

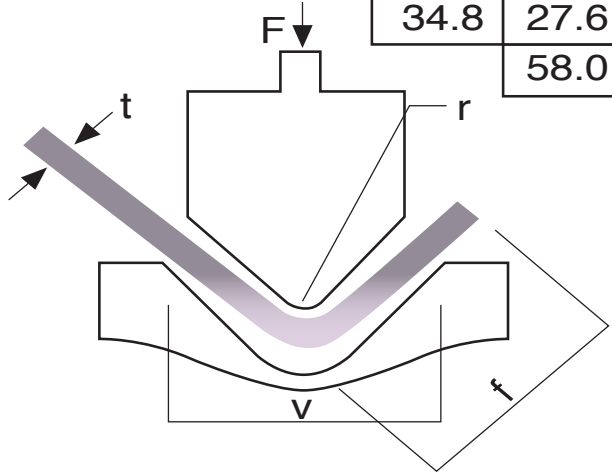


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PRESS BRAKE AIR-BENDING TONNAGE GUIDE

Force to Air-Bend Mild Steel (60,000 PSI)				F = U.S. tons/lineal ft. of workpiece														All Dimensions in inches																						
t ga.	v	1/4	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	v																						
	f	3/16	9/32	11/32	7/16	9/16	11/16	7/8	1 1/8	1 3/8	1 3/4	2 3/16	2 13/16	3 1/2	4 1/2	5 1/2	6 7/8	f																						
	r	1/32	1/16	5/64	7/64	9/64	5/32	13/64	1/4	5/16	13/32	33/64	5/8	3/4	1 1/32	1 5/16	1 5/8	ga.																						
20	0.036	3.1	1.75	1.2	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;">F Values</div> <div style="text-align: right;"> <p>For steel of different tensile strength. F value differs in proportion to strength ratio. Inside radius r for mild steel, is about 5/32 of female die opening v. for any t. Shaded F values are for v = 8t, common for average 90° bending. For t = 1/2 inch or more, use v = 10t.</p> </div> </div>														20																					
18	0.048	5.4	3.1	2.1															1.55	1.3															18					
16	0.060	9.6	5.5	3.8															2.8	2.2	1.45															16				
14	0.075	9.3		6.4															4.7	3.8	2.5	1.85															14			
12	0.105	20.5		14.0															10.4	8.1	5.6	4.1	3.2	2.2															12	
11	0.120	18.5		13.9															10.9	7.4	5.6	4.3	2.9	2.15															11	
10	0.135	25.2		17.2															14.5	9.9	7.3	5.7	3.8	2.85	2.23															10
3/16	0.188	34.8		27.6															19.1	13.9	11.0	7.5	5.6	4.3															3/16	
1/4	0.250	58.0		39.5															29.0	22.8	15.5	11.4	8.9	6.1	4.5															1/4
5/16	0.313	69.5		51.0															40.0	27.0	20.0	15.6	10.5	7.8	6.1															5/16
3/8	0.375	75.0		59.0	40.0	29.5	23.4	15.8	11.7	9.2	6.2	4.6															3/8													
7/16	0.438	115.0		90.0	61.0	45.5	35.2	24.0	17.8	13.9	9.4	6.9															7/16													
1/2	0.500	85.0		62.0	44.3	33.0	24.5	19.1	13.0	9.8	1/2															1/2														
5/8	0.625	86.0		58.0	43.0	34.0	23.2	17.5	5/8															5/8																
3/4	0.750	91.0		67.0	53.0	36.4	26.7	3/4															3/4																	
7/8	0.875	136.0		101.0	79.0	54.0	40.0	7/8															7/8																	
1	1.000	146.0		115.0	68.0	58.0	1															1																		



t = Workpiece thickness
r = Inside radius of formed part
v = Vee-die opening
f = Minimum flange

PLEASE VERIFY YOUR TOOLING IS CAPABLE OF HANDLING THE TONNAGE

*Tonnage requirements for coining are 3 to 5 times Greater than when air bending. Bending pressures for other metals are:

- Soft brass = 50% of pressure shown.
- Soft Aluminum = 50% of pressure shown.
- Aluminum alloys heat treated = same as steel.
- Stainless steel = 50% more than steel.