



800-871-5022

More information can be found at
www.HQ-Drill.com.

Suggested Drilling Feed Rates (inches per rev.)

| MATERIAL | BRINELL HARDNESS | HOLE DIAMETER | | | | | | | |
|------------------------|---------------------|---------------|-------|------|------|------|------|-------|------|
| | | 1/16" | 1/8 | 1/4 | 1/2 | 3/4 | 1 | 1 1/2 | 2 |
| Aluminum | 99-101 | .001 | .003 | .007 | .012 | .016 | .020 | .025 | .030 |
| Aluminum Bronze | 170-187 | .001 | .003 | .004 | .008 | .010 | .012 | .015 | .020 |
| Bakelite | - | .002 | .005 | .006 | .008 | .010 | .012 | .015 | .015 |
| Brass | 192-202 | .001 | .003 | .004 | .008 | .012 | .018 | .020 | .022 |
| Bronze, Common | 166-183 | .001 | .003 | .004 | .008 | .012 | .018 | .020 | .022 |
| Bronze Phos.; 1/2 Hard | 187-202 | .001 | .003 | .004 | .008 | .010 | .012 | .015 | .020 |
| Bronze Phos.; Soft | 149-163 | .001 | .003 | .004 | .008 | .012 | .018 | .020 | .022 |
| Celluloid | - | .002 | .004 | .005 | .006 | .006 | .008 | .008 | .010 |
| Copper | 80-85 | .001 | .003 | .004 | .008 | .010 | .012 | .015 | .020 |
| Copper Mang.; 30% Mn | 134 | .001 | .003 | .005 | .007 | .009 | .012 | .014 | .016 |
| Duralumin | 90-104 | .001 | .003 | .005 | .010 | .015 | .018 | .020 | .025 |
| Iron, Cast; Med Soft | 196 | .001 | .003 | .005 | .008 | .010 | .012 | .014 | .015 |
| Iron, Cast; Hard | 293-302 | - | .001 | .003 | .005 | .007 | .009 | .012 | .012 |
| Iron, Cast; Chilled | 402 | - | .001 | .003 | .005 | .007 | .009 | .011 | .011 |
| Iron, Malleable | 112-126 | - | .002 | .004 | .007 | .010 | .012 | .015 | .018 |
| Monel | 149-170 | - | .002 | .003 | .006 | .008 | .010 | .012 | .015 |
| Nickel, Pure | 187-202 | - | .002 | .003 | .006 | .008 | .015 | .018 | .020 |
| Nickel, Steel; 3 1/2% | 196-241 | - | .002 | .003 | .006 | .008 | .010 | .012 | .015 |
| Rubber, Hard | - | .005 | .010 | .012 | .015 | .018 | .020 | .025 | .030 |
| Screw Stock, C.R. | 170-196 | .001 | .003 | .004 | .007 | .010 | .012 | .015 | .018 |
| Stl, Carbon | 175-225 | .001 | .003 | .004 | .007 | .010 | .012 | .015 | .018 |
| Stl, Drop Forged | 170-196 | .001 | .002 | .004 | .007 | .010 | .012 | .015 | .018 |
| Stl, Machinery | 170-196 | .001 | .003 | .005 | .009 | .012 | .013 | .018 | .022 |
| Stl, Magnet; Soft | 241-302 | - | .002 | .003 | .006 | .008 | .009 | .010 | .011 |
| Stl, Magnet; Hard | 321-512 | - | .0005 | .001 | .002 | .002 | .003 | .003 | .004 |
| Stl, Mang.; 7-13% | 187-217 | - | .0005 | .001 | .002 | .002 | .003 | .003 | .004 |
| Stl, Mild; .20-.30C | 170-202 | .001 | .003 | .005 | .010 | .015 | .018 | .020 | .025 |

See http://www.drill-hq.com/?page_id=785 for more information



800-871-5022

More information can be found at
www.HQ-Drill.com.

Suggested Drilling Feed Rates (inches per rev.)

| MATERIAL | BRINELL HARDNESS | HOLE DIAMETER | | | | | | | |
|------------------------|---------------------|---------------|-------|------|------|------|------|-------|------|
| | | 1/16" | 1/8 | 1/4 | 1/2 | 3/4 | 1 | 1 1/2 | 2 |
| Stl, Molybdenum | 196-235 | - | .002 | .004 | .006 | .010 | .012 | .015 | .018 |
| Stl, Spring | 402 | - | .002 | .003 | .005 | .007 | .009 | .010 | .010 |
| Stl, Stainless | 150-225 | .001 | .002 | .004 | .006 | .008 | .011 | .013 | .016 |
| Stl, Stainless | 460-520 | - | .0005 | .001 | .002 | .002 | .003 | .003 | .004 |
| Stl, .40-.50C | 170-196 | .001 | .002 | .004 | .007 | .010 | .012 | .015 | .018 |
| Stl, Struct; A-36 | 160 | .001 | .003 | .005 | .010 | .015 | .018 | .020 | .025 |
| Stl, Tool; SAE, Forged | 149 | - | .002 | .003 | .006 | .009 | .011 | .014 | .016 |
| Stl, Tool; SAE, Forged | 402 | - | .0005 | .001 | .002 | .002 | .003 | .003 | .004 |
| Zinc, Alloy | 112-126 | .002 | .003 | .007 | .012 | .016 | .018 | .020 | .025 |

See http://www.drill-hq.com/?page_id=785 for more information