morris maintains an extensive inventory of tube bends available for 24-hour shipment. Most popular bend sizes are stocked in carbon steel, aluminum and stainless materials.



2240 W. 15th St. • Erie, PA 16505 • 814-459-1741

Phone: 1-800/426-1579 • Fax: 1-800/545-1399

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Call MORRIS COUPLING for all your pneumatic conveying line needs.



## PIPE DIMENSIONS AND WEIGHTS

PIPE SIZE	O.D. IN INCHES	PIPE SCHEDULES																		
		5s	5	10s	10	20	+	30	40s & STD.	40	⊕	60	80s & E.H.	80	100	120	140	160	DBL. E.H.	
1/8	.405		.035 .1383	.049 .1863	.049 .1863				.068 .2447	.068 .2447			.095 .3145	.095 .3145	<b>BLACK</b> WALL THICKNESS IN INCHES <b>RED</b> STEEL WEIGHT PER FOOT IN POUNDS <b>BLUE</b> ALUMINUM WEIGHT PER FOOT IN POUNDS					
1/4	.540		.049 .2570	.065 .3297	.065 .3297				.088 .4248	.088 .4248			.119 .5351	.119 .5351						
3/8	.675		.049 .3276	.065 .4235	.065 .4235				.091 .5676	.091 .5676			.126 .7388	.126 .7388						
1/2	.840	.065 .5383	.065 .1860	.083 .6710	.083 .6710				.109 .8510	.109 .8510			.147 .1088	.147 .1088					.187 .4510	.294 .1714
3/4	1.050	.065 .6838	.065 .2370	.083 .8572	.083 .8572				.113 .1131	.113 .1131			.154 .1474	.154 .1474					.218 .1937	.308 .2441
1	1.315	.065 .8678	.065 .3000	.109 .1404	.109 .1404				.133 .1679	.133 .1679			.179 .2172	.179 .2172					.250 .2844	.358 .3659
1 1/4	1.660	.065 .1107	.065 .3830	.109 .1806	.109 .1806				.140 .2273	.140 .2273			.191 .2997	.191 .2997					.250 .3765	.382 .5214
1 1/2	1.900	.065 .1274	.065 .4410	.109 .2085	.109 .2085				.145 .2718	.145 .2718			.200 .3631	.200 .3631					.281 .4859	.400 .6408
2	2.375	.065 .1604	.065 .5550	.109 .2638	.109 .2638				.154 .3653	.154 .3653			.218 .5022	.218 .5022					.344 .7462	.436 .9029
2 1/2	2.875	.083 .2475	.083 .8560	.120 .3531	.120 .3531				.203 .5793	.203 .5793			.276 .7661	.276 .7661					.375 .1001	.552 .1370
3	3.500	.083 .3029	.083 .1048	.120 .4332	.120 .4332				.216 .7576	.216 .7576			.300 .1025	.300 .1025					.438 .1432	.600 .1858
3 1/2	4.000	.083 .3472	.083 .1201	.120 .4937	.120 .4937				.226 .9109	.226 .9109			.318 .1251	.318 .1251					.636 .2285	
4	4.500	.083 .3915	.083 .1354	.120 .5613	.120 .5613				.237 .1079	.237 .1079			.337 .1498	.337 .1498		.438 .6560			.531 .2251	.674 .2754
4 1/2	5.000								.247 .1254				.355 .1761							
5	5.563	.109 .6349	.109 .2196	.134 .7770	.134 .7770				.258 .1462	.258 .1462			.375 .2078	.375 .2078		.500 .9353			.625 .3296	.750 .3855
6	6.625	.109 .7585	.109 .2624	.134 .9290	.134 .9289				.280 .1897	.280 .1897			.432 .2857	.432 .2857		.562 .3639			.719 .4335	.864 .5316
7	7.625								.301 .2354				.500 .3804						.875 .6308	
8	8.625	.109 .9914	.109 .3429	.148 .1340	.148 .1340	.250 .2236	.175 .5463	.277 .8543	.322 .2855	.322 .2855			.500 .3564	.500 .3564	.594 .5095	.719 .6071	.812 .6776	.906 .7479	.875 .7242	
9	9.625								.342 .3391				.500 .4873							
10	10.75	.134 .1519	.134 .5256	.165 .1865	.165 .1870	.250 .2804	.279 .1079	.307 .1134	.365 .4048	.365 .4048			.500 .5474	.500 .5474	.594 .7703	.844 .8229	1.000 .1041	1.125 .1156	1.000 .1041	
11	11.75								.375 .4556				.500 .6008							
12	12.75	.156 .2107	.165 .2218	.180 .2416	.180 .2416	.250 .3338	.375 .1714	.330 .1514	.375 .4956	.375 .4956	.500 .2263		.562 .7315	.500 .6542	.688 .8863	.844 .1073	1.000 .1255	1.125 .1367	1.312 .1603	1.000 .1255
14	14.00	.156 .2307		.188 .2773	.250 .3671	.312 .4561			.375 .5457	.375 .5457			.594 .8505	.500 .7209	.688 .1061	.938 .1309	1.094 .1508	1.250 .1702	1.406 .1891	
16	16.00	.165 .2790		.188 .3175	.250 .4205	.312 .5227			.375 .6258	.375 .6258			.656 .1075	.500 .8277	.844 .1366	1.031 .1648	1.219 .1924	1.438 .2236	1.594 .2453	
18	18.00	.165 .3143		.188 .3576	.250 .4739	.312 .5894			.438 .8215	.375 .7059			.750 .1382	.500 .9345	.938 .1709	1.156 .2080	1.375 .2441	1.562 .2742	1.781 .3085	
20	20.00	.188 .3978		.218 .4605	.250 .5273	.375 .7860			.500 .1041	.375 .7860			.812 .1664	.500 .1041	1.031 .2089	1.281 .2561	1.500 .2964	1.750 .3411	1.969 .3792	

## TUBING DIMENSIONS

TUBE GAUGE	18	17	16	15	14	13	12	11	1/8	10	9	5/32	8	7	3/16	6	5	4	1/4	2
WALL THICK.	.049	.058	.065	.075	.083	.095	.109	.120	.125	.134	.148	.156	.165	.180	.188	.203	.220	.238	.250	.280

