

| Thickness of Metal |        | Width of V Die Opening |       |      |       |      |      |      |      |      |        |        |        |      |        |      |        |       |       |       |       |      |      |      |      |
|--------------------|--------|------------------------|-------|------|-------|------|------|------|------|------|--------|--------|--------|------|--------|------|--------|-------|-------|-------|-------|------|------|------|------|
| Gauge              | Inches | 1/4"                   | 5/16" | 3/8" | 7/16" | 1/2" | 5/8" | 3/4" | 7/8" | 1"   | 1 1/8" | 1 1/4" | 1 1/2" | 2"   | 2 1/2" | 3"   | 3 1/2" | 4"    | 5"    | 6"    | 7"    | 8"   | 10"  | 12"  |      |
| 20                 | 0.036  | 3.1                    | 2.3   | 1.7  | 1.4   | 1.1  |      |      |      |      |        |        |        |      |        |      |        |       |       |       |       |      |      |      |      |
| 18                 | 0.048  | 5.3                    | 4.0   | 3.0  | 2.5   | 2.2  | 1.7  | 1.3  |      |      |        |        |        |      |        |      |        |       |       |       |       |      |      |      |      |
| 16                 | 0.060  | 9.6                    | 7.1   | 5.6  | 4.5   | 3.8  | 2.8  | 2.2  | 1.8  | 1.5  |        |        |        |      |        |      |        |       |       |       |       |      |      |      |      |
| 14                 | 0.075  |                        | 11.9  | 9.2  | 7.6   | 6.3  | 4.7  | 3.5  | 3.0  | 2.5  | 2.1    | 1.8    |        |      |        |      |        |       |       |       |       |      |      |      |      |
| 12                 | 0.105  |                        |       |      | 16.7  | 13.1 | 9.7  | 8.0  | 6.5  | 5.6  | 4.6    | 4.1    | 3.2    |      |        |      |        |       |       |       |       |      |      |      |      |
| 11                 | 0.120  |                        |       |      |       | 19.2 | 14.2 | 11.1 | 9.0  | 7.5  | 6.3    | 5.5    | 4.4    | 2.9  |        |      |        |       |       |       |       |      |      |      |      |
| 10                 | 0.135  |                        |       |      |       |      | 18.6 | 14.5 | 11.9 | 9.9  | 8.5    | 7.3    | 5.8    | 4.0  |        |      |        |       |       |       |       |      |      |      |      |
| 3/16               | 0.188  |                        |       |      |       |      |      | 27.4 | 23.1 | 19.3 | 16.4   | 14.3   | 11.2   | 7.5  | 5.7    | 4.4  |        |       |       |       |       |      |      |      |      |
| 1/4                | 0.250  |                        |       |      |       |      |      |      |      | 39.4 | 33.3   | 29.5   | 22.7   | 15.4 | 11.4   | 9.0  | 7.4    | 6.1   |       |       |       |      |      |      |      |
| 5/16               | 0.313  |                        |       |      |       |      |      |      |      |      |        | 50.4   | 39.8   | 27.0 | 19.7   | 15.3 | 12.7   | 10.5  | 7.7   |       |       |      |      |      |      |
| 3/8                | 0.375  |                        |       |      |       |      |      |      |      |      |        |        | 61.6   | 42.3 | 30.9   | 24.0 | 19.6   | 16.3  | 12.3  | 9.5   |       |      |      |      |      |
| 7/16               | 0.438  |                        |       |      |       |      |      |      |      |      |        |        |        | 61.7 | 45.8   | 35.4 | 28.6   | 24.4  | 17.3  | 14.8  | 11.2  |      |      |      |      |
| 1/2                | 0.500  |                        |       |      |       |      |      |      |      |      |        |        |        | 85.2 | 63.6   | 48.8 | 39.7   | 33.3  | 24.6  | 19.4  | 15.9  | 13.1 |      |      |      |
| 5/8                | 0.625  |                        |       |      |       |      |      |      |      |      |        |        |        |      | 110.0  | 86.2 | 70.0   | 58.3  | 43.1  | 33.3  | 27.4  | 23.3 | 16.9 |      |      |
| 3/4                | 0.750  |                        |       |      |       |      |      |      |      |      |        |        |        |      |        |      | 138.0  | 110.0 | 93.0  | 68.7  | 53.5  | 43.6 | 36.5 | 27.1 | 21.0 |
| 7/8                | 0.875  |                        |       |      |       |      |      |      |      |      |        |        |        |      |        |      |        | 165.0 | 137.0 | 104.0 | 80.7  | 64.6 | 52.9 | 39.7 | 31.6 |
| 1                  | 1.000  |                        |       |      |       |      |      |      |      |      |        |        |        |      |        |      |        |       | 197.0 | 143.0 | 113.0 | 91.2 | 76.2 | 56.3 | 44.2 |

On materials over 1/2" thick it is customary to use Female Dies 10 times the metal thickness or more.

The tonnages indicated in black boxes are for Female Die openings of 8 times the thickness of the metal, and the Male Die radius of a right angle bend is equal to the material thickness.