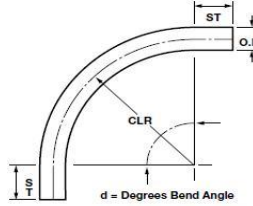


TUBE AND PIPE MANDRAL BENDING CAPABILITIES

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. LRH & Associates, Inc. tube bends are shipped from our Knoxville, Tennessee plant.



TUBE SIZE	PIPE SIZE	OUTSIDE DIAMETERS		COMMON CENTER LINE RADIUS "INCHES"			STANDARD STRAIGHT
		Inches	Millimeters				
1"		1	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"	1.66	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, 4			4"
	1-1/2"	1.9	48.3	5, 6, 7.5, 9, 10, 12, 18, 24, 30, 36,			4"
2"		2	50.8	2.5, 3, 3.5, 4, 5, 6, 8, 8.5, 9, 10, 12, 15, 18, 24, 30, 36, 48			4"
2-1/8"		2.125	54	3, 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	2.75, 4, 17, 30, 36, 48			5-1/2"
	2-1/2"	2.875	73	12, 12.5, 15, 17, 24, 30, 36, 60			5"
3"		3	76.2	4, 4.5, 7.5, 9, 10, 12, 15, 18, 24, 30, 36,			6"
3-1/4"		3.25	82.6	17, 30, 36			6-1/2"
3-1/2"	3"	3.5	88.9	3.5, 4.5, 6, 8.75, 12, 15, 16, 18, 24, 30,			7" (6" PIPE)
3-3/4"		3.75	95.3	17, 24, 32, 36			7-1/2"
4"	3-1/2"	4	101.6	4, 5, 6, 7.75, 10, 12, 16, 18, 20, 24, 30,			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,			9" (8" PIPE)
4-3/4"		4.75	120.7	36			9-1/2"
5"		5	127	5.5, 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	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	203.2	12, 20, 32, 48, 60, 72			16"
	8"	8.625	219.1	24, 32, 40, 42, 48, 60, 72			16"
	10"	10.75	273.1	40, 48, 50			20"

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. Aluminized tubing is ASTM A787.

STOCK TUBE BENDS: Many Standard Bends in Stock and Ready To ship.

ALL YOUR TUBEING, BENDING, COUPLING, HOSEING AND CUSTOM TUBE / PIPE FABRICATION NEEDS.

PHONE # (517) 784-1055 FAX # (517) 784-3687 E-MAIL LRHKARLYN@AOL.COM