

TONNAGE CHARTS

PRESSURE IN TONS PER LINEAR FOOT REQUIRED TO MAKE 90 DEGREE AIR BEND IN MILD STEEL

THICKNESS OF METAL		WIDTH OF FEMALE DIE OPENING																					
GAUG	INCHES	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1.125"	1.25"	1.5"	2"	2.5"	3"	3.5"	4"	5"	6"	7"	8"	10"	12"
20	.036	2.9	2.2	1.7	1.2	1.0																	
18	.048		4.0	2.9	2.2	1.6	1.3																
16	.060			5.6	3.6	2.7	2.2	1.7															
14	.075				6.0	4.5	3.4	3.0	2.5	2.1													
13	.090					6.8	5.4	4.3	3.7	3.3	2.9												
12	.105					10.1	7.4	6.3	5.4	4.4	4.0	3.2											
11	.120						10.5	8.8	7.2	6.2	5.4	4.3	3.2										
10	.135							11.3	9.6	8.4	7.0	5.6	4.1										
9	.150								13.1	11.9	9.0	6.7	5.2	3.5									
7	.188									16.4	14.0	11.2	7.6	5.8	4.5								
1/4	.250										28.8	22.0	15.3	11.5	9.1	7.5	6.2						
5/16	.312											38.0	26.0	19.2	16.0	12.5	10.6	7.6					
3/8	.375												41.0	29.9	24.0	19.4	16.0	12.3					
7/16	.437													45.2	35.0	28.0	24.0	17.0	14.6	11.1			
1/2	.500														47.9	39.0	33.1	24.0	19.0	15.6	12.7		
5/8	.625					WITH THESE THICKNESS IT IS USUAL PRACTICE TO HAVE DIE OPENING AT LEAST 10 x METAL THICKNESS									69.5	58.0	42.2	32.4	26.0	23.0	16.5		
3/4	.750																92.0	69.0	52.2	42.2	36.0	27.0	21.0
7/8	.875																	104.0	80.0	63.0	52.5	39.4	31.2
1"	1.00																		112.2	90.0	76.0	56.2	44.0
AIR FORM RADIUS		1/32	3/64	1/16	5/64	3/32	1/8	9/64	5/32	11/64	3/16	15/64	5/16	25/64	15/32	35/64	5/8	25/32	15/16	1.09"	1.25"	1.56"	1.87"
MIN. FLANGE INS. DIM.		3/16	7/32	1/4	5/16	7/16	1/2	9/16	5/8	11/16	3/4	15/16	1.188"	1.438"	1.75"	2"	2.25"	2.75"	3.38"	4"	4.5"	5.5"	6.5"

PRESSURES IN RED ARE FOR DIES WITH FEMALE OPENINGS APPROX. 8 x METAL THICKNESS, WITH RADIUS ON MALE DIE EQUAL TO METAL THICKNESS, AND ARE CONSIDERED IDEAL FOR RIGHT ANGLE BENDING.

Bending Pressures Required For Other Metals As Compared To 60,000 P.S.I. Tensile Mild Steel On Chart:

SOFT BRASS50% OF PRESSURE LISTED
 SOFT ALUMINUM50% OF PRESSURE LISTED
 ALUMINUM ALLOYS (Heat Treated)...SAME AS STEEL

STAINLESS STEEL50% MORE THAN STEEL
 CHROME MOLYBDENUM100% MORE THAN STEEL
 A36 STEEL30% MORE THAN STEEL